

**HAWAIIAN `AWA**  
***Piper methysticum***  
**A STUDY IN ETHNOBOTANY**

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# CHAPTER 1: INTRODUCTION

**`Awa**, or *Piper methysticum* G. Foster, is a highly significant plant in many Pacific island societies. This is particularly true in Hawaiian culture. The plant is known by many names, examples being **Kava** in Tonga, **Sakau** in Pohnpei, and **Yogona** in Fiji. The plant has a very rich history and associated cultural knowledge within each of the societies in which it is cultivated (Lebot et al. 1997). Hawai'i has lost much of its indigenous cultural knowledge since the time of European contact in 1778, because of colonization and the subsequent repercussions of the influences of foreign cultures and religions (Kame`eleihiwa 1992). **`Awa** has gone from being an integral aspect of daily life in Hawaiian culture (Kamakau 1991) to being nearly forgotten. It is likely that of all the indigenous cultures in the Pacific, Hawaiians are among those who have lost the most cultural knowledge pertaining to this plant (McClatchey, per. Comm. 2003).

In recent years, however, **`Awa** has experienced a renewed popularity within Hawaiian society. Unfortunately, much of the cultural knowledge of this plant has not accompanied its revival. It is not uncommon for contemporary Hawaiians, who utilize this plant, to substitute traditions from the South Pacific in place of the traditions of the old Hawaiians. This is due to a discontinuation of **`Awa** traditions within the majority of Hawaiian families. A more complete understanding of this plant and its traditional uses is crucial if contemporary Hawaiians are to maintain a distinct cultural identity.

**`Awa** is considered to be a "canoe plant," or a plant that was dispersed throughout the Pacific by ancient voyagers who traveled by canoe (Abbott 1992). It has been cultivated for approximately 3,000 years (Lebot et al. 1997). Within that time it has arguably become the most heavily cultivated nonfood plant within the cultures that use it, and probably has had a large impact on the evolution of these cultures. Because of this, an immense amount of cultural knowledge of this plant has been accumulated.

## LITERATURE REVIEW

Although there has been much published about the chemistry of *Piper methysticum*, little ethnobotanical research has been conducted on Hawaiian **`Awa**. Only a few of the published, and readily available, Hawaiian ethnographers have written anything substantial on the subject. The only one who makes a significant attempt at recording the importance of **`Awa** to Hawaiians was Samuel Manaiakalani Kamakau. His extensive works on Hawaiian history and culture were first printed in various Hawaiian language newspapers in the later part of the 19<sup>th</sup> century, but they were not readily available or published in English until the later part of the 20<sup>th</sup> century (Kamakau 1961, 1976, 1991, 1991II, 1996). The only other well-published Hawaiian ethnographer whose writings shed light into the significance of

**`Awa** in Hawaiian culture is Mary Kawena Pukui (Handy & Pukui 1972). She did not dedicate any piece of writing to **`Awa** specifically, however in her detailed and wide-spanning coverage of the Hawaiian culture she mentions the circumstances and manners in which **`Awa** was used amongst the people of Ka`ū, Hawai`i.

A majority of the information about the cultural significance of Hawaiian **`Awa** is found in the “Gray Literature.” Most of this is information recorded by various Hawaiian authors whose works were published in various Hawaiian language newspapers between the 1830’s – 1940’s. These have neither been made readily available in their original nor their translated form. Some information has been recorded in manuscript form, mostly in the Hawaiian language, and may be found housed various archives around Hawai`i. The most significant of these is a paper by Henry E.P. Kekahuna (1963) that is dedicated to the intoxicating beverages of the Hawaiian people. Another form of information is found in recorded interviews conducted by the staff of the B.P. Bishop Museum from the 1950’s – 1970’s, and the staff of the radio program “Ka Leo Hawai`i” which ran from the 1970’s to the turn of the century. These interviews were conducted with various **kūpuna** about life in old Hawai`i. Several of them discuss **`Awa**.

The only significant contribution from a supporting field was Margaret Titcomb’s (1948) anthropological study of **`Awa** which was based mostly on the archival materials at the Bishop Museum. More recently, Dr. Isabella Aiona Abbott (Abbott and Shimazu 1985, Abbott 1992) compiled literature references on Hawaiian medicinal plants and reported that **`Awa** was among the twelve most important medicinal plants in old Hawai`i.

## MODERN HISTORY OF `AWA IN HAWAI`I

In 1820, missionaries arrived in Hawai`i and began to discourage the use of **`Awa** because of its association with ancient Hawaiian religion (Kalalaupunaakeonaona 1863). Subsequent colonization by foreign cultures has led to further loss of language and cultural knowledge among Hawaiians. As a result of these circumstances, **`Awa** nearly faded into complete disuse around the 1940’s and 1950’s. At that time the last practitioners who used **`Awa** stopped passing on cultural knowledge of this plant to younger generations of Hawaiians.

The Hawaiian cultural renaissance, which began in the 1970’s, brought a sense of pride back to the Hawaiian people. Many cultural practices, that were almost forgotten, were revived. The groups most prominently involved in the revival of **`Awa** traditions were those involved in the revival of long distance canoe voyaging and navigation. **`Awa** ceremonies became a standard practice for occasions when these groups met. These ceremonies sparked some controversy among the Hawaiian community. Some claimed that such ceremonies were based on South Pacific traditions, and that they were not authentically “Hawaiian”. Concerns were raised about the abandonment of authentic Hawaiian traditions for new and invented traditions (Clark 1993). Others maintained that these were

evolved traditions based on an authentic Hawaiian concept (Clark 1993, Kane 1993). The **`Awa** traditions practiced by these and other affiliated groups, as well as the traditions practiced by other Pacific Islanders living in Hawai'i, were becoming combined to form the basis for the **`Awa** traditions perpetuated by contemporary Hawaiians (personal observation).

Although a commodity for over 100 years, *Piper methysticum* became much more highly prized on the world market as it became part of a growing fad of "alternative medicine" in the 1990's. This sparked further interest in Hawai'i for **`Awa**, this time as a cash crop. The Association for Hawaiian **`Awa** (A.H.A.), under the leadership of Ed Johnston, Jerry Konanui, and others, emerged as a great force in gathering information about *Piper methysticum*, and especially about Hawaiian **`Awa**. They even produced some information about the ethnobotanical significance of **`Awa** in Hawai'i (Maly 1998). AHA was also the major entity collecting the remaining old Hawaiian **`Awa** varieties and information about them.

## RELATIVE CULTURAL IMPORTANCE OF PLANT CULTIVARS

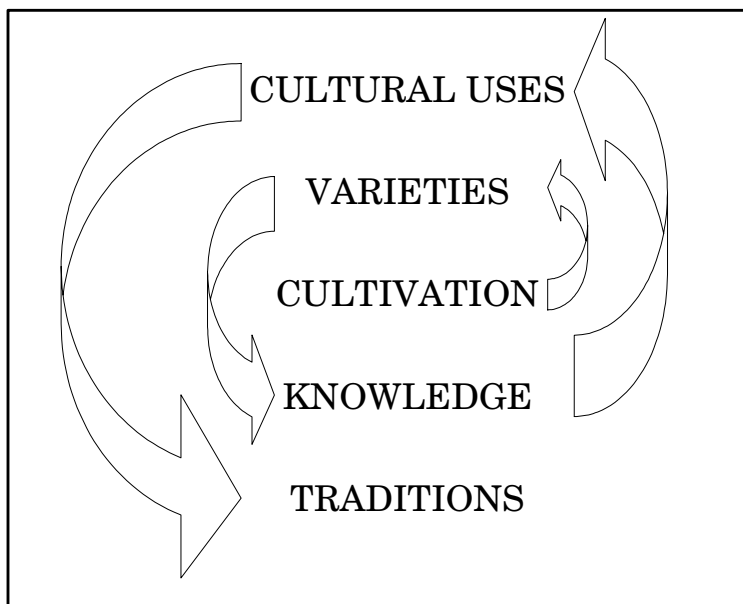
The relative importance of a particular plant in any culture is determined by the number of varieties that are recognized (Martin 1997). This is a common measure used by ethnobotanists examining biological diversity (Berlin 1992). A large number of varieties indicate substantial cultural significance of the plant in question.

An examination of the process of crop intensification within a culture often reveals a positive feedback pattern. A community begins with a simple crop with one cultivar. As the crop becomes more important and is therefore grown by more people, in greater quantities, there is greater generation and selection of new varieties. The intensification of cultivation therefore leads to an intensification of the number of varieties. An intensification of varieties leads to an intensification of cultural uses as people discover either selectively or accidentally, new value in the crop. An intensification of cultural uses leads to an intensification of knowledge pertaining to the plant. Once the knowledge pertaining to a particular plant is passed down to subsequent generations it leads to an intensification of traditions for this plant. Figure 1-1 illustrates this relationship.

Many Pacific cultures cultivate the same suite of plant species. However, certain species may be more important to one culture than another culture. For instance, in old Hawai'i, **Kalo** (*Colocasia esculenta* (L.) Schott) was by far the most important plant. It was also the staple food of Hawaiians that shared a cosmogonic origin with people (Kame`eleihiwa 1992). It was the body form of the god **Kāne** (Abbott 1992). There were more than 300 named varieties of **Kalo** (Handy 1940). Conversely, Hawaiians only had one variety of **`Ulu** (*Artocarpus altilis* (S. Parkinson ex Z) Fosb.) (Handy 1940). In contrast, in Nukuhiva (Marquesas), **`Ulu** was the most important crop as it was their staple. They had over 30 varieties of **`Ulu**, (Ragone 1997, Christian 1910, Le Cleac'h 1997, Denning 1980, Jardin 1862)

and fewer **Kalo** varieties than Hawaiians (Christian 1910; Denning 1980; Dunn, personal communication, 2002).

Figure 1-1. The relationship between intensification of plant cultivation and the intensification of traditions.



**`Awa**'s cultural importance to Hawaiians can also be measured in the same way, i.e. by assessing the number of varieties cultivated by Hawaiians. There have been previous attempts to estimate the number of Hawaiian **`Awa** varieties, although there have been no exhaustive studies; Handy (1940) estimated 14 and Lebot et al. (1997) estimated 11. These estimates place the **`Awa** relatively low among the other major Hawaiian crops (see Table 1-1). Numbers this low have undoubtedly influenced the assumptions about the cultural importance of **`Awa** in Hawai'i. In order to more accurately determine **`Awa**'s importance in ancient Hawaiian society, an accurate estimate of the number of **`Awa** varieties cultivated is needed.

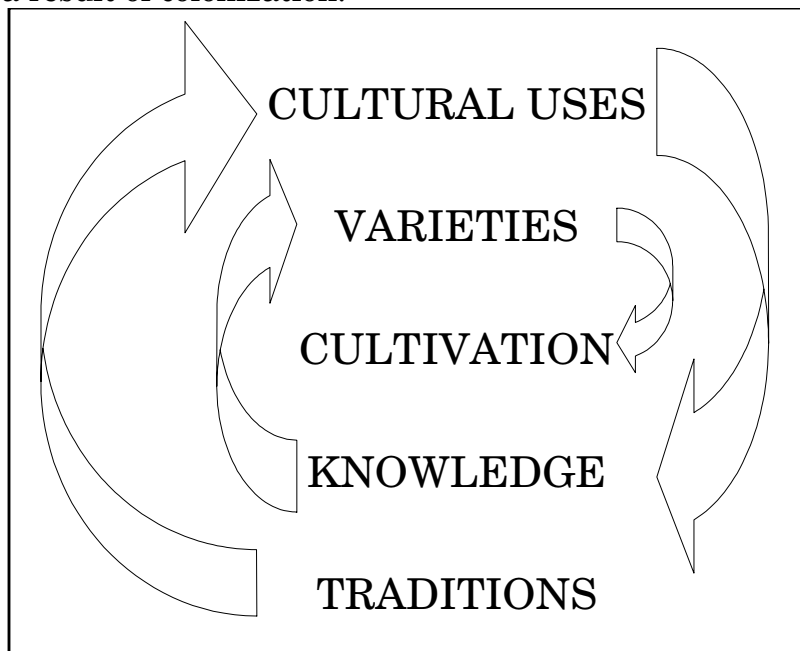
Table 1-1. Estimates of the number of varieties for the major Hawaiian crops based on number of names (Handy 1940)

| Crop           | <b>Kalo</b> | <b>`Uala</b> | <b>Mai`a</b> | <b>Kō</b> | <b>`Awa</b> |
|----------------|-------------|--------------|--------------|-----------|-------------|
| Variety number | 300+        | 200+         | 35           | 38        | 15          |

Similarly, plants and their associated culture can go through a collective de-evolution. Through a generational timeline traditions are abandoned, diversity of cultural uses declines, overall knowledge of the plant decreases, the need to maintain a diversity of varieties disappears, and finally, cultivation of the plant

ceases (see Figure 1-2). This process is often a consequence of colonization by another culture.

Figure 1-2. The collective process of de-evolution that plants and cultures go through as a result of colonization.



## **FOLK TAXONOMY AND BINOMIAL NOMENCLATURE**

Brent Berlin (1992) has done an amazing compilation of data as to the manner in which human cultures, including the culture of ‘modern’ scientific systematists, categorize and classify the relationships of plants and animals that nature presents. As is discussed in his book, this field, known as ethnobiological classification, has had its share of skeptics amongst biological systematists and anthropologists. However, with the data presented, Berlin (1992) demonstrates that the categorization and classification of the natural world is inherent to human nature, and humans around world and across cultures classify things in an observable pattern. This classification scheme is actually independent of cultural influences. Humans categorize things into six universal ranks: kingdom, life form, intermediate, generic, specific, and varietal (Berlin 1992).

Berlin (1992) also discusses ethnobiological nomenclature. In this system the general trend, with a few exceptions, is that generic taxa are labeled with primary names, and specific taxa are labeled with secondary names (Berlin 1992). In other words it is binomial in nature. This system of nomenclature, unlike the system of classification, is heavily influenced by culture. As Berlin (1992) points out, the

linguistical understanding of the nomenclature is important because gives insight into how the culture views the taxa.

“Ethnobiological nomenclature is semantically active in that the linguistic constituents of plant and animal names often metaphorically allude to morphological, behavioral, or ecological features that are nonarbitrarily associated with their biological referents.” (Berlin 1992)

This study of *Piper methysticum* deals with the ranks of generic, specific, and varietal. It is imperative that the ethnobiological nomenclature of the Hawaiian culture be understood because it will help to solve many questions about the morphology, ecological habit, and cultural significance of the **`Awa** species and varieties reviewed in this study.

### Hawaiian Ethnobotanical Nomenclature

Although plant names are very significant in Hawaiian culture, there have been many that have been forgotten. These names sometimes carry with them the key to the plant's significance, thus cultural knowledge is often retained or lost with the retention or loss of its name. In order to determine how each of the Hawaiian **`Awa** varieties are culturally significant, it is necessary to understand the basis for their names, i.e. how and why the ancient Hawaiians named plants.

Hawaiians have a binominal nomenclature system. It is not as strictly defined as the Linnaean system, having its beginnings prior to the formalized system used by Linnaeus. In explaining this system I will use the folk taxonomy terminology developed by Berlin et al. (1973). Contemporary classification systems used by biologists arrange plant taxa in hierarchical categories of kingdom, phylum, class, order, family, genus, and species. The Hawaiian classification system generally follows Berlin (1992); i.e., kingdom, life form, intermediate, genus, species, and variety. In Hawaiian classification, descriptive words follow the main word of interest. This is the same as in Latin. For instance, “white rose” is *Rosa alba* in Latin and **Loke kea** in Hawaiian. The life form or genus name is first, followed by its descriptive species name, and sometimes a variety name as well. For example, in Hawai`i all members of the genera *Metrosideros* and *Syzygium* have the Hawaiian generic name of **`Ōhi`a**. This refers to the large and showy myrtle-type flower. If referring to a nonspecific member of this Hawaiian generic group on the life form level one would say “**Kumu `Ōhi`a**” referring to the **`Ōhi`a** being a member of the life form **Kumu**. The generic groups are further subdivided into species. When referring to a particular species a binominal system is still used. The most popular member of this taxon is perhaps **`Ōhi`a lehua**, or *Metrosideros polymorpha* Gaud. It has long been a very special plant to Hawaiians and has recently been of great interest to the scientific community. When referring specifically to this tree one would say “**`Ōhi`a lehua**” and not “**Kumu `Ōhi`a**”



**lehua**” because if one is learned enough to distinguish to the species level, mentioning the life form is redundant. Hawaiian subspecies often follow color delineations, or other features that are easily observed. Their names too, adhere to a binominal system. The yellow Hawaiian subspecies of this plant is called “**Lehua mamo**” or “yellow **Lehua**.” Again, if one is learned enough to distinguish the Hawaiian variety level it would be redundant to say the Hawaiian life form and the Hawaiian equivalent of the genus name of the plant in addition to its Hawaiian species and Hawaiian subspecies name too. Therefore, **Lehua mamo** is sufficient. One would not say “**Kumu `Ōhi`a lehua mamo**.”

Understanding how ancient Hawaiians named plants is one thing, but understanding the basis for the names is another. The special significance of Hawaiian plant names is poorly understood today, but in some cases clear relationships exist. Hawaiian plants often have the same name as a particular place. For example, **`Aiea** is a tree in the family Solanaceae and also the name of an **ahupua`a** (land division) in the moku (district) of `Ewa. **Niu** is the name of the coconut tree and also the name of a valley upland of Maunaloa Bay. In most cases it is not known whether the plant was named after the place or vice versa. Hawaiian plants were sometimes named in accordance with their most typical use. **Pāpala kēpau** (*Pisonia brunoniana* Endl.) is a tree whose sticky fruit is used to catch birds. Its name refers to the way it is used. **Pāpala** means to “spread-on” and **kēpau** means “a sticky substance.” Another example is **`Ahu`awa** (*Cyperus* spp.). It is used in straining **`Awa**. **`Ahu** means “to gather” and **`Awa** refers to the **`Awa** dregs. Plants are sometimes named after their association with legends. **Pā`ūohi`iaka** (*Jacquemontia ovalifolia* H. Hallier) was the plant that **Pele** used as a wrap (**pā`ū**) for her younger sister (**Hi`iaka**) while **Pele** went surfing. Sometimes plants were named in association with the ancient religion. **`Awa manākea** means “**`Awa** with endless **mana** (divine power). Early settlers in Hawai`i also applied names of plants from their homeland to similar plants in their new environment. For example, **Māmaki** is a name that is used throughout the Pacific for a lowland forest tree in the family Urticaceae; in most parts of Polynesia it has been applied to various endemic species in the genus *Pipturus*. These are just a few of the factors that influenced the naming of plants by the ancient Hawaiians. There are probably many others.

## COMMON GARDEN EXPERIMENTS

Common garden experiments are useful in assessing the basis for the expression of markers that distinguish different species or varieties from the same species or variety responding differentially to differing environmental parameters. Clausen et al. (1940) in their studies of Yarrow, *Achillea lanulosa*, used comparisons of plants in their natural habitat, reciprocal transplants and sites, and uniform garden conditions to understand the interplay of environment and genotypes in explaining geographic variability of a variety of altitudinal races within this species. Similar

studies have been done in Hawai'i, with *Metrosideros polymorpha* (Corn and Hiesey 1973, Cordell et al. 1998). In these studies, common gardens were employed to help determine which traits are determined by environmental conditions and which traits are determined by genetics. As seen in these studies, common gardens are useful in determining these things because all environmental variables are equal, thus showing that any variation that is expressed is due to genetics.

### **Common Garden Studies of *Piper methysticum***

Unlike *Achillea lanulosa* and *Metrosideros polymorpha*, *Piper methysticum* does not reproduce sexually and therefore, there is no gene flow between populations. All plants of one variety are clones of a single progenitor that was a somatic mutant from another variety, i.e., thus they are all genetically identical (or likely so). *Piper methysticum* is also a plant that grows in only a very particular environment. It will only thrive in moist and cool conditions in well-drained soil (Konanui, personal communication, 2003). Unlike Yarrow, whose gene flow and extremes of habitat revealed a vast morphological plasticity, observations of **`Awa** growth within varieties planted in differing environments has very revealed little morphological variation (Konanui, personal communication, 2003). Any morphological variation that appeared in the common garden experiment would presumably identify the true varieties of **`Awa** based on a difference in their respective genetic makeup.

Lebot and Levesque (1989) conducted a common garden study in Vanuatu. Collection of varieties was done on 21 islands of the Vanuatu archipelago. Local cultivars were collected and identified by their vernacular names. This yielded 247 accessions. A list of morphological descriptors was developed, although the number of distinctive features used was limited to seven<sup>1</sup> because of the large size of the germplasm collection (Lebot and Leversque 1989). This study showed that there were 82 distinct morphotypes, which corresponded with distinct cultivars as distinguished by local farmers. They also showed that the ethnobiological classification of cultivars in Vanuatu is inflated by synonymy, and the plurality of vernacular languages ensures that many cultivars are known by several names.

### ****`AWA COLLECTIONS IN HAWAII****

There are no known practicing Hawaiian farmers who grow and can identify, by name and morphology, **`Awa** varieties that were grown by their parents or grandparents. However, there are several individuals who have been reviving practices, and are growing **`Awa** for personal and commercial purposes.

A major collector of Hawaiian **`Awa** was Joel Lau who collected **`Awa** varieties as he was hiking in the mountains throughout Hawai'i. Parts of his

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<sup>1</sup> Seven descriptive characters, that are used in ethnobiological classification by local farmers in Vanuatu, were chosen to differentiate the cultivars (Lebot and Levesque 1989).

collections now reside at the Amy Greenwell Ethnobotanical Garden in Kona, Hawai'i, at the Waimea Valley Audubon Center on O'ahu, and at Jeff Preble's Hawaiian plant nursery in Kahalu'u, O'ahu. Vincent Lebot established some of the varieties, that he collected in Hawai'i and around the Pacific, at the Lyon Arboretum in Mānoa, O'ahu, and at Kahanu Gardens in Hāna, Maui. Upon inspections in 2002, these collections were not properly cared for and could not be considered viable. A great force for the collection and distribution of the old Hawaiian **`Awa** varieties was the Association for Hawaiian **`Awa** (A.H.A.) under the leadership of Ed Johnston and Jerry Konanui. The AHA collection was established from that of Lau's and Lebot's, and from exploring ancient **`Awa** plantings in the mountains.

## **BASIS FOR THE RESEARCH PROJECT**

My inspiration for doing this project came after learning that **`Awa** was prevalent in precontact Hawai'i and played a major part in almost every aspect of life, and then realizing that it has become nearly completely absent in contemporary Hawaiian culture. The loss of knowledge of **`Awa** has led to misconceptions about the roles **`Awa** played in precontact society. As **`Awa** makes its way back into contemporary Hawaiian society, the loss of cultural knowledge has led to a replacement of previous Hawaiian traditions with those from the South Pacific. I believe that if contemporary Hawaiians are truly going to regain a unique sense of identity, a more complete understanding of the Hawaiian traditions of **`Awa** will be necessary.

In my opinion, many people have distorted views on the roles **`Awa** played in precontact Hawaiian society. Some say that it was only used ceremonially, some only know of its recreational usage, and others only know of its medicinal usage.

### **Basis for Experiment**

While there is no standard method for quantifying the relationship between cultivar number and cultural importance, Handy's (1940) estimate of 14 varieties of **`Awa** seems low for a plant with significant cultural importance. I hypothesized that there were more varieties in ancient Hawai'i, and that there are currently more than 14 varieties. I also hypothesized that the observed morphological variation among the populations of **`Awa** being cultivated on different islands is due to a different genetic makeup (i.e. different variety) rather than differing environmental conditions (as has been suggested by some farmers). This was tested with a common garden experiment. The purpose of making a common garden for **`Awa** was to eliminate environmental variables so that traits based on genetic variables could be assessed and used to morphologically determine the number of remaining **`Awa** varieties.

## CHAPTER 2: HYPOTHESES AND METHODS

Based upon the published literature, particularly of the rich cultural uses of **`Awa** in Polynesia as a whole, the following predictions were made about **`Awa** in Hawai'i and what would be found within the gray literature.

- **`Awa** played a significant role in the culture
- **`Awa** was so important that it was used for multiple purposes within society
- Because of **`Awa**'s importance in the culture Hawaiians developed significantly more **`Awa** varieties than are reported in the published literature

Using these predictions as a guide, two hypotheses were made.

### RESEARCH HYPOTHESES

- I. Hawaiians have traditions relating to **`Awa** that spanned the religious, medical, political, and recreational aspects of society.
- II. While it is likely that some varieties of Hawaiian **`Awa** are now extinct, there are currently more than 14 varieties of Hawaiian **`Awa** still in existence. (see Chapter 5)

### METHODS FOR EXPLORING GRAY LITERATURE

In order to address these hypotheses, I have explored the gray literature of archival documents, unpublished manuscripts, audio recordings and other records that are not widely available. Support of the hypothesis was expected to be in the identification of documents that shed light upon the wide spectrum of Hawaiian traditions that once existed for the **`Awa** plant.

The majority of the gray literature examined was originally produced in the Hawaiian language, mostly in the form of Hawaiian newspapers. These newspapers were published from the 1830's to the 1940's, and contain many recorded **mo`olelo** and editorials that shed light on the roles **`Awa** played and how it was used. Other archival materials were also used including unpublished manuscripts written in Hawaiian and English by various Hawaiian historians, ethnographers, and cultural practitioners who had the foresight and wisdom to record their knowledge in written form.

Interviews were used to collect anecdotal information that has never been written down. In some cases the interviews were conducted by others and in some cases, I had the opportunity to interview people myself (see section "Methods for Intracultural Research"). Interviews conducted by others include recordings in the Bishop Museum archives and from the "**Ka Leo Hawai'i**" program which was broadcasted on radio station, KCCN 1420AM, from the 1970's until just after the

turn of the century. Both of these sources consist of interviews with Hawaiian elders about various aspects of Hawaiian lifestyles. Some of these elders were born as early as the 1880s, and most of the interviews are in the Hawaiian language.

## METHODS FOR INTRACULTURAL RESEARCH

Interviews that were conducted by myself were with living **kūpuna** from O‘ahu, Maui, Hawai‘i, and Kaua‘i, about their recollections of **‘Awa** from their childhood. These interviews were expected to give some insight into the spectrum of cultural knowledge that exists by including **kūpuna** from different islands and different family traditions. In finding **kūpuna** to interview I used an “informant network” and “focus groups” (Bernard 1988). The informant network began with my family, then my friends’ families, and then expanded to referrals from the first groups of informants. Focus group interviews were conducted in places frequented by **kūpuna** the **Hale kilo akule** in Hāna, Maui.

Most ethnobotanical research thus far has been intercultural, meaning cultural outsiders trying to get information from cultural insiders (Cotton 1996). My research was intracultural. I was learning from people within my own community. There are some important distinctions between the two, and these need to be recognized. Failing to do so could have been detrimental to both my research and my reputation within the Hawaiian community.

### Interacting with Kūpuna

As a cultural insider, I am expected to follow certain cultural guidelines. Stepping out of these bounds could result in my being restricted from access to information, or being given wrong information as a punishment for not following the cultural guidelines. Cultural outsiders might be able to get away with not following cultural guidelines because they are not expected to be aware of these cultural guidelines. Since I am a relatively young person dealing with elders I had to be extra careful about how I conducted myself because elders tend to adhere more closely to cultural guidelines than the younger generations.

When first meeting a **kupuna** I established a relationship with them to make it clear that I was not just there to ask them questions. I did not attempt any audio recording on the first meeting. The approach involved explaining who my family is and where I am from. I also used locally accepted terms such as “talk story” instead of “interview” to keep things in an informal atmosphere. Instead of asking direct questions such as “Do you know anything about **‘Awa**?” I just told them what I am looking for and let them share with me what they would. I would say things like “I am looking for stories about **‘Awa**” (See Appendix 1). That was usually enough to get an interviewee started. If questions were asked, they were of an open nature.

My visit to **kūpuna** was within a teacher-student environment. There are two Hawaiian proverbs that describe the process of learning: “**Nānā i ke kumu**” and “**Pa`a ka waha, nānā ka maka, ho`olohe ka pepeiao, hana ka lima**” (Kaanaana, kupuna teachings, 1997-2002). “**Nānā i ke kumu**” means, “Look to the source.” In any learning endeavor, Hawaiians are told to seek out the source of that knowledge and learn from it. For instance, in the old days if it was determined that a child from a family that did not carve canoes sought to become a canoe carver, then that family would seek out the master carver in the area and explain the situation to him. The family would then ask if the master carver would take the child to live with him and learn from him. The second proverb, “**Pa`a ka waha, nānā ka maka, ho`olohe ka pepeiao, hana ka lima**” means “Keep the mouth shut, watch with your eyes, listen with your ears, and work with your hands.” The proverb indicates that the apprentice is not to ask questions, but is to do exactly what the teacher indicates; and the apprentice will only be shown what he/she is ready to learn. Thus, the things to be taught are always determined by the teacher and not the student.

In talking with **kūpuna** I had to word comments and questions in such a way so they see that I viewed them as the source of knowledge, and that is the reason I want to learn from them. It was important that I not be perceived as **nīele** or overly inquisitive. Being **nīele** is a violation of the cultural guidelines for learning and would result in negative consequences such as misinformation or no information at all as discussed above.

The questions asked were based on the questions in Appendix 1. All information received was from the recollections these **kūpuna** had of the relationship and traditions that their parents or grandparents had with **`Awa**.

## Direction of Research

Throughout this project my intentions were to study **`Awa** traditions that are purely Hawaiian, that is traditions that have been not been altered or diluted by the influence of South Pacific traditions which have become prevalent in Hawai`i in recent years (introduced by large immigrant populations, mostly from Samoa, Tonga and Fiji). From the era of the Hawaiian cultural renaissance to the advent of **`Awa** bars in Hawai`i around the year 2,000, the regular practice of drinking **`Awa** was rare amongst Hawaiians. **`Awa** consumption was mostly limited to two groups of Hawaiians: cultural groups, such as those affiliated with voyaging and **lua**, who ceremonially drank **`Awa** and made up the bulk of Hawaiian **`Awa** drinkers; and Hawaiians who lived or frequented places with large populations of Sāmoans, Tongans, and Fijians – such as Lā`ie and Kahuku on O`ahu. The cultural groups likely consisted of more Hawaiians, but they were still relatively small in number. Because of the association of these cultural groups with other Pacific island cultures, especially the ones involved in voyaging, many of these Hawaiians have drank **`Awa** with other Pacific islanders. Because of the relatively small number of

Hawaiians in these cultural groups, and the close affiliation between these similar groups, I was not likely to find a member who had not either drunken **`Awa** with another Pacific islander, or with another Hawaiian who had done so. While it is possible that some members of these groups practice undiluted **`Awa** traditions, it is likely that a good number of them have been influenced by traditions from the south. Determining the extent of influence South Pacific island traditions have had among Hawaiians in these groups was determined to be impossible from an intracultural research standpoint. Thus the decision was made not to interview anyone affiliated with such groups.

The advent of **`Awa** bars in Hawai`i, around the turn of the century, provided the opportunity for sharing experiences of **`Awa** traditions. The practice of drinking **`Awa** in such establishments brought together diverse groups of people, that would not normally interact with one another. Such establishments provide a place for tourists, college students, Hawaiians, Pacific travelers, South Pacific Islanders, and others to drink **`Awa** together. Hawaiian **kūpuna** – the keepers of cultural traditions – are not a demographic of the **`Awa** bars' clientele. Because of this great sharing of experiences, and the lack of presence or influence of Hawaiian **kūpuna** in such establishments, **`Awa** bars were not considered a place where exclusively Hawaiian traditions are perpetuated. Thus the decision was made not to interview anybody affiliated with **`Awa** bars.

The decision was made to interview only Hawaiian **kūpuna** who remember seeing the **`Awa** traditions of their parents and/or grandparents. These are likely the best view of undiluted Hawaiian traditions.

## **METHODS FOR STUDYING DIVERSITY IN HAWAIIAN CULTIVARS**

See Chapter 5 Common Garden Experiment

# CHAPTER 3: RESULTS OF GRAY LITERATURE REVIEW

## THE ORIGIN OF `AWA IN HAWAII

Unlike **Kalo** (*Colocasia esculenta* L.), there is no one well known and documented story of how `Awa came to be in Hawai`i. Neither are there any known chants that recall which voyage or which voyager brought `Awa to Hawai`i. It should not be assumed that `Awa came to Hawai`i on a single migration, but more likely several times throughout the Polynesian era. There are, however, several chants that contain references that indicate that `Awa came to Hawai`i from some land far away. Accompanying these references is often the mention of the gods **Kāne** and **Kanaloa**, the famous `Awa drinkers.

One such chant, given by Pukui (n.d. K), was sometimes uttered when harvesting `Awa. This chant refers to `Awa as being from Kahiki<sup>2</sup>.

**E ka `Awa a Kāne  
I ulu i Kahiki,  
I mule i Kahiki,  
I a`a i Kahiki,  
I kumu i Kahiki,  
I lālā i Kahiki,  
I lau i Kahiki,  
I mu`o i Kahiki,  
I pua i Kahiki,  
I ki`i mai nei au i ko kino  
I la`au no \_\_\_\_\_  
E Kāne e, ho mai i ola.**

**O `Awa of Kāne,  
That grew in Kahiki,  
Rooted in Kahiki,  
Bore rootlets in Kahiki,  
Grew a stalk in Kahiki,  
Branched in Kahiki,  
Leafed in Kahiki,  
Bore leaf buds in Kahiki,**

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<sup>2</sup> Kahiki is defined as, "Tahiti," or "Any foreign country, abroad, foreign" (Pukui and Elbert 1986).



Blossomed in Kahiki,  
I have come to take your body  
To be used as medicine for \_\_\_\_  
O **Kāne**, grant him health.  
(Pukui n.d. K)

In Malo (1951), there is an excerpt from a chant, that completes a canoe launching ceremony, that refers to three places as the origin of `**Awa**. These places are most likely outside of Hawai`i. Also referenced are the `**Awa** drinking habits of the two gods, **Kāne** and **Kanaloa**. Translation by Pukui (Titcomb 1948).

**He miki oe Kane;**  
**He miki oe Kanaloa.**  
**O Kanaloa hea oe?**  
**O Kanaloa inu awa.**  
**Mai Kahiki ka awa,**  
**Mai Upolu ka awa,**  
**Mai Wawau ka awa.**  
**E hano awa hua,**  
**E hano awa puaka.**  
**Halapa i ke akua i laau wai la!**  
**Amama, ua noa.**  
Lele wale aku la.

Active art thou, **Kāne**,  
Active art thou, **Kanaloa**,  
What **Kanaloa** art thou?  
Kanaloa the `**awa** drinker.  
From Kahiki came the `**awa**,  
From `Upolu came the `**awa**,  
From Wawau came the `**awa**.  
Homage to the frothy `**awa**,  
Homage to the well strained `**awa**,  
May the essence reach unto the gods!  
The tabu is lifted, removed,  
It flies away.  
(Titcomb 1948)

This is a possible reference of `**Awa** being brought from these places that are recognized as some of the ancestral homelands of Hawaiians. These names are now commonly associated with Tahiti, Sāmoa, and Tonga respectively (Ka`eo, personal communication, 2003).

A somewhat obscure story of John Mana (Fornander 1916-1920A), also acknowledges Kahiki as the homeland of `**Awa**. In this story Oilikukaheana

brought it to Hawai`i as a fishing plant. Mana (Fornander 1916-1920A) explains that it was a “favorite of sharks at the hands of kuhunas.” Fornander also acknowledges that there are other **`Awa** origin stories:

“There are many other places mentioned as to where **awa** came from. It is said that birds brought it and planted it in the forests of Puna, Hawai`i. Others say that Hi`ilei brought it. But this is what I have been told by my friends as to the origin of the **awa**.” (Fornander 1916-1920)

In Fornander (1916-1920C) there exists a version of the story of the adventurous voyager, Hawai`i-loa. Hawai`i-loa is the one who some credit with the discovery of Hawai`i. According to this story **`Awa**, perhaps, already existed in Hawai`i at the time of his arrival.

“One time when they (Hawai`i-loa and his company) had thus been long out on the ocean, Makali`i, the principal navigator, said to Hawai`i-loa: ‘Let us steer the vessel in the direction of Iao, the Eastern Star, the discoverer of land ... There is land to the eastward, and here is a red star ... to guide us ...’ So they steered straight onward and arrived at the easternmost island ... They went ashore and found the country fertile and pleasant, filled with **awa**, coconut trees ... and Hawai`i-loa, the chief, called that land after his own name ...” (Fornander 1916-1920C)

Titcomb (1948) speculated about the historical accuracy of this account:

“Did the ancient composer of this tale assume that **awa** was growing in Hawai`i when the first Hawaiians came here from the south, or was it his figurative way of describing any fertile land, to sketch in **awa**, coconuts and other desirable things?” (Titcomb 1948)

One thing that she did not consider was the possibility that there were, perhaps, already a people living in the Hawaiian Archipelago at the time of Hawai`i-loa’s voyage to Hawai`i. According to Peleioholani (n.d.), there was an ancient name for the Hawaiian Archipelago, Hoaka-lani, which was the name before this land was known as Hawai`i. Therefore, before the colonizer, Hawai`i-loa arrived and names the islands after himself, another people had already migrated to the islands, naming them Hoaka-lani. Therefore, it was these earlier immigrants who would have introduced **`Awa** or found it growing in the islands.

Anonymous (1894) gives a chant which refers to the story of Makali`i<sup>3</sup> and associates the coming of **`Awa** to Hawai`i with **Kāne** and **Kanaloa**.

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<sup>3</sup> Makali`i, the navigator of the above story, is described as a “celebrated king in Kahiki Kapakapaua-a-Kāne” (Fornander 1916-1920B) and a hoarder of food.

He `awa keia no`u no Awini,  
 He kanaka lawai`a au  
 No na pali hula`ana nei  
 O Laupahoehoenui me Laupahoehoeiki,  
 Na Kane me Kanaloa i kanu,  
 No`u akua o ka lewa lani, ka lewa nu`u,  
 O ka `awa popolo a Kane i kau iluna,  
 I ulu iluna, i lau iluna, i o`o iluna,  
 I hului ia e Makali`i pa`a iluna  
 I ki`ina ia i ka `iole moku ka `alihi  
 Helelei ilalo nei, ulu laha i ka honua  
 Aha`i ka manu kau iluna o ka la`au  
 Iho mai ka `awa hiwa me ka makea  
 Elua laua.  
 O ka papa`ele me ka papakea  
 Elua laua.  
 O ka mo`i me ka mokihana,  
 Elua laua.  
 O ka nene me kawaimakaakamanu,  
 Elua laua.  
 Ho`awa ko `awa e Kane i ka wai  
 Ina ka `awa, pupu i ka i`a  
 No ko pulapula no Hanoalele  
 Amama ua noa, lele wale ho`i.

Here is `awa from me, Awini,  
 A fisherman I am  
 Of the inaccessible cliffs  
 Of greater Laupahoehoe of lesser Laupahoehoe,  
 A plant set out by Kane and Kanaloa,  
 My gods of the heavens above and the heavens below,  
 The `awa popolo of Kane, that existed above,  
 Grew above, leafed above, ripened above.  
 It was seized by Makali`i and hung on high.  
 The rat ascended and chewed the rope that held it.  
 Down it fell, multiplied and spread over the earth.  
 The birds carried some up into the trees,  
 The `awa hiwa and the makea came down,  
 A pair were they.  
 The dark papa and the light papa,  
 A pair were they.  
 The mo`i and the mokihana,  
 A pair were they.  
 The nene and the ka-wai-maka-a-ka-mau,

A pair were they.  
The **`awa** of **Kāne** is mixed with water,  
The **`awa** is drunk, fish is eaten for aftertaste.  
This is for your offspring, Hanoalele,  
Amama, it is freed, it has flown.  
(Anonymous 1894, translation by Pukui in Titcomb 1948)

The chanter has here gathered together some of the salient points in the legendary history of **`Awa** – that it was set out by the gods, **Kāne** and **Kanaloa**, that for a time it was denied by mortals, or else almost disappeared during a famine or blight, and that it later spread widely. Some was carried to the trees by birds, and there flourished. And then he tells us some of the varieties, the pairing signifying varieties that were similar (Pukui in Titcomb, 1948). This chant is reflective of, “an old Hawaiian tradition which would make it appear that **`Awa** was indigenous in Hawai`i. The brewing and drinking of **`Awa** is particularity identified with **Kāne** and **Kanaloa**, two gods who are primordial. That they planted **`Awa** is indicated by the (above) chant, which was used when **`Awa** was offered to the gods” (Handy et al., 1991).

Kamakau (1976A), also states that **`Awa** was native to Hawai`i, and that the gods brought it down from their realm called Hoanianiku. Kamakau does not, however, neither indicates which gods he is referring to or the location of Ho-anianiku. In another text Kamakau (1996) states that **`Awa** has been in Hawai`i since ancient times, but not since the beginning of time, because **Lono** first got the plant from west of the place called Ololoimehani (**i lalo o Ololoimehani**); and then it was **Kāne** and **Kanaloa** who brought it to Hawai`i and planted it at Alanapō, Ke`ei, Hawai`i.

There are a multitude of origin stories for **`Awa** in Hawai`i. This could be interpreted in several different ways. It could be evidence that there were several introductions of **`Awa** to Hawai`i. Because of **`Awa**’s importance in Polynesian culture it would have been a commonly chosen plant to take along on a trans-Pacific voyage. It is likely it was brought to Hawai`i by several different voyages and from several different places. The descendants of each group of voyagers might have credited their ancestors with bringing **`Awa** to Hawai`i, which would explain the many versions of the **`Awa** origin story. However, there is also another interpretation, one that would explain some of the more obscure origin stories like the ones cited by Mana (Fornander 18916-1920A) and Kamakau (1976A). It is possible that the voyagers who brought **`Awa** with them to Hawai`i also brought along their own origin stories for **`Awa**. These may have been retained with, or without, the adoption of Hawai`i place names into the story. Either way these **`Awa** origin stories are interpreted, they do set a foundation in our understanding of **`Awa** as a significant plant in the Hawaiian culture.

# ‘AWA AS AN OFFERING

## Overview

Just as taro, sweet potato, and breadfruit are food (**‘ai**) for Hawaiians (**kānaka**); **‘Awa** is food (**‘ai**) for the gods (**akua** and **‘aumakua**). Poepoe (n.d.) defined **‘ai** as such in his dictionary of the Hawaiian language (... **ka ‘Awa, he ‘ai ia na ke akua**). This made it ideal as an offering for the gods. Other foods are used as offerings<sup>4</sup> – such as **pua‘a** (pork), **i‘a** (fish), **moa** (chicken), **mai‘a** (bananas), etc., depending on the circumstances, but **‘Awa** is the supreme offering. Kuaea (1867) describes **‘Awa**’s pre-eminence as an offering,

“There are many things offered to the gods, such as the **pua‘a**, the **moa**, the **‘ilio**, the **i‘a**, the **‘Awa**, and so on. The **‘Awa** was the best of them all. If other things were given, **‘Awa** came first.” (Kuaea 1867, translation by author)

Fornander (1916-1920) confirms this, “**‘Awa** was supposed to be the favorite of the gods, hence an acceptable offering on all occasions ...” and “**‘Awa** was religiously taught as being the most essential offering to propitiate the favour of the gods.” Kamakau says: “Over the **‘Awa** cup were laid the **kapus** of the chiefs, the **kapus** of the gods, the oaths sworn... to gods and men, and the... offerings for sins...” And Pukui corroborates this by saying that in olden times the primary offering was **‘Awa**, which was the gift most desired by **akua** and **‘aumakua** (Handy and Pukui 1972J), and **‘Awa** was so important that if only one thing were offered, it must be **‘Awa** (Pukui in Titcomb 1948).

While **‘Awa** is a food for the gods (**akua** and **‘aumakua**), it is important to realize that all of them had different relationships with **‘Awa**. All of the **akua** and **‘aumakua** have different personalities and different histories. Understanding this, and their respective relationships to **‘Awa**, will help us to understand the relationships of the gods (**akua** and **‘aumakua**) to the Hawaiian people.

## The Pāpāi‘awa Ceremony

Most ceremonial circumstances called for **‘Awa** in drink form, but some required a whole living **‘Awa** plant (**awalau**), or occasionally a whole root section (**pū‘awa**<sup>5</sup>).

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<sup>4</sup> These offerings would consist of specially selected varieties which were dependant on the circumstances.

<sup>5</sup>The most common offering of **‘Awa** is in liquid form. However, chants and prayers accompanying such ceremonies will often refer to the **‘Awa** as a “**pū‘awa**.” Occasionally this whole root would be

**Pāpāi`awa**<sup>6</sup> is a term that has been affiliated with ceremonial and religious offerings of `Awa in liquid form.

Although there are only a few known examples for ceremonies that have been termed **pāpāi`awa**, a general trend can be seen as to what kind of ceremony this is. It seems to be a ceremony in which `Awa, in liquid form, is offered to a specific god – or to various gods, that is primarily religious in nature. Even though there are rituals and ceremonial aspects applied to other occasions that call for the consumption of `Awa, such as an **ali`i** gathering for recreational drinking or political meetings, or for medicinal applications, there are no known examples of this term being applied to consuming `Awa under these other circumstances. While none of these aforementioned situations were devoid of some religious components while partaking of `Awa, their primary purposes were not religious, and therefore, seemingly, not referred to **pāpāi`awa** ceremonies.

Because there are only a few recorded examples of **pāpāi`awa** ceremonies known to exist it cannot be clearly defined. Though a general trend can be seen, care needs to be taken when applying this term. There are only four Hawaiian writers – Kamakau (1976G), Poepoe (1906, 1909<sup>7</sup>), Desha (2000), and Hale`ole (Beckwith 1997) – who are known to have included this term in their recorded **mo`olelo**. Kamakau, whose body of work is the most extensive of the four, is only known to have mentioned the term once. While what these writers have termed as **pāpāi`awa** seems to be the same thing that other Hawaiian writers (Pukui n.d. B; Handy and Pukui 1972A,E; Kamakau 1976H; Kekahuna 1963A) are describing, the conspicuous lack of this term by the later three writers lends to caution about making a definitive description of a **pāpāi`awa** ceremony.

### Pāpāi`awa Defined

The term “**pāpāi`awa**” is defined by Andrews (1865) as “A form of worshipping the gods.” According to Pukui and Elbert (1986), it is a “ceremonial offering of kava, especially to free one from the necessity of completing an oath or vow; to perform such a ceremony.” They reference Haleole’s story of Laieikawai (Beckwith 1997) in which `Aiwohikūpua and some of his lower **ali`i** perform a **pāpāi`awa** ceremony to ask his god, **Lanipipili**, to be freed from the necessity of completing an oath or vow. This example that Elbert and Pukui (1986) base their

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the offering, but more often than not, a **pū`awa** is probably referred to in chants because it is a single root section of `Awa which is the general amount required to prepare the `Awa beverage.

<sup>6</sup> **Pāpāi`awa** is spelled “**pāpāia`awa**” by some authors. It is a term that is not known to have been clearly defined.

<sup>7</sup> Poepoe 1909 is thought to be the author who wrote under the pseudonym Hooulumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai 1909.

definition on does not, however, seem to be the common circumstances in which a **pāpāi`awa** ceremony was performed.

Kamakau (1976G), in his writings first published in 1865, indicates a very close link between the act of prayer at a **Pōhaku o Kāne** altar and the ceremony he termed, “**papaiaawa**.” He also suggests that it was a responsibility that fell upon men to perform. Kamakau uses the word, “**maka`āinana**” when describing those who performed such ceremonies. This is an important reference. It shows that the **maka`āinana** class did use `Awa in some religious and ceremonial capacity. While the **Ali`i** and **Kahuna** classes would use `Awa for large scale ceremonies, and upon **heiau**, `Awa was such an important offering that it was utilized by the common people as well. It also shows that the **pāpāi`awa** ceremony was not a high religious ceremony that demanded a **kahuna**.

Elbert and Pukui (1986) did not specify if the `Awa used in **pāpāi`awa** ceremonies was in liquid or plant form, however, all known examples of **pāpāi`awa** ceremonies involve offerings of `Awa in liquid form. Among these few known examples, a common trend shows that `Awa in liquid form is offered to a god to ask for help of some sort.

As Desha (2000A) describes, when Kalani`ōpu`u returned, defeated, from Maui, he wasted no time in preparing to go back to battle. One of the things that was necessary for him to do was to ask for the help of his god, **Kūkā`ilimoku**. He did this with a series of **pāpāi`awa** ceremonies.

#### Example of a Pāpāi`awa Ceremony Performed by Papa

**Papa**<sup>8</sup> was the wife of **Wākea**. Poepoe (1906) published a part of their **mo`olelo**. When they were living in Kalihiuka, O`ahu; **Wākea**, in **Papa**’s absence, was abducted by the guards of `Olopana, the ruler of O`ahu. When she returned she learned that he was to be executed. She did not know if he was still alive or not, nor did she know what to do. She conducted a **pāpāi`awa** ceremony to ask that these things be revealed to her.

**Papa** found out about her husband’s impending doom when she returned home from the reefs of He`ei`a. She ran into a farmer named **Kali`u** who told her what had happened. When she realized that it was her husband that he was talking about she asked him if he had any `Awa. He replied that he only had a few rootlets of `Awa (**huluhulu`Awa**). **Papa** indicated that the mere rootlets were sufficient, and asked him to bring enough to make two or three chewed masses (**māna**) of `Awa and not any more. He was also to bring all the necessary paraphernalia for the preparation of the `Awa. **Papa** explained that he was to do this so that they could see, through the process of **hailona** (divination), if **Wākea**

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<sup>8</sup> **Papa** is also known as **Haumea** (Poepoe 1906). She is the cosmogonic deity whose name is often translated as “Earth Mother.” Her husband, **Wākea**’s, name is often translated as “Sky Father.”

would live or die. Kali`u suggested that they return to her house to do this process because they were at an inappropriate place (**he puu kahuahua paha o waho nei la**). She replied, “No,” and that they were to remain outside and in the open so that the sun could see their `Awa ceremony (**pāpāi`awa**). **Papa** went on to say that even though it was a seemingly bad place to perform the ceremony, it was actually the right place under the circumstances (**He oiaio, o puu kahuahua io no keia; aka, he puu hua no ke ola, a he puu hua no ka make; puu hua no ka pomaikai, a he puu hua no hoi no ka nele**<sup>9</sup>). Kali`u went to get the `Awa paraphernalia and when he returned she told him to masticate the `Awa. He agreed but explained that there was no water with which to prepare the `Awa. **Papa** told him to masticate the `Awa and she would get the water. She created the spring called Pūehuehu, and told Kali`u to get the water needed for the ceremony. He did as she said, and when he returned he was in complete awe at what he had seen. He prepared the `Awa and presented it to her. **Papa** said that it was good (**ua pono**), and told him to pour it into the coconut cup and give it to her. Kali`u gave her the cup, she reached for it, and presented her prayer (**uhau ihola i ka pule**).

Eia ka awa, e ke akua,  
 He ai nau e ke akua,  
 He ai na kini, na ka mano ame ka lehu o ke akua,  
 O ke akua i ka po loa,  
 O kini o ke akua, lau a menehune ke akua–  
 Mai ka hikina a ke komohana  
 Mai ka la kau a ka la komo,  
 Mai kai Koolau a kai Kona,  
 Mai ka paa iluna a ka paa ilalo  
 Mai ka hooku`i a ka halawai,  
 E halawai apau, eia ka ai, ke o,  
 Eia la he awa–  
 He awa nana pono, he awa nana hewa,  
 He uli pono, he uli hewa.  
 He ola, he make,  
 Huaina ke ola o ke kanaka  
 O ke ola nui, o ke ola loa  
 Au a ke akua,  
 Ola kuu aloha, ola loa no–  
 Amama – Ua noa – lele wale

Here is the `Awa, O gods,

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<sup>9</sup> The word **kahuahua** is not in either of the Hawaiian dictionaries. A more complete understanding of this word would allow for inferences to be made into why the farmer assumed it was an inappropriate place to conduct a **pāpāi`awa** ceremony.



Food for you O gods,  
 Food for the great multitude of gods,  
 The gods of the long night,  
 The multitude of gods all working together,  
 From the east to the west,  
 From the rising of the sun to the setting of the sun,  
 From the windward sea to the leeward sea,  
 From the firmament above to the firmament below,  
 From the zenith to the horizon,  
 Come and meet here, here is the food, the provisions,  
 Here it is, **`Awa**,  
**`Awa** to see the right path, **`Awa** to see the wrong path,  
 A sign of good, a sign of evil,  
 Life, death,  
 Life gushing forth for man,  
 Great life, long life,  
 The currents are directed by the gods,  
 Life for my love,  
 Long life indeed,  
**Amama**, freed is the kapu, it has flown away.  
 (Poepoe 1906, translation by author)

When **Papa** looked into the cup she was surprised to see that the oily film, that floats in the cup (**ka punohu o ka `Awa**), was forming a pattern on the right side. She gave the cup to Kali`u and said, “Our gods are showing us that the man, for whom we have affection, lives. The gods are on our side, ready to help to fulfill our wish. He lives! The **`Awa** of our gods has been drunken!”

There are several interesting points in this example. First of all it is a female who is performing the **`Awa** ceremony. A common perception is that females did not drink **`Awa** or partake in such ceremonies (Lebot et al. 1997). Although it is not clearly stated that **Papa** actually drank the **`Awa**, it is assumed that she did. Doing so would be consistent with the other examples of **pāpāi`awa** ceremonies. Second, the ceremony consisted of a female and a male participating together, with the female having a more prominent role. A common misconception is that because men and women were forbidden to eat together they were also forbidden to partake of **`Awa** together. This does not seem to be true at all (see discussion on females and **`Awa** in the following chapter). Thirdly, she is an **akua** asking for help. In the story her great **mana** is evident in her ability to create springs and do other seemingly magical feats, yet she needs to perform this ceremony to ask her **akua** to help her to see the fate of her husband. Although she is a cosmogonic deity, there are **akua** who are mentioned before her in the **Kumulipo** chant (Beckwith 1951) and so it is not inconceivable that she has **akua** of her own. Fourth, an **akua** and a **kanaka** are participating in the same ceremony together. This is notable because the two are of different classes in every way imaginable. Fifth, the **akua**, **Papa**, is

offering up the **`Awa** drink which had been prepared by a lowly farmer. Apparently, the preparation of the **`Awa** is not as important as the presentation in this type of ceremony. It seems that almost anybody can prepare the **`Awa**, however, it takes somebody with a significant amount of **mana** to actually chant the prayer and offer the **`Awa**. And lastly, there is, apparently, appropriate locations to perform such ceremonies. The farmer described the lay of the land and “**pu`u kāhuahua**,” and assumed that it was therefore an inappropriate location. The word, “**kāhuahua**” is not in any Hawaiian language dictionary so speculation as to why this site was considered inappropriate is limited.

### Examples of Pāpāi`awa Performed by Kamehameha

Desha (2000C) gives further insight into the **pāpāi`awa** ceremony. After the care of the god, **Kūkā`ilimoku**, was bestowed upon Kamehameha, he embarked upon a journey to return to Kohala. He performed several **pāpāi`awa** ceremonies along the way. It is not clear for what purpose these ceremonies were conducted. However, the circumstances and seriousness of these ceremonies was important enough to be noted. Interestingly, even though it was Kamehameha’s responsibility to perform the ceremony, it was Kekūhaupi`o who actually prepared the **`Awa**. Just as in the above example, it seems that the responsibility of preparation did not always fall upon the one whose responsibility it was to actually perform the ceremony. The preparation is apparently not taken lightly. It takes a certain level of concentration and reverence. It is so serious that when Kekūhaupi`o was preparing the **`Awa** and Kamehameha asked him an unrelated question, Kekūhaupi`o completely ignored him and concentrated on the preparation. Also evident is that the ceremonies seemed to correspond with either beginning or finishing significant legs of the trip.

### Pāpāi`awa Examples from Kawelo

In the story of Kawelo (Hooulumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai<sup>10</sup> 1909) further insight into the time, frequency, and sanctity of **pāpāi`awa** ceremonies are seen.

“It was dusk when they arrived outside of the housing compound. It was the time of Kalonaikahailaau’s **`Awa** ceremony (**pāpāia`awa**), therefore nobody was allowed to pass back and forth in front of the house.” (Hooulumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai 1909, translation by author)

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<sup>10</sup> Hooulumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai, judging by the style of writing, is believed to be a pseudonym for Joseph Moku`ohai Poepoe.

Later on in the story the author describes what he calls a “**kapu `Awa**”<sup>11</sup> ceremony. Within the context, it seems to be the same as a **pāpāi`awa** ceremony.

“When Kanewahineikiaoha arrived home only her mother was there. Kalonikahailaau (her father) was not there at that time. He went to the front house<sup>12</sup> to perform the **kapu `Awa** ceremony for his god (**no ke kapu awa ana no kona Akua**) like he always did every evening. The house in front was where he worshiped (**kahi e hoomana ai**) his god. It was a sacred house (**hale kapu**) in which women were not allowed to enter.”  
(Hooolumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai 1909, translation by author)

Although not described in so many words, it seems that the author is referring to the ancient ritual in which the head male of the family would go into the **hale mua** and perform prayers and offerings to the **Ipu-o-Lono**, or some other altar, on a daily basis (see discussion later in this chapter). Because of these daily offerings by Kalonikahailaau, his **akua** was extremely powerful. His **akua** had so much **mana** that it was able to clog up the ears of Kawelo’s **`aumakua** who was trying to spy on him. Thus, it is through ceremonies like the **pāpāi`awa** that **mana** could be increased.

#### More Pāpāi`awa Performed by Kamehameha

**Pāpāi`awa** ceremonies were much more diverse than the ones listed above. As Desha (2000D) describes, when King Kalani`ōpu`u died, a **pāpāi`awa** ceremony was performed to cleanse the kapu of the king’s corpse. The responsibility fell upon Kamehameha to prepare the **`Awa** ceremony. In this case it could not have been Kamehameha, and Kamehameha only, who could prepare the **`Awa**. The task of preparation did not fall upon Kekūhaupi`o as it did when Kamehameha performed the **pāpāi`awa** ceremonies for his god **Kūkā`ilimoku**. This **pāpāi`awa** ceremony could only be performed by Kamehameha because, according to the edict laid down by King Kalani`ōpu`u, Kamehameha was to be the one to prepare Kiwala`ō’s **`Awa**.

Interestingly, Kamehameha was also bequeathed the duty of caring for the god **Kūkā`ilimoku**, yet Kekūhaupi`o was able to prepare the **`Awa** in that case. Perhaps that is because this is a different type of **pāpāi`awa** ceremony, one more akin to the one performed by **Papa** in which Kali`u, the farmer prepared the **`Awa**. There seems to be a broad range of circumstances for **pāpāi`awa** ceremonies, so when trying to define the term care must be taken to not define it too narrowly.

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<sup>11</sup> “**Kapu `Awa**” is a very rare term. It is not known to be mentioned in any other texts. Probably the same as a **pāpāi`awa** ceremony.

<sup>12</sup> “The front house” was stated in Hawaiian “ka hale ma mua.” It may have been a misprint of “ka hale mua” or men’s house in which women could not enter.

It can be argued that this was not truly a **pāpāi`awa** ceremony because the author, Desha (2000), later on in the text also refers to the event as an “`aha **pāpāi`awa**,” (ceremonial gathering) and later again as an, “`aha inu `Awa” (drinking gathering). The lack of consistency could be seen as creative license, or it could be that the term **pāpāi`awa** is a rather broad one that encompass not only ceremonies that are appealing for help for a specific purpose from a specific **akua**, but any ceremony in which the drinking of `Awa is primarily religious in nature and not for recreational purposes.

Kamakau (1866), in his writings on the subject has termed the event an, “`aha `Awa o ke ali`i,” (an `Awa gathering for the ali`i). In his description of the same event, he did not go into the detail that Desha (2000D) does about the preparation and religious aspects of the `Awa ceremony. Kamakau describes the event as more of a political gathering, and Desha describes it as more of a religious ceremony. Perhaps that is why the two differ in the way in which they label the event.

As is the case with the above ceremony to cleanse the King Kalani`ōpu`u’s corpse, some **pāpāi`awa** called for particular things in the preparation process under certain circumstances. Sometimes the water used in the preparation of the drink had be water from a special spring or a particular kind of coconut. Also, special occasions required certain ingredients such as `Ōlena and particular sugarcane varieties to be added into the `Awa liquid. Furthermore, depending on the circumstance, certain grasses or sedges might be required to strain the drink. All these were likely chosen for their symbolic connotation; perhaps because of the name of that plant variety, where it is from, it being a physical representation (**kinolau**) of one of the gods, or some other reason.

This is the only known recorded example, of what is specifically termed as a **pāpāi`awa** ceremony, in which things other than `Awa are used in the process of ceremonial offering. It is important to recognize this because it broadens the understanding of what a **pāpāi`awa** ceremony is.

The reason why these things were added was not explained. The **Niu lelo** (yellow coconut) was used to mix the `Awa for the men, whereas the **Niu hiwa** (black coconut) was reserved to be used in mixing the `Awa for the god. This was probably due to the fact that certain offerings reserved for the gods were often black in color, such as **Pua`a hiwa** (black pig) and **`Awa hiwa** (black `Awa). Pukui and Elbert (1986) explains that the difference between the two varieties of coconuts is that the **Niu hiwa** is used ceremonially, medicinally, and for cooking; whereas, the **Niu lelo** is used in many ways, but not ceremonially or medicinally. Poepoe (1906) explained in his version of the story that the **Niu hiwa** coconuts for this ceremony were from the famous coconut grove in Wailua, Kaua`i, and were the sacred coconuts planted by La`a-mai-Kahiki. The **Pi`ihonua** cane was perhaps a red variety whose name, and perhaps color, symbolically referenced the high status of the ali`i. The `Ōlena might have been added for its cleansing properties, perhaps the same reason that it is included in the **pikai** ceremony that is used to cleanse the bodies of those who participated in the burial of dead ali`i.

Before King Kalani`ōpu`u died, he bequeathed the governance of the kingdom to Kīwala`ō, and the care of the religion to Kamehameha. That is why it was Kamehameha's duty to perform the **`Awa** ceremony. In this case (Desha 2000D), as can be seen in the complexity of the preparation process, it was an especially rigorous ceremony. Under these circumstances the rituals of ceremony were strictly adhered to. These rituals included the drinking order of those present. As happened in this example, any disregard of the ritual would have grave consequences.

It is not explained if only Kamehameha and Kīwala`ō were allowed to partake of the **`Awa** in this ceremony; or if the two attendants – Kekūhaupi`o and Kuikuipua – were only allowed to be present and not allowed to drink; or whether they, too, could join in the ceremonious drinking, but only after the two higher **ali`i**. Either way this act created a schism between the two cousins, which eventually led to war. As Desha (2000) describes, in the time after this happened it was widely debated as to whose fault it was, Kamehameha's or Kīwala`ō's. In time, it seems that most people placed the blame on Kīwala`ō.

### **`Awa and the Ancestors**

**`Aumakua** are intimate members of the human family, and therefore spiritual relationships with them are especially close and their presence is sought for feast and festivity as well as in time of crisis. They act as healers and advisors, counteracting troubles and punishing faults (Gutmanis 1983E).

Pukui (n.d.) goes into depth about **`Awa**'s importance in maintaining relationships with one's ancestors. Although she does not state it, it seems that she is describing a **pāpāi`awa** ceremony<sup>13</sup>. It is consistent with the type of ceremony described and labeled as "**pāpāi`awa**" in the writings of Kamakau (1976G), and Hooulumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai (1909).

"As an offering for any and all ceremonies the **`aumakua** and **`unihipili** liked **`awa** the best. It was considered food for the gods and essential for the nourishment and growth of the spiritual beings, just as **poi** and fish were essential to man. The **`unihipili** and **`aumakua** were family spirits, and the families to which they belonged offered them **`awa** daily. This was their food for strength and growth and procured their good will." (Pukui n.d. A)

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<sup>13</sup> As is evident in the definition of the word "**pāpāi`awa**" given in Pukui's dictionary of the Hawaiian language (Pukui and Elbert 1986), it is not a term that she is familiar with. Her definition is purely based on the one example given in the story of Lā`iekawai (Hale`ole 1997) which was first published in 1919. While much of the religious **`Awa** ceremonies she describes would likely be termed **pāpāi`awa** by other Hawaiians, she does not mention it anywhere.

**`Awa** was of such preeminent importance as an offering that its use was not restricted to **pāpāi`awa** ceremonies, but it was used across a wide spectrum of ceremonial offerings. No matter what type of ceremony it was, special kinds of **`Awa** were usually used.

“The best liked varieties of **`awa** for offerings were the **hiwa**, the **papa**, and the **moi [mō`i]**. Whole **`awa** root (**pū`awa**) was more highly considered than one that was divided. That is, when the root was dug out of the ground, the undivided root was set aside for the offering. It might be cut up to make it easier to dry, but every part of the root must be kept together.” (Pukui n.d. F)

### **`Awa Varieties Used in Offerings**

The color or variety of an offering was extremely important Pukui (n.d. N). The **hiwa** and the **mō`i** varieties both have distinctive eggplant-purple stems and are both very potent (personal observation). It is likely that a combination of these two properties is the reason for their desire as offerings. Pukui (Beckwith 1940) states that the **papa** variety was especially favored by the female deities. This was likely due to it sharing its name with the female cosmogonic deity, **Papa-hānau-moku**.

As is the case with many of the ceremonial offerings of the ancient religion, if a particular offering could not be obtained there was always an acceptable replacement. According to Pukui (n.d. K), the **Pōpolo**<sup>14</sup> plant (*Solanum* spp.) is a replacement for **`Awa** under these circumstances. It has an eggplant-purple fruit that has the same distinctive color as the stems of the **hiwa** and **mō`i** varieties of **`Awa**. This, and/or its association with **Kāne** as a **kinolau** of his, are the likely reason as to why it was used as suitable substitute. The same amount of ritual was used when gathering **Pōpolo** for ceremonial use as was used in gathering **`Awa** for ceremonial use.

### **The Act of Offering**

**`Awa** was often presented to the ancestors along side other food offerings. Pukui (n.d. N) describes where **`Awa** fit in.

“Before an offering was cooked, it was laid out on **ti** leaves and with prayers dedicated to the **`aumakua**. Each article was touched with as it was mentioned. The dedicatory prayer was something like this, “O **`aumakua** of the [day and of the] night, from the sun rise to the place of rest; from the

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<sup>14</sup> There is a variety of **Pōpolo** called **Pōpolo-`ai-a-ke-akua** (*Solanum sandwicense* Hook. & Arnott). The name can be translated to “the-**Pōpolo**-eaten-by-the-gods.” Perhaps this name indicates that this variety of **Pōpolo** was especially sought out for as a replacement for **`Awa**.

north to the south; from the zenith to the horizon. Here is the red fish, here is the **`awa**. An offering a gift to you.” And then mention was made of the purpose of the offering. After the fish was cooked and the **`awa** prepared, another prayer was offered before eating. At this time the words, “**O ke aka kā `oukou, o ka `i o kā mākou**,” (the essence is yours, the material is ours) were included in the prayer. The offering was consumed by the members of the family; the **`aumakua**, their invisible guests, partook of the “shadow” or essence.” (Pukui n.d. N)

In the post-contact period, as the use of alcoholic beverages crept into the fabric of Hawaiian society, alcohol, in some circles, became an accepted substitute for **`Awa** as an offering to **Pele** (Pukui n.d. M).

Pukui’s description of the process seems consistent with the practices that have been labeled, “**pāpāi`awa**,” however her conspicuous lack of mentioning the term only reinforces an insecurity of trusting in a solid definition for this term. It is possible that this was the general preparation method for a variety of ceremonies in which **`Awa** was offered to ancestral gods, including those that would have been labeled “**pāpāi`awa**.”

### Cleanliness of Offerings

Pukui (n.d. B, C, E) explains that in the common practice of offering **`Awa** to one’s ancestors (**`aumakua** and **`unihipili**) much care was taken in the preparation of **`Awa** that was to be offered to the ancestors. Special attention was always given to avoid defilement.

From start to finish, the utmost sanctity was observed when interacting with **`Awa**. The same amount of care that was given to the disposal of the **`Awa** dregs, at the completion of the ceremony, was given to the gathering and preparation of the **`Awa**.

“The dregs of the **`Awa** after the juice had been extracted were never carelessly discarded but were bundled carefully, and thrown into the sea or a running stream.” (Pukui n.d. G)

This was likely done with the understanding that all things involved in this had been endowed with a person’s **mana**, and it had to be disposed of properly lest it be used against that person spiritually.

Handy and Pukui (1972I) give an example of a prayer in which **`Awa** was probably offered in a way that would likely resemble the preparations and care in disposal as described about.

“On occasions of crisis or festivity, when the presence of **akua** or **`aumakua** was desired because their help was needed, or required for reasons of

ceremonial and ritual, the following was the **pule kāhea** (calling prayer) that was used by her relatives:

**Eia ka `ai e ke akua,  
He `ai lani wale no.  
`Inu a ke kama iki  
I ka `awa lau lena o ke-ahi-a-laka  
Halawai akula me Pele,  
Ke `ako la i ka lehua,  
Ke kui la i kai o Hopoe e,  
He `awa no na Kāne o ka lani,  
He `awa no na wahine o ka lani,  
He `awa no na Kāne o ka Lua,  
He `awa no na wahine o ka Lua,  
Pela aku, pela mai.  
E mu ka waha,  
E holoi i ka lima,  
`Eli`eli kapu, `eli`eli noa,  
Noa ke Kū, noa ka hele,  
Noa kanawai o ke akua.**

Here is food, oh gods,  
Only a morsel of heavenly food,  
A gift from me, thy little child,  
Of the yellow-skinned **`awa** of **Ke-ahi-a-laka**.  
(My prayer) has gone to meet **Pele**,  
Who is gathering **lehua** blossoms,  
Who is stringing them into wreaths by the sea of **Hopoe**,  
Here is **`awa** for the men of heaven,  
Here is **`awa** for the women of heaven,  
Here is **`awa** for the men of the Pit,  
Here is **`awa** for women of the Pit,  
Hither and yon,  
**Come rinse out your mouths and wash your hands,**  
**This (rite) is sacred and profound; let the kapu be released,**  
Freed that we may stand, that we may walk about,  
Freed by the decree of the gods.” (Handy and Pukui 1972I)

### Importance of Prayer

According to Gutmanis (1983R) there were prayers to commence the start of a new day. The example given in Gutmanis (1983R) contains a reference to an offering of whole **`Awa** root (**pū`awa uli, pū`awa kea**), however there is no



mention of the process nor of an offering even taking place. Since this is a prayer uttered in the early morning, which is not the typical time to consume `Awa, this could be, perhaps, a call to the ancestors to recall that they had been offered `Awa in the past and therefore should listen to the prayer at hand. However, `Awa can be offered in the morning under certain circumstances (Kamakau 1991D), and perhaps the above example is one of them.

Prayer was a part of daily life. In praying (**pule**<sup>15</sup>) one could ask for answers to be revealed in a dream or a vision. A common practice was to look for those answers in the `Awa drink by gazing into the cup (Pukui n.d. D, H).

### Use of a Haka

Sometimes one's ancestors demanded `Awa, not in liquid form, but in the form of a whole root (**pū`awa**) or whole plant (**`awalau**). This could be revealed in dreams or séances (Pukui n.d. H). When offering `Awa in these forms there were specific prayers or chants given, as opposed to prayers or chants used when offering `Awa in liquid form (Handy and Pukui 1972I).

According to Pukui (Handy and Pukui 1972 F, G) in a séance, the use of a **haka** (spiritual medium) was essential. These séances allowed living members of a family to communicate with ancestors for help and guidance. `Awa was an essential aspect of this process.

As Pukui (n.d. M) explains, if an `aumakua were offended it would turn its back on its descendant. Many offerings would be required to appease the offended `aumakua. Pukui describes many of these, yet `Awa, for some reason, is

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<sup>15</sup> Pukui (n.d.): Unlike the foreigners, the Hawaiians did not bow the head or close the eyes in prayer. They looked up and chanted or talked as though the `aumakua were visible and present. One of my delights was to go to the old Lunalilo Home at Makiki several years ago, and join the inmates in their worship. Some prayed to the Christian God in the same manner as had their people before them to the `aumakua, with open eyes and in familiar conversation, as to a dear friend who understood all.

Handy and Pukui (1972): The effectiveness or **mana** of a **pule** lay partly in the words and names used. The words of a prayer, like those of a **mele** or dance-chant, had to be good words in their connotations, and not words whose composition or sounds might be offensive to **akua** or `aumakua. And the proper names, be they personal or place names, must also be good in their connotations and pleasing to the beings listening to the prayer. The gods and guardians were relatives, more sacred and powerful than any living person. If a member of an **ali`i** family were chanting or dancing for the beloved (and, because of his **mana**, revered with awe) senior **ali`i**, the words and steps and gestures must be good and pleasing. Furthermore, the recital must be good and pleasing. Furthermore, the recital must be correct and unfaltering. A slip (**hala**, fault, error) of the tongue would naturally be displeasing to the **akua** or `aumakua listening to a **pule**, for it was disrespectful, and inaccurate. It would anger the god or guardian, as a forgetful or careless chanter or dance would anger an **ali`i**, or faulty workmanship would be contemptuously discarded by a master canoe builder (**kahuna kālai wa`a**). Hence it was that the composition and reciting of prayers was a form of craftsmanship, exactly as was canoe or image adzing.

Equally important is praying is the breath (**hā**). The **mana** of the prayer was in the words and names, but it was the breath that carried the words and names.

conspicuously missing. However, Kamakau (1991I) explains that angered **`aumakua** were the source of diseases known as **`aumakua** sickness. If this were recognized the many kinds of offerings, including **`Awa** were needed. Chun (1994II), also, gives many examples of such circumstances in that **`Awa** was an essential offering to regain the favor of an **`aumakua**.

Not all prayers to **`aumakua** had to necessarily include the mention or offering of **`Awa**. Of the two prayers that Gutmanis (1983E) gave as examples of **`aumakua** prayers, only one contains any mention of **`Awa**.

### **Manō (Shark) `Aumakua**

For Hawaiians, **`aumakua** are embodied in, or can often take on the form of certain animals such as the **manō** or others. These embodied forms are constant throughout the course of several generations and families will identify with their respective **`aumakua** for the duration of that time. If, for some reason, a descendant did not know who the **`aumakua** was or what form the **`aumakua** would take, there were certain ceremonies to go through the process of finding an **`aumakua**. These ceremonies required the offering of an **`awalau** (Kamakau 1991C).

As is consistent with offerings for ancestors, the physical embodiment of **`aumakua** were also offered **`Awa**. Each individual **`aumakua** would have its own desired offering, but general trends can be seen among classes of **`aumakua**. In general, **manō** typically liked **`Awa** offered in a certain way, the **mo`o** had theirs, etc.

In old Hawai`i, certain sharks were deified. Most of these were worshiped in the capacity of an **`aumakua**. The term **`aumakua**, in reference to **manō**, does not include all sharks or even a species of shark. It is important to note that these sharks are specific, individual sharks and each has its own name. **`Aumakua** were carefully cared for because they were members of the family. They were also a source of help and guidance in times of need. Shark **`aumakua** were especially cared for by families who lived by the sea where the shark's powers were of great influence (Kamakau 1991G).

All of these **`aumakua** sharks have, associated with them, stories of saving their descendants who were in peril upon the open ocean. Unfortunately most of these have been lost to time. The relationship between Hawaiians and their shark **`aumakua** was a mutually beneficial one that resulted in lifelong relationships. As is seen in the story of Luia (Kamakau 1991E), **`Awa** was the payment for a shark **`aumakua**'s guidance. Another such example is of **Pakaiea**, the shark that was fed bananas and **`Awa** (Handy and Pukui 1972B).

Sometimes these shark **`aumakua** had special plantings of their food, such as **Mai`a**, **Kō**, and **`Awa**. These patches would be dedicated to them and were **kapu** to all others. A breaking of this **kapu** would result in the shark killing the trespassers (Pukui 1962, Pukui n.d. J)

## Origins of Shark `Aumakua

Shark **`aumakua** are unique in that they could be born from human mothers. These sharks would then become guardians for the family. These sharks could be distinguished by their particular coloration or markings. This type of shark was fed and cared for by a chosen member of the family. A favorite food of these sharks was **`Awa**. As long as these shark **`aumakua** were cared for properly, they would be guardians over the family for generations<sup>16</sup>.

The story of **Ka-`ehu-iki-manō-o-pu`ulua** (Uaua 1870-71) was about a shark born of a human mother, and who was raised as a beloved child. This story describes the birth and care of such a shark. During the shark's infancy, the human-mother's milk was used as the liquid with which to strain the **`Awa** that was used to feed the shark. In it there is also a description of the process of anointing the shark with **`Awa** and the associated chant. Later the shark would help to get food for its parents, and in return he would be rewarded with **`Awa**.

However, there are other origins of these shark **`aumakua**. **`Aumakua**, in general, can be ritually transfigured through ceremonies that included offerings of **`Awa** and pig (Kamakau 1991G). A body could be ritually transfigured into a shark **`aumakua**, specifically, through an extensive ceremony that involves many sacrifices and offerings, the most important of which were the pig and the **`Awa** (Kamakau 1991F).

## **Mo`o (Giant Lizards)**

Another deified animal form was the **mo`o**<sup>17</sup>, or giant lizard. Unlike the shark, which was worshiped in the capacity of an **`aumakua**, the **mo`o** was worshiped as an **akua**. They were prayed to for the same reasons, for health, welfare, and fish; and were also given offerings of **`Awa** (Kamakau 1991G).

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<sup>16</sup> I have heard of several stories of sharks appearing at the funerals of their caretakers and never being seen again. These stories took place in the late 19<sup>th</sup> century and early 20<sup>th</sup> century as the caretakers, realizing the younger generations did not have the capacity to take on the responsibilities of caring for shark **`aumakua**, died. With them went the knowledge of caring for their shark **`aumakua**.

<sup>17</sup> Kamakau (1991G): The **mo`o** that were chosen to be worshiped were not the house or rock lizards (**mo`o kāula**, **mo`o ka`alā**) or any of those little creatures with which we are familiar. Not indeed! One can imagine their shape from these creatures, but these were not their bodies. The **mo`o** had extremely long and terrifying bodies, and they were often seen in the ancient days at such places as Maunalua, Kawainui, and Ihukoko (Ihukōkō?) at Uko`a. They were not seen just at anytime, but when the fires were lighted on the **ko`a** altars beside their homes. There was no doubting them when they were seen. They lay in the water, from two to five **anāna** in length, and as black as the blackest Negro. When given a drink of **`Awa**, they would turn from side to side like the hull of a canoe in the water.

Like the shark, humans can be transfigured into **mo`o** after death. Although the process is different, offerings of **`Awa** are at the center of this ritual as well (Kamakau 1991H).

### **Inside the Hale Mua**

Perhaps the most common kind of **`Awa** offering, in ancient Hawai`i, took place in the **hale mua**, the men's house. This practice, of offering **`Awa** to one's **`aumakua**, usually took place in the evenings.

Offerings of **`Awa** to the family **`aumakua** in the **hale mua**, and the associated prayers, were a daily practice. It is through this process that the head of the family received help and guidance (Handy and Pukui 1972A).

O.P. Emerson (1903), gives an example of a prayer that accompanies such an offering.

**“Na akua o ka po,  
Na akua o ke ao,  
E hoomau i ke ola  
O ka oukou pulapula,  
A Kolopupu,  
A Haumaka iole,  
Kanikookoo,  
Palalauhala,  
A ka i koko.  
(Na ka pulapula e pane mai)  
E-O.  
(A olelo a`e la ka makua)  
Amama ua noa.  
A lele wale akula.**

Ye gods of the night,  
Ye gods of the day,  
Perpetuate your scion  
Until crouching old age,  
Till his features become peaked and pinched with age,  
Resembling those of a rat,  
Till the rattle of his hobbling stick shall be heard,  
And his skin shall become yellow as the ripened pandanus,  
Till he is helpless with years, as to be hung up in a net.  
(The son of the house responds)  
Here I am.  
(The parent then closes with)  
So be it.

It is freed” (Emerson 1903)

A brief description of the process of worshipping **`aumakua** with **`Awa** in the **hale mua** is described in the story of Kawelo (Hooulumahiehie-i-ka-oni-malie-a-pua-lilia-lana-i-ka-wai 1909). It is described therein as a “**pāpāi`awa**” and then again, in another passage, as a “**kapu `Awa**.” This process occurred every evening and during it nobody was allowed to pass in front of the house.

### Ipu-o-Lono

The worship of the **akua, Lono**, was also done in the **hale mua**. Gutmanis (1983B), gives insight into the offering of **`Awa** to **Lono**<sup>18</sup>. **Lono**, the messenger, with restless eyes and many formed cloud-bodies, came to Hawai`i with the rushing of heavenly sound as a voice coming over the water<sup>19</sup>. Landing first on Maui, he brought with him the techniques of the farmer and became patron of the fertility of the land. As such he was represented in the men’s eating-house of each family by a gourd covered with woven materials and hung by cords attached to a notched stick. A little piece of **`Awa** was tied outside of the gourd. Mornings and evenings the family elder took the gourd and laid it at the door. He then faced outward and prayed, first for the chiefs and then for the commoners and then his own family. After that they chewed the **`Awa** and ate the food. The food, fish, and **`Awa** were then kept inside the gourd. An example of such a **Lono** prayer is given in Gutmanis (1983B).

Handy and Pukui (1972E) contrasts the daily offering of **`Awa** to **`aumakua**, with rites that were dedicated to the **akua Lono**. The daily offerings were performed primarily for the family **`aumakua**. Special rites of male passage involved dedication of a boy with initiation to **Lono**, the provider. **`Awa** was a key offering during such ceremonies.

Kamakau (1976H), describes the **Ipu-o-Lono** as a **heiau** to increase the growth of food (**heiau hō`ulu `ai**). He contrasts the large and structural **heiau** used by the **ali`i**, and the **Ipu-o-Lono** in the family’s **hale mua**. He describes the **hale mua** as the place where the **maka`āinana** would perform their offerings of **`Awa** and other things to the god **Lono**. In the larger **heiau**, such as the **Po`okanaka** which were dedicated to other gods, **`Awa** was sometimes not used as much as an offering as it was to conduct an **`Aha `Awa Ko`o** (**`Awa** assembly) – a unique kind of **`Awa** ceremony used to determine the victim to be sacrificed.

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<sup>18</sup> Gutmanis (1983): As the patron of agriculture, **Lono** is closely associated with sweet potatoes, pigs, gourds, rain, clouds, and heavy rain. As **Lono-puha**, he is also major patron of the **kahuna lā`au lapa`au** or herbal doctor. In this form he is associated with many medicinal plants.

<sup>19</sup> **Lono** was a child of **Kāne** and **Hina**, according to Amalu (Gutmanis 1983).

## Kāne and Kanaloa

In Hawaiʻi, **`Awa** is closely associated with the **akua** (gods) **Kāne** and **Kanaloa**<sup>20</sup> as it is a favorite drink of theirs. There are many stories of them, while on their travels around the islands, creating springs with **Kāne**'s magic staff because of **Kanaloa**'s desire to drink **`Awa**. Examples of these stories are seen in the recorded **mo`olelo** of various Hawaiian language newspaper writings (Naimu 1865, Waiamau 1865, and Mokumaia 1921) and audio recorded interviews (Akiona n.d., Keola Hū`eu 1984, Pukui 1962). **Kāne** is the one most often credited with bringing **`Awa** to Hawaiʻi from Kahiki.

Despite **Kāne** and **Kanaloa**'s strong association with **`Awa**, it does not seem to have been a common practice to offer the two of them **`Awa** in honor of their deeds and their famed fondness for **`Awa**. However, they were often remembered in the chants used in preparation of the **`Awa**. Seemingly, it was the chant and not the **`Awa** itself that was offered to them. (An example of this kind of chant is included in section AS BEVERAGE)

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<sup>20</sup> It is often stated by contemporary Hawaiian scholars that **`Awa** is a **kinolau** of **Kāne**, however this specific relationship was not readily mentioned in the sources that I reviewed.

Gutmanis (1983): With the vigor and lustiness of young adventurers, **Kāne** and **Kanaloa** came to Hawaiʻi traveling on the surface of the ocean from Kahiki. Landing at Ke`ei, Maui, the pair flung themselves into the joys of exploring new lands and wherever they went they celebrated the pleasures of life with **`Awa**. As they wandered around the islands they left behind them many springs which were brought into being when **Kāne** struck an outcropping of rocks with his **kauila** staff. The water which gushed forth was used for mixing with the **`Awa** which they had carried with them. Before moving on they planted **`Awa** around these new springs.

Although constant companions in their many adventures, **Kāne**'s name generally precedes that of **Kanaloa** in the stories about them as well as in the prayers to them.

In time, **Kāne** became the patron of fresh water and **Kanaloa** of the ocean, especially the deep ocean. Both are associated with canoes; **Kāne** as the builder and **Kanaloa** the sailor. **Kāne** as **Kāne-koa** is associated with the increase of **`o`opu** fish in the streams while **Kanaloa** is the **`aumakua** of the squid and octopus. To some extent both are also associated with medicine.

The east is spoken of as the "high road traveled by **Kāne**" or the "red road of **Kāne**." The west is called the "much traveled road of **Kanaloa**." The route of the northern limit of the sun (summer solstice, the longest day of the year) is called the "glistening black road of **Kāne**" and the southern limit of the celestial ecliptic (winter solstice, the shortest day of the year) is the "road of **Kanaloa**."

Individually, **Kāne** is associated with sunlight, bamboo, taro, sugarcane, **wauke**, **pōpolo**, and coral; **Kanaloa** is associated with ocean winds and bananas. Both are associated with red roosters and black pigs. **Kāne**, the fair one, has at least seventy aspects, epithets, or forms associated with him. In Hawaiʻi, **Kanaloa** has no such known forms. (In other parts of Polynesia the traditions of **Kanaloa** are stronger and there he is, perhaps, the most famous of the gods.)

Abbott (personal communication 2004): Because of **Kāne**'s association with taro he became the ranking Hawaiian god. Among his many emobimens were various forms of sea life such as rays and others.

When offering **`Awa** to one's god (**`aumakua/akua**), or whenever mentioning **`Awa** in any chant for that matter, it was a common practice to honor either **Kāne**'s bringing of **`Awa** to Hawai'i, or **Kāne** and **Kanaloa**'s association with it. In the chant, "**Auwē, he mai ho'i ē, Auwē,**" **`Awa** is used as a metaphor for hospitality and welcome. It is also a good example of how **`Awa**, and its association with **Kāne**, are often recalled in chants (Desha 2000B).

Although daily **`Awa** offerings were normally performed in the **hale mua**, at the **Ipu-o-Lono** shrine, if for some reason the family **`aumakua** were offended, offerings would be made at the **Pōhaku-o-Kāne**, or Stone of **Kāne** (1991B). It does not seem that the offerings, including **`Awa**, were offered to **Kāne** himself, but rather the family's **`aumakua**. The ceremony has a similar reverence to that of the daily one done to **Lono** in that there is complete silence with no movement about taking place.

## **Pele**

**Pele** is a very dynamic **akua**, and **`Awa** is greatly associated with her. She was a noted **`Awa** drinker. Her younger sister **Kuku`ena-i-ke-ahi-ho`omau-honua** (The-burning-hot-one-in-the-eternal-fire-in-the-earth), is the one who always prepared **Pele**'s **`Awa** (Handy and Pukui 1972C).

**Pele** is a female **akua** whose worship is generally limited to the island of Hawai'i, where she lives in the volcano at Kīlauea. **`Awa** is offered to **Pele** under many circumstances. These range from the most basic offering of the essence of the **`Awa**, before one of her followers would drink, to very complex ceremonies. These complex offerings would include ceremonies to calm her wrath, to awaken her fires, and to intern a body into her volcano. Under all these circumstances **Pele** was always honored with **`Awa** and other choice gifts. Her favorite varieties of **`Awa** are the **`Awa hiwa** and the **`Awa mō`i**, both of which are extremely dark varieties (Kekahuna 1963A, Cox 1930). **Pele** is one of the few **akua** who is offered **`Awa** in all three forms – as drink, whole plant, and whole root section.

### Chants for Pele

P.K. Kuhi (Anonymous 1995) gives an "**`Awa mele for Pele**," or an **`Awa** chant for **Pele**, entitled "**He `Awa i Kanu `ia e ke Akua**," or "The **`Awa** planted by the gods." He was born on O`ahu in 1861, but hailed from Kalihikai, Kaua`i. It is interesting that a chant from Kaua`i would be honoring **Pele**, who lived all the way on Hawai'i island. Perhaps Kuhi was a member of **Pele**'s line who, living on Kaua`i, and yet honored her with this mele. Or perhaps this is a chant honoring her for the time she spent on Kaua`i. None of these possibilities are recorded in the book. Presumably, this is a **mele** chanted before consuming **`Awa**.

**Pele** has her own **`Awa** offering prayers (Gutmanis 1983C). Gutmanis did not indicate under what circumstances this chant was done, but because she mentions within the text that it is a **kānaenae** chant it is presumably a chant done before drinking **`Awa**.

Gutmanis (1983Q) gives some examples of prayers used to ask of **Pele** to cease her devouring of the land. Two were given and both were recited after eating. Interestingly, there was no reference to **`Awa** in this second prayer. It is hard to say whether or not some people just did not use **`Awa** in these situations, or if **`Awa** was used and just not mentioned in the chant.

If no sign of **Pele**'s presence could be seen for some time the people of Puna would begin to miss her. Some, from the **Pele** line, were able to awaken her in her times of slumber. Gutmanis (1983Q) also gives an example of a chant to awaken the fires of **Pele**.

Kaleohano Kalili<sup>21</sup> (1956), in a recorded interview discusses the process of awakening **Pele**. The process includes an **Oli Hō`ala Pele**, or **Pele** awakening chant – of which he gives an example, and several **mōhai**. According to him there are many kinds of **Oli Hō`ala Pele**. The **mōhai** that he offered was **Pua`a hiwa**, and **`Awa hiwa** which was mixed with special water. He performed this ceremony because **Pele** had been sleeping for so long. After performing the ceremony, later that night **Pele**'s fires could again be seen.

William Kalaiwaa<sup>22</sup> was a Christian minister but he was also called a **kahuna**. On March 22, 1925, with George Kalama and “**Hoochie of Kau**,” he performed rituals, including the chant, “**`O Pele lā ko`u Akua**,” on the edge of Halemaumau to call **Pele** to return to the volcano. Although there was no eruption, when the offerings were ready to be cast into the pit there was an avalanche on the further wall. After the offerings, as an **`Awa** root was hurled over the observations platform into the pit, large clouds of steam gushed into the air (Gutmanis 1983 Q, R).

Kalaiwaa's chant is very similar, in content, to a version of “**`O Pele lā ko`u Akua**,” in Gutmanis (1983C); however, this would, presumably, be referred to as an **Oli Hō`ala Pele**, and not a **kānaenae** – as is the version in Gutmanis (1983C). In other words, they would be done in two different chant styles. The similarities are probably due to some contextual template on which **Pele** chants are based. The differences are probably due to there being two different circumstances under which the chants were performed. Some changes could also possibly be attributed to fitting the context of the chant into the chant style used in each occasion.

For those of the **Pele** clan it was an honor to be buried within her fires upon their death. **Pele** would only accept the true members of her family to be interned within her fires. Kamakau (1991D) and Pukui (Handy and Pukui 1972J, K) elaborate and explain how **`Awa** is used in the process.

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<sup>21</sup> Kalili was born in approximately 1884

<sup>22</sup> Kalaiwaa was born in 1875



Henry E.P. Kekahuna<sup>23</sup> was of the **Pele** line, and gave a special insight into the manner in which offerings were cared for (Kekahuna 1956). He related what he remembered about the process of making a pilgrimage from Hāmoa, Maui, to Puna, Hawai`i, to give offerings to **Pele**. As Kekahuna (1956A) describes, great care was taken in growing and obtaining particular offerings that **Pele** desired. One of these was the **`awalau**.

### Special Occasions

For special occasions that happen only a few times in a lifetime, such as sacramental feasts and house blessings, various gods (**akua** and **`aumakua**) would be called upon to bless the situation. **`Awa** was a key to the success of a few of these special occasions.

Pukui (Handy and Pukui 1972D) describes the practice of the **`Aha`aina Māwaewae**, or Sacramental feast for the first-born, which in some lines were dedicated to the god **Lono**. In this feast there were many symbolic foods, and because it was an occasion for offerings, **`Awa** too. Pukui (Handy and Pukui 1972) recorded other types of ceremonial feasts, in which **`Awa** might have played a special role, but this was the only feast that mentioned **`Awa**.

**`Awa** was one of the common gifts presented to a new household, as it was both a symbol of wealth and food for the gods. Gutmanis (1983L), Pukui (Handy and Pukui 1972F), and Kamakau (1976F) all describe the process of a house blessing and **`Awa**'s place as an offering. They, respectively, refer to it as "**ho`omaika`i i ka hale**," "**ho`ola`a i ka hale**," and "**komo ka hale**."

Pukui (Handy and Pukui 1972F) gives great detail on the process of the house blessing, but she is not clear as to the purpose and use of **`Awa** in that situation. Kamakau (1976F), does give detail and how it was used in situations of what is translated as a "house warming". Kamakau's accounts do show a little more of what **`Awa**'s role was in this celebration. It should not be assumed that practices recorded by Kamakau and Pukui are exactly the same because the two authors are speaking from two different islands. Traditions often vary between districts on the larger islands, and even greater so between islands which in the times before Kamehameha were separate kingdoms. Perhaps the traditions of Kamakau put more emphasis on **`Awa** than those recorded by Pukui. Another possibility to consider is that Kamakau and Pukui were of the opposite sex which undoubtedly had an influence on their writings.

As is seen in Kamakau's (1991K) story of "**Pua ma**" **`Awa** was not only integral to the blessing of new houses for mortals, but also in new houses dedicated to gods.

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<sup>23</sup> Kekahuna (1881 – 1969) was raised in Hāmoa, Maui.

## ‘Ailolo (Graduation) Ceremonies

‘**Ailolo** (graduation) ceremonies are performed for students who have completed their formal training for things like **hula**, **lua**, and navigation. ‘**Awa** had an important role in such events.

Sailing the canoe, although under the protection of the gods, also required training. A part of the training was learning how to handle a canoe in rough water. Offerings, including ‘**Awa**, and prayer said by a **kahuna** were presented when a student was ready to demonstrate his ability to right a swamped canoe (Gutmanis 1983M).

## Wa`a (Canoes)

The process of making canoes in old Hawai`i was a very sacred one, that is long and multistaged. Gutmanis (1983M), describes several of the steps in the process and the associated chants and prayers. ‘**Awa** was key to many, but not all, steps in the process of carving a canoe (Gutmanis 1983M).

After the felling of a tree in the forest it was roughly dug out to make it lighter and easier to move. Before leaving the forest, the log itself was given ‘**Awa** (Gutmanis 1983M) as it was considered to be a living entity.

In 2002, Edward Kaanaana<sup>24</sup> was the **kupuna** who guided the felling, rough carving, and pulling of a canoe log out of the forest in Mānoa, O`ahu. Before the canoe was dragged out of the forest he poured some ‘**Awa** on the stump, acknowledging it as the parent whose child would be taken away. He then poured some ‘**Awa** on the stern – where the pulling ropes were attached to the **māku`u** – and prepared the canoe for a journey away from its home and into its new life (personal observation 2002).

## Hula

In ancient times, all aspects of the art form of **hula** were filled with deep sanctity and symbolism. While this is not the venue to discuss such things, mentioning the involvement of ‘**Awa** in certain aspects of **hula** is.

### The Kuahu

On the **kuahu**, or **hula** altar, were placed many specific plants for different reasons. Some of the writings pertaining to **hula** differ on the things placed on the **kuahu**, why, and in what manner (Gutmanis 1983O). Some say that ‘**Awa** was

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<sup>24</sup> Kaanaana (b. 1925) learned the process of canoe carving from his grandfathers in Miloli`i, Kona, Hawai`i.

placed on the **kuahu**. Emerson (1965) said the bowl of **`Awa** on the altar of the **hālau hula** was changed daily. Mrs. Wilson (Kealiinohomoku 1964) disagreed and said that the coconut shell of **`Awa** and all the green plants remained the same from the beginning to the end of the training period and were part of the miracle of a successful **hula** school.

According to Gutmanis (1983N), after the greens have been placed on the altar<sup>25</sup>, the dancers retire to dress. As they prepare themselves, the **kumu** chants a prayer (**pule ho`oulu**) beginning with “**E ulu, e ulu.**” **Ulu** may mean growth in any form. In the case of the **hula**, the growth sought is that of talent and inspiration.

### Hula Prayers

As the dancers actually dress, special prayers (**pule ho`okomo lole**) are said. Gutmanis (1983N) gives various examples of these, including specific prayers for putting on anklets/bracelets and **lei**, but none of these had any reference to **`Awa**. Only the prayer for putting on the **pā`ū** included a reference to **`Awa**. This reference, however, was a mere mention of **`Awa**’s association with certain female deities. It is not a reference to **`Awa** being used as an offering.

Before the start of a performance, dancers would pray for inspiration to dance in the ways of the **akua hula**. When praying for inspiration (**he kuehu i nā akua**) in performing **hula**, some say it is the god **Laka** whom one should approach first. Others say that it is **Kapo-`ula-kīan`u** who should receive the first prayer.

Gutmanis (1983N) gives four examples of prayers of inspiration. One of the prayers is to **Laka**; the second calls to **Laka** as a friend of **Kapo** (as **Kīna`u**) and includes a call to **Lono**; the third is to **Kapo**; and the fourth is to **Kapo** but calls also to **Kāne** and **Kanaloa**. The only prayer that included a mention of **`Awa** in its content was the one to **Kapo**, “**Noho ana Kapo i ka uluwehiwehi.**” It is interesting that **`Awa** is not mentioned in the text of the prayer to **Kāne** and **Kanaloa** – the famous **`Awa** drinkers.

This chant to **Kapo** contains the line, “**He `ike pū`Awa hiwa**” that was translated as, “A drinking by the god that is to the scaly appearance of the skin from **`Awa** drinking.” However, Pukui and Elbert (1986), under the definition of, “**`ike**,” discuss that same verse indicating that the line is translated as, “a knowledge from kava offerings.” Taking this definition it can be seen that **`Awa**, especially of

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25 “Every morning the altar is sprinkled with water to keep the greens fresh. The water is gathered daily. Any water remaining after the sprinkling is thrown either into the ocean or the woodland. The container is left in the middle of the altar. It is a long gourd like a **hōkeo**, but smaller. If some of the greens are dry they should be replaced. When the **`ōhi`a** or **`ie`ie** dry out all the greens must be replenished.” (Kuluwaimaka in Gutmanis 1983N)

the **hiwa** variety<sup>26</sup>, was offered up to **hula** deities in return for knowledge and inspiration.

### Malicious Use of Ancestors

Pukui (Handy and Pukui 1972J) gives details on how the spirit of recently deceased family members can be controlled:

“... The conversion of a beloved departed soul into a controlled, **mana** endowed spirit (**`unihipili**) {is} by means of gifts which attracted and held the **`uhane**; and of causing it to have power (**ho`omana**) by a routine of prayer (**pule**). ... in olden times the primary offering was **`awa**, which was the gift most desired by **akua** and **`aumakua**...” (Handy and Pukui 1972J)

Gutmanis (1983D) also gives some insight into the process of creating an **`unihipili** and feeding it offerings of **`Awa** and other things. She adds that if properly kept, the spirit will take on the good or evil character of its caretaker and will go on whatever mission it may be sent. These errands may include evil deeds.

Gutmanis (1983G) records that if one has offended another and a curse, or evil spirit, has been sent there are protocols to undo these influences. These protocols include many offerings, including **`Awa**, and prayers.

### Spirit Sending

Pukui (Handy and Pukui 1972L) describes other forms of spirit sending that has a bad reputation called **ho`oaunauna**, and Kamakau (1991L) describes yet another called **akua kumuhaka** – which is probably the same as **akua lele**. Both of these require offerings of **`Awa** by their keepers to care for them.

The powerful wooden images, called **Kālaipāhoa**, were sometimes used for evil as well. Kamakau (1991M) describes the process in which Kamehameha anointed and cared for these images so that he would not be harmed. Offerings of many things – including **`Awa**, accompanied by a unique kind of **`Awa** ceremony was required.

According to Gutmanis (1983H) spirit sending can be defended against with an impenetrable spiritual barrier. Such barriers are made with the help of a **kahuna** who uses various prayers and offerings, including **`Awa**. Kamakau (1991K) also reports that **`Awa** is one of the offerings used when preparing a remedy for spirit sending. When someone has been unjustly cursed there are forms of sending back the evil through a process called **kuni**, or prayer with fire. This

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<sup>26</sup> I have noticed that the **hiwa** variety is particularly useful in promoting deep introspection. This trait of the **`Awa hiwa** may add another level to our understanding of the saying, “**He `ike pū`awa hiwa,**” and perhaps to the reasons in which it was the preferred variety of **kahuna**.

involves prayers and offerings, which under the most dire circumstances require **`Awa** (Gutmanis 1983I).

## **`AWA AS A BEVERAGE**

### **Overview**

The **`Awa** drink is probably best known, to non-Pacific Islanders, as a beverage used in important ceremonies. It is generally known for its mildly sedating effects that are useful in easing tension, recuperating from a hard days work, and mediation and consultation.

As a beverage **`Awa**'s taste, preparation, and effect have been described by many foreign explorers, missionaries, and writers (Portlock 1789, Vancouver 1798, Kotzebue 1821, Ellis 1826, Remy 1868, Emerson 1903, Hough 1905, Churchill 1916, Anonymous 1918, Deihl 1932). However, none of these were from an Hawaiian perspective and therefore reflect an etic rather than emic perspective. Kekahuna (1963 A, H-P) gives a description about the whole process. He discusses, in amazing detail, the process of harvesting, purification before preparation, cutting and crushing of the root, mastication, straining, secondary and tertiary brews, and serving. One thing that Kekahuna did not include is an example of a chant done while preparing the **`Awa**. These chants would be to the **akua**, **Kāne**, in honor of his associations with fresh water and **`Awa** – the two main components of the beverage. A good example of such a chant is given by Gutmanis (1983A).

As a beverage in Hawaiian culture, there are a series of issues to be considered. Firstly, what is the role of **`Awa** as a ceremonial drink? Second, who usually consumed **`Awa** and for what purposes? Third, what is the process of preparation of **`Awa** as a beverage. These questions have been addressed in bits and pieces by a range of authors, and much speculated over by contemporary Hawaiian **`Awa** drinkers. A discussion of all these questions has been brought together here.

### **The Ceremonial `Awa Drink**

The most highly esteemed beverage of ancient Hawai'i was the **`Awa** drink. It was a favorite of the gods, priests, and chiefs, and a first and most essential of the offerings to the ancestors. Each of the many varieties, some of which are known by different names in different localities, shares its name with the drink it produces (Kekahuna 1963A).

The most sacred of the **`Awa** varieties are the **`Awa hiwa**, and the **`Awa mō'i**. The drink from these varieties was especially offered to the mighty Volcano-Goddess **Pele** and other **akua**. A chant was offered, and then the drink itself. This

involved dipping one's finger into the **`Awa** and snapping it either upward, backward, or both. The essence of the drink (**ke aka**, lit. "the shadow") was first offered to the gods, whereupon it was the duty of the **kahuna** to ceremonially consume the remaining substance (**ke kino**, the body; **ka `i`o**, the flesh) (Kekahuna 1963A). According to Pukui (Titcomb 1948), the symbolic offering was accompanied by the saying, "**Ke aka kā `oukou, ka `i`o kā mākou**," or, "The essence is yours, the substance is ours." Kuaea (1867), while stating that some people did it differently says that one variation was, "**`O ko `oukou akula nō ho`i ia, a `o ko`u nō ho`i kēia**," or, "This is yours and this is mine."

The great chiefs, for their pleasure, also imbibed the sacred **`Awa**, permitting only the use of non-sacred varieties to the humble commoner, unless a **kahuna** used a sacred variety to treat a sickness (Kekahuna 1963A).

## Ali`i

In ancient times, the **ali`i** were probably the only ones who had enough power and wealth to drink **`Awa** frequently and with a large gathering of people in a social manner. While it is likely that these gatherings were for the purpose of partaking of the intoxicating aspects of **`Awa**, they were not devoid of a certain level of ceremony to honor the various **akua** and **`aumakua** whose **mana** allowed the **ali`i** to rule effectively. Sometimes the **ali`i** had his/her **kahuna** chant prior to the first drink being consumed, or sometimes it was the **ali`i** themselves who chanted. Such a chant is termed **kānaenae**.

Cook (1784) gives some valuable insights into the protocols observed by the **ali`i**.

"Amongst their religious ceremonies, may be reckoned the prayers and offerings made by the priests before their meals. Whilst the **ava** (sic) is chewing, of which they always before they begin their repast, the person of the highest rank takes the lead in a sort of hymn, in which he is presently joined by one, two, or more of the company; the rest moving their bodies, and striking their hands gently together in concert with the singers. When the **ava** is ready, cups of it are handed about to those who do not join in the song, which they keep in their hands until it is ended; when uniting in one loud response, they drink of their cup. The performers of the hymn are then served with **ava**, who drink it after a repetition of the same ceremony, and if there be present one of a very superior rank, a cup is last of all presented to him, which after chanting some time alone, and being answered by the rest and pouring a little out on the ground, he drinks off. A piece of the flesh that is dressed is next cut off without any selection of the part of the animal; which, together with some of the vegetables, being deposited at the foot of the image of the Eatooa (**akua**) and a hymn chanted, their meal commences. A

ceremony of much the same kind is also performed by the chiefs, whenever they drink ava between meals.” (Cook 1784)

In the story of Nā-maka-o-ka-pā`o`o (Anonymous 1917), Imaikalani, an **ali`i** from Kaua`i, called for a gathering to drink `Awa on an important night. Present were **kahuna**, lay people, men, women, a general, and a messenger. Imaikalani's **kahuna** offered a chant before the **ali`i** drank. It is interesting that this is in contrast with some South Pacific traditions wherein not all who were present were required to drink, but only the ones who desired `Awa drank it.

The Nā-maka-o-ka-pā`o`o example is a good depiction of some of the social-drinking practices of the **ali`i**. It is important to note that although the primary reason for consuming `Awa may be social, the utmost honor was given to the `Awa. Such drinking was not devoid of at least some level of ceremony that incorporated aspects of the religion into the event. These actions set a tone of respect. It was commonplace to include some kind of chant or prayer that asked for the blessings and guidance of deified ancestors. The chant given for Imaikalani (Anonymous 1917), and one collected by Emerson (Gutmanis 1983F) are good examples of `Awa drinking prayers for an **ali`i**.

Samwell (1779), a member of Captain Cook's crew, reported an instance of `Awa consumption that further sheds light into the practice of chanting prior to the first drink of `Awa. In this case, it was the highest **ali`i** himself who gave the chant.

“A chief in one large double canoe drank his morning dose of... Kava with his attendants along side the ship they prepare it..., while this operation was going forward the chief himself began a song or gave out the stave and was joined by all his people in the canoe, when the liquor was ready the man who had prepared it gave some in cups to those round him who were allowed to drink it being inferior chiefs and dependants on the other, they held their cups in their hands without offering to drink till the song was concluded, then they all gave a shout together and emptied their cups, after this a cup of liquor was given to the chief himself and was answered by the rest, he repeated them three times and was answered as often, upon which he emptied his cup, then he dipped his fingers in a wooden bowl containing some thin pudding ...” (Samwell 1779)

### Protocols and Serving Order

Protocol were incorporated with the `Awa drinking gatherings of the **ali`i**. One was the practice of chant or prayer as is mentioned above. Another was the order in which **ali`i** were served and drank. Pukui (Beckwith 1940) gives some insight with her writings.

“...The order of serving was also important. At the entertainment of a guest, it was considered an insult to the host if the guest refused the cup or passed the cup handed to him, as guest of honor, to an inferior chief. Before a war especially all chiefs drank together a cup of **awa**, which passed from hand to hand in order of rank. In passing the cup to a chief it was customary to utter some appropriate remark or sing a chant, but no particular form was fixed by tradition.” (Beckwith 1940).

There is not enough recorded information to say exactly what the rules were for serving **awa** in the times of the **aliʻi**, and it would be a mistake to assume that all customs were the same from Hawaiʻi to Niʻihau. Kekahuna (1963P) gives a little more detail, than Pukui’s above statement, about the protocols of serving order.

“...At an informal party the highest chief was served first, and the others according to rank; but at a ceremonial party, the chief second in rank was served first, and the last cup, strongest and richest in remaining sediment (**koʻana**), was reserved for the highest chief. This last cup is the serving that a pourer would ordinarily seek this for himself...” (Kekahuna 1963P)

Eben Lāʻau (2003, personal communication), grew up in the district of Kohala, Hawaiʻi. He gave some insight into the writings of Kekahuna. According to Lāʻau, in the times before Kamehameha united the island of Hawaiʻi there was much warring between the Hawaiʻi island **aliʻi**. If a truce were to be called, the **aliʻi** who made the invitation sat at the **kānoa** – at the head of the seating circle, and all the other **aliʻi** would sit around with the highest **aliʻi** of the opposing side sitting directly opposite of the head. The host **aliʻi** chewed and strained the **awa**. The lower ranking **aliʻi** would be sitting on both sides of him and would be the first served. The very last person served was the highest ranking **aliʻi** on the opposing side, the one sitting directly opposite of the head. The reason for this was that the opposing **aliʻi** was never sure of the intentions of the host **aliʻi**. The opposing **aliʻi** was not sure if he was honestly invited for the purpose of a truce, or invited under the auspices of a truce to be poisoned<sup>27</sup>. This is the reason why the two **aliʻi** sat directly opposite from one another, so that they were eye to eye and nothing was hidden between them. The opposing **aliʻi** would watch carefully that no poison be slipped in during the preparation process. The host **aliʻi** drinking the first cup was a sign that there was no poison. All the lesser **aliʻi** would then be served while the opposing **aliʻi** carefully watched to make sure that none of them show any signs of succumbing to poison. Lastly, the highest-ranking **aliʻi** of the opposing side, feeling comfortable that there was no poison in the **awa**, drank his cup of **awa**. Lāʻau added, that both sides were careful not to consume more than the other, lest they be vulnerable due to the incapacitating effects of the intoxication. He went on to say

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<sup>27</sup> Lāʻau explained that the poison was made by slipping juice from the **ʻAkia** plant into the **awa**.



that **`Awa** drinking of this sort was not for the purposes of intoxication, as was the **`Awa** drinking at **kilu** games.

Apparently, if two **ali`i** were peers, they would drink simultaneously. Kamehameha and Kaumuali`i conducted a ceremony between the two of them to symbolically demonstrate to one another that they were equals. In this ceremony they exchanged and wore each other's feather helmets and **malo**. In conclusion of this ceremony they simultaneously drank **`Awa** together.

“As the ruling **ali`i** (Kamehameha and Kaumuali`i) were yet talking, Kaumuali`i's attendant chewed the **`Awa**, strained and poured it into two cups and brought them to the two **ali`i**. The two high **ali`i** took them together and drank.” (Desha 1924E, translation by Pukui in Titcomb 1948)

The Samwell (1779) example, if accurate, also shows that some traditions or circumstances called for the whole group – consisting of different ranking **ali`i** – to drinking simultaneously and not individually according to rank.

An example of the importance of serving order is illustrated in the story of Kiha-a-pi`ilani (Anonymous 1840). As Titcomb (1948) explains, the hero, a younger brother, feeling himself hated and abused by his elder brother, tries to snatch the power he covets by sitting on his father's right knee, instead of the left, where he properly belongs; and also by interfering in the order of serving **`Awa**, with an attempt to snatch the **`Awa** cup intended for his older brother. According to Pukui, this attempting to snatch the prerogatives of an elder brother was a common motif in legend as well as tradition. If success against the personal adversary were won, the acclaim of retainers made it a fact – disapproval providing grounds for continuing the struggle (Titcomb 1948).

### Consequences of Protocol Deviation

Deviations in the etiquettes of serving order could potentially have disastrous results. Such disregard of protocol led to war between Kamehameha and Kīwala`ō, as seen in the following example.

“When Kamehameha entered the man's house (**mua**), the chiefs drinking gathering (**ka `aha `Awa o ke ali`i**) was being prepared for. Kekūhaupi`o suggested to the ruling **ali`i**, Kīwala`ō, ‘Let Kamehameha prepare you **`awa**.’ Kīwala`ō asked, ‘Why should he?’ and Kekūhaupi`o answered, ‘That was the will of your father, that one of you should serve the other, and one stand at the head of the government.’ Kamehameha chewed the **`awa**, strained and poured it into a cup. He offered a prayer and after freeing the **kapu**, the ruling **ali`i** Kīwala`ō took the first cup in his hand and gave it to a favorite friend. When the friend raised the cup to drink it, Kekūhaupi`o slapped it away from him and said, ‘You are wrong, O **ali`i**, your younger cousin did not

chew the **`awa** for anyone but you.’ Kekūhaupi`o pushed Kamehameha with his foot and said, ‘Let us go ...’ This act of Kekūhaupi`o was much discussed by the attendants of Kīwala`ō. Some blamed Kekūhaupi`o and some approved, and laid the blame on Kīwala`ō.” (Poepoe 1906, translation by Pukui in Titcomb 1948)

At times it was desirable to transfer the effect, or most of it, from the actual drinker to another person present who might or might not be participating in the drinking (Titcomb 1948). Pa`ahana Wiggin (Titcomb 1948) explains two situations in which this might be done. If an **`Awa** chewer were treated ungraciously in any way, if for instance the service were performed by request but no gift of **Kō, Mai`a**, or other things were given in exchange for the service, the chewer might appeal silently to her own **`aumakua** to transfer the pleasant effect from the ungracious one to another person designated.

### **`Awa’s Role in Politics**

As seen in the above examples **`Awa** played an important role in the political procedures of the **ali`i**. The writings of Kamakau (1976A) give us some insight into why **`Awa** was such a significant plant under political circumstances.

“**Awa** was a refuge and an absolution. Over the **awa** cup were handed down the tabus and the laws of the chiefs, the tabus of the gods, and the laws of the gods governing solemn vows and here the wrongdoer received absolution of his wrongdoing...” (Kamakau 1976A)

Kamakau (1991A) gives some specific examples that highlighted **`Awa’s** role as discussed above.

### Transferring the Effects of **`Awa**

The following excerpt from a chant<sup>28</sup> collected by Helen Roberts (n.d.) illustrates another situation. An **ali`i**, being either male or female, might wish to drink **`Awa**, either for personal pleasure, or for ceremonial necessity, yet feel himself in personal danger from untrustworthy persons present, and so wish to keep his senses alert. He would then ask a **kahuna** to pray to the gods to cause the effect to be transferred. In this chant the effect is felt by the Pleiades, which were, possibly, among the personal gods of the female **ali`i** Maukaa (Titcomb 1948).

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<sup>28</sup> This name chant is not ancient, Maukaa (Mauka`ā?), a Ka`u chiefess, having been born in early missionary days. However, the composer was evidently familiar with ancient concepts.

“O ka `awa makeanu o Puna i ka la`au,  
 I ka `awa mokihana a ka manu,  
 I kanu i ka papa o Kaniahiku,  
 I ulu i ka `ohi`a o Kali`u, ka pu`awa mo`i,  
 Papakea i mama ia e ka wahine a wali,  
 I hoka i ke kanoa i ka mau-`u  
 I ho`ohae i ka `apu ke ke au  
 Ho`okahe ka`awa he `awa no ke `li`i,  
 No ka pua a I nona ka pu`awa hiwa a Kane o Lono,  
 Ho`olono ka inu `awa kupuna o Kanaloa-wai-a-ka-honua,  
 Ho`ohonua ka `aha inu `awa,  
 A ka pua i kela i ka wekiu,  
 He kiu ka •omm. • `awa no Lono o Puaka,  
 Kau onaona Makali`i i ka `ona a ka `awa,  
 He `ona, he lehua, he poluea,  
 He luluhi `ona `awa no Mauka`a,  
 Ke moe maila i Halehalekalani.

The `awa grows in the cold, on the trees of Puna,  
 The **mokihana** `awa planted by the birds.  
 It is planted on the flat lands of Kaniahiku,  
 In the **ohia** forest of Kaliu grows the **moi** [mō`i] variety of `awa.  
 The **papakea** `awa is masticated well for the woman [Maukaa]  
 It is strained in the **kanoa** with fibers  
 Dip it up in a cup, hold it till it becomes still [literally, till the current stops]  
 Pour, pour out the `awa for a royal one,  
 For the descendant of I, [name of a person] to whom the **hiwa** `awa of **Kane**,  
 of **Lono**,  
 All are quietly attentive during the drinking of the ancestral `awa of  
**Kanaloa-wai-a-ka-honua**,  
 Hushed is the `awa-drinking company,  
 Of the offspring of the most high.  
 The Kiu is **Lono**'s chilling wind at Puaka.  
 The Pleiades are becoming drowsy with the effects of `awa,  
 They are drunk, drowsy, dizzy,  
 They are sleepy for Maukaa, from the effects of `awa,  
 They slumber at Halehalekalani.” (Titcomb 1948)

### Ulterior Motives in Causing Intoxication

There was good reason for Mauka`ā to be weary of treacherous deeds being done unto her while intoxicated with `Awa. Anciently, `Awa was sometimes used, under the auspices of friendliness, to dull the senses of victims to make it possible to

kill them. `Ā`i and Maio (1986), recall the story of Pāmanō. In the story, Pāmanō's uncle got Pāmanō drunk with `Awa and then killed him. From this event came the saying, “**Make `o Pāmanō i kona i`o pono`i,**” or “Pāmanō died because of his own flesh.” `Awa was also to dull a victims senses in order to be killed by spiritual means. Ka`imikaua (1990) gives an example of this in his story of Lanikaula. Lanikaula was a very powerful and famous **kahuna** in the time of Kamalālāwalu. Throughout his life various **kahuna** tried to kill Lanikaula through prayer and other spiritual means. They all failed. Only when Lanikaula was weak with extremely old age was Lanikaula susceptible to such things. A cunning **kahuna**, Kawelo of Lāna`i, under the guise of friendship, got Lanikaula drunk with `Awa. Once Lanikaula was heavily intoxicated, Kawelo hurried home to Lāna`i. From his home at Pu`u o Hōkū, on Moloka`i, Lanikaula saw the fires of Kawelo burning on Lāna`i. He knew what Kawelo was up to so he gathered together his sons to plan for the hiding of his bones after his death. Soon after that, Lanikaula was dead, and his bones hidden under a vast **Kukui** grove at his home of Pu`u o Hōkū.

### `Awa as a Symbol of Power and Wealth

An abundance of `Awa was a sign of a truly wealthy **ali`i**, as is seen in the story of Keawe-nui-a-`Umi (Kamakau 1961).

“To him (`Umi-o-ka-lani) the people made their gift offerings, tources burned constantly for him and his chiefs, the old men among his followers drank `awa constantly – it was clear that he was a rich lord. As for Kanaloa’s old counselors, their urine was white. That was a sign of a chief without wealth.” (Kamakau 1961)

**Ali`i** were, as alluded to in the above writings of Samwell (1779), probably also the only ones with enough power and wealth to drink `Awa more than once a day. Ordinarily the `Awa drink of the chiefs was prepared for them by their body servants (**kahu**) both before and between meals. It was customary, however, to drink `Awa after and not directly before meals, as the effect of `Awa might cause the drinker to lose hs/her way to their mouth and put food on some other part of his face (Kekahuna 1963).

### Drinking Times

The above example contrasts with the traditions of the **maka`āinana** in that they tended to drink only after a hard days work and before eating (see below section on **maka`āinana**). The **ali`i** probably ate after because they received only the best and most potent `Awa. As is seen in the tale of Kamiki (Anonymous 1912) the **ali`i** preferred the famously potent `Awa-**kau-lā`au** of Puna.

“It is true that the **`Awa**-that-grew-in-the-trees (**`Awa-kau-lā`au**) in Puna was a favorite of the ruling **ali`i** in ancient times, carefully kept in gourd calabashes, rolled up and kept in a piece of tapa.” (Anonymous 1912, translation by Pukui in Titcomb 1948)

### Role of Kahu

As is seen in the many stories of Hawai`i, **ali`i** had, in their retinue, specially designated people (**kahu**) to do different tasks for the **ali`i**. These people were highly trusted individuals because anything that had touched or come from an **ali`i** was endowed with his/her **mana**. These things, if not disposed of properly, could be used spiritually against him/her. **Kahu** had to also be highly trusted because anything that the **ali`i** consumed could contain a deadly poison (**`apu kōheoheo**). It was not uncommon for **ali`i** to have designated people (**po`e māmā `Awa**) to chew, and sometimes mix, his/her **`Awa**. The stories of Nā-maka-o-ka-pā`o`o, Lā`ieikawai, and others are good examples of these.

To be a **kahu** for an **ali`i** was an honor. It was often an office held by a relative or a lower class **ali`i** (Titcomb 1948). Being a good and efficient **kahu** could lead to a close relationship to the **ali`i** and a rise in status within the court. This is detailed in the story of Pāka`a:

“Pāka`a was the servant of Keawe-nui-a`umi, the king of Hawai`i (island), and was a very great favorite with his master. It was his duty to have supervision of lands and the household servants of the king. It was also his duty to have in his keeping all of the king’s personal effects, the **kapa**-s, the food, the meat and fish, the **malo**-s, the feather **kahili**-s, **`awa** bowls (**kānoa**), **`awa** cups (**`apu `awa**), **`awa**, the calash containing ointment and all of the different things belonging to the comfort of Keawenuiaumi. Because of the great care exercised by Pāka`a in the supervision of the things belonging to the king, he was raised to the highest office in the king’s household and he became a greater favorite than all the **ali`i** and men under the king. In time the king gave Pāka`a several pieces of land in the six different districts of Hawai`i for his own use...” (Fornander 1916-1920)

The story continues to be interesting as evidence of the place of **`Awa** in the pleasure of a king. The king made favorites of two other men, and through their intrigues the king’s affection for Pāka`a lessened. Heavy-hearted, Pāka`a withdrew to Moloka`i, married and had a son named Kua-pāka`a. “The meaning of the name is this: ‘the cracked skin’ (literally: scaly back), given because the skin of Keawenuia`umi was cracked by the constant use of the **`Awa**, so much so that the flesh was exposed in places.” Pāka`a trained his son in all things that he knew. With love for his chief still in his heart, he said to his son, “It is possible that in time he will miss me and will come to make a search; if he does I want you to be in a

position of readiness to meet him.” That is just what happened. The indecisive Keawenuia`umi, longing for Pāka`a, his dear servant, his “backbone,” is lured to Moloka`i by a dream about Pāka`a. Without revealing their identity, Kuapāka`a and Pāka`a meet the canoes of the king. Through spiritual means Pāka`a plays some trickery with the winds, the winds play havoc with the weather, the canoes of the king are imperiled, and even his life. Kuapāka`a had been the mouthpiece during the meeting with the **ali`i**, reciting chants that insult the lesser **ali`i**, chants that call forth the winds, chant that quiets the winds. Finally Keawenuia`umi is brought to shore safely, in disgust with his **ali`i**-s, less skilled in taking care of him than his again beloved Pāka`a. He admires Kuapāka`a for his knowledge of chants, and his use of them. Dry clothes, of the kind he used to be provided for under the care of Pāka`a, are brought to him by Kuapāka`a, and again the king is pleased (Titcomb 1948).

“That evening the chiefs came together with their men and as they were sitting quite close to the king, the king said, “If Pāka`a were here, of an evening like this, he would have my `awa cup ready with two fresh **Hinālea** (a favorite **pūpū`Awa**, or chaser). I would drink the cup of `awa and as its effects came over me, I would feel like a newly made net, nice and snug, all night. How I do miss my Pāka`a.”

“When Kuapāka`a heard this he returned to his father ... and said, “My master is in want of some `awa, and he has expressed his affection for you and showed that he still remembers you.” When Pāka`a heard this, he took down the `awa cup (**apu**), the `awa dish (**kānoa**), the grass (**mau`u**), the piece of `awa (**pū`awa**), and two pieces of `awa already prepared (**māna`awa**), and said to the boy, “You take these to your master and show them to him. If he should ask you to prepare the `awa for him, give your consent. Then you turn to one side where it is dark, leave the piece that is not prepared, take up the portions that are ready, strain them into the cup. He will compliment you for being very quick, for I was ever ready with these things when I was with him. After you have strained the `awa into the cup, hand the cup to your master, then run (as) fast as you can to the pool where we keep the **Hinālea** and catch two for your master, for he would want the fish to take away the bitter taste of the `Awa from his mouth.” (Titcomb 1948)

All went according to his plan, and

“Because of these things performed by the boy, Keawenuia`umi complimented him for being quick, and for carrying himself like a person who has always lived with the kings, and for conducting himself so well. The king then drank up the `Awa and as the effects of it stole over him, combined with the weariness of a hard and eventful day, he fell into a deep sleep.” (Titcomb 1948)

**`Awa**, as seen in this tale, was a central point in the lives of **ali`i**. It had so great an influence that it could make or break the political careers of those given charge of the care of the kings **`Awa**. **`Awa** was important, too, for the other political classes in ancient society such as **kahuna** and **maka`āinana**. For each, **`Awa** had its own significance.

## **Kahuna**

At the height of ancient Hawaiian civilization there were dozens of classes of **kahuna** (Willis and Lee 1990, Pukui and Elbert 1986, Kamakau 1976, Kamakau 1991, Malo in Chun 1996, Ii 1959). Each was trained in a specific aspect of ancient culture and they were considered to be among the wisest in society. They also had inherent spiritual gifts and special abilities to communicate with the ancestors. **`Awa** played an important role in the lives of **kahuna** because it helped them to channel and focus their energy in these areas. Kamakau (1976A) summarized this concept.

“That was the way, and the priestly practice, of **ka po`e kahiko**. With **awa** they soothed and appeased the burning wrath of the gods. This was how it was recognized that the gods heeded the repentance of the people: they granted blessings to the race, they increased the ‘food’ and ‘fish’ and mankind; and they warded off misfortunes that might come, such as diseases, epidemics, contagious diseases, and sudden disasters.” (Kamakau 1976A)

It was kahuna who used **`Awa** as a crucial aspect of their profession.

## Story of `Umi

For a **kahuna**, **`Awa** was as an essential aspect of life as food. This is seen in the story of **`Umi-a-Līloa** (**`Umi-son-of-Līloa**) (Fornander, 1916-20). Hākau, the eldest son of Līloa had just inherited the kingdom. Nunu and Kakohe, two **kahuna** who were favorites of the king Līloa during his reign, sent a request to Hākau for some **`ai**, some **i`a**, and some **`Awa** to sustain them. Hākau refused and the two **kahuna** decided not to support him as they did his father who cared for them well.

Later, it was partially due to the fulfillment of their desire for **`Awa** that they decided to politically support **`Umi** in his quest to overthrow Hākau. **`Umi**, while hiding his identity of a high ranking **ali`i**, served them **`Awa** as a humble servant. The **kahuna** realized **`Umi**’s ability to care for them and partially felt embarrassed that the high-ranking **ali`i** served them **`Awa** as a lowly servant would. It was because of this cunning act that **`Umi** gained the alliance of the two powerful **kahuna** who eventually helped him to overthrow his elder brother.

## Divination

`**Awa** was used by some **kahuna** for divination (**hailona**). These **kahuna** used it to see the unseen and thus the **kahuna** were able to guide others as to what actions needed to be taken. Although this practice was probably not exclusive to the **kahuna** class, it is most often associated with them.

Hale`ole (Fornander 1916-1920) states that `**Awa** was one of the revealing substances of the divining priest (**kahuna ho`omanamana**). Westervelt (1915), in the story of Ke-au-nini, gives an example about using `**Awa** to prophesize the sex of a child.

“I will prepare **awa** in a cup, cover it with white **kapa**, and chant a prayer. I will lift the cover, and if the **awa** is there I am at fault. If the **awa** has disappeared, I am correct. I will be proved by the **awa** disappearing that a girl will be born.” (Westervelt 1915)

Air bubbles was something closely watched for in the divination process. The lack of air bubbles was a negative answer while their presence signified success. The movement of the bubbles indicated the time it would take to be fulfilled or the length of time it would last (Pukui n.d. D). The direction of the bubbles movement is also significant. This, as well as the sanctity of the process, is evidenced in another example from the Keaunini story (Westervelt 1915).

“Prepare the **awa** cup while I take the little stones, pour **awa** into a cup: I will cover it up and we will watch the signs. If, while I chant, the bubbles on the **awa** come to the left side we will find Haina-kolo. If they go to the right, she is fully lost. Let all the people keep silence; no noise, no running about, no sleeping. Watch all the signs, and the clouds in the heavens.” (Westervelt 1915)

As Desha (1920-1924) explains, when it came to seeing the future different classes of **kahuna** used different methods.

“**E paa ana kela me keia papa kahuna, a papa kilokilo hoi, papa onioni honua, papa makalua, papa kakaolelo hoi, a ua makaukau no hoi keia mau papa like ole i ka lakou mau kuhikuhi ana i ka manwa e makemake ia ai ka lakou mau alakai ana.**

**O ka hana nui o kela mau papa like ole, oia no ka nana ana i na ouli ma na ao o ka lewa, a ma ka hoike paha a na moeuhane ma ka po, a i ka hakilo ana paha i na ike kilokilo ma ka hoailona o na apu awa, ame kekahi mau hana kilo e ae o ia au kahiko o ka aina. He lahui kanaka ike kilo i na ouli keia lahui ma o keia mau papa like ole i hoike ia aela, a ua hoopuni mau ia ke alo o na alii ai moku me keia mau papa like ole o ka poe ike i na ouli o ka manawa.**



All the orders of **kahuna** were set, the order of astrologers, the **`oni`oni hōnua** order, the order of prophets, and the order of orators, and all of these different orders were ready to give guidance in the time that they were needed.

The greatest contribution of all these different orders, was the reading of signs in the heavens, receiving visions in dreams, close scrutiny that which is shown in the signs within a cup of **`Awa**, and through some other means of reading omens of that ancient time. The Hawaiians were very skilled at reading the signs in nature because of the various orders shown above, and the ruling **ali`i** surrounded themselves with these different orders who read the signs of nature.” (Desha 1920-24, translation by author)

**Kahuna lā`au lapa`au** would use **`Awa** to determine whether an ailment was a physical one – which could be cured with herbs, or a spiritual one –which required offerings of **`Awa**. Kuaea (1867), writes:

“The messenger bore the **`awa** in his hands and gave it to the **kahuna**, saying, “Here is the **`awa** from the patient so-and-so, to you the **kahuna**. A gift to your gods, from the sunrise to the sunset, from the heavens above to the earth beneath, from the zenith to the horizon.” The **kahuna** took the **`awa** root and used divination (**hailona**) to see whether the patient would live or die, whether he could be treated or not. He chewed up the **`awa**, strained it, poured it into a cup and stood up to pray ... Should the **kahuna** discover that the sickness was caused by an **`aumakua**, then he would say to the messenger, “Go home and appease your **`aumakua**, then come back for treatment.” The messenger would then go home and consult with the relatives of the patient ... They would take an **`awa** rootlet (**huluhulu `awa**), a young taro leaf, a mullet spawn, or the **Pua`a** grass, and pray to the **`aumakua** ... This was done five times, then it was finished.” (Kuaea 1867, Pukui translation)

Whereas the **ali`i** primarily used **`Awa** as a means to bring together other **ali`i** for consultation or socialization, the **kahuna** used **`Awa** for much more serious matters. **Kahuna**, for their wisdom and special abilities, were often consulted with on matters ranging from curing disease to predicting the future. Such matters were a heavy responsibility, and because **`Awa** was used to help facilitate knowledge **kahuna** maintained a high level of sanctity when dealing with **`Awa**.

### **Maka`āinana**

A group that had a different relationship with **`Awa** was the **maka`āinana**. Presumably, they could not afford the huge amounts of **`Awa** that the **ali`i** could. This undoubtedly influenced their drinking practices. **Maka`āinana**, while

inviting the company of their **`aumakua**, seem to have drunken most often in physical solitude at the end of a hard days work. If drinking took place in groups, it was usually a small one consisting of other male family members in the **hale mua**. While the **ali`i**, and to some extent the **kahuna**, drank **`Awa** at any time of the day – and perhaps several times a day, the **maka`āinana** seemed to have not used **`Awa** as freely or as often. It seems that for the **maka`āinana**, **`Awa** was mainly used as medicine, and as an offering to **`aumakua**.

There is some controversy, however, about whether or not **maka`āinana** were even allowed to use **`Awa**. Emerson (1903) openly expressed his doubts about the **maka`āinana**'s use of **`Awa**. In 1873, an anonymous Hawaiian author (Anonymous 1873) states that **maka`āinana** only had access to **`Awa** after the abolishment of the **kapu** system in 1819.

“When the Whites first came to this archipelago, and in the years following, **`awa** was not much drunk by the people for it was unobtainable. Only the chiefs, the kahunas, and members of the royal household had **`awa** to drink. **`awa** was not much planted in those days but later when many of the ancient kapus were abolished; the common people began to drink it. Perhaps many drank it because they could not get it before...” (Anonymous 1873, translation by Pukui in Titcomb 1948)

This contrasts with many other Hawaiian writers (Kekahuna 1963, Kamakau 1976 and 1991, Pukui 1972, Kuāea 1867). It could be argued that this anonymous author is the most accurate because he/she is writing in such an early period, but Kamakau's original writings were published in the late 1860's. In these, Kamakau records the use of **`Awa** by **maka`āinana** for religious ceremonies at the **Ipu-o-Lono** and **Pōhaku-o-Kāne** shrines. It is possible that in some of the drier districts of Hawai`i **`Awa** was such a limited precious resource that its use was restricted for the **ali`i** and **kahuna**. According to Kalokuokamaile and Kelsey (1933), **Ka`awaloa**, Kona, Hawai`i, was named for the long distance that the **ali`i** of the area had to send their runners to in order to get **`Awa**.

**“Ka`awaloa: Ua kapa `ia no ka noho ana o nā `li`i malaila, a `ono i ka `awa. Ho`ouna i Puna ke kūkini, a i Waipi`o, i ke au mamua loa – i ke au o Keawe-i kekahi-ali`i-o-ka-moku [sic.], Keawe-nui-a-`Umi, etc; a o Kamehameha kekahi i noho malaila. Lō`ihi ka `awa o ke ki`i `ana.**

**Ka`awaloa:** This place was named for the ruling **ali`i** there, and their desire for **`Awa**. Their runners were sent to Puna and to Waipi`o in the old days – in the time of Keawe-i kekahi-ali`i-o-ka-moku [sic.], and Keawe-nui-a-`Umi; and Kamehameha also lived there. The **`Awa** was a great distance away to fetch.” (Kalokuokamaile and Kelsey 1933, translation by author)

In areas such as this, it would have been hard for **maka`āinana** to obtain `Awa. Any `Awa available in the area would have likely gone to the **ali`i**, and it is unlikely that a **maka`āinana** would have the resources to hire a runner to go and fetch some `Awa.

Anonymous (1873) does seem to focus on the act of drinking `Awa, perhaps implying social use, and not necessarily medicinal or religious use. This would fall in line with what the other authors have either implied or outright generalized about use of `Awa by the **maka`āinana** – which is to say that, for the most part, the **maka`āinana** did not drink `Awa socially.

Pukui (Handy 1940) considers the idea, that `Awa was **kapu** to **maka`āinana** in the past, as erroneous. She makes the distinction between the `Awa drinking of the **ali`i** and the **maka`āinana** was one of manner and purpose of using the drink. She further states that the **ali`i** largely drank for pleasure, the **kahuna** for religious ceremony, and the **maka`āinana** for relaxation after strenuous labor. There was an abundance of `Awa for everyone (Handy 1940).

Anonymous<sup>1</sup> (n.d.) expresses that the **maka`āinana** could drink `Awa only when it was prescribed as medicine, or when using the left-over dregs that were no longer suitable for the **ali`i** and the **kahuna**.

“Nolaila, e huli hou a`e kakou a nana aku no keia ninau inu awa. He mau lolina paa ko keia ai i ka wa o na kupuna. I ka wa kahiko, he elua wale na mahele hiki ke loa a ka awa. Papa o na Ali`i, Papa o na Kahuna, a me ka po`e i loa hia i na popilikia, oia ho`i, na makaainana ma lalo o ka lapaau ana a na kahuna, mamuli o ka ma`i... Maanei la, makemake au e hoomaikeike iki aku i na lolina o ka ai ana i keia ai kapu a na kupuna a kakou. Ke inu na alii a me na kahuna, o ka wai mua e hoka ia ana oia ka lakou e inu ai. He mea kapu loa ke inu na alii a me na kahuna i ke kua (ke oka), he elua ia. He mea pono e ike mai ka lehulehu, o keia mea he kua, he pala-niho ia. Aole loa ae ia na alii e inu i ka pala-niho, o ka mea e hoao ana e hanai i na alii i keia, o kona hoopai he make. Pela no na kahuna, aole loa lakou e hiki ke hana i kekahi papahana me ka awa kua, oiai no ke Akua ko kakou awa e mohai ai, aia a pau ka mohai ana, alaila lakou inu mai. Kekahi olelo ana, he kahukahu, a he alana hoi kekahi olelo ana, i mua o ko lakou mau Akua. Pela mai no a hiki mai no i keia manawa. Aka, i ka noa ana i na makaainana ua malama ia ia mea he kua. Mamuli mai no ia o ka nui o ke kumu kuai, a me ke kapu o na mala awa o ke kuahiwi.

Therefore, let us turn back and look to this question about `Awa drinking. There are several steadfast rules of this food in the times of the ancestors. In the old days, there were only two divisions that could obtain `Awa. The **Ali`i** class and the **Kahuna** class, and the people who were begotten by great troubles, namely the commoners who were under the treatment of the

**kahuna** because of disease... And now, I would like to somewhat reveal some of the rules pertaining to the partaking of this forbidden food of our ancestors. When the **ali`i** and the **kahuna** drink, they drink the first extraction. It is absolutely forbidden for **ali`i** and **kahuna** to drink the **kua** (the dregs), it is the second. Everybody needs to understand that this thing referred to as a **kua** are the scraps. There is no way in which the **ali`i** would be allowed to drink the scraps, and for the one who tries to feed the **ali`i** thus, his punishment is death. And so it is with the **kahuna**, there is no way that they could perform a single task with the **kua** of the `**Awa** since the `**Awa** that they are offering is for their gods, and only when their offering is done can they themselves drink. Some say that it is a **kahukahu** offering, and some say that it is an `**ālana** offering, to their gods. And that's how it was all the way until now. But because it was not **kapu** to the **maka`āinana** the **kua** was saved, for the reason that the price of `**Awa** was so high and the mountain plantings were forbidden." (Anonymous1 n.d., translation by author)

While not mentioning it in his/her writings, the above author might be referring only to the potent and spiritually powerful `**Awa** varieties, the **mō`i** and the **hiwa**, that were typically reserved for the **ali`i** and **kahuna**. That would fall in line with Kekahuna's (1963A) statement,

"The great chiefs, for their pleasure, also imbibed the sacred `**Awa**, permitting only the use of non-sacred varieties to the humble commoner, unless a **kahuna** used a sacred variety to treat a sickness." (Kekahuna 1963A)

In a reference that makes it hard to deny the use of `**Awa** by the **maka`āinana**, Kamakau (1976A), explains the common circumstances for the use of `**Awa** by **maka`āinana**. Unlike the **ali`i**, who drank `**Awa** for social reasons, the **maka`āinana** used `**Awa** as medicine to soothe the soreness of the muscles after a hard day's work. However, like all those in society, the utmost sanctity and respect was always shown to the `**Awa**, as well as, the ancestors associated with it.

### Maka`āinana and the `Aumakua

For the **maka`āinana** maintaining a relationship with the ancestors was important. `**Awa** facilitated a way to communicate with, and honor one's ancestors. As Kekahuna (1963A) explains, other plants that were involved with the consumption of `**Awa**, such as **Kō** and **Mai`a**, were identified by their varietal names to further insure that the help and guidance that is asked for, at such times, is received.

There were innumerable kinds of prayers said over the **`Awa** cup. These prayers usually honored the gods (**akua** and **`aumakua**), and asked of their blessings for the **ali`i**, the family, and for long life. According to Gutmanis (1983F), of all the offerings man has to give the gods, that of **`Awa** is the most pleasing<sup>2</sup>. It is as essential for their nourishment and growth as **i`a** and **poi** are essential for the growth and nourishment of man.

Kuaea (1867) recorded the following, which is a typical prayer said when offering **`Awa**. Such prayers were often chanted as a **kānaenae**, or chant of supplication, and are uttered just prior to drinking.

**O Ku, o Kane, o Kanaloa, na `li`i,  
Na `aumakua i ka po,  
Na `aumakua i ke ao,  
Eia ka `awa.  
E ola ia Kamehameha,  
E ola no hoi ia makou pulapula,  
A kaniko`o, a pala-lauhala,  
A kolopupu, a haumaka`iole,  
O ka ola ia e ke akua  
A hiki i ka puaneane.**

**O Ku, O Kane, O Kanaloa**, the chiefs,  
To the **`aumakua** of the night,  
To the **`aumakua** of the day,  
Here is **`awa**.  
Grant health to Kamehameha,<sup>29</sup>  
Grant health to us, thine offspring,  
Till the [time of the] sounding of cane, the sprawling on **lauhala** [mat],  
The hitching along, bent with age, with eyes heavy and wrinkled as a rat's,  
That is the life from [dealt out by] the gods,  
Till breath gradually fades away. (Kuaea 1867, translation by author)

After saying the prayer, the drinker dips a finger into the **`Awa** and snapping it upward says, “**`O ko `oukou aku la nō ho`i ia, a `o ko`u nō ho`i kēia**,” or “This is for all of you, and this is mine.” Then the **`Awa** is consumed (Kuaea 1867).

Another **`Awa** prayer (**kānaenae**) is demonstrated by Pakele<sup>30</sup> (Anonymous 1995). It is described as an **`Awa**-drinking prayer (**He Pule Inu `Awa**) and a supplication chant for female deities, **Pele**, **Hī`iaka**, and **Laka** (**He mele kānaenae no Pele, Hī`iaka, a me Laka**).

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<sup>29</sup> The name of the then currently ruling chief was used here. Today the name of the highest official of the nation, state, city, or any organization may be used.

<sup>30</sup> Contributor: Peter Pakele Sr., Waiākea, Hilo, Hawai`i. 1869-1952. Born in Kaupakuea, Hilo, Hawai`i (Anonymous 1995).

**Kū malolo iā Puna i ka `Awa,**  
**He `Awa inu kahela `ia na Kalani**  
**Ua līhau a`ela i ka lehua makanoe<sup>31</sup>**  
**Hī`olani kēlā moe i Wahinekapu.**  
**Kau i keha a ke kanaka kia manu ē, he anu.**  
**`O ke kanaka paha i ai make i ke anu,**  
**Ke hā`i maila i kāna ko`eko`e**  
**E uhi iho `oe i wahi kapa no`u i mehana au.**  
**E Kalani nō, e ho`ōla, ola nā ma`i āpau.**

Thriftily grows the **`Awa** in Puna,  
 The **`Awa**, a tasty drink for the Chiefess.  
 Pleased is she with the stunted lehua  
 And falls asleep at Wahinekapu.  
 She pillows her head and sleeps like a bird catcher, who is cold,  
 Perhaps like a man benumbed with cold,  
 Who complains of the damp and chill.  
 Cover her over with a covering, to warm her.  
 O heavenly One, grant health, heal all kinds of diseases. (Pakele in  
 Anonymous 1995)

This is a good example that shows the diversity of culture, within ancient Hawaiian society, for the common practice of prayer before partaking of **`Awa**. While this chant is of the same substance as some the other known examples of **kānaenae** prayers it is somewhat different from many in that it has a different format. Most of the other known examples begin with lines that call upon the gods (**akua** and **`aumakua**) and end with a call for extremely long life. This example is not as direct. It uses hidden meaning (**kaona**) to refer to and honor **Pele** with poetic metaphors describing her intoxication with **`Awa**. The chanter thereby demonstrates her greatness as a woman who was powerful enough to drink the **`Awa** of the **ali`i**. This chant, which was practiced in Puna, is easily identifiable as a chant from the Puna and Hilo areas by its contextual metaphors. Such a chant would not likely be used outside of the people of the Puna and Hilo area. Of note is that the person who contributed this chant, Peter Pakele, is a male, and this is a chant to female **akua**. However, caution should be taken when speculating about this example because it is not known if Pakele used this chant himself or if he merely had knowledge of it.

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<sup>31</sup> **Lehua makanoe** [a small shrub] is a play on words; **maka**- eyes, **noe** – misty. “Drowsy is she with the **`Awa**.”

### `Awa amongst fishermen

**`Awa** was one of the things traded for by fishermen (Kamakau D). It was also used as a medicine for relaxation after a hard day of fishing. The **`Awa** would be prepared and the day's fish cooked, and then the men would partake of these things in the **hale mua** (Kamakau 1976C, D)

One of the few records of **maka`āinana** actually having a feast and/or celebration that included **`Awa** was one given by Kamakau (1976B) when he wrote about the completion of a net. Completing a large hand-made net is a long and tedious process. Kamakau (1976B) wrote that at the completion of such a net a feast, including **`Awa**, was prepared for all those involved in the making and future use of the net. Kamakau did not clearly state **`Awa**'s role but it can be inferred that it was an offering to the various fishing **`aumakua** and celebratory drink for those involved. That night, presumably with the intoxication of **`Awa**, as the fishermen were sleeping the success of the following day's fishing expedition would be revealed unto them. This is a special example because it shows that **maka`āinana** too, had social gatherings involving **`Awa** consumption. Because **`Awa** was such a precious commodity, such celebrations were probably rare.

### **Female Consumption of `Awa**

Lebot et al. (1997) have noted a sexual asymmetry of Kava consumption in the Pacific. However, as alluded to in their book, this conclusion may have been heavily influenced by the fact that most of the ethnobotanical studies done amongst **`Awa** drinking societies of the South Pacific were done by men in the context of male socialization customs. Many people assume that this asymmetry of **`Awa** consumption applies to Hawai`i as well. Pukui herself (Titcomb 1948) stated that women were permitted to drink **`Awa**, but usually by themselves, and rarely in the presence of men. This does give validity to the thought that Hawai`i did not escape this trend of asymmetry. Furthermore, it is sometimes speculated amongst contemporary **`Awa** drinkers in Hawai`i that the **`Aikapu** system, which separated the male and female **ali`i** when eating, applied to the consumption of **`Awa** as well. However, that does not seem to be the case. There are several examples that show this dichotomy between the sexes was not as strong as some people think. Yet, while there is no doubt that women, in ancient Hawai`i, partook of **`Awa**, it is not clear if it was as common a practice for them as it was for males. Within Hawaiian **mo`olelo** of precontact Hawai`i, there are not only records of females partaking of **`Awa**, both on a social and a ceremonial level, but also of them partaking of **`Awa** in the presence of men. In some cases, women were even the ones who conducted the ceremonies with men on the side as assistants. These examples, however, are few and far between.

### Adverse Effects on Female Reproductive System

Lani Kealoha (2003) gave some insight as to why it may be that there are few records of women partaking of **`Awa** in Hawai`i. Her great-grandfather, Kekai Moku, was a well known healer in the late 1800's to the early 1900's, in Kohala, Hawai`i island. He placed a **kapu** of **`Awa** upon all the females in his family because of the negative affects he knew it had on the female reproductive system. According to him **`Awa** consumption led to premature births. Such knowledge was perhaps well known because both Pukui (Handy and Pukui 1972) and Helekūnihi (Spenser 1895) documented that **`Awa** should be avoided by pregnant women.

If ancient society, as a whole, viewed **`Awa** as being detrimental to those who bore the future generations, it may have put social restrictions upon the drinking of **`Awa** for females of childbearing age. This may be the reason that so little is recorded about the relationship between **`Awa** and Hawaiian females in ancient society. However, under certain ceremonial circumstances, its preeminence as an offering and as an embodiment of certain gods may have superceded the social restrictions that frowned upon the female consumption of **`Awa**.

### Within the Drinking Parties of the Ali`i

As seen in the above example from the tale of Nā-maka-o-ka-pa`ō`ō (Anonymous 1917), women drank freely in a social gathering of **`Awa** drinking called for by a male **ali`i**. Another example, given in the tale of Kepakailiula (Anonymous 1919), shows that it was not uncommon for women to be present in the drinking parties of **ali`i**.

“The chief, Kukuipahu, had an **`awa** drinking party that evening. The **Kukui** candles were lighted in the long shed of the chief. The burnt nuts were knocked off by four hunch-backed men. Hunch-backs were favorites of chiefs. After the chiefs had drunk their **`awa**, Kukuipahu sat against the wall, but he was not intoxicated with **`awa**. The house inside was encircled by chiefs, not only men but women too.” (Anonymous 1919, translation by Pukui in Titcomb 1948)

In the first example it was not stated whether the women were of **ali`i** class or not, but in the second it clearly stated that the females were of **ali`i** class. Neither example, however, stated whether or not they were beyond child-bearing age. When female **ali`i** did drink **`Awa** they also had particular variations of prayers said over the **`Awa** as is seen in the previous example collected by Emerson (Gutmanis 1983).



## Religious Ceremonies

There are not nearly as many records of **`Awa** drinking by females as there are for males. This includes the partaking of **`Awa** for religious ceremonies. Perhaps this is due to the fact that most of those who recorded aspects of the ancient culture were men (e.g., Kamakau, Malo, Īi, Kekahuna, Kuaea), and therefore not privy to ceremonies conducted by women. Pukui, though, knew about some of the ceremonies in which **`Awa** was offered to female deities. She recorded (Beckwith 1940) that particular varieties of **`Awa** were used in female ceremonies, "... the **papa** (variety of **`Awa**)... being specially offered to female deities. " Unfortunately she did not go into details about what those ceremonies were, or who they were for. It is likely that women conducted such ceremonies, perhaps on **heiau** dedicated to female deities, but there are no other known records of such practices. Perhaps these ceremonies were for **Papa**<sup>32</sup> herself. These female deities whom Pukui refers to are likely to be deities other than **Pele**. Kekahuna (1963) states that **Pele** preferred the **hiwa** and **mō`i** varieties. This is also supported by the many recorded chants for **Pele**.

## Female Akua

There is no doubt that female **akua** consumed **`Awa**. In the legend of Kawelo (Green and Pukui 1929), a goddess, **Malei**, "felt a longing for **`Awa** such as is planted by the birds in the trees of Pānā`ewa... When the **`Awa** was prepared both **Malei** and her lord... drank so deeply as to be intoxicated." Poepoe (1906) wrote of an **`Awa** ceremony which was conducted by the female **akua Papa** with the help of a male farmer. **Pele**, too, was famously fond of **`Awa** (Handy and Pukui 1972), although she seemed to be one who would rather drink in the presence of women. The following chant (Emerson 1909) records those females of her clan that were associated with **`Awa**.

**"O Pele la ko`u akua  
Mihi ka lani, mihi ka honua.  
`Awa iku, `awa i lani,  
Kai `awa`awa, ka `awa nui a Hi`iaka,  
I kua i Maui-ola,  
He `awa kapu no na wahine,  
E kapu!  
Ka`i kapu ko`u `awa, e Pele-a-honua-mea,  
E kala, e Haumea wahine,  
O ka wahine i Kilauea,**

---

<sup>32</sup> **Papa** is also known as **Papa-hānau-moku** and **Haumea** (Poepoe 1906), and is sometimes referred to in English as Earth-mother.

**Nana i eli a hohonu ka lua.**  
**O Mau-wahine, o Kupu`ena [Kuku`ena]<sup>5</sup>**  
**O na wahine i ka inu-hana`awa,**  
**E ola na `kua malihini!**

**Pele** is my goddess,  
Let there be silence in the heavens, silence on the earth.  
For the straight-growing `Awa, the heavenly `Awa,  
The bitter juice, the great `Awa of **Hi`iaka**,  
That was cut down at Maui-ola,  
It is `Awa dedicated to the women,  
It is sacred!  
Let your `Awa be sacred indeed, O **Pele-honua-mea**.  
Proclaim the **kapu**, O **Haumea-the-moman**,  
The woman at Kilauea.  
It was she who dug the pit until it was deep.  
**Mau-wahine** and **Kuku`ena**  
Were they who prepared the drinking `Awa,  
Long like the gods from foreign lands!"  
(Emerson 1909, with revised translation by Pukui in Titcomb 1948)

### Female Ali`i

The act of ceremonially offering `Awa was not only practiced by female deities, but by female **ali`i** as well. The tale of Kamiki (Anonymous 1912) is a clear example of the role of women under the circumstances of `Awa consumption. Ka-uluhe-nui-hihi-kolo-i-uka, an **ali`i** was the gray-haired (**po`ohina**) grandmother of Kamiki and Maka`iole, who were both males. Throughout the story, when Kamiki and Maka`iole had to ceremonially consume `Awa, Ka-uluhe-nui-hihi-kolo-i-uka was the one who conducted the ceremony. She not only prepared the `Awa, but was also the one who offered the chant that precedes the consumption of `Awa, and then drinks with them. This is the only known example in which the age and social status of the female is known.

Even if men conducted the ceremony, there were at least certain circumstances under which women could participate. Hoke (1896) stated:

"At the close of the prayer ceremony, the king announces its success. All people bow alike before the altar; after which the king takes a portion of the pig, perhaps the snout, the hoof, the tail, and the liver. When he has eaten this and drank the cup of `awa, with the prayer to the god **Kāne**, for his preservation, and that of his chiefs and retainers, for victory over his enemies ... when the priest has blessed the sacrificial pig, then the remaining chiefs and chiefesses, the counselors, the priests and all honourable people of the

land eat alike of the pig and drink the **`awa** of the **heiau** with thanksgiving...” (Hoke 1896, translation by Pukui in Titcomb 1948)

This is a peculiar example because it records that women also partook of the pig, which was **kapu** in the old days under the ancient laws. Nonetheless, it shows that women were participants in such ceremonies.

Through these examples it can be concluded that the consumption of **`Awa** was practiced by women in ancient Hawai`i for ceremonial and social purposes. Perhaps, like the traditions of the South Pacific, reported by Lebot et al. (1997), the female consumption of **`Awa** was restricted to women who were past child bearing age. But the lack of descriptions, within these few records of women drinking **`Awa**, makes it impossible to definitively say either way; and unless further evidence is uncovered it may never be known.

### Excessive Drinking

Excessive drinking of the **`Awa** beverage can be harmful to one’s health. Many explorers, missionaries, and visiting writers have described these deleterious effects (Portlock 1789, Vancouver 1798, Kotzebue 1821, Ellis 1826, Emerson 1903, Hough 1905, Churchill 1916, Anonymous 1918, Deihl 1932, Bird 1964, King in Beaglehole 1967) which paints an ugly picture of Hawai`i’s **`Awa** culture, but Terangi Hiroa<sup>33</sup> (1957) stated, “the various derogatory accounts regarding its drastic effects have been grossly exaggerated.” Perhaps the most accurate account comes from Kekahuna (1963G).

“It reduces control of the arms and legs. The mind is temporarily dulled, though it remains clear till the drinker sleeps. Continued excess debilitates, causes underweight, and eventually a withered body. The eyes become inflamed, bleary, bloodshot, squinty, and suppurated; the lips become cracked and dry. After several weeks the skin becomes rough, shiny, ulcerous, and **mahuna** (scaly).” (Kekahuna 1963G)

Sometimes these seemingly negative effects upon the skin actually were sought after for cosmetic reasons. As Kekahuna (1963F) explains, copious drinking was actually done to obtain beautiful skin.

“A very effective cosmetic, popular with both men and women, was [the] **`awa** drink. For a month or two the beauty seeker drank considerable **`awa** till scaly skin (**mahuna**) appeared. A good purgative was then taken, and sea bathing engaged in for about a week, whereupon the scales disappeared.

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<sup>33</sup> Terangi Hiroa was also known as Sir Peter S. Buck and was the director of the B.P. Bishop Museum from 1936-1951.

Coconut oil was then rubbed over the body. The delightful outcome was a soft, fair new skin (**ma`ili ka `ili**) like that of a child.” (Kekahuna 1963F)

In this way, **`Awa**’s seemingly negative effect was actually used for a positive purpose.

## **`AWA AS MEDICINE**

### **Overview**

**`Awa** was one of the most important medicinal plants in pre-contact Hawai`i (Abbott and Shimazu 1985). Medicinally, **`Awa** has a wide range of applications. These ranged from the universal applications that the any general person would know, to specific applications that needed to be prescribed by a professional healer, or **kahuna lā`au lapa`au**.

**`Awa** was universally recognized amongst the people of ancient Hawai`i as having unique abilities to relieve aching muscles and induce a good night’s sleep. In this manner the ancient fisher and farmer used it after a hard day’s work (Kamakau 1976A). Aside from the above, **`Awa** was generally known to have been useful for improving health, soothing the nerves, steadying the pulse, and not raising the temperature (Kekahuna 1963E).

However, **`Awa** was recognized by **kahuna lā`au lapa`au** as having a far greater range in medicinal applications. Almost all **kahuna lā`au lapa`au** did seem to use **`Awa**. Of the 21 **kahuna lā`au lapa`au** surveyed in Chun (1994II) 14 used **`Awa** in at least some aspect of their healing. Within this class of professional healers there were universal uses of **`Awa**. Such general uses included **hailona** (divination), and offerings and prayers to various healing **akua** in the diagnosis process (Gutmanis 1976, Chun 1994II F, K). Yet **`Awa** had many specific uses that varied greatly amongst practitioners. Table 3-1, 3-2, and 3-3 illustrates some examples of this phenomenon. It was also used as a crucial aspect of a regiment to lose weight (Kamakau 1976A, Kekahuna 1963E).

Not only the **`Awa** beverage was used as medicine. Miscarriage is said to have been induced by the insertion of **`Awa** leaves into the vagina, and mashed **`Awa** root was used as a poultice for boils (Kekahuna 1963E). In fact all parts of the plant were recognized as having medicinal aspects (see Tables 3-2). Because of **`Awa**’s wide range of medicinal applications there were various ways of preparation, even if only the drink is made (Chun 1994I A, 1994II A-C,F,H,I,L-N).

## Medicinal Varieties

Several varieties were noted to have special medicinal qualities. According to Pukui (Beckwith 1940), the juice of the **nēnē** variety was used as a soothing syrup for fretful infants. The saying goes, “This is a fretful (**ōnēnē**) child and must be given the **`Awa nēnē**.” Kaaiaakamanu and Akina (Chun 1994I A) reported that the varieties **hiwa**, **mō`i**, and **papa `ele`ele** are especially useful in treating urinary problems; and that the **mō`i** and the **papa kea** are especially efficient in treating splitting headaches.

## Medicinal Practices

Chun (1994I A, 1994II A-C,F,H,I,L-N) is also evidence of the wide range of illnesses treated with **`Awa**. It also shows that all parts of the plant were used. **`Awa** was not always sufficient in and of itself to treat problems. It was quite often used as only one ingredient in one portion of a highly complex remedy. In these complex treatments many other plants were mixed directly with **`Awa** (Table 3-1). If **`Awa** was prescribed in drink form, depending on the circumstances, it would be injected cold, room temperature, or warm. If not injected in liquid form it could also be applied as an ointment, body covering, enema, or as an offering (Chun 1994II A-C,F,H,I,L-N).

Table 3-1. Illnesses Treated with ‘Awa

|  |
|--|
| <ul style="list-style-type: none"> <li>• <b>`Āwailalo</b></li> <li>• <b>`Āwailena</b></li> <li>• <b>`Ea</b></li> <li>• <b>`Ea `ōpūlauoho / `Ea umalei</b></li> <li>• <b>Haikala</b></li> <li>• <b>Kohepopo / Wai`ōpua</b></li> <li>• <b>Lua`i koko</b></li> <li>• <b>Luhi / Ma`uhā / Mā`opa`opa</b></li> <li>• <b>Maka`ā</b></li> <li>• <b>Mimi pa`a / Mimi kulu</b></li> <li>• <b>Nahu</b></li> <li>• <b>Ni`aulua</b></li> <li>• <b>Pā`ao`ao</b></li> <li>• <b>Pā`ao`ao kakua</b></li> <li>• <b>Po`o hua`i</b></li> <li>• <b>Pū`ao kole / Pū`ao pelu</b></li> <li>• <b>Pu`upa`a / Haku ala</b></li> </ul> |
|--|

Table 3-2. Parts of `Awa plant used in medicine as reported by Chun (1994I and 1994II)

|   |
|---|
| <ul style="list-style-type: none"> <li>• <b>Huluhulu</b> (Rootlets)</li> <li>• <b>Pū`awa</b> (Root section: Half dried / Well dried / Ash)</li> <li>• <b>Pu`upu`u ma ka ponapona</b> (Stem internodes)</li> <li>• <b>Ponapona</b> (Stalk)</li> <li>• <b>Lau</b> (Leaf )</li> <li>• <b>Mu`o</b> (Leaf buds)</li> <li>• <b>`Awalau</b> (Young plant)</li> </ul> |
|---|

Table 3-3. Other ingredients mixed directly with **`Awa** for medicinal remedies as reported by Chun (1994I and 1994II)

- Fermented sea water
- **`Ahu`awa**: stalk
- **`Akia**: leaves
- **`Ana**
- **`Āweoweo**: fruit
- **`Ea** (turtle): powder
- **Hala**: flower
- **`Ihi`ai**: leaves, buds, stalk
- **`Ilie`e**: leaves
- **`Ilima**: flowers
- **Kalo**: leaves
- **Kāmanomano kuahiwi**: leaves
- **Kō**: juice
- **Koali**: tap root
- **Ko`oko`olau**: leaves, flowers
- **Kūkaepua`a**: leaves
- **Kukui**: flowers; nut: peel, ashes
- **Limu o ka wai**
- **Lumaha`i**
- **Mai`a**: fruit
- **Makoa**: root
- **Makou**: leaves
- **Māmaki**: fruit
- **Moa**: egg
- **Moa kuahiwi**
- **Niu**: water, roots
- **`Ōhi`a `ai**: leaves, bark
- **`Ōhi`a hāmau**: leaf bud
- **`Ōlena**: root
- **Pāmakani**: leaves
- **Pāpipi**: juice
- **Pili** grass: ash
- **Pōpolo**: leaves, fruit
- **Puaaloalo**: leaves
- **Pūwahanui**: flower
- **Tī**: sap, leaves
- **`Uala**: tuber
- **`Uhaloa**: root
- **Uhipe`a**: stalk, leaves, fruit
- **`Ūlei**: leaf buds
- **Wauke**: sap, leaf buds
- **Wiwi**: leaves

The treatments that included **`Awa**, reported by Chun (1994II) contains much more detail and tended to be more complex and elaborate than the remedies reported by Chun (1994I A). Chun (1994I) consists of a compilation of various healers' remedies arranged by plant and not individual practitioner. Therefore, individual remedies are not attributed to individual practitioners. Chun (1994II) consists of interviews of individual **kahuna**. The text is arranged by individual **kahuna** and not by individual plants.

Although some deleterious effects are noted, proper usage of **`Awa** was considered to be an integral part of promoting good health. It is important to note its universal importance in relieving sore and aching muscles, and among **kahuna**, in the diagnosis process. Yet, its specific uses as a mediator of health are widely varied among practitioners.

## **`AWA VARIETIES**

### **Overview**

My research has uncovered 49 names and descriptions of Hawaiian **`Awa** varieties<sup>34</sup>. Some varieties had more than one name, and some of the descriptions are ambiguous. There are, no doubt, more that have not been described or recorded. Two varieties currently in cultivation – under the names “Spotted **hiwa**” from **`Opihikao**, Puna, Hawai`i; and “**Hanakāpī`ai**” from Hanakāpī`ai valley, Nāpali, Kaua`i – are old Hawaiian varieties that do not fit any of the descriptions collected. When these double and ambiguous names are taken into account, together with the remaining Hawaiian varieties that do not match any of the assembled descriptions, it appears that there were at least 35 distinct varieties in Hawai`i.

### **Number of Varieties in Ancient Hawai`i**

The idea that the ancient Hawaiians had many more than 14 **`Awa** varieties is supported by several sources. It is not known exactly how many did exist, but there are records that there were many. Chun (1994I B) alludes to a number that is too high to make an accurate count.

“He nui a he lehulehu wale na ano Awa, a ua hoomaopopo ia hoi lakou pakahi ma ko lakou lau, kino a me aa.

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<sup>34</sup> For a discussion of the relationship between varietal number and cultural importance see introduction.



There are many types of **`Awa**. They are each distinguished by their leaves, stalks and roots.” (Chun 1994I B)

Kekahuna (1963A) states,

“There are approximately two dozen Hawaiian varieties, some of which are known by different names in different localities, each of which shares its name with the drink that it produces.” Kekahuna (1963A)

He only describes the two that he says were most sacred, **`Awa hiwa** and **`Awa mō`i**.

John Ka`imikaua<sup>35</sup> is another source that confirms this concept. In his youth, in the early 1970's, he used to travel the islands with his maternal great-grandmother, as she would go around to visit her friends. He would often collect from these **kūpuna** the varieties of **Kalo**, **`Uala**, **Kō**, **`Awa**, etc. that they had growing in their gardens, along with their names and other ethnobotanical information. He grew 18 varieties of **`Awa** that he collected during his travels with his great-grandmother. These varieties were very different than what Handy (1940) mentions.

Handy (1940), the most commonly cited source when discussing **`Awa** varieties, collected 15 names and descriptions of Hawaiian **`Awa**<sup>36</sup>. His work was far from exhaustive, and he describes his own work on varietal names by saying,

“Limitation of time made impractical any effort at systematic collecting and identifying varieties of awa from different localities. Here I merely summarize what is in print and in my field notes, based on observation of a few specimens but mainly upon descriptions by local residents<sup>3</sup>.” (Handy 1940)

With this statement we can see that Handy himself acknowledges the possible existence of many more varieties.

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<sup>35</sup> John Ka`imikaua is a **Kumu Hula** whose traditions come from the island of Moloka`i

<sup>36</sup> Handy's (1940) sources for information on **`Awa** varieties. Apparently, only the first four are from his own research. The last three are from published sources available at the time.

- Akuna, a planter in Puna, Hawai`i.
- Kelihue, and old **kama`āina** of Ka`u, Hawai`i
- Mawai, and old **kama`āina** from Nahiku, Maui
- Mrs. M.K. Pukui, born in Ka`u, Hawai`i, very well acquainted with Puna and with the island of Kaua`i, and now a resident of O`ahu.
- Emerson, writing about O`ahu (Emerson 1903)
- Kamakau also writing about O`ahu (Kamakau 1976A)
- Kaaiakamanu, a **kama`āina** writing about Maui (Chun 1994I originally Kaaiakamanu and Akina 1922)

Oscar P. Cox (1930) collected seven names and descriptions from his granduncle in Waialua, O`ahu. This list of names and descriptions is very important because it describes several varieties that are not mentioned elsewhere. Based upon the nomenclature and descriptions, it seems that a few of the varieties he mentions were local varieties with little distribution. Although he only names and describes seven varieties, he tantalizingly alludes to more. “There may be other varieties, but at present the above are the only ones I have, will continue (sic).” Unfortunately, no other documents pertaining to **`Awa** are known to have been written by him.

Kamakau (1976A) describes the look of the plant, and the six varieties that he was familiar with in a truly Hawaiian fashion.

“**`Awa** was one of the choice foods of the planter. **`Awa** is a handsome plant, with nicely rounded leaves and stems and shiny joined sections like the short rounded sections of the red **papa`a** sugar cane. The low growing **papa`ele`ele** and **papa kea** varieties of **`awa** grow to be very handsome and decorative; the stems of the **hiwa** and the **mō`i** varieties grow straight up with sections of those of the **honua`ula** sugar cane; **mākea** has dark green stems like the bamboo, and the **mokihana** stems grow thickly, like a clump of bamboo growing in a sunny place. These are some kinds of **`awa**.”  
(Kamakau 1976A)

The varieties he mentions are among the most frequently described varieties and seem to have been the handful that were the most common in his time.

The relationship between some of the **`Awa** varieties is referred to in a chant in the tale of Lauaieie<sup>37</sup> (Anonymous 1894). One verse mentions four pairs of **`Awa**, each within a pair being similar in some sense.

**“Iho mai ka `awa hiwa me ka makea  
Elua laua.  
O ka papa`ele me ka papakea  
Elua laua.  
O ka mo`i me ka mokihana,  
Elua laua.  
O ka nene me kawaimakaakamanu,  
Elua laua.**

The **`awa hiwa** and the **makea** came down,  
A pair were they.  
The dark **papa** and the light **papa**,  
A pair were they.  
The **mo`i** and the **mokihana**,

---

<sup>37</sup> Exact pronunciation of “Lauaieie” is unknown to author

A pair were they.  
The **nene** and the **ka-wai-maka-a-ka-mau**,  
A pair were they.”  
(Anonymous 1894, translation by Pukui in Titcomb 1948)

It is not clear why the chanter has paired these eight **`Awa** varieties in the way he/she did. The pairing could either be based on some physical similarity or it may be showing some other relationship. Perhaps one in each of these pairs is the parent of the other, the other possibly being a somatic mutation.

For many Hawaiian plants, there has been a great loss of associated cultural knowledge. In Hawaiian culture, plant names are very significant. These names sometimes carry with them the key to the plant's significance, and thus cultural knowledge is often retained or lost with the retention or loss of its name. In order to determine how each of the Hawaiian **`Awa** varieties are culturally significant, it is necessary to understand the story behind their names, i.e. how and why the ancient Hawaiians named plants<sup>38</sup>.

### **`Awa Names and Descriptions**

Knowing the old varietal names and descriptions will be useful in determining whether or not any of these ancient varieties are the ones being grown in the common garden. Below is a list of the names and their associated descriptions as described by the original sources. For an easy breakdown of these see Table 3-4. For a breakdown of these in their ethnobiological classification categories see Table 3-5. The following is a complete list of all known varieties and descriptions.

#### **`Apu**

- Distinguished by its short green stalks (Emerson 1903).

#### **`Awa-a-Kāne**

- Same as **`Awa li`i**, a variety of kava. It is said that the god **Kāne** brought the first **`Awa** to Hawai`i. (Pukui and Elbert 1986:34)

#### **Ha'alani**

- No known description other than it being a short growing variety. From Kona, Hawai`i. (Ka'imikaua n.d.).

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<sup>38</sup> For a discussion on the process of naming Hawaiian plants see introduction.

### Ha`alani hiwa

- No known description other than it being a short growing variety. As the name indicates, it was probably distinguished from the other **Ha`alani** varieties by its darkish characteristics. From Kona, Hawai`i. (Ka`imikaua n.d.).

### Ha`alani kea

- No known description other than it being a short growing variety. As the name indicates, it was probably distinguished from the other **Ha`alani** varieties by its whitish, or light green characteristics. From Kona, Hawai`i. (Ka`imikaua n.d.).

### Ha`alani kolo

- No description other than these were short growing varieties. As the name indicates, it was probably distinguished from the other **Ha`alani** varieties by its tendency to crawl or grow extremely prostrate. From Kona, Hawai`i. (Ka`imikaua n.d.).

### Ha`alani `ula

- No known description other than it being a short growing variety. As the name indicates, it was probably distinguished from the other **Ha`alani** varieties by its reddish characteristics. From Kona, Hawai`i. (Ka`imikaua n.d.).

### Ha`upu poko

- Short **Awa** plant. Stems grow vine-like with short, brown colored stems. Plant never reaching more than 3 feet high. Found at private garden at Diamond Head Hawaiian Center in 1972 (Ka`imikaua n.d.).

### Hiwa

- He lau ano poepoe like me ko ka Maunaloa a Ohia ai no paha, he ano mahumahu a hinuhinu o ka lau. He eleele paa loa keia ano Awa, a loloa no hoi ka puna (pona), he hoohana a hookapukapu e na kahuna hoomanamana, he ano kakaikahi kona hua ana, a i na kahuna haha he laau lapaaui mai kona mu`o kona mole (**Chun 1994I**).
- Its leaf is kind of round like the Maunaloa and perhaps the **Ohia`ai**. The leaf is kind of smooth, shiny and brittle. This type of **Awa** is very black and its sections are very long. The use and sanctification of this plant was done by the **kāhuna ho`omanamana**. Its fruit is very rare and the **kāhuna Hāhā** used its leaf bud and tap roots for medicine. (Chun 1994)
- Has long joints and dark green stalks (Emerson 1903).
- Resembles the **Honua`ula** sugarcane (Kamakau 1991).

- Forms a low bush. **Wai-a-ka-manu** is a special form coming from **Hiwa** as an offshoot, having joints green on one side and dark (**`ele`ele**) on the other (Mawai in Handy 1940).
- The most sacred of these varieties were the **`Awa hiwa**, with dark green somewhat long stem internodes, dark at each node when mature, and the **`Awa mō`i** ... (Kekahuna 1963).
- The skin or bark of the stem is dark, the leaves are also dark. They also use this kind of **`Awa** in the sacrificial ceremonies of **Pele** worship. It is used at the **Heiau** and fish **Ko`a** (fishing spots) (Cox 1930).
- **Hiwa** and **Mākea** are paired in the **Lauaieie** chant (Anonymous 1894).

### **Huanēnē hiwa**

- Black spotted **`Awa** on stems. Acquired at Kahakuloa, Maui, in 1973 from Ho`opi`i family (Ka`imikaua n.d.).

### **Huanēnē `ula**

- Dark-red spotted **`Awa** on stems. Acquired at Kahakuloa, Maui in 1973 from Ho`opi`i family (Ka`imikaua n.d.).

### **Kau-lā`au**

- Is the famous **`Awa** of Puna, Hawai`i, which grows in the crotches of trees where, according to Hawaiians, it becomes planted by birds building pieces of the stem into their nests (Mawai in Handy, 1940).
- A line from a **mele** reads: **“Ka manu ahai kanu awa e,”** or “The bird clipping the twig of the **`Awa** and planting it elsewhere.” Kaaiakamanu identifies it as the same as **Mokihana**, but Mrs. Pukui, who is well acquainted with Puna (Kaaiakamanu came from eastern Maui) tells me that any variety might be found growing in this way. This Puna **`Awa** was famous for its strength, which was due, in Mrs. Pukui’s opinion, to the fact that its roots grew in the sunlight (Handy 1940).

### **Ka-wai-maka-a-ka-manu**

- Only known mention of this variety is from the **Lauaieie** chant, in which it is paired with **Nēnē** (Anonymous 1894). Probably, like the **Nēnē**, a spotted variety of medium height.

### **Ke`oke`o**

- Described as “whitish in general appearance and more commonly found than the others” (Kamakau 1991).
- Probably the same as **Papa kea**. (Handy 1940)

### **Koa`e**

- This is a fast growing **`Awa** and very plentiful. The skin or bark of the stem is striped or long white stripes running up and down. The leaves are large

and like the Hoi-vine. This kind of **`Awa** root is named after **Puni-ai-koae**, a demi-god. Perhaps there is some growing at Mt. Ka`ala, O`ahu (Cox 1930).

- Perhaps resembling the white-striped **Koa`e** banana.

### **Kua`ea**

- See **Nēnē**.

### **Kūmakua**

- Internodes of medium length, green, bush tall (Akuna in Handy 1940).
- Although no records are known to exist about the meaning of this name it could possibly be a shortened version of the word “**kū-ma-kuahiwi**”, or “stands-in-the-mountains.” If this is true then its name could possibly be an indication of its ecological habitat. It might suggest that this is a variety that is well suited for mountainous areas.

### **Kūkaenalo or Spotted `Awa**

- The skin or bark of the stem is spotted with black spots. This is considered a strong **`Awa** (Cox 1930).

### **Kukae Nēnē**

- White splotched color on stems and leaves. Attractive variety of **`Awa**. The most beautiful of all **`Awa** varieties. Collected in Waimea, Kauai, 1974. The **`Awa** of this variety is very strong (Ka`imikaua n.d.).

### **Kupali`i**

- A variety of **`Awa** with very small leaves (Pukui and Elbert 1986).

### **Li`i**

- See **`Awa-a-Kāne**.

### **Mākea**

- He keokeo ke kino a me ka akaaka o keia Awa. Ano like ka loloa o ka pona (puna) me ka Awa hiwa, he wahi mea haulaula nae ma ka hookuina o na pona, like paha ka lau me ka Awa papa keokeo, like ke nunui o hua me na Awa e ae (**Chun 1994I**).
- The body and stalks of this **`Awa** are pale white. Its sections are kind of long like the **`Awa hiwa**, and its joints at the sections are kind of reddish. The leaf is perhaps like the **`Awa papa ke`oke`o** and the fruit is numerous like other types of **`Awa**. (Chun 1994I)
- **He keokeo [kona] mau lala, he nunui ka lau** (Fornander 1916-1920A).
- [It has] white branches and large leaves (Fornander 1916-1920A).
- **`Awa ma-kea** at Ka`ū, Hawai`i, also **`Awa a-kea** and **`Awa mahakea**. (Pukui and Elbert 1986)
- Has long internodes (Kamakau 1991).

- Lighter green than **`Apu** with one subvariety spotted (Emerson 1903).
- This is called **Mahakea** in Ka`ū, Hawai`i (Keliiahue in Handy 1940).
- I am told that both **Makea** and **Papa** sometimes put out a dark shoot which becomes one of the dark varieties (**Ele`ele, Hiwa, Mō`i**). **Ma-kea** grows into a tall bush (Handy 1940).
- **Mākea** and **Hiwa** are paired in the **Lauaieie** chant (Anonymous 1894).

### **Mahakea**

- Ka`ū name for **Mākea** (Keliiahue in Handy 1940)

### **Māmaka**

- Was seen at Wainiha, Kaua`i. The internodes are short and the stalk light green (Handy 1940).

### **Manākea**

- White-**`Awa**. It is not strong and not much used. Named after **Wākea**, the demi-god (Cox 1930).

### **Mānienie**

- A white, smooth stalk (Keliiahue in Handy 1940).

### **Moano kahakaha**

- Green and red stripes on stems. Leaves small and rounded. Low growing **`Awa** variety. Acquired from Aha`ino, Moloka`i in 1975 (Ka`imikaua n.d.).

### **Mō`i**

- He hauli ka nanaina o kona akaaka, a emi iki mai ka loaloa o kona pona i ko ka Awa hiwa, a he ano hakeakea no hoi ma ka hookuina a na pona. He laau lapaau maikai ka mu`o i ka Awa a ke aa, he hinuhinu ka lau (**Chun 1994I**).
- The general appearance of the stalk is a darkish color, and its sections are slightly shorter in length than the **`Awa hiwa**. It's sort of pale at the joints of the sections. The buds of the **`Awa** and the roots are a good medicine and the leaf is shiny. (Chun 1994I)
- **A ina kanu ia ka papa, puka mai he papa ame ka puawa moi, he eleele ka ili o waho o kona mau lala** (Fornander 1916-1920A).
- Should the **Papa** be planted it would produce **Papa** and the root **Moi**; these have black skin on their branches (Fornander 1916-1920A).
- Internodes are short, dark green and the nodes are somewhat whitish (Emerson 1903, Pukui in Handy 1940, Kamakau 1976A).
- Called **Papa mō`i** in Ka`ū, Hawai`i (Keliiahue in Handy 1940).
- A mutant from **Mākea** (Akuna in Handy 1940).
- Most sacred of these varieties were the **`Awa Hiwa** ... and the **`Awa mō`i** with dark stems and internodes not quite as long as those of the **`Awa hiwa** (Kekahuna 1963A)

- The skin or bark of the stem of this variety of **`Awa** root is red or sort of brownish. The priests of old, use this kind of **`Awa** in the sacrificial ceremonies to Pele. I am informed that plants of this specie can be obtained (Cox 1930).
- The **Mō`i** and the **Mokihana** are paired in the **Lauaieie** chant (Anonymous 1894).

### **Mokihana**

- He like ka lau a me ke keokeo me ka Awa makea. Pekepeke liilii ka pona i like aku me ka Ohe opiopio liilii. O keia ke ano Awa e lawe ia ai ka hua me ka aka e ka mau a kau iluna o ke kumulaau, a •omm. inoa ia ai “Ka Awa kau laau.” He ano aala ka inu ana o keia Awa, a he ikaika loa ka ona ke oi aku mamua o ke kupono ka inu ana (**Chun 1994I**).
- The leaf and its pale white color are like the **`Awa mākea**’s. The sections are very small [short and stubby] like the young **`Ohe** (*Schizostachyum glaucifolium* (Rupr.) Munro). This is the **`Awa** in which the fruit stalks are taken by birds and placed in trees. It is called “**Ka `Awa kau lā`au.**” There is a kind of fragrance smelled when drinking this **`Awa** and its potency is increased when it has been properly drunk. (Chun 1994I)
- **He keokeo [kona] mau lala, he nunui ka lau** (Fornander 1916-1920A).
- [It has] white branches and large leaves (Fornander 1916-1920A).
- Looks like **Papa** (Emerson 1903).
- Has “stalks like a clump of bamboo standing in a sunny place with branched thick together” (Kamakau 1976A).
- It is fragrant, hence the name for the **Mokihana** berry; and it makes a very strong brew. Internodes short and yellowish green. It is peculiar in having hairlike rootlets (Mawai in Handy 1940).
- **Mokihana** and **Mō`i** are paired in the **Lauaieie** chant (Anonymous 1894).

### **Nākea**

- Green stems with long joints. Light purple color near each joint. Collected from Johnny Kainoa from Hālawa, Moloka`i. (Ka`imikaua n.d.).

### **Nākea `ula**

- Same as above with reddish color under stems of leaves, from the **piko** down (Ka`imikaua n.d.).

### **Nākea hiwa**

- Same as above with dark brown to black color under stems of leaves (Ka`imikaua n.d.).

### **Nēnē**

- Awa kuaea ka inoa huna. He like ka akaaka o keia Awa me ko ka Awa makea. Eia na[e] he kikokiko kona nanaina a ano apuupuu no hoi like paha



me ke kikokiko o ke kua ea o ka honu, a i ole me ka Moa hulu nene no hoi (Chun 1994I).

- **`Awa kua`ea** is its secret name. The stalks of this **`Awa** are like the **`Awa ma-kea**. Furthermore, its general appearance is spotted and kind of lumpy like the spots of a turtle's back or also like the **Moa hulu nēnē**. (Chun 1994I)
- **Nēnē** is paired with **Ka-wai-maka-a-ka-manu** in the **Lauaieie** chant (Anonymous 1894).

### **`Ohe`Ohe**

- Extremely long stems between each joint: over 16 ½ inches when plant is two years old. The stems are green with light-dark stripes that finger out at each joint (Ka'imikaua n.d.).

### **`Ohe`Ohe`ula**

- Same as above except the stems are reddish in color. Both **`Ohe** varieties were found in Kona, Hawaii, in 1972. Called **`Ohe`ohe** because of the long stems of the plant (Ka'imikaua n.d.). Jerry Konanui (pers. comm., 2002) suspects the name **`ohe`ohe** came about like the **Kalo** variety called, **`Ohe**, because of the light-dark green stripes that are found on the Hawaiian **`Ohe** (bamboo).

### **Palai`i kea**

- The underside of each leaf is crinkled and resembles the **Lehua Palai`i** taro. Stems are green with no other color (Ka'imikaua n.d.).

### **Palai`i hiwa**

- Same as above except the stems; beginning from each joint, are dark to light green at the middle of each joint (Ka'imikaua n.d.).

### **Palai`i hiwaloa**

- Under crinkled leaves: stem is dark black with no green; the joints are thick and long, thus the name **Hiwa loa** or long dark stem. **Palai`i** found on Hanapepe, Kauai-1973 (Ka'imikaua n.d.).

### **Papa**

- **He keokeo [kona] mau lala, he nunui ka lau... A ina kanu ia ka papa, puka mai he papa ame ka puawa moi** (Fornander 1916-1920A).
- [It has] white branches and large leaves... Should the **Papa** be planted it would produce **Papa** and the root **Moi** (Fornander 1916-1920A).
- Has short internodes and a spotted stalk (Emerson 1903).
- The bush grows low (Akuna in Handy 1940).
- This is the smallest kind of **`Awa**. Grows slow and creeps. The bulk is very hard and is the strongest kind of **`Awa**. The effect after drinking is stronger than the other kinds of **`Awa**. It has very small roots (Cox 1930).

### **Papa `ele`ele**

- Like kona kino me ko ka Awa hiwa, aka nae, he pokopoko ka puna, a i ole (akaaka) he ano nunui iki ae ko ia nei lau, a like no hoi ka nanaina me ko ka Awa mo`i (**Chun 1994I**).
- The body is like the **`Awa hiwa**, but, the sections of the stalk are short and its leaves are slightly bigger, and in this regard its general appearance is like the **`Awa mō`i**. (Chun 1994I)
- Internodes shorter than **Mō`i** and is dark green (Handy 1940).
- It is described along with **Papa kea** by Kamakau (1991) as a “creeping variety,” (**nā `Awa nēne`e ha`aheo o kona ulu `ana me ka hanohano**).
- **Papa `ele** and **Papa kea** are paired in the **Lauaieie** chant (Anonymous 1894).

### **Papa kea**

- Is like **Papa `ele`ele** as to internodes and habit, but has a light green stalk (Handy 1940).
- Same as **Papa ke`oke`o** (Pukui and Elbert 1986)
- **Papa `ele** and **Papa kea** are paired in the **Lauaieie** chant (Anonymous 1894).

### **Papa ke`oke`o**

- He keokeo no kona mau ano a pau, a like no ka lau ke kino a me ka pona (puna) me ko ka Awa papa eleele. O keia ke ano Awa loa nui a ano ulu ma ka nahelehele hoi ke ano o kona ulu ana kiwalao ana ma na wahi ulu nui o keia ano Awa (**Chun 1994I**).
- It is whitish all around. Its leaves, body, and sections are like the **`Awa papa `ele`ele**. This is a commonly found **`Awa** in the forest. Its growth is prolific and spread out. (Chun 1994I)

### **Papa mō`i**

- Name for **Mō`i** in Ka`ū, Hawai`i (Keliiahue in Handy 1940).

### **Papa nēnē**

- No description (Kelsey notes, n.d., circa 1940). Perhaps, as indicated by the name a low growing (**papa**) and spotted (**nēnē**) variety.

### **Polohiki-a-Kāne**

- Black, shiny stems; extremely dark green leaves; short jointed about 2 to 3 inches; tall awa plant up to 8 feet. Found Lā`ie, Oahu 1975. Used for ceremonies. The awa variety the Gods **Kāne** and **Kanaloa** drank while on their visit to each of the Hawaiian Islands (Ka`imikaua n.d.).

### Pueo

- A green **`Awa** found in a 4 inch pot in the back of a greenhouse at the Lyon Arboretum in 2003. It was collected years earlier by Ron Fenstermacher from Harry Kunihi Mitchell in Ke`anae, Maui. It did not survive an attempt at outplanting.

### Puhi

- Not the flower, **awa-puhi**. This is a fast growing **`Awa** with dark color and white short strips [stripes?]. Named after **Puhi`ula**, another demi-god (Cox 1930).

### `Ula

- A commonly heard variety amongst those who collect Hawaiian **`Awa**. However, it is very illusive and has not yet been found. The author has heard mention of its existence in Ma`akua valley, O`ahu, from two sources, but was not found upon inspection. Only one reference is known to exist in the literature in Chun (1994II I): “...**ka `Awa `ula e iniki ai...**” or “...the red **`Awa** that pinches...”

### Wai-a-ka-manu

- A special form coming from **Hiwa** as an offshoot, having joints green on one side and dark (**ele`ele**) on the other (Mawai in Handy 1940).

Table 3-4. Hawaiian `Awa Varieties

Morphology of known Hawaiian `Awa varieties as described by Hawaiians. Descriptive terms are in the original words of the informants, i.e. no quantification of descriptive terminology has been done. Numbers correspond to respective informants.

| VARIETY                            | HEIGHT   | INTER-NODE LENGTH  | STEM COLORATION   | LEAF   | MISC.  |
|------------------------------------|--|--|---|--|--|
| <b>`Apu</b>                        | Short <sup>4</sup>                                       | --   | Green <sup>4</sup>  | --   | --   |
| <b>`Awa-a-Kāne /<br/>`Awa li`i</b> | --   | --   | --  | --   | --   |
| <b>Ha`alani</b>                    | Short <sup>1</sup>                                       | --   | --  | --   | --   |
| <b>Ha`alani<br/>hiwa</b>           | Short <sup>1</sup>                                       | --   | --  | --   | --   |
| <b>Ha`alani kea</b>                | Short <sup>1</sup>                                       | --   | --  | --   | --   |
| <b>Ha`alani kolo</b>               | Short <sup>1</sup>                                       | --   | --  | --   | --   |
| <b>Ha`alani `ula</b>               | Short <sup>1</sup>                                       | --   | --  | --   | --   |
| <b>Ha`upu poko</b>                 | Short<br>(3ft. max<br>height),<br>vine-like <sup>1</sup> | --   | Brown <sup>1</sup>  | --   | --   |
| <b>Hiwa</b>                        | Low bush <sup>8</sup>                                    | Very long <sup>6</sup><br><br>Long <sup>4</sup><br><br>Somewhat<br>long <sup>2</sup> | Dark green <sup>4</sup><br><br>Dark green<br>internodes, dark<br>at each node<br>when mature <sup>2</sup><br><br>Dark <sup>10</sup> | Round like the<br>Maunaloa and<br>perhaps `Ōhi`a `ai;<br>Smooth, shinny, and<br>brittle <sup>6</sup><br><br>Dark <sup>10</sup> | Fruit (flower?) is very<br>rare <sup>6</sup> |
|                                    | --   | --   |   | --   | --   |

|                              |                    |  |  |  |   |
|------------------------------|--------------------|--|--|--|---|
| <b>Huanēne hiwa</b>          |                    |  | Black spotted <sup>1</sup>   |  |   |
| <b>Huanēnē `ula</b>          | --                 | --   | Dark-red spotted <sup>1</sup>  | --   | --  |
| <b>Kau-lā`au</b>             | --                 | --   | --   | --   | Grows in crotches of trees <sup>8</sup><br><br>Any variety growing in this way <sup>9</sup>                           |
| <b>Ka-wai-maka-a-ka-manu</b> | --                 | --   | --   | --   | --  |
| <b>Ke`oke`o</b>              | --                 | --   | Whitish in appearance <sup>5</sup>   | --   | --  |
| <b>Koa`e</b>                 | --                 | --   | Stripped or long white stripes running up and down <sup>10</sup>   | Large like the Hoi vine <sup>10</sup>                          | Fast growing, perhaps resembling white-striped Koa`e banana <sup>10</sup>   |
| <b>Kūmakua</b>               | Tall <sup>3</sup>  | Medium <sup>3</sup>                                  | Green <sup>3</sup>   | --   | --  |
| <b>Kūkae nalo</b>            | --                 | --   | Spotted with black spots <sup>10</sup>   | --   | --  |
| <b>Kūkae nēnē</b>            | --                 | --   | Splotched color <sup>1</sup>   | Splotched color <sup>1</sup>                                   | --  |
| <b>Mākea</b>                 | Tall <sup>11</sup> | Long like Hiwa <sup>6</sup><br><br>Long <sup>5</sup> | Pale white, joints are reddish <sup>6</sup><br><br>Lighter green than `Apu <sup>4</sup><br><br>Whitish <sup>12</sup> | Like the Papa ke`oke`o <sup>6</sup><br><br>Large <sup>12</sup> | Fruit (flowers?) are numerous <sup>6</sup><br><br>One subvariety spotted with reddish color at the nodes <sup>4</sup> |
| <b>Mahakea</b>               |                    |  |  |  | Ka`ū name for Mākea <sup>7</sup>  |
| <b>Māmaka</b>                | --                 | Short <sup>11</sup>                                  | Light green <sup>11</sup>  | --   | --  |

|                       |                          |   |  |  |  |
|-----------------------|--------------------------|---|--|--|--|
| <b>Manākea</b>        | --                       | --  | White <sup>10</sup>  | --   | --   |
| <b>Mānienie</b>       | --                       | --  | White, smooth <sup>7</sup>   | --   | --   |
| <b>Moano kahakaha</b> | Low growing <sup>1</sup> | --  | Green and red stripes <sup>1</sup>   | Small and rounded <sup>1</sup>                         | --   |
| <b>Mō`i</b>           | --                       | Slightly shorter in length than Hiwa <sup>6</sup><br><br>Short <sup>4</sup><br><br>Short <sup>9</sup><br><br>Not quite as long as Hiwa <sup>2</sup> | Darkish, pale at joints <sup>6</sup><br><br>Dark green and nodes whitish <sup>4</sup><br><br>Dark green and nodes whitish <sup>9</sup><br><br>Dark stems <sup>2</sup><br><br>Red or sort of brownish <sup>10</sup><br><br>Black skin <sup>12</sup> | Shinny <sup>6</sup>                                    | Comes up from the Papa variety <sup>12</sup>   |
| <b>Mokihana</b>       | Short <sup>8</sup>       | Very small like the young `Ohe (bamboo) <sup>6</sup>  | Yellowish green <sup>8</sup><br><br>Whitish <sup>12</sup>  | Like the Mākea <sup>6</sup><br><br>Large <sup>12</sup> | Fragrant when drunk <sup>6</sup><br><br>Looks like Papa <sup>4</sup><br><br>Stems grow thickly like a clump of bamboo growing in a sunny place <sup>5</sup><br><br>Peculiar in having hairlike rootlets; fragrant, hence named for the Mokihana berry <sup>8</sup> |

|                      |    |  |   |    |    |
|----------------------|----|--|---|----|----|
| <b>Nākea</b>         | -- | Long <sup>1</sup>  | Green, light purple near each joint <sup>1</sup>  | -- | -- |
| <b>Nākea `ula</b>    | -- | Long <sup>1</sup>  | Green, light purple near each joint; reddish color under stems of leaves from the piko down <sup>1</sup>                          | -- | -- |
| <b>Nākea hiwa</b>    | -- | Long <sup>1</sup>  | Green, light purple near each joint; dark brown to black color under stems of leaves <sup>1</sup>                                 | -- | -- |
| <b>Nēnē / Kua`ea</b> | -- | Like the Mākea <sup>6</sup>                                | Spotted and kind of lumpy like the spots of a turtle's back or also like the Moa hulu nēnē (nēnē feathered chicken?) <sup>6</sup> | -- | -- |
| <b>`Ohe`Ohe</b>      | -- | Extremely long, over 16.5 inches at two years <sup>1</sup> | Light green with light-dark stripes that finger out at each joint <sup>1</sup>  | -- | -- |
| <b>`Ohe`ohe `ula</b> | -- | Extremely long, over                                       | Same as above except stems  | -- | -- |

|                            |  |  |   |   |   |
|----------------------------|--|--|---|---|---|
|                            |  | 16.5 inches<br>at two<br>years <sup>1</sup>  | reddish in color <sup>1</sup>   |   |   |
| <b>Palai`i kea</b>         | --   | --   | Green with no<br>other color <sup>1</sup>   | Underside of leaf<br>crinkled and<br>resembles the Lehua<br>palai`i taro <sup>1</sup> | --  |
| <b>Palai`i hiwa</b>        | --   | --   | Beginning at<br>each joint stems<br>are dark to light<br>green at the<br>middle of each<br>joint <sup>1</sup> | Underside of leaf<br>crinkled and<br>resembles the Lehua<br>palai`i taro <sup>1</sup> | --  |
| <b>Palai`i<br/>hiwaloa</b> | --   | Joints<br>(stem?) are<br>thick and<br>long <sup>1</sup>                                    | Dark black with<br>no green <sup>1</sup>  | Underside of leaf<br>crinkled and<br>resembles the Lehua<br>palai`i taro <sup>1</sup> | --  |
| <b>Papa</b>                | Grows<br>low <sup>3</sup><br><br>Smallest<br>kind of<br>`Awa <sup>10</sup> | Short<br>internodes <sup>4</sup>   | Spotted stalk <sup>4</sup><br><br>Whitish <sup>12</sup>   | Large <sup>12</sup>   | The bulk is very hard<br>and is the strongest<br>kind of `Awa. It has<br>very small roots <sup>10</sup> |
| <b>Papa `ele`ele</b>       | --   | Body is like<br>the Hiwa,<br>but the<br>sections of<br>the stalk<br>are short <sup>6</sup> | --  | Leaves are slightly<br>bigger than Hiwa <sup>6</sup>                                  | General appearance<br>like the Mō`i <sup>6</sup><br><br>Creeping variety <sup>5</sup>                   |
| <b>Papa kea</b>            | --   | Like Papa<br>`ele`ele as to<br>internodes  | Light green<br>stalk <sup>11</sup>  | --  | Like Papa `ele`ele as to<br>... habit <sup>11</sup>   |



|                        |                                |   |   |                                   |  |
|------------------------|--------------------------------|---|---|-----------------------------------|--|
|                        |                                | ...   |   |                                   |  |
| <b>Papa mō`i</b>       |                                |   |   |                                   | Ka`ū name for <b>Mō`i</b> <sup>7</sup> |
| <b>Papa nēnē</b>       | --                             | --  | --  | --                                | --                                     |
| <b>Polohiki-a-Kāne</b> | Tall up to 8 feet <sup>1</sup> | Short jointed about 2-3 inches <sup>1</sup> | Black, shiny <sup>1</sup>                                   | Extremely dark green <sup>1</sup> | --                                     |
| <b>Puhi</b>            | --                             | --  | Dark color and white short strips [stripes?] <sup>10</sup>  | --                                | Fast growing <sup>10</sup>             |
| <b>`Ula</b>            | --                             | --  | --  | --                                | --                                     |
| <b>Wai-a-ka-manu</b>   | --                             | --  | Joints green on one side and dark on the other <sup>8</sup> | --                                | An offshoot from Hiwa <sup>8</sup>     |

Each source corresponds to a respective number reference in the table.

1. John Ka`imikaua (Ka`imikaua n.d.): all islands
2. Henry Kekahuna (Kekahuna 1963A): Maui and Hawai`i
3. Akuna (Handy 1940): Puna, Hawai`i
4. O.S. Emerson (Emerson 1903): O`ahu
5. Samuel Kamakau (Kamakau 1976A): O`ahu
6. Kaaiakamanu (Chun 1994I): Maui
7. Keliihue (Handy 1940): Ka`ū, Hawai`i
8. Mawai (Handy 1940): Nahiku, Maui
9. Mary Pukui (Handy 1940): Ka`ū and Puna, Hawai`i; Kaua`i; O`ahu
10. O.P. Cox (Cox 1903): Waialua, O`ahu
11. E.S. Handy (1940)
12. John Mana (Fornander 1916-1920A)

By the rules of ethnobiological classification all of the above described taxa are either species or varieties of the genera **`Awa**. Table 3-5 demonstrates the ethnoclassification of Hawaiian **`Awa**.

Table 3-5. Ethnobiological classification and nomenclature of Hawaiian **`Awa**.

| Genus       | Species                 | Variety         |
|-------------|-------------------------|-----------------|
| <b>`Awa</b> | <b>`apu</b>             |                 |
|             | <b>-a-kāne</b>          |                 |
|             | <b>ha`alani</b>         | <b>hiwa</b>     |
|             |                         | <b>kea</b>      |
|             |                         | <b>kolo</b>     |
|             |                         | <b>`ula</b>     |
|             | <b>ha`upu</b>           | <b>poko</b>     |
|             | <b>hiwa</b>             |                 |
|             | <b>huanēnē</b>          | <b>hiwa</b>     |
|             |                         | <b>`ula</b>     |
|             | <b>kau-lā`au</b>        |                 |
|             | <b>ka-wai-a-ka-manu</b> |                 |
|             | <b>ke`oke`o</b>         |                 |
|             | <b>koa`e</b>            |                 |
|             | <b>kua`ea</b>           |                 |
|             | <b>kūmakua</b>          |                 |
|             | <b>kūkaenalo</b>        |                 |
|             | <b>kūkaenēnē</b>        |                 |
|             | <b>kupali`i</b>         |                 |
|             | <b>li`i</b>             |                 |
|             | <b>mākea / mahakea</b>  |                 |
|             | <b>māmaka</b>           |                 |
|             | <b>manākea</b>          |                 |
|             | <b>mānienie</b>         |                 |
|             | <b>moano</b>            | <b>kahakaha</b> |
|             | <b>mō`i</b>             |                 |
|             | <b>mokiahana</b>        |                 |
|             | <b>nākea</b>            | <b>(maoli)</b>  |
|             |                         | <b>hiwa</b>     |
|             |                         | <b>`ula</b>     |
|             | <b>nēnē</b>             |                 |
|             | <b>`ohe`ohe</b>         | <b>(maoli)</b>  |
|             |                         | <b>`ula</b>     |
|             | <b>palai`i</b>          | <b>hiwa</b>     |
|             |                         | <b>hiwaloa</b>  |
|             |                         | <b>kea</b>      |
|             | <b>papa</b>             | <b>(maoli)</b>  |
|             |                         | <b>`ele`ele</b> |
|             |                         | <b>kea</b>      |
|             |                         | <b>mō`i</b>     |
|             | <b>polohiki-a-kāne</b>  |                 |
|             | <b>pueo</b>             |                 |
|             | <b>`ula</b>             |                 |
|             | <b>wai-a-ka-manu</b>    |                 |

## Studying the Diversity of `Awa Varieties

It is likely that a good number of the `Awa varieties that once existed have now gone extinct. This is a reflection of how long ago the use of `Awa declined to a point where maintenance of numerous cultivars was not practical for Hawaiians. This may also have been heavily affected by the irresponsible harvesting techniques used in recent years, which included destructive-harvesting and no replanting. In the 1990's as `Awa became a commodity on the world market people would take `Awa out of the ancient mountain patches to sell. Such destructive-harvesting would often wipe out a whole `Awa patch leaving nothing. It is likely that several varieties were lost because of such practices.

Some of the ancient varieties seem to have been very common and planted on all the islands, whereas others may have only been cultivated in only a single region of one island. The more common ones are probably the ones that are described by more than one author (Handy 1940, Kamakau 1976A, Kekahuna 1963A, Cox 1930), and are likely the ones remaining today (see Table 3-6). The ones that have been only described by one source, such as the ones described by Ka'imikaua (n.d.) and some of the ones described by Cox (1930), were seemingly rare. It is likely that these varieties were local varieties that were developed in certain areas and were best suited for specific conditions there. These are the varieties that are more likely to have gone extinct because they were rare in the first place.

Table 3-6. The most common Hawaiian `Awa varieties as determined by the number of authors who described them.

| Variety                  | Number of Descriptions |
|--------------------------|------------------------|
| Kau-lā`au                | numerous               |
| (Papa) mō`i              | 10                     |
| Mākea / Mahakea          | 9                      |
| Hiwa                     | 7                      |
| Mokihana                 | 6                      |
| Papa `ele`ele            | 4                      |
| Papa kea / Papa ke`oke`o | 4                      |
| Papa                     | 4                      |
| Nēnē / Kua`ea            | 2                      |

## THE CULTIVATION OF `AWA

### Overview

Although many non-Hawaiian botanists have described *Piper methysticum*, a description of the `Awa plant and its growth habits by the old Hawaiians, who knew this plant intimately, has a special value. Such descriptions are reflective of a

collective knowledge of **`Awa** cultivation that spans back thousands of years to the time when **`Awa**'s progenitor was first domesticated. The following is a compilation of the writings of three Hawaiians, S.M. Kamakau, H.E.P. Kekahuna, and M.K. Pukui, who had first hand knowledge of the cultivation of **`Awa**.

“Cool moist uplands are the best for the growth of the **`Awa** shrub, though with care it can be grown at lower levels. Dry lands produce weak drink, as is the case with the **Tī** plant. Too much rain makes the **`Awa**-root watery (**kāwai**), and it becomes rotten (**palahū**).” (Kekahuna 1963B)

Kamakau (1976A) further adds,

“**`Awa** grows well on lands with plenty of rain (**āina ua nui**), and on warm lands (**āina mehana**). It grows in gravelly soil where there is plenty of water seepage (**nā makaili hānono wai**) and in wooded places (**lae lā`au**) where the **kūkaepua`a** grass and the **`ama`u** ferns grow... In places where **wauke** and dry taro are planted, **`Awa** may also be planted. These plantings, together with those of bananas and sugar canes, were the pride of the farmer. In the old days, there were some **`Awa** fields (**He kanu māla kekahi `Awa**), but most of the **`Awa** was planted [sparingly] (**he kanu li`ili`i wale nō**) on the borders of taro (**ma nā kuauna o ka māla kalo**) or **wauke** fields (**māla wauke**).”

And

“... On the **kula** slopes, or hillsides and mountainsides above the plains, and in the lower forests, upland taro and yam, arrowroot, tumeric, bamboo, **olonā**, and **`Awa** were planted in arable clearings.” (Pukui 1972M)

It was a common practice for patches of plants, that were chosen to be used later as offerings, to be set aside and dedicated to **`aumakua**. As Pukui (n.d. I) explained, **`Awa** was one such plant.

“Some Hawaiians dedicated an **`Awa** patch to an **`aumakua**, offering prayers while planting the stalks and never allowing any one to take any of the **`Awa** when it matured. The **`Awa** in the patch belonged to the **`aumakua**. Although this dedication of a patch was not rare, it was dangerous unless the planter was always on guard. (Pukui n.d. I)”

Taking plants that were pre-dedicated to **`aumakua** for other reasons could result in deadly repercussions. Koko Head on O`ahu got its name for the blood that was shed when a shark **`aumakua** killed a girl as a consequence of her stealing its pre-dedicated plants (Pukui 1962).

## Variation in Potency

In Hawai`i, the `Awa from Puna was the most famous of all for its potency (Kaleiheaana 1974, Handy 1940, Fornander 1916-1920A). Kamakau (1976A) recognized the `Awa from Puna, Hawai`i, but mentioned that other places were made famous for the potent `Awa produced there as well. These places included Ko`uko`u on Kaua`i, Hena on O`ahu, and Lanakila on Maui. Mana (Fornander 1916-1920A) knew of some other places that were famous for their `Awa such as, Kamaile on Kaua`i, and Hālawa and Hakipu`u on O`ahu. Kekahuna (1963B) mentioned that Ka`elekū<sup>39</sup>, in Hāna, Maui, was a place where the `Awa of the ali`i grew. Here the `Awa was up to three centuries old, and was of the highest quality – being extremely potent and possessing a fine flavor.

Ancient Hawaiian farmers were keen observers of their plants. They cultivated many different varieties of all of their crops and had names for each. Along with the names, the ancient Hawaiians knew the best environmental conditions for the optimal production of each variety. As is seen in Handy (1940), this is true for taro, sweet potatoes, sugar cane, bananas, yams, etc. Although there is nothing known to have been recorded about the optimum growth conditions for the different varieties of `Awa, in keeping with the pattern for the other cultivated plants, it is safe to assume that such knowledge once existed.

Kekahuna (1963B), who was raised on Maui and but spent years on Hawai`i, noticed how the differences between the more developed soils of Maui and the relatively young, undeveloped soils of Hawai`i affected the growth of `Awa.

“In the rich soil of Maui, under best conditions, one giant root, sometimes termed a parent root (**pū`awa makua**), might make from about 8 to 10 chunks (**pū`awa**), weighing from 8 to 10 pounds each, even 12 such pieces. A general measure in the modern sale of `Awa-root was eight such chunks, or one **walu** (eight). In contrast, `Awa-root grown in poor soil, such as is found in part of the island of Hawai`i, may yield only 1 or 2 chunks of regular size.” (Kekahuna 1963B)

## Planting Methods

There seems to be at least two general methods of vegetative propagation utilized by ancient Hawaiians for planting `Awa. One form, **ho`owa`a**, is a method

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<sup>39</sup> In days of old special lands on the different islands were famed for `Awa of greatest excellence. Such a land was Ka`ele-ku, district of Hāna, island of Maui, where grew `Awa for chiefs. Massive `Awa roots, well yellowed with great age, perhaps two or three centuries old, were found there. One such huge root might take two men all day to dig out (**kā`awa**), and require their combined strength to lift it from the hole. Such a root produced `Awa drink unexcelled, of highest quality, most potent, and of finest flavor (Kekahuna 1963B).

involving planting of cuttings. The other form, **kākiwi**, is a method of ground layering. Both methods are used in planting a new patch, but only the **kākiwi** method was used in lands already under cultivation. Kamakau (1976A) describes the planting of a new patch.

“To plant **awa**, the planter first went to fetch stems (**hākai**) and broke off (**ha`iha`i**) a quantity of them. He carried them on his shoulder to a suitable place, where he broke them into sections (**poke**), being careful not to break off the nodes on the joints, and laid them in a trench in a compost of muck and trash (**ho`owa`a a kīpulu i ka lepo`ōpulupulu a me ka`opala**). He cut a lot of greenery (**pulu**) for mulch, and left these grasses until they had dried, then mixed them with soil. Then he fetched the stems which had been laid in the trench. Some of them had sprouted ‘ears’ (**pepeiao**; stipules), some had sprouted leaves, and some, fine roots. The farmer took them and planted them in the mulch, along with some plants that had been ground-layered before (**kākiwi mua`ia**). (Kamakau 1976A)”

Kekahuna (1963C) in the context of replanting describes a similar process of sprouting **`Awa** and adds that the sprouts were called **niho pua`a** (pigs teeth). Kekahuna (1963C), again in the context of replanting, recorded the practice of ground layering (**kākiwi**) that Kamakau (1976A) briefly mentioned above.

“Therefore when a large **awa** root was removed it was replaced by one or more cuttings (**kiwi**), or tiny plant-sprouts (**aka**), or sprouts from the stems (**lālā**) bent to the ground and weighted (**kākiwi`ia**).” (Kekahuna 1963C)

It seems that in this method could have been used to diminish the time between planting and harvesting by making successful propagules of the plant prior to harvest. Such propagules, which would be healthy with an established root system, and could potentially have shortened the time between harvests by several months to a year. In comparison to the **kākiwi** method, the **ho`owa`a** method would have advantages and disadvantages. An advantage to this method would be that numerous propagules could be produced simultaneously. A disadvantage would be that it is a much slower process for producing a mature plant (See Table 3-7).

Table 3-7. Comparison of growth rate and propagule production by planting method.

| Planting Method | Growth Rate | Propagules Produced |
|-----------------|-------------|---------------------|
| Kākiwi          | Fast        | Few                 |
| Ho`owa`a        | Slow        | Many                |

As Kamakau (1976A) mentioned the propagules produced from both the **kākiwi** and **ho`owa`a** methods would be planted in the same patch. Doing so would ensure that the best aspects of each method would be taken advantage of.

The numerous propagules produced, through the **ho`owa`a** method, would ensure that there was enough planting material to fill a large plot. The faster growing propagules produced, through the **kākiwi** method, would ensure that some plants would mature faster and could be harvested while the rest of the patch is maturing. If this strategy was employed using planting material from several varieties that had different growth rates, a farmer would have a steady supply of mature **`Awa** for several years. This kind of farming is typical of the subsistence farmer who would want to have a constant supply of mature **`Awa** while putting in a minimal amount of effort.

Kamakau (1976A) also describes the practice of ground layering, but contextually applies this planting method for lands that were currently under **`Awa** cultivation.

“When the root portion, the **pū`awa**, of the plant was big (**nui**), the farmer [ground] layered the stems (**kākiwi i ka hākai**). By the time the **pū`awa** got very big (**nunui**), the layerings had put out new **pū`awa**, and when the first **pū`awa** matured, the layerings also matured. If the farmer wanted to keep the main **pū`awa**, then he pulled up only the layered plants. That is how **`Awa** is cultivated. It takes from two to three years for **`Awa** to mature, and it will keep on growing for many years and be a bequest to one’s descendants.” (Kamakau 1976A)

This method takes advantage of the fact that the lateral meristems at the apex of the plant begin to develop first, and perhaps utilizes the length of the mature stem as being an ideal planting distance between plants. This may be an adoption of the plant’s natural system of asymmetric reproduction. Also, through this method of successional ground layering<sup>40</sup>, the ancient **`Awa** farmer could insure not only a continuous supply of **`Awa**, but he could also maintain a few very large and old plants that were left untouched. These large and old **`Awa** plants were highly prized because they were considered to be very potent and possessing the highest quality of flavor. For these reasons these untouched plants would be saved for a very special occasion, or could be passed on to the next generation. Because each farmer gave his loving care to the plant, the plant would take on his **mana**. With the passing of each generation a plant’s **mana** would also grow.

## Planting Prayers

As with cultivating all things, prayers were said during the planting of **`Awa** to insure its vigorous growth. **Kāne** is the god most closely associated with **`Awa**, and the fresh water used to mix it. He was often recognized as the one who planted

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<sup>40</sup> This successional planting method could presumably be done in a line to have a steady supply of mature **`Awa**, or in a circular method around a single large plant in order to always have a supply of **`Awa** while at the same time letting the one in the middle grow and age.



**`Awa** in the ancestral homeland and the one who brought it here to Hawai`i. The following is an example, from Hilo, Hawai`i island, of a chant that would be done when planting **`Awa** (Pakele in Anonymous 1995). It is a prayer that acknowledges **Kāne** as the diety who is associated with bringing **`Awa** to Hawai`i. **Pele**, who is also closely connected with **`Awa**, is mentioned in the chant as well. **Pele**'s influence within the religion of Hawai`i island was very powerful. In most of the districts of Hawai`i island<sup>41</sup>, **Pele** was prayed to in multiple capacities. Being that this is an **`Awa** chant that originated in the Hilo area it is not surprising that **Pele** is mentioned therein. It is not likely that similar prayers on different islands, or even in Kohala of Hawai`i island, would include a mention of **Pele** in them unless the one saying the prayer had a direct connection to the **Pele** line.

**He Pule Kanu `Awa na Kāne**<sup>42</sup>

**Kanu `ia i hea ka `Awa a Kāne?**

**Kanu `ia i Kahiki, a ulu a lau i Kahiki,**

**A o`o i Kahiki, aka i Kahiki.**

**A mama `ia a`ela i kōwaha aku i ke ka he`e i kō `apu**

**`O Hoakakalani, ka `āina a kini akua.**

**Ke ola lā, ua ola iā kini akua iā Pele,**

**Ua ola loa nō ē.**

**A Prayer for the planting of Kāne's `Awa**

Where is the **`awa** of **Kāne** planted?

It was planted in Kahiki, grown and leafed in Kahiki,

Matured in Kahiki, grew stems in Kahiki.

Chewed by your mouth and poured into your cup

At Hoakakalani, land of a multitude of gods.

There is health from the multitude of gods and from **Pele**,

Complete health.

(Anonymous 1995)

**`Awa Planted in the Trees**

**`Awa** is not thought to be able to produce viable seed (Prakash et al. 1994), and is therefore said to only be able to be reproduced vegetatively (Lebot et al. 1997). However, there once existed in Hawai`i a type of **`Awa** that was noted to grow high up in the trees. The **`Awa-kau-lā`au**, **`Awa**-growing-in-the-branches, of Puna,

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<sup>41</sup> Of the 5 districts of Hawai`i island (Hāmākua, Hilo, Ka`ū, Kona, and Kohala) Pele was said to have ruled over all of them except Kohala – which was the dominion of Kamapua`a.

<sup>42</sup> Contributor: Peter Pakele Sr., Waiākea, Hilo, Hawai`i. 1869-1952. Born in Kaupakuea, Hilo, Hawai`i.

Hawai`i, was famous from Hawai`i island all the way to Kaua`i for its extreme potency (Kapaka 1958, Kaleiheaana 1974). It is not thought to have been cultivated by the ancient Hawaiians in such a manner. However, oral tradition recorded that it was planted by the birds of old Hawai`i.

The following excerpt is a famous verse from Puna, Hawai`i, that is in many old songs and chants from the area. This particular example is one that was uttered by **Hi`iaka** (Emerson 1997). It refers to the potent, yellow roots of the **`Awa** that was planted by birds.

**“Ka wai mukiki ale lehua a ka manu,  
Ka awa ili lena i ka uka o Ka-li`u,  
Ka manu aha`i lau awa o Puna:  
Aia i ka laau ka awa o Puna.  
Mapu mai kona aloha ia`u-  
Hoolaau mai ana ia`u e moe,  
E moe no au, e-e!**

O honey-dew sipped by the bird, distilled from the fragrant **Lehua**;  
O yellow-barked **awa** that twines in the upper lands of Ka-li`u,  
O bird that brews from this leafage Puna’s bitter-sweet **awa** draught;  
Puna’s potentest **awa** grows aloft in the crotch of the trees.  
It wafts the seduction to sleep,  
That I lock my senses in sleep!”  
(Emerson 1997)

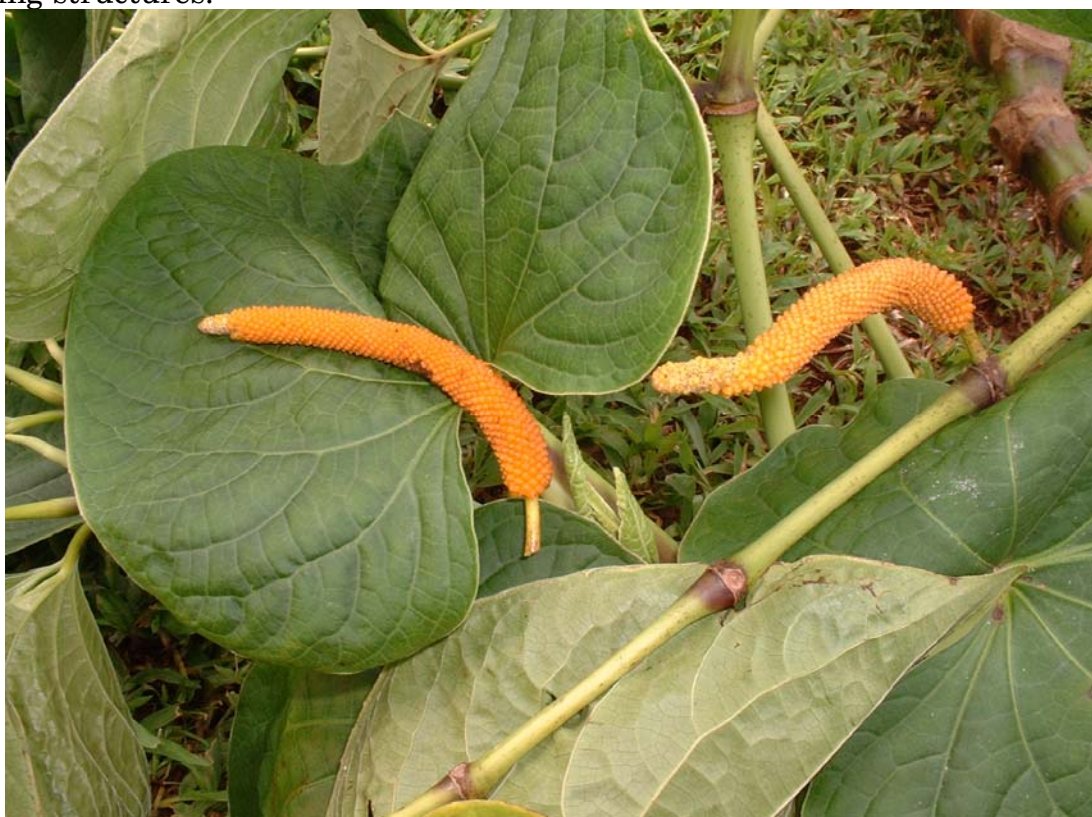
The observation that birds were responsible for the planting of the **`Awa** in the trees is recorded in this verse. Whether this means that it was planted by vegetatively or by seeds is not known. **`Awa**, supposedly, does not produce viable seed, which would lead some to assume that this could only refer to vegetative propagation. However, what appears to be mature fruits are seen, rarely, in Hawai`i (See Figures 3-1 and 3-2) (Winter, field observation, 2000-03). It is possible that these rare fruits truly are viable, but that they just will not germinate under normal conditions. If that is the case, then it is also possible that if these fruits passed through the digestive system of some of birds that they would be able to germinate. Given Hawai`i’s extremely diverse bird species in the Polynesian era, it is a possibility that should be looked in to.

Kekahuna (1956C) says that **`Awa** took on different qualities depending on what kind of tree it grew in. According to him, **`Awa** that grew in **`Akia** trees was poisonous, **`Awa** growing in **Hala** trees was dry, **`Awa** growing in **Kukui** trees would be bitter, but the best **`Awa** was the one that grew in the **`Ōhi`a lehua** tree.

Figure 3-1. A typical inflorescence of the Mahakea variety.



Figure 3-2. An inflorescence from the S.I.G. variety that appears to have mature fruiting structures.



## Growing an `Awalau

Not only the final product, the mature and potent root, of the **`Awa** plant was desired. **`Awa** was such an important plant that all its parts were used, and in all stages of growth. Therefore special care was given not only to the most mature plants, but youngest ones as well to insure that they were healthy and handsome. Such plants, called an **`awalau**, had a value unto themselves. Kekahuna (1963B) describes this practice.

“The **`awa** is of slow growth. A small **`awa** plant with only a few leaves and a little white root, not large enough to chew for **`awa** drink, is called an **`awalau** from the time it bears leaves till it is about 3 years old. The small plants were prized, and their value increased with age. They were used by priests (**kahuna**-s) as an offering to the gods. Seekers of aid from medicinal **kahuna**-s (**kahuna lapa`au**) would pull up **`awalau**, wash them, and present them to these medical doctors. The whole plants were pounded up for portions (**`apu**) called **`awalau**, and secret ceremonies were performed in connection with treatment to insure protection from harm, or to bring good luck.” (Kekahuna 1963B)

## Maturation Time

According to traditional knowledge **`Awa** will increase its potency, and therefore worth, as it gets older. According to Kamakau (1976A), **`Awa** was mature after being grown for two to three years, and he implied that one plant would grow for generations and be passed down within the family. Kekahuna (1963) said that **`Awa** was not worthy for the **ali`i** until it was more than 30 years old and had obtained a yellowing of the roots.

“From about 20 years of age, when the root was still white, to 30 years, when it was somewhat yellowed, its weight would range from about 8 to 10 pounds. When dried in the sun for about a week to remove wateriness, the **awa** drink from it would be acceptable as offerings to the gods, and to grace the **awa** drinking parties of the great chiefs.” (Kekahuna 1963B)

This prized yellowing of the roots, mentioned above, is also recorded in songs and chants (see the above example from Emerson 1997). The only surprising thing in the above statement is the size of the root after growing for 30 years. In contemporary times, it is not unusual for a two to three year old root to weigh 20 plus pounds in wet weight. Perhaps the ancient cultivation methods kept the root mass stunted, and that was the reason for the potency; or perhaps it was a misprint. He might have been alluding to his earlier statement of what he called a “**pū`awa makua**” which consisted of 8-12 chunks, each weighing 8-10 pounds.

## Harvesting

In contemporary times, perhaps influenced by the mindset of commercial production of **`Awa**, a patch of plants is usually planted all at once using planting material of the same age, and then pulled up in their entirety in the process of harvesting the roots (Winter, personal observation 2000-2003). Such “destructive harvest” of **`Awa** plants is unlikely to have been a common practice in ancient times. As one old time Hawaiian explained to me, it doesn’t make sense to pull up a whole **`Awa** plant that has been growing for five years because you have to wait another five years to get **`Awa** that is equally as potent (Anonymous interview 2002). In the ancient Hawaiian mindset of managing natural resources things were only very rarely harvested in their entirety and thereby destroying them. It was more often the practice to take small bits from here and there over the expanse of the resource, thereby not creating holes in a continually abundant resource.

This concept is actually conveyed often in the Hawaiian literature, but not often translated as such. There are two words used in describing the part of the plant harvested: **pū`awa** and **ōpū`awa**. Getting a good grasp of what these words refer to exactly is not easy. Different authors will respectively use either word consistently, but they are both often translated to mean the same thing. Both terms are often translated to suggest a destructive harvest in which the entire plant is uprooted. However, the subtle difference can be seen in the rare instances that the same author uses both words in the same document.

First, and understanding must be established about what exactly are the potential differences in these two terms. The word **pū`awa** could be used to describe a single root-section within a clump of **`Awa**. The prefix “**pū-**” has been used by some native speakers of Hawaiian in contemporary times to refer to a single stalk in a cluster. When translating the word for “tree” the word “**kumu**” is usually used. However, when describing a single tree that has a cluster-type growth form the prefix “**pū-**” is used. **Pūmai`a** can refer to a single banana stalk, stump, or trunk within the clump of banana stalks (Handy 1940). Similarly, **pūhala** can refer to a single *Pandanus* stalk within the clump of *Pandanus* stalks. Handy (1940) defines it to mean, “whole tree.” The term **kumu mai`a** and **kumu hala** would not be used to describe this phenomenon. Similarly, when listing the terms specific to **`Awa**, Handy (1940) lists **pū`awa** as meaning “stocky root” and differentiates **ōpū`awa** as meaning “bush or clump.”

The word **ōpū`awa** could be used to describe the entire cluster, or clump, of **`Awa**. The word **ōpū** has been used by some native speakers of Hawaiian, in contemporary times, to refer collectively to a whole cluster, or clump, of some plant (Winter personal observation 2000). It is commonly used as **ōpū weuweu** to describe a tuft of grass. Pukui (1986) defines **ōpū** as “Clump, as of sugar cane, bananas, kava; cluster.”

Through this line of thought the word **pū`awa** would refer to a single root stalk within the cluster of stalks that is the whole plant, or **ōpū`awa**. Therefore, throughout the Hawaiian literature we can look for these two terms and determine

which is the more common way of harvesting **`Awa**. In keeping with the natural resource management strategies of ancient Hawaiians it would be expected that the more common method of harvesting would be the non-destructive harvest of a single, or a few, individual root stalks, as needed, thus insuring the long term availability of the resource. In this case the resource would be the **`Awa** plant itself. This is in fact reflected in the literature as the use of the term **pū`awa** far exceeds the use of the term **ōpū`awa** when it comes to harvesting.

However, confusion arises because of the inconsistencies in the translation of these terms by Pukui herself. Sometimes Pukui treats the term **pū-** almost as a variant pronunciation of the word **ōpū**, and then sometimes she treats it as meaning a single stalk. The term **pū-** is translated by Pukui (Pukui and Elbert 1986) as, "Tree, cluster of several stalks, as of bananas, pandanus, or kava; clump, as of sugar cane." This definition, while contrasting with how the term has been used by some contemporary native speakers, could be a reflection of the language of the people of Ka`ū – the place where Pukui is from. However, in her 1986 dictionary and her 1983 book of proverbs, she uses the term **pū-** in a singular sense, as well, for her discussion of the word "**pūmai`a**." For the word **pū`awa** she defines it both ways as being either a kava plant or a root portion. In her own large body of writings she usually translates the term **pū`awa** as referring to the whole plant, and that includes her mentions of the harvesting of **`Awa**.

Perhaps, anciently, the distinction was not all that clear either, but there was a distinction made by at least a few. Clarity can be found in an example where an author uses both terms, **pū`awa** and **ōpū`awa**, in the same document. In the **mo`olelo** of Nā-maka-o-ka-pa`ō`ō (Anonymous 1917) the unknown author uses both terms. The author uses **ōpū`awa** when describing the whole plant. The author later uses the term **pū`awa** to describe what was harvested for the purposes of drinking and for certain ceremonies. And the author again uses the term **ōpū`awa** to describe the portion of **`Awa** that was pulled up for a special occasion.

So it is likely that the term **pū`awa** refers to a single roots portion of the larger **`Awa** plant. Therefore, the harvesting of **`Awa** would have usually consisted of the removal of a small portion of the roots stalk as needed. Rarely, whole plants (**ōpū`awa**) were pulled up for special occasions, but this kind of destructive harvest was not the norm in ancient times.

## Replanting

Every time **`Awa** was harvested, whether it be the **pū`awa** or the **ōpū`awa**, replanting was always done. As Kekahuna (1963) said, "The ancient Hawaiians were careful to replenish their sources of food and other products from the land and sea." In his discussion of **`Awa**, he only refers to the planting of **`Awa** in the context of replanting after harvesting.

As seen in this chapter the ancient Hawaiians had an intimate relationship with their **`Awa** plants. They practiced subsistence planting methods which often

sharply contrast with those practiced by commercial farmers in contemporary times. **`Awa** was a precious resource and with the ancient practices of planting, harvesting, and replanting, it was a resource that was constantly in abundance.

## **`AWA IN THE LATE 19<sup>TH</sup> – EARLY 20<sup>TH</sup> CENTURY**

### **Overview**

Through missionary influence, which started in 1820, and subsequent colonization by foreign powers, many things that were apart of Hawaiian culture and traditions began to disappear. Traditions related to the ancient Hawaiian religion were amongst the first to go. The use of **`Awa** was discouraged due to its association with the old religion. In 1846, a law was passed to restrict the sale and prescription of **`Awa** (Anonymous 1856).

Many of these missionary sentiments, which were responsible **`Awa**'s fall from grace, were expressed openly in the Hawaiian language newspapers of the time (Kalalaupunaakeonaona 1863, Kahu 1866). In these newspapers there were even Sunday school songs for children that included **`Awa** amongst the evils of chewing and smoking tobacco, and drinking rum (Anonymous 1878, translation by author).

**Aloha ia na kamalii,  
Na ai inu awa nei [sic.],  
A nau a puhi baka no,  
A koho i ka naaupo**

**Hookii na kino a wiwi,  
Mahuna a akaakaa e,  
Ele ka waha me ka puu,  
Na ake pu me na naau**

**Ua hele a hohono e  
Ka hanu, buke, na kihei,  
Na rumi, na moena no,  
Hohono na mea a pau**

**E ku a e hoohiki no,  
E pau, e pau ka naaupo,  
E hele a maemae kakou,  
I ae Iesu e noho pu.**



O beloved children,  
Avoid drinking **`Awa**,  
Chewing and smoking tobacco,  
And choosing ignorance

The body wastes away until thin,  
With scaly and cracked skin,  
Black will be your mouth and throat,  
So shall be your liver and your intestines

Stinky shall be  
Your breath, books, and clothes,  
Your rooms and your sheets,  
Everything will stink

Stand proud and promise,  
Done, done is ignorance,  
That we shall all become clean,  
And Jesus will agree to be with us.  
(Anonymous 1878, translation by author)

As the new influences of missionaries and foreign ideals became prevalent, the practices of **`Awa** began to change; and eventually, for the most part, disappeared by the mid 20<sup>th</sup> century. Through the few records collected, a glimpse of these changes can be seen. Because most of these records are first hand observations and not first hand experiences – records of what people remember those of their grandparents' generation doing, not of what they practiced themselves - it is hard to say whether or not there was actually change or just that these traditions were the way things were practiced in that particular family<sup>43</sup>. But in observing what was happening to the Hawaiian culture as a whole at this time, it is safe to assume that there was significant changes happening the all practices that **`Awa** was a part of.

Records of the recollections of Hawaiians born closer to or before 1820 are more likely to reflect undiluted traditions. Most of the Hawaiians who recorded, in the 20<sup>th</sup> century, information about **`Awa** actually recorded what they remember seeing practiced by their grandparents' generation. By looking at the birth date of these people the amount of change can be somewhat gauged.

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<sup>43</sup> These Hawaiians who recorded what they saw actually had some first hand experience, but it was only in that they were the youths of the time that they were asked to chew the **`Awa** for its preparation.



## Ancient Practices Continued

For at least some length of time the roles of **`Awa** outside of the religion, such as socialization customs, continued for a time. This was especially true for communities in rural area that were far removed from contact with other cultures.

Story-telling was an ancient custom that served to entertain and to pass on wisdom, history, and lessons to the younger generations. These story-telling sessions would often be held around and **`Awa** bowl. Henry Kekahuna (1956B) was born in 1881 in remote are of Hāmoa, Maui. He recalled **`Awa**'s role in the daily story telling sessions that occurred in the evenings. **`Awa** would be drunk, food would be eaten, and then stories would be told. This was probably a very good view of one of the aspects of **`Awa**'s role in the society prior to 1820. Such story telling at night around the **`Awa** bowl still exists in some parts of the Pacific<sup>44</sup>, and serves as a bridge between the generations (McClatchey, personal communication 2004).

## De-evolution of Traditions

As the diversity of **`Awa**'s role in society decreased, so did the number of varieties cultivated (see Figure 1-2, discussion in “**`Awa** in Cultivation”). Whereas it was once common to have several varieties planted at once, at this time of declining **`Awa** usage the practice of having only two varieties planted in one's garden seems to be a common one.

Leilehua Sap (1978) who was born in early 1900s<sup>45</sup>, in **`Ōpihi**hale, Kona Hema, Hawai`i, remembered that there were two varieties planted in her grandparent's garden. Women were only allowed to use the whitish (**ke`oke`o**) **`Awa** and men would only use the reddish (**ula`ula**) **`Awa**. She did not elaborate as to what they were used for, but in the context of the conversation it can be assumed that these varieties were for the purpose of drinking.

Janet Kaohi Kahalekomo (2003) who was born before the mid 1900s<sup>46</sup>, in Hanapēpē, Kaua`i, also remembers that two varieties were planted by her grandparents. One was blackish and one was whitish. She also noted that these two varieties were planted in separate places. Kahalekomo, who was a very curious child and admittedly asked too many questions (**nīele**), once asked her grandmother why the two varieties were planted separate. Likely following the custom of responding to an overly curious (**nīele**) child with a false answer, the grandmother replied that one variety was male and the other was female, and if the two got together they would have babies – and that was the reason they were planted separately.

Many other Hawaiians who remembered seeing their grandparents using **`Awa** remembered seeing only two varieties. Philip Kauaiiki Palama (1967) who

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<sup>44</sup> McClatchey had first hand experience of this practice in Rotuma.

<sup>45</sup> Leilehua Sap was elderly at the time of her interview.

<sup>46</sup> Janet Kaohi Kahalekomo looked to be in her mid to late 60's at the time of her interview in 2003.

was born in approximately 1892 and raised in Kōloa, Kauaʻi; and Winfred Kalā (2001) who was born in before the mid 1900's<sup>47</sup>, and raised in Hāna, Maui, both remember seeing only a whitish and a blackish variety.

### **`Awa's Sacredness Maintained**

Some families apparently used **`Awa** purely for medicinal purposes. In these families it was not used socially or recreationally at all. This was a practice that extended from Hawaiʻi island to Kauaʻi (Sap 1978, Kahalekomo 2003, Kealoha 2003, Kaanaana kupuna teachings 1997-2002).

Leilehua Sap (1978) would chew (**mama**) **`Awa** for her grandmother (**kupuna wahine**). She recalled that her grandmother only used **`Awa** as a medicine to relieve sore muscles after a hard day of work. The grandmother did not drink it every day, but rather only in evenings after working hard enough to need the pain relieving properties of **`Awa**. As for recreational drinking the grandmother would drink alcohol (**lama**), but only when on vacation in Honolulu.

Lani Kealoha (2003) who was born prior to the mid 1900s<sup>48</sup> in Niuliʻi, Kohala, Hawaiʻi, had a great grandfather who was a famous bone setter in his time. He prepared the **`Awa** drink for his patients to drink before resetting their broken bone. Lani Kealoha said that her great grandfather himself did not drink **`Awa** recreationally. For recreational drinking he would drink **`Okolehao**<sup>49</sup> with his friends. Kealoha also noted that her great grandfather placed a **kapu** over the women in his family. None of them were allowed to drink **`Awa** because of the negative consequences of drinking **`Awa** during pregnancy. This **kapu** extended, however, to all the women (not only those of childbearing age) and not even the elderly drank women **`Awa**.

Janet Kaohi Kahalekomo (2003) said that her **kūpuna**, would use it, “for what it was supposed to be used for. Today, they use it (to) drug out... and this is totally **lōlō** (stupid).” She had never before seen the ceremonial aspects of **`Awa** that are associated with voyaging and hula until recent years when she began to travel. Her grandparents only used **`Awa** medicinally for birth and relieving pain of any sort. It was also given before **lomi** to relax the body and enable the masseuse to better work on the body. After doing so the medicinal practitioner could then prescribe what medicine would be best. She went on to explain that before every aspect of healing **pule** was said. This included the treatment of **`Awa**. **Pule** was said before the harvesting, preparation, and drinking of the **`Awa**.

Some families would also reserve **`Awa** for certain ceremonies dedicated to the ancestors. Edward Kaanaana (kupuna teachings 1997-2002) born in 1925 and raised in Miloliʻi, Kona Hema, Hawaiʻi. He, Like Kealoha (2003), recalled that

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<sup>47</sup> Winfred Kalā appeared to be in his 70s at the time of the 2001 interview.

<sup>48</sup> Lani Kealoha appeared to be in his 70s at the time of the 2003 interview.

<sup>49</sup> Fermented and distilled *Cordyline fruticosa* roots

during social parties **`Okolehao** was drunk, but never **`Awa**. **`Awa** was only rarely used and for serious purposes.

### Sanctity Lost

After the old religion was abandoned the connection that **`Awa** had with the ancestors was eventually forgotten, or at least disregarded. Some people would apparently use **`Awa** purely for social and recreational drinking, a prolific practice during this time period. It is likely that this was an unbroken tradition from prior to 1820 when the **ali`i** would drink for social purposes, but became a practice that grew in popularity once the **kapu** system was abolished in 1819. At this time those of the **maka`āinana** class were allowed to drink all varieties of **`Awa** more freely – including the very potent ones previously reserved for **ali`i**. By the middle of the 20<sup>th</sup> century this practice of drinking became devoid of the rituals that were once common practice, such as the of honoring one's ancestors and **ali`i**. Soon after, alcohol finally replaced **`Awa**'s role as an intoxicant because it was easier to obtain.

Kake`e Kaleiheaana (1974) was born in 1882 and raised in Waimea, Ko`olauloa, O`ahu. She remembered that the selling and buying of **`Awa** was common at the Hawaiian market, **`Ulakōheo**. Upon being asked what **`Awa** was used for, she replied bluntly that it was drunk for the purposes of intoxication.

**"I mea, inu `oe i kēlā, `ona `oe!"** (Kaleiheaana 1974)

Lilia Wahinemaika`i Hale (2000), who was born in 1913 and raised on Moloka`i, remembered chewing **`Awa** for her **kūpuna** in preparation for drinking. She remembered that they would all sit in a circle and drink until they could not even stand up.

Evidence of this practice was also recorded in the old Hawaiian language newspapers. Kahu (1866) stated, in an editorial article, that Hanapēpē, Kaua`i, exceeded all other places when it came to **`Awa** consumption.

"...From my day of arrival here to this day I have not found a land lived on by a people that were greater drinkers of **`awa** than those of Hanapēpē here. The drinking is from the sea to far upland at the boundary of the village, by the elders and the children.

Upon looking at the kind of men and women the eyes go to the defiled, smutty, the dandruff (**kepia**) and the gum of the breadfruit, they see the long eyelashes (**lihilihi**), all above and below, and get this chant of **Kama-pua`a** to **Pele** [sic.].

Red eyes, red eyes the first  
Go to the place of inflamed (**Piheka**)  
What is the food to eat?  
A border eaten by the god.

Here is the thing that I saw in this valley, the complete freedom (**noa**) of the selling **`awa**, sold in the village like hard pounded taro, undiluted. Where is the policeman that will arrest this troublemaker? No policemen. All of them are drinking **`awa**, and will fear of the assembly, said this land of Hana-pēpē here.” (Kahu 1866, Kelsey translation)

Kamana`opono Crabbe (2003) recalled that his granduncle from Kipahulu, Maui, would drink **`Awa** purely for recreation. In doing so he would follow no protocols whatsoever. It was drunk for intoxication because Kipahulu was so remote that it was hard to come by alcohol (Crabbe 2003).

### Mixing and Preparation

The process of preparation also changed slightly. It seems that pounding (**ku`i**), instead of mastication (**mama**), grew in frequency during this time in history. It was likely because of introduction of various contagious diseases brought by foreigners. This change can also be partially attributed to the breakdown of Hawaiian society. There was no longer the diversity of professions that there was in the times of the **ali`i**. There was no longer a person whose designated job it was to masticate the **`Awa**. The job increasingly fell upon the Hawaiian youth who were believed to be clean, free from disease, and possessing strong teeth.

Kaleiheaana (1974), recalled masticating **`Awa** for her grandparents but included that if there were many people drinking, six or seven at a time, then one of them would pound the **`Awa** in a large mortar carved out of a hard wood such as **`Ohai** (Monkeypod, *Samanea saman* (Jacq.) Merr.).

Kalā (2001) was born and raised in Hāna, Maui, by his grandfather, who himself was from Honomalino, Kona, Hawai`i. Kalā (2003) recalled the process that his grandfather went through in preparation. Of the two common varieties, the whitish one and the blackish one, the grandfather would seek out the black one. They would go up in the mountains, get the **`Awa**, come back, clean it, leave it out for a while until the roots lost some rigidity and became limp, then pound it.

Some traditions involved the brewing of extremely strong **`Awa**. This practice was very popular in many areas, but especially east Maui. It was continued, there, at least amongst those who continued the tradition of recreational drinking. Kalā (2001) further recalled that only one drink was needed to get one completely intoxicated. This was done by squeezing the freshly pounded **`Awa**, without adding water. If water was added, it was not considered to be strong<sup>50</sup>. Kalā’s grandfather would only drink fresh **`Awa** prepared in this manner.

Kalā (2001) described the drinking of **`Awa** in social situations, such as parties, with music being played. Some people drank **`Awa**, some drank swipe

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<sup>50</sup> “**`A`ole `oe ho`okomo i ka wai. Ma hope ho`okomo `oe i ka wai, a kēlā mea, `a`ole itaita.**” (Kalā 2001)

(made from sweet potatoes), and some drank **`Okolehao**; but these people would not mix the drinks. Those who drank **`Awa** would only drink **`Awa**, those who drank swiwe would only drink swiwe, etc.

The tradition of mixing **`Awa** with water from the coconut was also continued into this time period. Joseph “Blondie” Kaina (2002) was born in 1943, and raised in Hāna, Maui. He recalled that his father would only drink dried **`Awa** that was mixed with coconut water. Kaina added that the coconuts for mixing **`Awa** were obtained from one specific tree and none other. He could not however recall what variety of coconut this tree was. The tree was no longer living and therefore its variety could not be determined.

### **The Last Practitioners of Unbroken `Awa Traditions**

With the successful abolishment of the old religion, **`Awa**’s primary use as a religious offering became, for the most part, an unheard of practice by the advent of the 20<sup>th</sup> century. The use of **`Awa** continued, but mainly in its other two forms as medicine and as a recreational drink. These practices evolved and were continued by people with two seemingly different perspectives of **`Awa**. One perspective of **`Awa** was that it was still considered to be a sacred plant which was to be partaken of only under the appropriate conditions, namely as medicinally required. Those who perpetuated this mindset of **`Awa** as a sacred plant would generally not drink **`Awa** for the purposes of socialization or recreation. For social gatherings they would consume some form of alcohol but never **`Awa**. The other perspective was that **`Awa** was a commodity and not a spiritual being in and of itself. Among this group **`Awa** drinking did not require any special circumstances other than a desire for intoxication. While there are many stories about the recreational drinking traditions of East Maui, these two perspectives existed on all islands. They seem to have been determined by family traditions rather than location.

By the middle of the 20<sup>th</sup> century traditions relating to the use of **`Awa** were no longer being passed on to the younger generations. This seems to have been due to a combination of the younger generations failing to recognize the importance of continuing the old ways, and the power that alcohol can have over a culture. Today, beer and other alcoholic beverages have completely replaced **`Awa** as the traditional drink amongst Hawaiians. Alcohol’s hold over Hawaiian society is so strong that even the recent resurgence of **`Awa** in mainstream culture has not been due to a resurgence of **`Awa** traditions within families. Rather it has been facilitated by establishments that are based off of the success of alcohol distribution centers, or bars.

# CHAPTER 4: SUMMARY

## GRAY LITERATURE

The gray literature has been an extremely important resource for this research. The amount of information contained about all aspects of ancient Hawaiian culture is staggering. A review of this literature was not able to cover all the materials of the gray literature of Hawai'i. Unfortunately, these materials are neither easily accessible nor well catalogued. The Bishop Museum archives have countless unpublished manuscripts in Hawaiian and English that discuss subjects not covered in any published materials. Unfortunately there is no one complete catalogue for all the manuscripts and other resources in these archives in which to do a word or subject search. There is undoubtedly more information about **`Awa** within this archive that has yet to be found. The Hawaii State Archives are in a similar state. The Gutmanis family private archives was not in any organized state. Research consisted of going through boxes of books and manuscripts.

The three most significant authors, for this research and likely any other into aspects of Hawaiian culture, who have written unpublished manuscripts are Joseph Mokuohai Poepoe, Henery Enoka Palenapa Kekahuna, and Theodore Kelsey. Poepoe was an editor and significant contributor of Hawaiian language newspapers. He also has hand written many unpublished manuscripts in the Hawaiian language. The Bishop Museum archives houses these and their translations that were done by Pukui. Kekahuna was born 1881 in Hāmoa, Maui, and was very learned when it came to Hawaiian culture and history. He spent three years (1903-05) walking around the entire Big Island for the purpose of seeking out the oldest **kūpuna** he could find to learn from them about Hawaiian history and culture. He also traveled the other islands, especially Kaua'i. He wrote down much of this in an extensive collection of manuscripts. Kelsey was not Hawaiian but he spoke Hawaiian and was embraced by many Hawaiian **kūpuna**. From these **kūpuna** he learned and recorded all aspects of Hawaiian culture. He has an extensive collection of chants. Kekahuna and Kelsey became very close and shared a lot of information. The manuscripts of Kekahuna and Kelsey are spread out between the Bishop Museum, Hawai'i State, and the Gutmanis family private archives. The works of these three authors are very significant contributions to the Hawaiian people and should be utilized more often in ethnographic research.

The Hawaiian language newspapers have been equally important for this research. Unfortunately less than 10% of them have been catalogued. Several groups have initiated the process of digitizing these newspapers and converting them into searchable documents. Perhaps within a decade or so they will become completely searchable, but until that time there is undoubtedly still more information about **`Awa** in the Hawaiian language newspapers.

The collection of interviews done by the Bishop Museum staff are catalogued fairly well, but most are not transcribed into searchable documents. The recordings

that had significant discussions of **`Awa** were likely all included in the catalogue and reviewed for this research. Recordings with brief mention of **`Awa**, although possibly significant, may have not all been included in the catalogue and were not reviewed. The first 10-15 years of the Ka Leo Hawai'i program recordings are catalogued in roughly the same way as the Bishop Museum recordings. A search of the catalogue produced good information. However, like the Bishop tapes there are likely references to **`Awa** that were not catalogued, and the last 10-15 years was not catalogued. There is undoubtedly more information about **`Awa** in these recordings.

Two specific sources that do have information about **`Awa**, but were not thoroughly reviewed for this study, are the collection of **Hi`iaka-i-ka-poli-o-Pele**<sup>51</sup> (**Hi`iaka**) stories and Poepoe's manuscripts in the Bishop Museum. The story of **Hi`iaka**, was a favorite among Hawaiians and was recorded by various authors in the old Hawaiian language newspapers. There are at least eight versions of this story. They all vary in length, content, and detail. A review of all of these would be needed to assess which version(s) give the most detail about the **Pele** family's relationship with **`Awa**, as well as the female drinking practices. Poepoe wrote various manuscripts about **kahuna** ceremonies, some of which involved **`Awa**. This was a good place to look for more examples of **pāpāi`awa** ceremonies. Time constraints did not allow for a thorough review of all of these materials.

## INTRACULTURAL RESEARCH

Living **kūpuna** are the keepers of Hawaiian language and traditions. Because of colonization, Hawaiian society has come to a point where **kūpuna** are the only people who actually lived in a time when Hawaiian language and an unbroken line of traditions was practiced. It is now hard to find a **kūpuna** under 70 years of age who grew up in such a lifestyle. Our last opportunities to learn from such people are quickly fading.

Culture and traditions cannot be completely understood from reading a book. **Kūpuna** have been an invaluable resource for my research. They have provided links between things that I have found in the gray literature and not understood. They have also shared a wealth of information of aspect of Hawaiian traditions that not many would think to write down and few, if any, have.

If approached in the right way, **kūpuna** are often happy to talk story and share about their life growing up. This research has been a pleasure because it has given me an opportunity to become closer to **kūpuna** that I had only been acquainted with. It has also allowed me to meet some very special **kūpuna** from all over Hawai'i.

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<sup>51</sup> Hi`iakaikapoliopole was the favorite younger sister of Pele. Her story is mainly about her traveling to Kaua'i to fetch Lohi`au (Pele's lover) and bring him back to Hawai'i, and her adventures along the way.

In working among cultural practitioners relationships are important<sup>52</sup>. Actively practiced traditions may not be readily discussed with just anyone. Sharing of such traditions will often only be done with people who have good relationships with the practitioners or with people who the practitioners view as being a good person to continue such traditions. This was known to me but has become very evident in my research of this subject. Things were sometimes shared with me because of my relationship with certain practitioners, and it was an unspoken understanding that such information was too important to be written about by me. I have not included such information within this thesis because my relationship with these practitioners is more important to me than recording it here.

An important relationship for me is the one that I have with my **Kumu Hula** John Ka'imikaua. Because of our relationship he shared with me information about the **`Awa** that he collected and grew in his youth. There is no doubt that a lot of information about the old Hawaiian traditions of **`Awa** is still out there among practitioners of Hawaiian culture.

Elders and/or cultural practitioners often teach things to cultural researchers that they may not have an opportunity to pass on otherwise. Intracultural research is extremely important for indigenous societies that are in danger of losing traditional knowledge. The bond of culture allows intracultural researchers to learn things that would be difficult for intercultural researchers to obtain. As a positive consequence of their research, intracultural researches will be the vehicles for the preservation of traditions in an ideal fashion– not because of their writings, but because of their association within their own culture. They are and will always be a part of that culture. The influence of an elder or another cultural practitioner will be felt each time that an intracultural researcher practices their learned culture.

Intracultural researchers need to understand one fundamental thing – culture is not meant to be passed down in written form. They should not aim for their writings to do so. Instead they should use writing only as vehicles for documentation, and allow their own actions as the vehicles for perpetuation of culture.

## EVOLVING TRADITIONS

The information contained herein is not a reflection of all the variation of **`Awa** traditions found within Hawai'i in ancient times. It merely highlights a few points on the spectrum in hope that its broadness can be realized. There are a few practices today, that have been embraced among some contemporary Hawaiian **`Awa** drinkers, which are conspicuously absent in the records relating to **`Awa**

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<sup>52</sup> I am referring to active cultural practitioners who have not yet reached the status of **kupuna**



traditions. It is possible that these practices are purely Hawaiian traditions that were just not recorded. However, in light of the conspicuous absence of any mention of these practices, and the fact that these practices are the ones most criticized by traditionalists, it is likely that these practices are either the result of influences from the South Pacific, or they may have been a necessary evolution in the absence of well understood traditions. These four practices are discussed below.

- Clapping hands after drinking a bowl of **`Awa**:  
The practice of clapping hands is most likely not a Hawaiian tradition. All **kūpuna** interviewed were asked about this practice and all stated, some emphatically, that this was not a practice of their **kūpuna**.
- Formalized greeting ceremony involving **`Awa**:  
While **`Awa** was often offered to guests as a symbol of hospitality there is no record of such a ceremony. One anonymous practitioner explained that, as he was taught, **`Awa** was never used in such situations because **`Awa**, which also means “bitter.” In Hawaiian thought such an offering would symbolically demonstrate that the hosts’ land and disposition was sour. He went on to explain that formal greeting ceremonies did exist and it had a name, but other plants would be used that symbolically demonstrated the sweetness of one’s land and welcome.
- The use of servers in formal ceremonies:  
There is no evidence of such a role in ancient Hawai`i. Both Hawaiian and non-Hawaiian authors alike make no mention of this role in the many descriptions of ceremonial **`Awa** consumption. In fact the **`Awa** bowls are often described as being passed hand to hand. This practice may have developed out of necessity due a loss of understanding of **`Awa** traditions amongst many Hawaiians who participate in such ceremonies. If the traditional practice was to pass the cup in order of rank, first an understanding of this practice would need to exist amongst all participants. This is a practice that ceased generations ago. Second, contemporary ceremonies would require all participants to understand the social rank of all other participants – which is no longer a standard practice of the Hawaiian people either. Thus, if the understanding of **`Awa** traditions are only known to those conducting ceremonies, servers are a necessity to help regulate the ceremony and reduce confusion.
- Tossing the **`Awa** cup during ceremonies  
One of the reasons that **`Awa** ceremonies were sacred is that many of the plants used were considered to be **kinolau** of various **akua**: the **`Awa** of **Kāne** and the coconut cup of **Ku**. It is not likely that the embodiment of these **akua** would be tossed around with seemingly wanton disregard for their sacredness.

## THE RELATIONSHIP BETWEEN `AWA AND AKUA

One interesting trend noticed in the gray literature is that the relationship between `Awa and certain **akua** is more well recorded than others. The relationship of **Pele** to `Awa is well recorded by various people, both Hawaiian and non-Hawaiian. The relationship of **Kāne** and **Kanaloa** with `Awa, while well known, is not recorded in nearly the detail that **Pele**'s is. Furthermore, there is little or no mention of a relationship between other **akua**, such as **Kū** and **Hina**, and `Awa. Does this reflect that **Pele** had a more developed relationship to `Awa than any other **akua**? I do not think so.

**Pele**, being the "volcano goddess" had a particular appeal in the 19<sup>th</sup> and 20<sup>th</sup> centuries that other **akua** did not. Writers like to write about her, and readers like to read about her. All aspects of her story were recoded in great detail.

**Kāne** and **Kanaloa**, on the other hand, had a very developed relationship with `Awa. Stories of their travels around the islands creating springs to drink `Awa were well know but not recorded. The stories of their travels were undoubtedly told as an epic whose hidden meanings carried significant weight with important lessons about how and why fresh water springs began to appear all over Hawai'i at the same time in a particular era of Hawaiian history. One of the hidden meanings of this story could be a record of how Hawaiian practices changed the hydrology of Hawai'i. These stories have only been recorded fragmentally by individual springs.

**Kū** and **Hina** have little or no mention of a relationship with `Awa in documents describing aspects of general culture. It is possible that `Awa was simply not important to them. It is also entirely possible that if they had a well-developed relationship with `Awa but it has not been recorded. It is difficult to say either way. The Kamehameha story, however, does include mention of **pāpāi`awa** ceremonies for the god **Kūkā`ilimoku**, which indicates that `Awa offerings were appropriate for at least one form of **Kū**.

## `AWA'S ROLE IN HAWAIIAN CULTURE

Based upon the 49 names and descriptions, which boils down to upwards of 35 distinct varieties, it can be predicted that `Awa played a significant role in Hawaiian culture and its uses spanned many aspects of Hawaiian society. This has been supported by the rich range of uses for `Awa by all members of ancient Hawaiian society (see chapters 3-4).

## CONCLUSIONS

The research for this project has been far from exhaustive. There is undoubtedly more information about the cultural significance of **`Awa** in the gray literature and amongst the few remaining kūpuna who grew up in the old ways. Much more work has yet to be done in researching the gray literature. As these resources are digitized in a word-searchable format more information will be brought to the surface. The resources that will no be around for much longer are the **kūpuna**. Several learned **kūpua** have passed since I began this project, and with them went their knowledge and experiences of Hawaiian culture. The day is fast approaching that will be the end of their era.

# CHAPTER 5: COMMON GARDEN EXPERIMENT

## INTRODUCTION

**`Awa**, or *Piper methysticum* G. Foster, is a highly significant plant in many Pacific island societies. This is particularly true in Hawaiian culture. The plant is known by many names, examples being **Kava** in Tonga, **Sakau** in Pohnpei, and **Yaqona** in Fiji. The plant has a very rich history and associated cultural knowledge within each of the societies in which it is cultivated (Lebot et al. 1997). Hawai`i has lost much of its indigenous cultural knowledge since the time of European contact in 1778, because of colonization and the subsequent repercussions of the influences of foreign cultures and religions (Kame`eleihiwa 1992). **`Awa** has gone from being an integral aspect of daily life in Hawaiian culture (Kamakau 1991) to being nearly forgotten. It is likely that of all the indigenous cultures in the Pacific, Hawaiians are among those who have lost the most cultural knowledge pertaining to this plant (McClatchey, personal communication, 2003). Among the knowledge lost about this plant was that pertaining to the various cultivated varieties, i.e., how many varieties were known in ancient Hawai`i, and how many remain. In order to achieve a better understanding of the diversity of **`Awa** that once existed in Hawai`i a comprehensive review of the gray literature was conducted (See Chapter 3). The purpose of the present chapter is to report on morphological observations of **`Awa** in as a means of assessing the number **`Awa** varieties still extant in Hawai`i.

Only three studies of *Piper methysticum* have been conducted in Hawai`i. Lebot et al. (1997) studied the morphological, phytochemical, and genetic variation of Hawaiian cultivars. They determined that there were 13 Hawaiian cultivars at the time of their study. These results, however, were not produced under the conditions of a common garden. Nerurkar et al. (2004) and Dragull et al. (2003) studied the chemical components, specifically the alkaloid components, of *P. methysticum* and their possible relation to liver toxicity.

Lebot and Levesque (1989) conducted a common garden study in Vanuatu. Collection of varieties was done on 21 islands of the Vanuatu archipelago. Local cultivars were collected and identified by their vernacular names. This yielded 247 accessions. A list of morphological descriptors was developed, although the number of distinctive features used was limited to seven because of the large size of the germplasm collection (Lebot and Leversque 1989). This study showed that there were 82 distinct morphotypes, which corresponded with distinct cultivars as distinguished by local farmers. They also showed that the ethnobiological classification of cultivars in Vanuatu is inflated by synonymy, and the plurality of vernacular languages ensures that many cultivars are known by several names.

## MATERIALS AND METHODS

### **`Awa collections in Hawai`i**

There are no known practicing Hawaiian farmers who grow and can identify, by name and morphology, **`Awa** varieties that were grown by their parents or grandparents. However, there are several individuals who have been reviving practices, and are growing **`Awa** for personal and commercial purposes.

A major collector of Hawaiian **`Awa** was Joel Lau who collected **`Awa** varieties as he was hiking in the mountains throughout Hawai`i. Parts of his collections now reside at the Amy Greenwell Ethnobotanical Garden in Kona, Hawai`i, at the Waimea Valley Audubon Center on O`ahu, and at Jeff Preble's Hawaiian plant nursery in Kahalu`u, O`ahu. Vincent Lebot established some of the varieties that he collected in Hawai`i and around the Pacific at Lyon Arboretum in Mānoa, O`ahu, and at Kahanu Gardens in Hāna, Maui. Upon inspections in 2002, these collections were not properly cared for and could not be considered viable. A great force for the collection and distribution of the old Hawaiian **`Awa** varieties was the Association for Hawaiian **`Awa** (A.H.A.) under the leadership of Ed Johnston and Jerry Konanui. The AHA collection was established from those of Lau's and Lebot's, and from exploring ancient **`Awa** plantings in the mountains.

### **Choice of Materials for Common Garden Experiment**

Unlike other Pacific Island Nations (Lebot and Levesque 1989) there are no longer any known farmers in Hawai`i, who can identify cultivars by name and morphology. In order to determine what varieties should be collected to grow within the common garden, I first conducted a review of published and gray literature, as well as interviews to determine varietal names and how they are distinguished. All available varieties were then obtained from private collections, farmers, and from the remnant patches deep in the mountains.

After discussing the collected **`Awa** varieties with Ed Johnston and Jerry Konanui, 31 cultivars were chosen to be put into the common garden field plot (see Table 5-01). The resulting common garden consisted of all known Hawaiian **`Awa** varieties remaining, and those South Pacific varieties currently being grown commercially in Hawai`i.

The plants grown in the garden were grown from stem cuttings. With the exception of twelve cultivars, all those grown were obtained from plants originally collected by A.H.A. (see Appendix 2 for A.H.A.'s list of cultivars). Among the A.H.A. collections I noticed that the cultivars labeled S.I.G., that were collected from Kolekole (outside of Hilo) and in Pana`ewa, were slightly different when grown next to each other at Ed Johnston's house in Pēpe`ekea, Hilo. These were therefore both chosen to be included in the experiment in order to see if the differences would

persist in a common garden on O`ahu. Two dark colored cultivars, resembling **hiwa**, that were somatic mutations from green colored parents were included along with the parents. One came out of the Honokāneiki cultivar on Zack Gibson's farm and has been labeled "Zack's Mutant," and one came out of the Puna Green cultivar at Ed Johnston's farm and has been labeled "Alia Mutant."

The exceptions to the A.H.A. collection were some unidentified Hawaiian cultivars currently referred to as Waihe`e, Kahuna Valley Long, Kahuna Valley Short, Wailau, Amy Greenwell's **Hiwa**, Joel Lau 2, and Joel Lau 6. Waihe`e is a cultivar that looks like a darker stalked relative of **Mahakea**. It was collected by Jonathan Yee in Waihe`e, O`ahu. Kahuna Valley Long and Kahuna Valley Short are green cultivars of long and medium heights. The length descriptors in their names refer to the respective lengths of their internodes. I collected these two cultivars on the grounds of the Lyon Arboretum in 2002 in a small valley that the arboretum employees refer to as Kahuna Valley. Wailau is a cultivar originally from Wailau, Moloka`i, and was obtained from Jim Henderson. Amy Greenwell's **Hiwa** is an extremely dark cultivar that was collected at Amy Greenwell Ethnobotanical Garden in Kona, Hawai`i. Joel Lau 1-7 came from the remnants of Joel Lau's **Awa** collection which had been rescued by Jeff Preble and grown in his nursery. The state of the collection was not good. All cultivars were in various sized small pots, and most were not of sufficient health to distinguish morphological differences. The seven collected were the seven that appeared to be distinct cultivars and were arbitrarily labeled Joel Lau 1-7. At the time of out-planting, only two displayed characters distinct enough to justify putting out in the experiment plot. These were Joel Lau 2 and Joel Lau 6.

One cultivar that was unobtainable for this experiment was a mutant of **mahakea**, which has white mottled leaves. This mutant occurred on the C. Brewer **Awa** plantation on the Big Island. The second generation retained this trait, but a third generation cutting lost it (Johnston, personal communication, 2002)

Table 5-01. *Piper methysticum* cultivars having morphologies distinct enough to be included in the common garden experiment as distinguished by coloration. The corresponding numbers associated with each cultivar were assigned arbitrarily. These were used as identification numbers in the statistical analyses. Note: These modern names do not necessarily reflect ancient varieties

| <b>Cultivar number</b> | <b>Cultivar</b>      |
|------------------------|----------------------|
| 1                      | Mahakea              |
| 2                      | Hiwa                 |
| 3                      | Zack's mutant        |
| 4                      | Amy Greenwell's Hiwa |
| 5                      | Alia Point mutant    |
| 6                      | Lu`ukia              |
| 7                      | S.I.G. Kolekole      |
| 8                      | S.I.G. Pana`ewa      |
| 9                      | Puna Green           |
| 10                     | Joel Lau 2           |
| 11                     | Alia 3               |
| 12                     | Wailau               |
| 13                     | Kahuna Valley short  |
| 14                     | Papa kea             |
| 15                     | O`ahu 237            |
| 16                     | Mākea                |
| 17                     | Honokāneiki          |
| 18                     | Spotted Hiwa         |
| 19                     | Kasaakau (Akau)      |
| 20                     | Joel Lau 6           |
| 21                     | Hanakāpī`ai          |
| 22                     | Nēnē                 |
| 23                     | Iwi                  |
| 24                     | Isa                  |
| 25                     | Rhamwanger           |
| 26                     | Lekahina (Hina)      |
| 27                     | Waihe`e              |
| 28                     | Rhamedel             |
| 29                     | Ava le`a             |
| 30                     | Sāmoan Lā`au         |
| 31                     | Kahuna Valley long   |

### **Propagation and Out-Planting**

Materials for propagation were obtained between February – April 2002. Propagation consisted of making cuttings of individual nodes and placing them in trays of a 1:1 perlite/vermiculite mix under a mist system. No rooting hormone was

used. Once healthy roots were established, propagules were transferred individually to 4 inch pots with a 2:1:1 sphagnum moss : black cinder : perlite mix, until ready for out-planting.

The plot for the common garden experiment was at the Lyon Arboretum in the land of Haukulu, Mānoa, O`ahu, on a well-drained northeast-facing slope (~70-80% grade). According to the Arboretum's weather station rainfall was 127 inches in 2002, and 123 inches in 2007. A plot consisting of hydric dystandept soil was selected and cleared of a dense growth of *Hibiscus tiliaceus*.

Out-planting took place in June 2002. One plant of each cultivar was randomly located on a plot grid such that distance between the plants was 2 meters. Mulch consisting of decaying branches and leaves of *Hibiscus tiliaceus* and leaves of yellow ginger were placed around plants to retain moisture in the soil. An equal amount of water from Aihualama stream was given to each plant, as needed for the first 12 months to keep the soil moist

At 12 months it was determined that growth had been slower than expected. After consulting with Ed Johnston and Jerry Konanui it was decided that the plants were not receiving enough water and nutrients, and were infected with an outbreak of the "Shot-hole fungus" (*Phoma* sp.). The lack of water was thought to be due mainly to the fact that the experimental plot was cut out of a thick grove of *Hibiscus tiliaceus* which still remained on 3 of 4 sides of the plot. The roots of the remaining trees in the grove, that had existed prior to the experiment, were visibly growing into the plot. Upon closer inspection new root growth of *H. tiliaceus* was noticeable in the area of the mulching around the plants.

To remedy this situation several things were done. All visible roots that did not belong to *Piper methysticum* were taken out. To increase the availability of water for the plants, watering with a hose was initiated with water from a city and county pipe. To increase nutrient uptake and battle the "shot-hole fungus" a foliar feed spray of Miracle Grow foliar feeder, mixed with Elite fungicide, was applied, as weather permitted, for the duration of the experiment.

### **Character Selection and Assessment**

Lebot and Levesque (1989) selected a set of morphological-color terms largely based upon those used by traditional Pacific farmers for identification of *Piper methysticum* varieties. They used seven descriptive characters to distinguish between varieties:

- General appearance: erect, normal, prostrate
- Stem coloring: pale green, dark green, green with purple shading, purple, black
- Internode configuration: uniform, mottled, speckled, striated and mottled
- Leaf coloring: pale green, dark green, purple
- Lamina edges: undulate, raised, drooping, regular



- Leaf pubescence: present, absent
- Internode shape: short and thick, long and thin, long and thick

In my research, I was dealing with mostly Hawaiian varieties that do not display the broad morphological range that exists in Vanuatu, where Lebot and Levesque (1989) conducted their studies. I adapted their qualifying measurements in various ways to make a set of quantification measurements more appropriate for the relatively narrow morphological range that exists in Hawai'i. The three tallest branches on each plant were used for measurements and statistical analysis. Of the 31 cultivars chosen to be planted out, 27 survived the duration of the experiment. Kahuna Valley Long, Rhamedel, and Sāmoan La`au died prior to the conclusion of the experiment. Waihe`e did not survive the propagation attempt in the greenhouse.

### Quantified data

The qualitative terms used by Lebot and Levesque (1989) were quantified for the purposes of this experiment. In order to address the categories of “general appearance” and “internode shape” measurements were taken of the node thickness (NT), internode thickness (INT), and internode length (INL). Measurements of the nodes on a stem started with the second node from the bottom that was above any stump or rooting structures, and ended with the third node below the shoot apex; all internodes between these extremes were measured. Internode length was measured from center to center of adjacent nodes. Thickness was measured at the narrowest point in the center of the internode.

Using the data from Tables 5-7 – 5-32 (see Appendix 14) an average of the first 5 data points in each measurement category for each of the three branches of the cultivars were calculated in order to run a multivariate analysis. If there were not 5 data points on a branch to produce an average it was not included. Some **`Awa** varieties did not meet the 5 data point requirement on any of their branches and were, therefore, excluded from the analysis. The data used in statistical analyses is in Table 5-33 (see Appendix 14). For a condensed version of the data refer to Table 5-2 (see Results).

In order to address the categories of “stem coloring,” “internode configuration,” and “leaf pubescence” ranked data were taken as discussed below. To measure stem color a scale of 1 – 7 was developed. Figures 5-1 illustrates examples of the colors that were observed, and how they were placed within the scale of 1-7. Internode configuration was ranked (1-4) by uniform, spotted, spotted and striped, and striped as depicted in Figure 5-2. Figure 5-3 shows stem, instead of leaf, pubescence that was ranked by presence (1) or absence (0).

Figure 5-1. Color scale for *P. methysticum* stems.

1. Black or any color darker than eggplant purple as mentioned by some elder Hawaiians.

No picture available. No `Awa within the common garden displayed this color. It was included based upon oral accounts recalling the black color of some varieties.

2. Purple stem color as found on the **hiwa** variety (voucher #WCM2979).



3. Mostly purple with a little green as found on the **mahakea** variety (voucher # WCM2955).



4. Approximately half purple and half green as found on the **mahakea** variety (voucher #WCM2955).



5. Mostly green with some purple as found on the **mahakea** variety (voucher # WCM2955).



6. Dark green with no purple as found on the Wailau variety (voucher #WCM2956).



7. Light green with no purple as found on the Oahu 236 variety (voucher #WCM2952).



Figure 5-2. Internode configuration was ranked (1-4) by uniform, spotted, spotted and striped, striped.

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Uniform configuration. No picture available but this character would resemble picture correlated with rank 3 below, but without any markings in the internodal region.

1. Spotted configuration as found on the **nēnē** variety (voucher #WCM2943)



2. Spotted and striped configuration as found on the Wailau variety (voucher #WCM2956)



3. Striped configuration as found on the Alia3 variety (voucher #WCM2974)





Figure 5-3. Stem pubescence was measured by presence (1) or absence (0).

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0. Absence as found on the hiwa variety (voucher #WCM2979)



1. Presence as found on the Isa variety (voucher #WCM2957)



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The three tallest branches of each plant were selected for data collection. Data points were taken starting at the third node above the stump (or any other rooting structure including adventitious roots) and continued through until the third node from the top. Internode measurements were taken on all internodes between these two aforementioned nodes. Ranked data were taken for each respective internode.

## RESULTS

The data shows that the cultivars vary considerably in most categories. Based on Table 5-02 node thickness ranged from 2.69 – 3.87 cm, internode thickness ranged from 1.52 – 2.63 cm, internode length from 4.76 – 20.07 cm, color from rank 2.9 – 7, and configuration from rank 1 – 4. Only one cultivar exhibited pubescence. The patterns within these ranges are the basis for varietal distinction.

Table 5-02. Data used in Multivariate analysis. The quantified measurements of the nodes and internodes are mean values for the first five data points. Other categories are ranked.

| Cultivar | NT<br>(cm) | INT<br>(cm) | INL<br>(cm) | NT/INL<br>(cm) | INT/NT<br>(cm) | INT/INL<br>(cm) | Color | Configuration | Pubescence |
|----------|------------|-------------|-------------|----------------|----------------|-----------------|-------|---------------|------------|
| 1        | 4.32       | 2.92        | 17.72       | 0.24           | 0.68           | 0.16            | 6     | 3             | 0          |
| 1        | 3.28       | 2.18        | 14.12       | 0.23           | 0.66           | 0.15            | 6     | 3             | 0          |
| 1        | 3.6        | 2.24        | 18.32       | 0.20           | 0.62           | 0.12            | 6     | 3             | 0          |
| 2        | 3.1        | 2.2*        | 20.22       | 0.15           | 1.68           | 0.26            | 3.2   | 2.6           | 0          |
| 2        | 3.3        | 1.78        | 20.52       | 0.16           | 0.54           | 0.09            | 3     | 3             | 0          |
| 2        | 2.94       | 1.64        | 9.74        | 0.30           | 0.56           | 0.17            | 4     | 3             | 0          |
| 3        | 3.2        | 1.92        | 21.96       | 0.15           | 0.60           | 0.09            | 3     | 3             | 0          |
| 3        | 3.28       | 2           | 17.14       | 0.19           | 0.61           | 0.12            | 3.8   | 3             | 0          |
| 3        | 2.9        | 1.82        | 16.12       | 0.18           | 0.63           | 0.11            | 3.6   | 3             | 0          |
| 4        | 4.16       | 2.4         | 20.74       | 0.20           | 0.58           | 0.12            | 3.4   | 3             | 0          |
| 4        | 3.48       | 2.24        | 19.86       | 0.18           | 0.64           | 0.11            | 3     | 3             | 0          |
| 4        | 3.34       | 1.84        | 19.62       | 0.17           | 0.55           | 0.09            | 3.8   | 3             | 0          |
| 5        | 2.94       | 1.84        | 15.2        | 0.19           | 0.63           | 0.12            | 3.4   | 3             | 0          |
| 5        | 2.8        | 1.58        | 16.64       | 0.17           | 0.56           | 0.09            | 2.8   | 3             | 0          |
| 5        | 2.32       | 1.44        | 17.84       | 0.13           | 0.62           | 0.08            | 2.6   | 3             | 0          |
| 6        | 2.8        | 1.68        | 5.92        | 0.47           | 0.60           | 0.28            | 4.2   | 2             | 0          |
| 6        | 2.92       | 1.92        | 9.96        | 0.29           | 0.66           | 0.19            | 3.6   | 2             | 0          |
| 6        | 3.16       | 2.08        | 7.62        | 0.41           | 0.66           | 0.27            | 3.6   | 2             | 0          |
| 7        | 3.32       | 1.94        | 13.32       | 0.25           | 0.58           | 0.15            | 5     | 3             | 0          |
| 7        | 2.86       | 1.58        | 12.32       | 0.23           | 0.55           | 0.13            | 5     | 3             | 0          |
| 7        | 2.86       | 2.02        | 5.8         | 0.49           | 0.71           | 0.35            | 5     | 3             | 0          |
| 8        | 3.3        | 1.94        | 4.76        | 0.69           | 0.59           | 0.41            | 7     | 3             | 0          |
| 9        | 3.2        | 2.18        | 14.24       | 0.22           | 0.68           | 0.15            | 7     | 3             | 0          |
| 10       | 3.06       | 2.18        | 8.2         | 0.37           | 0.71           | 0.27            | 3     | 2             | 0          |
| 10       | 3.7        | 2.76        | 4.3         | 0.86           | 0.75           | 0.64            | 3.8   | 2             | 0          |
| 10       | 3.4        | 2.64        | 4.26        | 0.80           | 0.78           | 0.62            | 5     | 2             | 0          |
| 11       | 3          | 1.76        | 5.3         | 0.57           | 0.59           | 0.33            | 4     | 2             | 0          |
| 11       | 2.74       | 1.64        | 5.24        | 0.52           | 0.60           | 0.31            | 5     | 2             | 0          |
| 11       | 2.84       | 1.44        | 9.98        | 0.28           | 0.51           | 0.14            | 3     | 2             | 0          |
| 12       | 3.4        | 1.9         | 19.36       | 0.18           | 0.56           | 0.10            | 7     | 3             | 0          |
| 12       | 3.4        | 1.84        | 20.5        | 0.17           | 0.54           | 0.09            | 7     | 3             | 0          |
| 13       | 3.02       | 1.62        | 11.68       | 0.26           | 0.54           | 0.14            | 7     | 3             | 0          |
| 13       | 2.6        | 1.32        | 12.78       | 0.20           | 0.51           | 0.10            | 7     | 3             | 0          |
| 13       | 2.64       | 1.74        | 7.12        | 0.37           | 0.66           | 0.24            | 7     | 3             | 0          |
| 14       | 3.38       | 2.3         | 6.6         | 0.51           | 0.68           | 0.35            | 7     | 1             | 0          |
| 14       | 3.08       | 1.82        | 5.98        | 0.52           | 0.59           | 0.30            | 7     | 1             | 0          |
| 14       | 2.84       | 2.16        | 7.14        | 0.40           | 0.76           | 0.30            | 7     | 1             | 0          |
| 18       | 3.2        | 2.16        | 16.52       | 0.19           | 0.68           | 0.13            | 3.8   | 4             | 0          |
| 18       | 3.5        | 2.2         | 17.4        | 0.20           | 0.63           | 0.13            | 4.4   | 4             | 0          |
| 18       | 3.48       | 2.04        | 21.84       | 0.16           | 0.59           | 0.09            | 2.6   | 4             | 0          |
| 19       | 4.26       | 3.06        | 21.28       | 0.20           | 0.72           | 0.14            | 3     | 4             | 0          |
| 19       | 3.78       | 2.22        | 19.68       | 0.19           | 0.59           | 0.11            | 4     | 4             | 0          |

|    |      |      |       |      |      |      |   |   |   |
|----|------|------|-------|------|------|------|---|---|---|
| 19 | 3.56 | 2.48 | 14.46 | 0.25 | 0.70 | 0.17 | 4 | 4 | 0 |
| 20 | 4.48 | 3.04 | 7.16  | 0.63 | 0.68 | 0.42 | 5 | 4 | 0 |
| 20 | 3.82 | 3.02 | 5.98  | 0.64 | 0.79 | 0.51 | 5 | 4 | 0 |
| 20 | 2.98 | 1.84 | 5.74  | 0.52 | 0.62 | 0.32 | 5 | 4 | 0 |
| 21 | 3.68 | 2.68 | 18.48 | 0.20 | 0.73 | 0.15 | 5 | 4 | 0 |
| 21 | 3.18 | 1.86 | 16.86 | 0.19 | 0.58 | 0.11 | 5 | 4 | 0 |
| 21 | 3    | 2.02 | 14.62 | 0.21 | 0.67 | 0.14 | 5 | 4 | 0 |
| 22 | 3.04 | 1.9  | 14.36 | 0.21 | 0.63 | 0.13 | 7 | 4 | 0 |
| 22 | 3.42 | 1.88 | 14.72 | 0.23 | 0.55 | 0.13 | 7 | 4 | 0 |
| 22 | 3.72 | 2.12 | 16.2  | 0.23 | 0.57 | 0.13 | 7 | 4 | 0 |
| 23 | 2.62 | 1.42 | 21.08 | 0.12 | 0.54 | 0.07 | 7 | 4 | 0 |
| 23 | 3.2  | 2    | 18.78 | 0.17 | 0.63 | 0.11 | 7 | 4 | 0 |
| 23 | 2.86 | 1.66 | 10.18 | 0.28 | 0.58 | 0.16 | 7 | 4 | 0 |
| 24 | 3.18 | 1.92 | 19.72 | 0.16 | 0.60 | 0.10 | 7 | 4 | 1 |
| 24 | 2.92 | 2.12 | 13.34 | 0.22 | 0.73 | 0.16 | 7 | 4 | 1 |
| 25 | 3.18 | 1.92 | 13.66 | 0.23 | 0.60 | 0.14 | 7 | 4 | 0 |
| 25 | 3.04 | 1.86 | 20.28 | 0.15 | 0.61 | 0.09 | 7 | 4 | 0 |
| 25 | 2.5  | 1.42 | 10.06 | 0.25 | 0.57 | 0.14 | 7 | 4 | 0 |
| 26 | 2.76 | 1.52 | 16.16 | 0.17 | 0.55 | 0.09 | 7 | 4 | 0 |

\*The data point listed as 2.2 was mistakenly labeled as 5.2 in the original processing of the data. This produced an outlier. A measurement of 5.2 cm is impossible considering the plant measured. It is assumed that I mistakenly typed in 5.2 instead of 2.2 as I was entering the data into this table. Unfortunately, my original data recordings were lost so I cannot confirm this.

## Multivariate Analyses

### Principal Component Analysis (PCA)<sup>53</sup>

A principal component analysis was run with multiple variables to determine if these variables can statistically distinguish varieties. The variables chosen were NT/INL (node thickness / internode length), INT/NT (internode thickness / node thickness), INT/INL (internode thickness / internode length), color, configuration, and pubescence (Tables 5-7 – 5-32, Appendix 14).

Table 5-03. Simple statistics of principal component analysis

|                  | <b>NT/INL</b> | <b>INT/NT</b> | <b>IN/INL</b> | <b>Color</b> | <b>Configuration</b> | <b>Pubescence</b> |
|------------------|---------------|---------------|---------------|--------------|----------------------|-------------------|
| <b>Mean</b>      | 0.29          | 0.64          | 0.19          | 5.14         | 3.14                 | 0.03              |
| <b>Std. Dev.</b> | 0.17          | 0.15          | 0.13          | 1.61         | 0.86                 | 0.18              |

<sup>53</sup> The statistical analyses and graphs were all run with the mistaken data point of 5.2 instead of 2.2 indicated in for cultivar 2 in Table 5-02. This mistake was not corrected upon submission of this thesis.

Table 5-04. Correlation matrix of the principal component analysis.

|                      | <b>NT/INL</b> | <b>INT/NT</b> | <b>INT/INL</b> | <b>Color</b> | <b>Configuration</b> | <b>Pubescence</b> |
|----------------------|---------------|---------------|----------------|--------------|----------------------|-------------------|
| <b>NT/INL</b>        | 1.00          | 0.11          | 0.97           | 0.04         | -0.45                | -0.11             |
| <b>INT/NT</b>        | 0.11          | 1.00          | 0.33           | -0.18        | -0.12                | 0.03              |
| <b>INT/INL</b>       | 0.97          | 0.33          | 1.00           | -0.01        | -0.43                | -0.09             |
| <b>Color</b>         | 0.04          | -0.18         | -0.01          | 1.00         | 0.16                 | 0.21              |
| <b>Configuration</b> | -0.45         | -0.12         | -0.43          | 0.16         | 1.00                 | 0.19              |
| <b>Pubescence</b>    | -0.11         | 0.03          | -0.09          | 0.21         | 0.19                 | 1.00              |

The correlation matrix showed a very strong correlation between the ratio of internode thickness and internode length. This means that this variable, which corresponds to Lebot and Levesque's (1989) qualified categories of "general appearance" (erect, normal, prostrate) and "internode shape" (short and thick, long and thin, long and thick), is a strong determinate characteristic.

Table 5-05. Eigenvalues of the Correlation Matrix for the principal component analysis.

|          | <b>Eigenvalue</b> | <b>Difference</b> | <b>Proportion</b> | <b>Cumulative</b> |
|----------|-------------------|-------------------|-------------------|-------------------|
| <b>1</b> | 2.39              | 1.14              | 0.40              | 0.40              |
| <b>2</b> | 1.25              | 0.21              | 0.21              | 0.61              |
| <b>3</b> | 1.04              | 0.34              | 0.17              | 0.78              |
| <b>4</b> | 0.70              | 0.10              | 0.12              | 0.90              |
| <b>5</b> | 0.60              | 0.59              | 0.10              | 1.00              |
| <b>6</b> | 0.01              | -                 | 0.00              | 1.00              |

The Eigenvalues of the correlation matrix show that 78.16% of variation is explained with the first three principal components (Table 5-05). An examination of the Eigenvectors shows that in the first principal component the ratio between internode thickness and length is the most influential variable (0.61), followed by the ratio between node thickness and internode length (0.59). In the second principal component the most influential variables were color (0.73) and pubescence (0.54). In the third principal component the most influential variables were the ratio between internode thickness and node thickness (0.79), and pubescence (0.53).

Table 5-06. Eigenvectors of the principal component analysis.

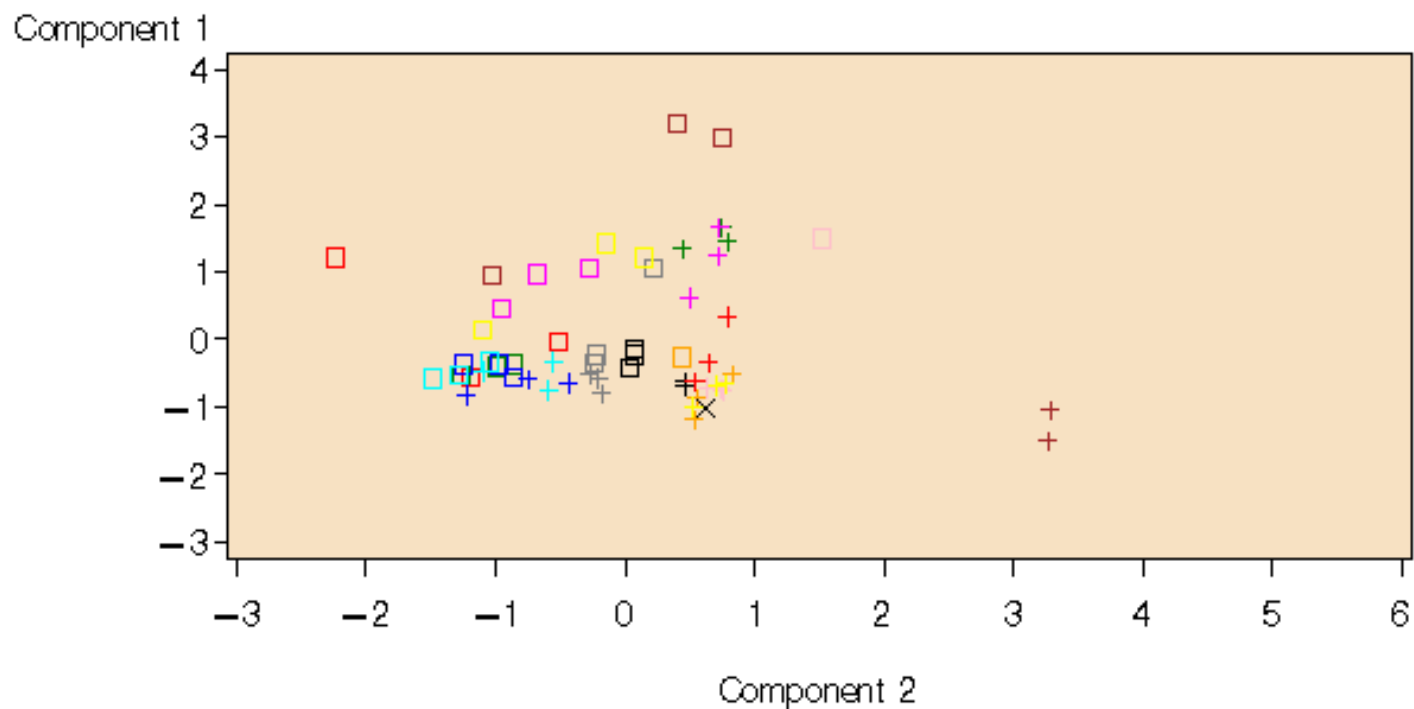
|                      | <b>Prin1</b> | <b>Prin2</b> | <b>Prin3</b> | <b>Prin4</b> | <b>Prin5</b> | <b>Prin6</b> |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>NT/INL</b>        | 0.59         | 0.25         | -0.14        | 0.03         | 0.31         | 0.69         |
| <b>INT/NT</b>        | 0.24         | -0.19        | 0.79         | 0.39         | -0.33        | 0.16         |
| <b>INT/INL</b>       | 0.61         | 0.20         | 0.06         | 0.12         | 0.26         | -0.71        |
| <b>Color</b>         | -0.09        | 0.73         | -0.20        | 0.39         | -0.51        | -0.01        |
| <b>Configuration</b> | -0.43        | 0.17         | 0.18         | 0.55         | 0.69         | 0.02         |
| <b>Pubescence</b>    | -0.15        | 0.54         | 0.53         | -0.62        | 0.13         | 0.01         |



The Eigenvectors show that for the first principal component the variables of NT/INL and NT/INL were the most influential, for the second principal component the variables of color and pubescence were the most influential, and for the third principal component the variables of INT/NT and pubescence were the most influential (Table 5-06).

The results for the first three principal components were plotted against each other (Figures 5-4 – 5-6).

Figure 5-4. Principal component analysis graph of the six variables (NT/INT, INT/NT, INT/INL, color, configuration, pubescence) looking specifically at the axes of component 1 and component 2. The colored symbols and their corresponding numbers refer to the cultivar numbers as listed in Tables 5-07 – 5-32 (see Appendix 14).



|         |       |    |       |    |       |    |       |    |       |    |
|---------|-------|----|-------|----|-------|----|-------|----|-------|----|
| Variety | □ □ □ | 1  | □ □ □ | 2  | □ □ □ | 3  | □ □ □ | 4  | □ □ □ | 5  |
|         | □ □ □ | 6  | □ □ □ | 7  | □ □ □ | 8  | □ □ □ | 9  | □ □ □ | 10 |
|         | □ □ □ | 11 | □ □ □ | 12 | □ □ □ | 13 | □ □ □ | 14 | □ □ □ | 18 |
|         | □ □ □ | 19 | □ □ □ | 20 | □ □ □ | 21 | □ □ □ | 22 | □ □ □ | 23 |
|         | □ □ □ | 24 | □ □ □ | 25 | □ □ □ | 26 |       |    |       |    |

Figure 5-5. Principal component analysis graph of the six variables (NT/INT, INT/NT, INT/INL, color, configuration, pubescence) looking specifically at the axes of component 1 and component 3. The colored symbols and their corresponding numbers refer to the cultivar numbers as listed in Tables 5-07 – 5-32 (see Appendix 14).

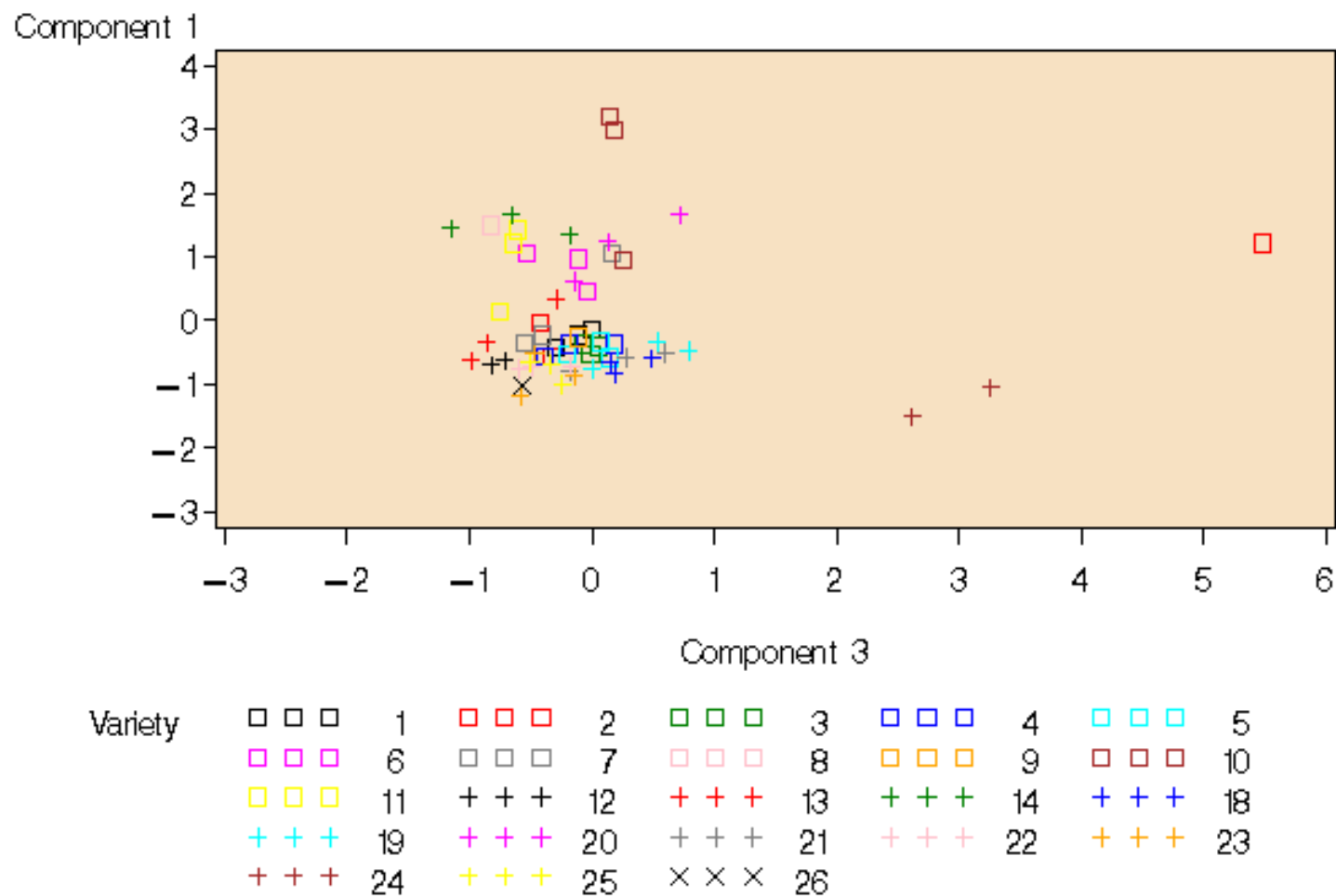
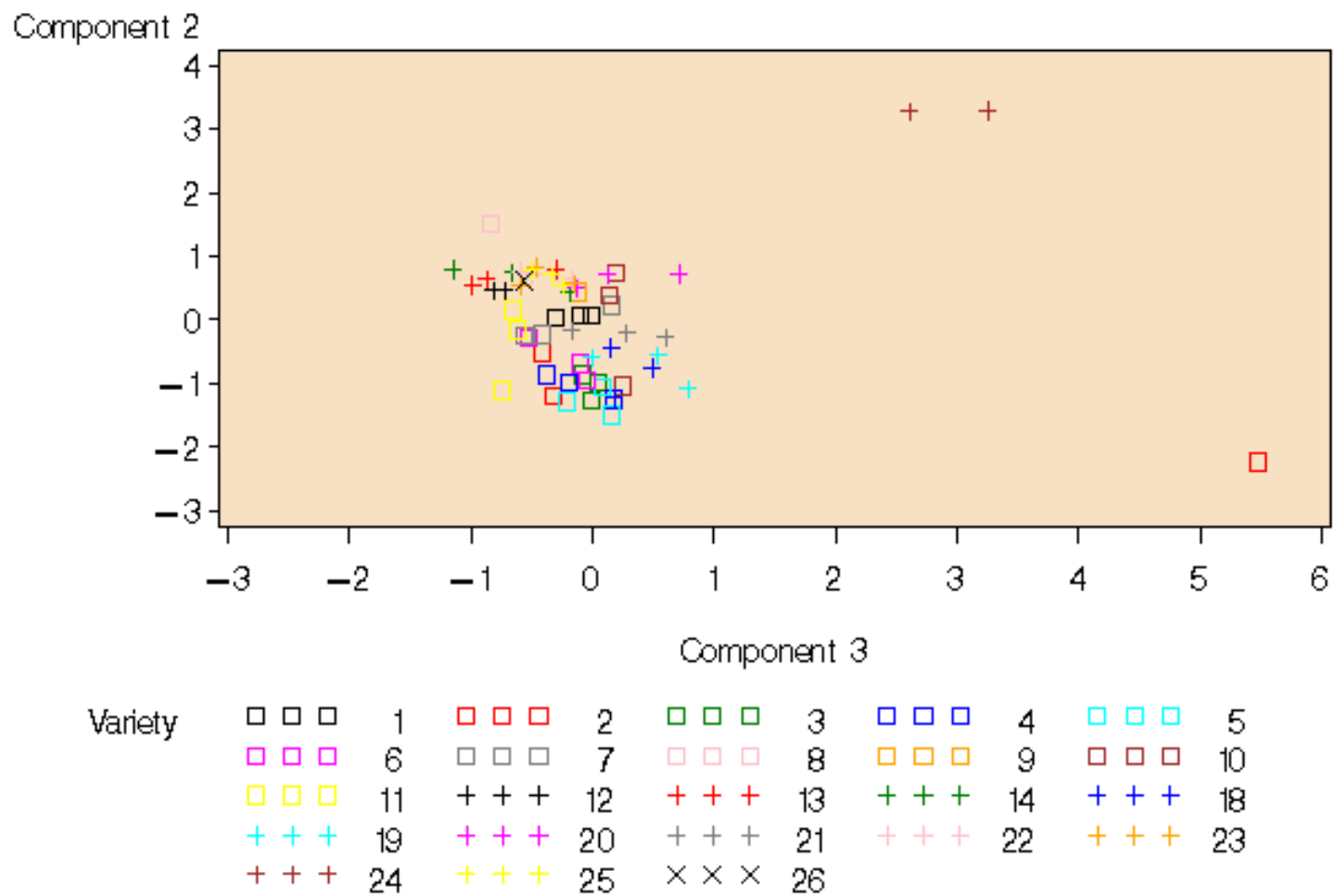


Figure 5-6. Principal component analysis graph of the six variables (NT/INT, INT/NT, INT/INL, color, configuration, pubescence) looking specifically at the axes of component 2 and component. The colored symbols and their corresponding numbers refer to the cultivar numbers as listed in Tables 5-07 – 5-32 (see Appendix 14).



The clustering of data sets in these graphs (Figures 5-4 – 5-6) show that there are indeed statistical similarities that reflect varieties. The only consistent outlier was a Papua New Guinea variety (24, **Isa**) which is the only variety measured that had pubescence. To get a better idea of how this affected the correlation, variance, and clustering the analysis was run again (but not presented here) using only five variables, the pubescence variable being left out. Neither the values of the simple statistics, nor those of the correlation matrix, changed with the removal of the pubescence variable. The Eigenvalues of the correlation matrix changed with the removal of the pubescence variable. They showed that 70.44% of the variance was explained within the first two principal component analyses. When these values were plotted again the lack of the pubescence variable affected the graphs by having the Isa variety, number 24, group with the other cultivars. The close clustering of different cultivars may indicate a probability that these cultivars are the same variety, but this cannot be determined by this analysis. A cluster analysis is needed to make such determinations.

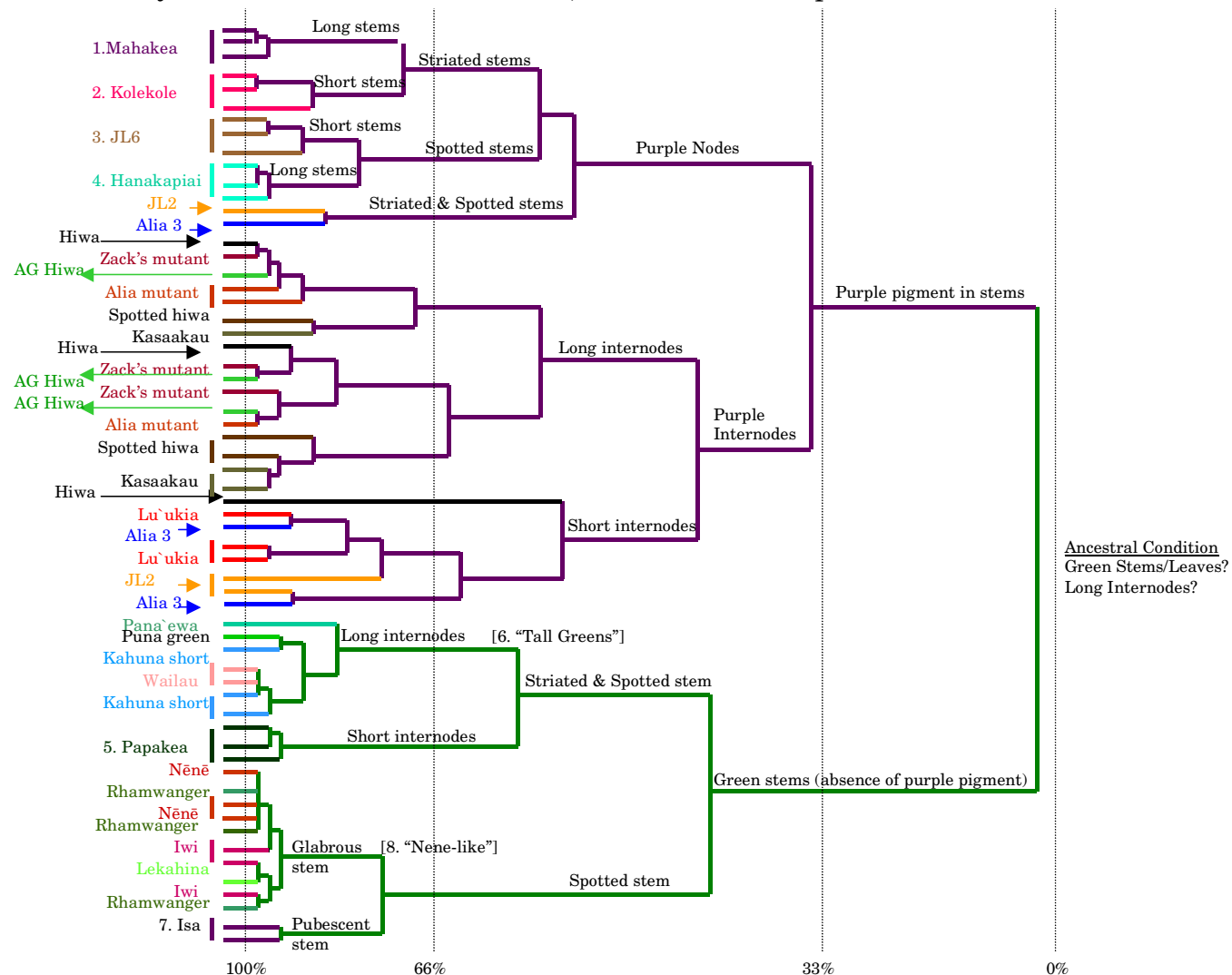
#### Cluster Analysis (CA)<sup>54</sup>

A cluster analysis (Figure 5-7) was run with the multiple variables obtained from the data (see Table 5-33 in Appendix 14). The analysis was run with Minitab® version 7.1 using the Manhattan settings. It reveals several things about the morphological relationship between the cultivars. It shows two main clades based on the presence or absence of purple pigmentation.

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<sup>54</sup> The statistical analyses were all run with the mistaken data point of 5.2 instead of 2.2 indicated in for cultivar 2 in Table 5-02. This mistake was not corrected upon submission of this thesis. If included it would likely have cleared up some of the groups in the purple clade.

Figure 5-7. Cluster Analysis showing the overall similarity of characters. The numbered clusters refer to a probable distinct variety based on the characters used, it does not correspond with cultivar identification number.



The purple clade further splits into two sub-clades, one (Purple Nodes) generally producing clusters of sampled branches that each comprise a single cultivar, and another (Purple Internodes) that clustered branches of different cultivars together. The first purple sub-clade (Purple Nodes) ended in pure clusters of branches, each representing a single cultivar except for one cluster that grouped JL2 and Alia3. These results support the recognition of Mahakea, Kolekole, JL6, and Hanakāpī ai as distinct varieties (designated 1 – 4 in Figure 5-7).

The second purple sub-clade (Purple Internodes – consisting of Hiwa, Alia mutant, Zack’s mutant, JL2, Lu`ukia, Alia3, AG Hiwa, Spotted Hiwa, and Kasaakau) did not cluster according to cultivar. Rather, the stems of each of these clustered with others in this clade. These were all cultivars that had a wide distribution of purple pigmentation that extended out of the nodal region and into the internodal region. The fact that stems of each cultivar were distributed throughout this clade indicates that, based upon the characters used, they can all be considered one variety.

The green clade divides into sub-clades, one consisting exclusively of Hawaiian cultivars (Pana`ewa, Puna green, Kahuna short, Wailau, Papa kea), and one consisting of mostly non-Hawaiian varieties (Isa, Iwi, Lekahina, Rhamwanger), and the Hawaiian cultivar, Nēnē.

The all-Hawaiian clade (Striated and Spotted Stem) showed clustering which supports the presence of two distinct varieties in this clade: Papa kea (Short Internodes) and the sister group (Long Internodes), labeled 5 and 6 in Figure 5-7. Within the mostly non-Hawaiian clade (Spotted Stem), **Isa** was the only cultivar that had all stems clustered together in its own distinctive sub-clade. Thus, the cluster analysis supports **Isa** as a seventh distinctive variety. The sister clade to **Isa** did not produce ultimate clusters according to cultivar; therefore the entire clade (Glabrous Stem) is considered to comprise a “Nēnē-like” eighth variety.

Among the 26 cultivars included, the cluster analysis provides a degree of support for recognition of 8 distinct varieties characterized as follows:

### Botanical descriptions

*Piper methysticum* G. Foster (Yunker 1959): Shrub with thick, woody rhizome, up to 3 meters or more tall, glabrous, nodes swollen. Leaves round-ovate, short-acuminate, base deeply cordate, up to 20 cm or more long and 15-20 cm wide, palmately 9-13 nerved, nerves minutely puberulent beneath, petiole up to 3 cm long, vaginate at base. Spikes leaf-opposed, solitary, up to 5 or 6 cm long, greenish white.

1. *P. methysticum* probable ethnovariety **Mahakea**: internodes to 20 cm in length and 3 cm in width, nodes to 4.5 cm in width; stems glabrous, with purple pigmentation occurring at the nodes and occasionally distributed across the entire internode; fruit a cluster of berries, seeds unknown.

2. *P. methysticum* variety Kolehaha: internodes 13.5 cm in length and 2 cm in width, nodes to 3.5 cm in width; stems glabrous, purple pigmentation limited to the nodes; fruit as cluster of orange berries, seeds unknown.
3. *P. methysticum* possible ethnovariety **Papa**: internodes to 7.5 cm in length and 3 cm in width, nodes to 4.5 cm in width; stems glabrous, purple occurring at the nodes and occasionally distributed across the entire internode, additional dark purple spots throughout; fruit cluster of orange berries, seeds unknown.
4. *P. methysticum* variety Hanakāpī ai: internodes to 18.5 cm in length and 2.75 cm in width, nodes to 3.75 cm in width; stems glabrous, purple pigmentation occurring at the nodes and occasionally distributed across the entire internode, additional dark purple spots throughout; fruit and seeds unknown.
5. *P. methysticum* possible ethnovariety **Papa kea**: internodes to 7.5 cm in length and 2.5 cm in width, nodes to 3.5 in width; stems glabrous and green, lacking purple pigmentation and spots or striations; fruit a cluster of orange berries, seeds unknown.
6. *P. methysticum* ethnovariety **Isa**: internodes to 20 cm in length and 2.5 cm in width, nodes to 3.5 cm in width; stems pubescent, green, lacking purple pigmentation, but with darker green spots throughout; fruit and seeds unknown.
7. *P. methysticum* probable ethnovariety “**Kūmakua**”: internodes to 20.5 cm in length and 2.5 cm in width, nodes to 3.5 cm in width; stems glabrous, green, lacking purple pigmentation, but with darker green striations above the node and spots below the node; fruit and seeds unknown.
8. *P. methysticum* variety “Nēnē-like”: internodes to 21.25 cm in length and 2.25 cm in width, nodes to 3.75 cm in width; stems glabrous, green, lacking purple pigmentation, but with darker green spots throughout; fruit and seeds unknown.

## DISCUSSION

The common garden experiment in this study based its quantification categories on the common garden studies of *P. methysticum* by Lebot and Levesque (1989). Upon reviewing their methods and reviewing the range of morphologies present in the Hawaiian cultivars it became apparent that **`Awa** in Hawai`i does not display the wide range of morphologies exhibited by the numerous cultivars of *P. methysticum* in Vanuatu.

Lebot and Levesque (1989) saw noticeable differences in leaves and created the categories of light green, dark green, and purple. The Hawaiian cultivars had only green leaves which seemed to demonstrate as much variation within a plant as



between plants, therefore this category was not quantified in the present study. Similarly, the leaf edges, qualified by Lebot and Levesque (1989) as undulate, raised, drooping, and regular, also seemed to have as much variation within plants and between plants, and appeared to be heavily influenced by factors such as wind and leaf age. Therefore these characters were disregarded in this study. In retrospect, if these traits had been included, the non-Hawaiian plants might have been more readily distinguished from the Hawaiian cultivars.

Several observations were not quantified here, but are worthy to note for future research.

- The leaves of some varieties are noticeably and consistently asymmetric (example: **Iwi** from Papua New Guinea) which may be an identifiable characteristic of non-Hawaiian varieties.
- Leaf **piko** (anterior adnation point of petiole to leaf) seem to be consistently present on varieties that have significant amounts of purple pigmentation in their stalks.
- Almost every plant in the field had some leaves with overlapping proximal lobes. This was particularly true with the younger and larger leaves of the Hawaiian varieties. However, each plant also had leaves that did not display this characteristic.
- Cross sections of stems show that some are triangular (like Joel Lau6) and some are seemingly perfectly round (like Amy Greenwell's **Hiwa**). With further analysis this may prove to be a character that is useful in the distinction of varieties.
- Inflorescence length seems to vary between the Hawaiian varieties and other Pacific Island varieties. This is a possible defining character for varieties.

The current perception of a low number of **`Awa** varieties in Hawai'i may be an underestimate because the morphological differences between varieties can often be very subtle and differences that are genetically based may be dismissed as variation due to environmental conditions. An example of this is the difference between Oahu 237 and Papa kea. Both have the same growth habit and coloration; the only difference is the stem configuration, uniform versus striate.

Growth of the plants in this common garden experiment was slower than expected. The major factor that retarded growth was most likely intrusion of roots of adjacent well-established trees which out-competed **`Awa** for water and nutrients. The roots were from a thick grove of *Hibiscus tiliaceus* trees growing in and around the study plot before the experiment began. A second major factor was the presence of Shot-hole fungus (*Phoma* sp.). Given more time for growth, more accurate measurements may have been possible. Under ideal growth conditions the same statistics could be measured in two categories, mature branches and young shoots, since both display different appearances.

The plants in the common garden closely resemble the same varieties planted in other collections such as Amy Greenwell Ethnobotanical Garden in Kona,

Hawai'i; and at Alia Point `Awa Nursery in Hāmākua, Hawai'i. Therefore, I conclude that variation is explained more by genetic components than environmental influences.

### Principal Component Analysis

This analysis statistically showed that the variables chosen were valid characteristics for distinguishing varieties. This finding is important because it validates the manner in which humans distinguish varieties, i.e., primarily by growth form (node thickness, internode thickness, and internode length), and secondarily by stem color and configuration.

All PCA plots showed grouping of data points corresponding to variety. The only data points corresponding to a variety that were not grouped in all three PCA plots were those for variety 2 (**Hiwa**). This was likely due to the fact that this variety was not healthy and did not display typical growth patterns. A consistent outlier was variety 24 (**Isa**), due to the presence of pubescence. This is a variety from Papua New Guinea and was expected to be an outlier amongst the Hawaiian varieties. On the other hand, different cultivars often clustered very close to each other, sometimes overlapping. This indicates that they may represent the same variety. A principal component analysis, however, cannot statistically determine this, therefore a cluster analysis was done.

### Cluster Analysis

The cluster analysis produced in this thesis probably does not accurately depict the diversity of Hawaiian `Awa that actually exists. This is attributable to the manner in which the data were collected. The color ranks selected probably divided the distribution of shoots with purple pigments more than they should have because the variation of purple pigment distribution was great even within a single branch of a single clone. Thus, the narrow way of treating the distribution of purple pigment may have led to an inaccurate depiction of the relationship between some of the cultivars.

In the larger purple clade there were two main clades, one that showed clustering of stems mostly corresponding to cultivar and one that did not. The one that clustered branches mostly according to cultivar (including Mahakea, Kolekole, JL6, Hanakāpī`ai) only had purple pigments at the nodes that did not extend far into the internode region. The clade that did not cluster according to cultivar (consisting of Hiwa, Alia mutant, Zack's mutant, JL2, Lu`ukia, Alia3, AG Hiwa, Spotted Hiwa, Kasaakau) included varieties that had a wide range of purple pigment distribution within even a single branch. The fine separation of color ranks resulted in a clustering of branches that was not associated with cultivars within this clade. However, if the color ranks had been defined differently, I believe that at least three varieties would be distinguished within this group: one with

long-dark internodes (Hiwa, Alia mutant, Zack's mutant, AG Hiwa), one with short-dark internodes (JL2, Alia 3, Lu`ukia), and one with dark-long-spotted internodes (spotted Hiwa, Kasaakau).

The green clade consisted of an all-Hawaiian sub-clade (comprising Pana`ewa, Puna green, Kahuna short, Wailau, Papa kea), and a mostly non-Hawaiian sub-clade (comprising Isa, Iwi, Lekahina, Rhamwanger, and Nēnē as the only Hawaiian variety). Because all of the clusters did not correspond to individual cultivars these results can conservatively be read as only two distinct varieties, Papa kea and "Tall Greens." The mostly non-Hawaiian clade included all spotted cultivars. Within this clade Isa, from Papua New Guinea, formed a distinct sub-clade due to its pubescence. Branches in the sister clade to **Isa** did not cluster according to named cultivars, and this clade is tentatively considered a single "Nēnē-like" cultivar. The lack of resolution of existing named varieties in this clade may be attributable to the fact that the characters chosen for analysis did not reflect the morphological variation present in the South Pacific varieties. If other characters had been measured, such as leaf morphology and inflorescence length, additional clades corresponding to existing named varieties may have been identified.

### **Future Research of `Awa Varieties**

More work needs to be done to more accurately specify the number of **`Awa** varieties remaining in Hawai`i. The common garden of **`Awa** cultivars should be continued until an ideal growth form of all the cultivars is obtained and replicant number increased. Statistical measurements should then be taken again, but divided into two groups: mature branches and young shoots. Genetic work currently underway by Ruth Le`au, will shed further light into the relationships of **`Awa** varieties. Chemotype analyses, currently underway by Klauss Dragull, will also be valuable.

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# APPENDIX 1

## INTRODUCTION

Introductions were made through my friends and family. I explained who I am and where I am from. I wanted to downplay my association with the university, because of its bad reputation amongst some Hawaiian elders, so I did not mention it during the introduction period. As much as possible, no interviews were conducted immediately following the introduction, but rather on a later date.

## EXPLAINING RESEARCH

Before conducting interviews I informed the interviewee that I am a student hoping to learn some things from them for the purposes of research. This was done in a culturally sensitive way through the questions asked as outlined below. All interview sessions were referred to with the culturally accepted term “talk story.”

## QUESTIONS

Questions were worded in such a way so that the interviewee (**kupuna**) would have control of where the conversation was going, and wouldn't feel pushed into answering an overly inquisitive (**nīele**) person. Below are some areas of information I wanted to learn about and the associated questions I asked.

- Goal: Determining if the kupuna has any knowledge they were willing to share about **`Awa**.
- Question: **Ke imi nei au i mau mo`olelo no ka `Awa? Ua `ike `anei `oe i ia mea i kou wa `opio?**
- Goal: To learn about **`Awa** varieties.
- Question: **`O ka `Awa, aia he mau `ano paha, `a`ole paha?**
- Goal: To determine if clapping hands (a practice that is seen in contemporary Hawaiian ceremonies that is a possible introduction from the South Pacific).
- **No ka inu `ana i ka `Awa, aia paha he mau loina e malama ai no ka po`e inu `Awa?**

## APPENDIX 2

**`Awa varieties collected and distributed by the Association for Hawaiian `Awa (A.H.A.) under the direction of Edward Johnston and Alia Point `Awa Nursery, and Jerry Konanui.**

**Alia #2:** from Waima area of Waipi`o Valley; stout, black/red, short, 5 ft. Collected in 1988. Planted at Alia collection in January 1992. This could be `Awa mo`i or Papa 'ele'ele.

**Mapulehu, Molokai:** large, 12 ft.; brilliant green w/ black, "1/2 -moon" markings above nodes, after 6-8 months growth; Found in Mapulehu, Moloka`i. Planted in Pauka`a collection in August 1994.

**Alia #3** (HM 1A, HM#8, HM#10, Alia #5, **Mō`i**): from Kipahulu, Maui; collected, Sept. 1993; probably same morphotype as Alia #2, but appears darker, with shorter internodes, thicker stem. Planted in Alia collection, January 1994; Pauka`a collection in April 1995. This could be **`Awa mō`i** or **Papa 'ele'ele**.

**Alia #7** (HM # 7, HM#9, HM#2): collected in Kipahulu, Maui; short to medium internode, 5 + ft; black, speckled. Planted at Pauka`a in April 1994 and Alia March 15, 1995. Could be Papa `ele`ele pu'upu'u.

**Mahakea** (Waipio Purple/Puna Purple): collected in far back of Waipi`o Valley, beyond Meliton's cabin in 1985 ; huge 'awa, 12 + ft. upright ; long internodes; green to purple; some with a single green stripe on purple; some all green w/ purple nodes; if grown in mostly shade stems can be solid black; [has incorrectly been labeled **Mokihana** at AP`AN]. First planted at Alia in July of 1992. Chemotype for stump = 425631; lateral root = 436251.

**Hanakāpī`ai** (**Nēnē ele`ele**, Kaua`i): collected in 1980; in Napali, Kaua`i. In valley of same name; tall `awa, up to 8 ft., upright; looks like Nene, but with very dark internodes. Planted at Alia in June 1992. Pauka`a in April '94.

**Nēnē:** collected in Honokānenui Valley and Waimanu Gap (Waipi`o Dam side), Hawai`i Island; tall, upright, 8 ft; green with numerous speckles (lenticels) all along internodes. This variety seems to be prone to nutritional deficiency causing slow growth and yellow spots within leaves. However, this condition can be overcome with double quantities of organic fertilizers, leaves will green up and growth rate will improve. Other Hawaiian names: **kua`ea**, **kukaenalo**. First planted at Alia in April 1992.

"Kipahulu Red": (has been labeled **Waimea Arboretum Red**) collected in Kipahulu, Maui ; is probably same morphotype as Alia 3; however, propagation is harder and live rate less; at 2 years old, amount of side roots seems to be far greater than average. Planted at Pauka`a in June 1993. Could be **Mō`i** or **Papa 'ele'ele**.

S.I.G. "Short Internode Green": ...this is low growing, has purple nodes and green internode. Found in Pāpa`ikou, Hilo Coast in 1993. Planted at Alia collection in July of 1995. Preferred Hawaiian name per Genesis Leeloy—**Pana`ewa**.

Lu`ukia (Queen): collected in Hi`ilawe, Waipi`o in 1992, at legendary site of "Queen's Patch" \* ; appears same as Alia 3 characteristics. Planted at Alia in September of 1993. Could be **Mō`i** or **Papa 'ele'ele**. \*Long time Waipio residents tell me this is the old `awa field of Chiefess Lu`ukia and the story can be found in Legends of Old Hawai`i by Betty Allen.

**Rahmedel (Rahdmel)**: one of 2 cultivars from Pohnpei. Brought here in 3/9/95. This cultivar can be a weak grower unless extra nutrition is applied. It is green with some lower internodes being purple/black. Light red stripes appear below surface of green internodes. (\* this spelling is given by Nature Conservancy worker, John Van't Slot, who is in charge of that organization's Kava Project in Pohnpei. Lebot's spelling in Kava, the Pacific Drug is *Rahdmel*. Planted at Alia and Pauka`a in July of 1995.

Wa`a Wa'a (John Fowler-Hawaiian Beaches): collected in Hawaiian Beaches; this is a deep green `awa with very long internodes, growing upright to 16 feet and more. Planted in Alia collection December 1995. Could be **Koa`e**.

`Awa Hiwa: a very black `awa, medium to long internodes, upright to 8 ft plus. Collected in 1987 in forest near "old slaughterhouse" along Railroad Avenue, Kea`au. Planted in Alia collection July 1992.

Spotted Hiwa-- found in forest at `Opihikao. This is erect grower, deep black to leaf petiole, long internodes, raised black lenticels. First planted at Alia in October 1996. Preferred Hawaiian name? Hiwa pu'upu'u??

Pauka`a #1: second generation from cuttings of Alia 2; characteristics appear same. Planted in Pauka`a collection June 1995. Could be **Mō`i** or **Papa 'ele'ele**.

**Rahmwahnger**: dark green, significant raised black lenticels (speckled, like **Nēnē**), medium to long internodes, upright to 12 feet. Prize cultivar of Pohnpei. Similar in appearance to **Nēnē** but lenticels fade with age of stems, and growth rate seems much faster. This speckled is listed as "**Rahdmel**" on page 273 of the ALLERTONIA paper and "Rahmedel" on page 280. In Kava: the Pacific Drug, the speckled kava from Pohnpei is spelled Rahmwahnger. Planted in Alia and Pauka`a



collection in July 1995.

Honokāneiki (Kia/Kona): cuttings are from farm in Waipi`o Valley. Propagated, November 20, '94. Originally collected in Kona; large `awa (similar in size and shape to **Mahakea**) but emerald green stems with black spots around nodes. Also, stem has blotches of black at internodes and some striation. This variety has also been found in Honokāneiki Valley, Hawai`i Island. Planted in Alia collection June '95. Could be **Li`i** or **A Kane**.

Puna Green (may be **Kūmakua**): cuttings from large `awa growing area in upper Puna, Hawai`i Island. Dull, green stems with few to no marking, long internodes, 16 to 18 feet; some rooted and growing out of crotches of trees in forest, upright grower. Planted in Alia collection March 1997.

**Ava lea**:-- Collected from Lebot's plants at Lyon Arboretum. Originally from Samoa. Similar to **Nēnē**, not as upright a grower. Planted in Alia collection March 1996. Samoan's have said this is actually **Ava La'au**.

**Isa**: Erect, upright grower. Original plant purchased at Star Market on Oahu labeled from Papua, New Guinea. Leaves and stems appear darker green than any `awa I've seen; stems have a pastel appearance; fragrance from stem is unlike any `awa I know of; stems are stronger and more fibrous than others; deep green stalks have black speckles. Planted in Pauka`a collection December 1996 and Alia collection in March 1997. Lebot verified name in 8/8/97 visit. He originally collected it in North Papua. It ended up at Lyon Arboretum and, we guess, someone got cuttings and began to sell.

**Iwi**: Papua, NG. Collected at Nation Tropical Botanical Garden in 1997. Was in Dr. Lebot's collection there. Looks just like Isa but without the pubescence.

J. S., Moloka`i: August 1995 as cutting from Moloka`i. Planted at Alia in December 1995. Large, upright, to 12 feet. Lower part of new growth has striation, spots, black splotches on green stem. Stem appears mostly green with age.

**Hina**: from Tonga. Collected from "Lebot Collection" at NTBG in Hana, Maui on July 9, 1997. Dwarf to prostrate; thick green spotted stems and short internodes.

**Akau**: same collection site as above, however is different morphotype-- black/purple, thick stems with medium internodes, raised lenticels (spots) on stem. From Vava`u Archipelago, northern Tonga.

**Apu**: Short/All green. Collected in 1997 at cultivated `awa field in Leilani. Originally collected from Kauai Experiment Station at Kapa`a. Short internodes, all green, no purple. Low growing. Same as Oahu 235 (Lebot).

## APPENDIX 3

Chun, M.N. 1994. Native Hawaiian Medicines. First People's Productions, Honolulu.

### A

There are many types of **`Awa**. They are each distinguished by their leaves, stalks, and roots.

Their medicinal value is very much alike and each one has a potency for use as a medicine. One of its important aspects is a very good medicine for the illness **Maka`ā**, that is insomnia. This is how the preparation is done: The **`Awa** [root] is dried in the sun until it is half dry, then it is shaken and cleaned of any dirt. The **`Awa** is cut up into pieces and chewed or pounded in top of a board. If it is chewed then five "branches" of **`Awa** root are mixed with three fourths a cup of **Niu** water and it is prepared by hand mixing. **`Awa** liquid is thoroughly squeezed into a drinking bowl (the container in to which **`Awa** is strained). The **`Ahu`awa** sedge is used to strain the liquid. It is not too good to use too much sedge lest the liquid becomes too filtered (**o miki`ia ka wai`awa a koe`u`uku**) and perhaps using four and two extra and up to eight **`Ahu`awa** flower stalks might be enough to clean the liquid. Then, some sap is squeezed from the lower parts of four young **Ki** leaf shoots. The **`Awa** liquid is then warmed with some suitable small stones that have been heated in a fire. The medicinal liquid **`apu** is drunk while it is still warm and this is done until a good sleep has been induced, two pieces of dried **Mai`a lele** and **Iholena**, which have been scraped with an **`Ōpihi** shell and steamed in **Ki** leaves (**lāwalu**), are eaten to reduce the aftertaste. Spring water is drunk. **Maka`ā** is the illness and **Ho`onaku** (gas pains) are the symptoms of the illness; **`Apu wai`Awa** is the medicine; **Miloloa** [?] is the secret name used for this medicinal **`apu**.<sup>55</sup>

The young leaf buds of the **`Awa** are a good medicine for **`Ea** and **Pā`ao`ao** when mixed inside of a child's body.

This is how the preparation is done: For children a week old (**anahulu** – ten day week) one young **`Awa** leaf bud, chewed with four of the bottom half of the **Pūwahanui** flower buds, or perhaps the **`Ilima** flower, until it is a fine pulp. It is then fed to the child. This is done two times in the morning and the evening, and milk is fed later. Then all the **`Ea** and **Pā`ao`ao** should cease.

The **`Awa** leaves, stalk and roots are a good medicine for many illnesses and in particular for **Lī** (chills), **Anu nui pinapina`i o ka hanu** (repeated coldness of breath) and **Anu ha`ukeke** (a form of being cold, such as shivering).

This is how the preparation of **`Awa** is done to make a medicine for these illnesses:

The **`Awa** root is dried in the sun until it is half dry. It is shaken until all the dirt has fallen off, then it is cut up into small pieces and beaten to a pulp, but not over done. Then, it is put into a gourd container and mixed with a **Niu** shell of water (to increase the amount of **`Awa** pieces, fill up a woman's hatful with cut up roots and stalks).

The **`Awa** is allowed to stand in the water and then it is pounded with a **Niu** shell full of **`Ōhi`a`ai** leaves and leaf buds, the peel of one green **Kukui** nut, twenty **Ko`oko`olau** leaf buds and flowers, and the meat of one section of **Kō kea**.

All these ingredients are mixed and pounded into a mash and mixed with water inside of a gourd container. It is left standing. The liquid is prepared, as with drinking **`Awa**, by being strained with **`Ahu`awa** sedge until thoroughly clean of any sediment. It can also be strained again with dried **Niu** sheath.

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<sup>55</sup> This section was apparently edited out in the 1922 publication

The liquid is boiled with four hot stones until it has cooled down. One full **kualimu`Ōpihi** shell is drunk and this is done three times a day, perhaps for three to four days. There is an aftertaste after drinking this medicine.

The **`Awa** is a very quick cure for the illness of **Luhi** (tiredness), **Ma`uhā** (weariness), **Mā`opa`opa** (achiness) and such illnesses that overcome the body of both men and women when they have been strenuously working night and day.

This is how the preparation is done: first take a bath in a stream deep enough to dive head in or into a spring. Upon returning from the bath, the **`Awa** rootlets are first mashed and then strained with three fourths a **Niu** cup of fresh **Niu** liquid. It is strained and cleaned with **`Ahu`awa** sedge and then drunk while eating half a section of **Kō kea** to sweeten the aftertaste. Or perhaps some **Mai`a Iholena**, some “tasty” fish and **poi** that has been prepared by members of the household can be eaten and drunk with a mouthful of water, followed by smoking a pipe.

The action of the **`apu`Awa** begins with a tickling sensation and then sleep is induced for one whole night without awakening even to urinate. In the early morning the patient can dive into the water before eating, and goes back to their work. The patient is like a “new person” who has never worked before in his or her life.

These **`Awa** are very good medicines: **`Awa hiwa**, **`Awa mō`i** and **`Awa Papa`ele`ele** for the illness of **Mimi pa`a** (inability to urinate) and even perhaps **Mimi kulu** (difficulty urinating.)

This is how the preparation is done. Five **`Awa** root branches (**māna`Awa**) are chewed, and if more **`Awa** is desired then a **Niu** shell full is made with **`Awa** pieces that have been pounded. The **`Awa** is strained with **`Ahu`awa** sedge and let to stand in a **Niu** shell cup. Then four inches of **`Ōlena**, that have been crushed to soften it, are placed in the liquid. The liquid is mixed with half or more of the ripe **Niu** liquid.

Some small sized stones that are glowing hot are tossed into the liquid to heat it up. The hot rocks inside of the liquid are stirred with four young **Ki** leaf shoots that come from the plant. The very top of the shoots, one at a time, is used to stir the liquid until it turns dark. The liquid is stirred until all the leaves are used up, then, the liquid is drunk while it is still warm. When the **`apu** has been drunk, then half of a **`Uwala huamoa** or a **Mōhihihi**, the size of a fist is eaten. Half of it can be eaten raw with the skin peeled off.

This works well as a purgative to end constipation and the patient would drink a lot of spring water, one to even three drinks are enough.

The **`Awa mō`i** and the **`Awa papa ke`oke`o** are good medicines for **ka ma`i`eha iloko o ke po`o a holo i nā mahamaha me nā maka** (headache that travels to the temples and the eyes).

This is how the preparation is done: The **`Awa** is dried until half dry, and then it is cut up into pieces suitable for chewing, both flesh and roots. One to two pieces suitable for chewing, both flesh and roots. One to two pieces of flesh and even roots are chewed, every half hour and broiled **Niu** meat is chewed to counter the effects of the aftertaste of the **`Awa**. The sediment of both **`Awa** and **Niu** are spat out.

From the third to the fifth day, the **`Awa** is chewed and spring water and fermented seawater is constantly drunk. Half an **`apu kai** that is drunk works as a purgative to undo the constipation.

With the treatment described above, on the **`Awa** as prepared can counter the illnesses of **Lele**, **Pala**, **Pu`upu`u`ōhune** (bumpy skin rash), **Me`eau** (itch) and other types of **Pu`upu`u** (lumps) known and familiar that are contagious, and so too, for the illness **Maka`ula`ula** (Pinkeye, lit. reddish eyes) and **`Ea Makahonu**.

The ashes of the **`Awa** are a good medicine for **`Ea** and **Pā`ao`ao**.

This is how the preparation is done: The sediment from the preparation of **`Awa**, that has been drunk, is set out to dry. It is then burnt in a fire until ashes have formed. These ashes are mixed with the ashes of **Pili** (*Heteropogon contortus* (L.) P. Beauv. Ex. Roem. & Schult.) and the blackened remains of a **Kukui** nut that has been broiled to a crisp.

These ashes and the blacked **Kukui** nut remains are blended together, and this is the medicine used to smear and treat the tongue of children with **`Ea**. The symptoms are mucus running down from the mouth and a pale whitish matter which swells up on the tongue and is scratched off with a piece of **pa`ūpa`ū kapa**.

This is done three times a day and for five days. The child drinks **Ko`oko`olau** liquid, which has been warmed with hot stones and allowed to cool down before drinking.

All the types of **`Awa** (except the **`Awa lauanea Kāne**) can be mixed in the many medicinal **`apu** for serious illnesses like **Kohepopo** and **Wai`ōpua**. This is how the mixing is done: One woman's hatful of pieces of **`Awa** flesh and root that have been half dried, one woman's hatful of **`Ihi`ai** (the leaf buds, the leaves and stalk), four yellowish ripe **Noni** fruit, one woman's hatful of the **`Ōhi`a`ai** leaf bud, one piece of **`Ōhi`a`ai** bark, the size of a large open hand [are gathered].

All of these ingredients are pounded into a mash and mixed with one cup of **Niu** water and prepared like drinking **`Awa**. The liquid is strained using **`Ahu`awa** sedge until it is free of any sediment. Then it is covered with four glowing hot stones and the stones are left in the liquid until they have cooled. The liquid is then strained again with dried **Niu** roots.

One mouthful of medicine is taken once and this is done three times a day for five days.

However, if the medicine is bitter and tastes rather awful or weak, then it was not to be drunk again. A whole day would pass until the treatment discussed just above was started again as directed.

This medicinal **`apu** and treatment is called **Pi`ipi`iolono** [?], which is also the name of this **`apu**.

The **`Awa**, all types of it except the **`Awalauanea Kāne**, are used for the illness **Pu`upa`a** (**Haku ala**), that is **`eha a nā waliwali o ka pu`upa`a** (the pain and weakening of the **Pu`upa`a** kidneys?).

This is how the preparation is done: One **Niu** cupful of **`Awa** flesh and roots, chewed or perhaps thoroughly pounded. The **`Awa** is kneaded until a very good mash is formed, then four **Ki** leaf shoots, two arms length, are pounded until both the whitish and dark parts are mixed well into the mash. This is then mixed together with the **`Awa** and also with three-fourths a **Niu** cup full of spring water.

It is strained and prepared in the customary way drinking **`Awa** is done. The **`Awa** and **Ki** leaf liquid is squeezed, mixed and strained using **`Ahu`awa** sedge until it is clean, then it is drunk before eating. This is done twice a day in the morning and the evening. One to two mouthfuls of spring water are taken to counteract the aftertaste of swallowing the **`apu`Awa**.

Two mouthfuls of spring water are to be constantly drunk if at all possible, perhaps even taking it eight times a day.

Eating a lot of salty foods with meats and fish with dark colored meat is forbidden. **Pikonia** is the illness; **`Awa hōkale** (watery or diluted **`Awa**) is the medicine.<sup>56</sup>

The **`Awa** is good medicine for **Pū`ao kūlou** (and perhaps **Pūao pelu**<sup>57</sup>) of women who have or have not given birth.

This is how the mixing of the **`Awa** and other plant materials is done to obtain a medicine: Four knobby nodes of **`Awa** (only the flesh), one handful of **Pōpolo** berries, four **`Ākoko** leaf buds and two leaves from just below the leaf buds, the top portion of two **Kikawaioa** fern shoots (no stems), one handful of **Kūkaepua`a** leaf buds and leaves.

All these ingredients are pounded together into a mash, and two **kualimu`Ōpihi** shells full of fresh **Niu** water is mixed in. The liquid is prepared as is done for drinking **`Awa**. It is squeezed and strained with dried **Niu** sheaths until it is clean of any sediments, then it is

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<sup>56</sup> This last phrase was apparently edited out of the 1922 publication.

<sup>57</sup> Translation in the 1922 publication as, "For displacement of the womb"

ready to drink. When it is time to eat, eight **`Ilima** flower buds are first chewed and swallowed, then the medicine is drunk afterwards. After a little while has passed, half of the fresh **Niu** water is drunk.

This is done two times a day, in the morning and the evening until five medicinal **`apu** have been taken. Spring water is drunk a lot with **Ko`oko`olau** liquid that has been heated up with glowing hot rocks. This is done with the same restrictions placed upon the medicinal **`apu** used for the illness **Pu`upa`a**, just discussed. It is an excellent medicine for girls twelve years of age to drink.

## APPENDIX 4

Chun, M.N. 1994B. Must we wait in Despair: The 1867 report of the `Ahahui Lā`au Lapa`au of Wailuku, Maui on the Native Hawaiian health. First People's Productions, Honolulu.

### A

Pauanihi, **kahuna** o Waiehu Maui

:9 **He Nahu ka mai: He pua Hala me kahi Awa e mama a moni aku me kahi wai aku mahope, alaila hi mai, a i hi ole e ai mai i hookahi haohana Lumahai me kahi nahuna Niu a moni aku a hamo mawaho kekahi o ka oluolu no ia.**

:137 **Nahu** is the illness: **Hala** flowers (**pua Hala** or **hinano**) and some **`Awa** are chewed and swallowed with some water is drunk afterwards. Then, diarrhea occurs and if this does not happen then one handful of **Lumaha`i** and a little bit of **Niu** (coconut meat) is eaten and swallowed. Some of it is smeared externally for relief."

:12 **Paaao Kakua: E ike ia keia mai ma ka nana ana i ke poo o ke keiki e kawaha ana mai hope mai a hiki i ka manawa me he mea la ua mahele ia he poo. E kii 1 kauna lau awa hiwa. Kui a wali hamo ma ke poo a puni. E kii i ka mole a nui o ka Makoa me kona lau i mea kapai mawaho o ke keiki. Kui a popo hamo mawaho. Hanai mau ka mole Makoa maloko ma ka pua ana, a e ai no ka makuahine a moni nana, pela mau no e ai ai, a na ka naha no e naha, a ikiiki ka makuahine no ka nui o ka naha e hoomaha no ka ai ana, a hala kekahi mau la, e hana hou no, a e pau no kela owawa o ke poo a piha pono e poepoe ana. Ua pau kela mai.**

:142 **Pā`ao`ao kakua:** The illness is diagnosed by looking at the head of the child that has fractured from the back to the anterior fontanel as if the head had been divided in four. Four **`Awa hiwa** leaves are gathered, pounded until soft and smeared all around the head. A great quantity of **Makoa** [**Makou**?] taproots are gathered with its leaves to make a ball to rub externally. They are pounded and shaped into a ball and rubbed externally. The **Makoa** tap roots are first chewed and then fed to the baby. The mother also eats and swallows it for the baby [if the baby is too small]. That is how the baby is fed the medicine that causes purging. [However,] if the mother is in pain because [she has eaten too much of the medicine] of the purging, then she stops eating the medicine until several days have passed. Then the treatment resumes again and the fracture on the head is gone and seems to be completely 'filled in' to a round shape. The illness is then cured."

:15-16 Na mai pili aumakua: **O kela mau mai maoli i hoakaka ia ma mua, ma ka hana ana ke Kahuna a me na mai paaao pu no hoi. Ua komo pu no me ke ano aumakua, kumupaa, penei.**

**I ka hana ana a loa ka mai ma kahi e loa ai a kai ao ka lima a hana hou iho aole ua mai la, a laila ua komo ke ano kumupaa, ia Manawa e ninau ai ke Kahuna i ka mai a me no makua o ka mai, "Heaha kou kumupaa?" A hai mai ka mai, "He mano, he Pele paha, he pueo paha, Kanehekili paha, he Kihawahine paha."**

**Alaila, e hoihoi aku ke kahuna na ka mai no e hana me kona mau makua, a i pane mai ka mai, he hemahema, a laila hana ke Kahuna e like me ka hai ia mai he "Mano." Alaila, 1 Niu hiwa, 1 Puawa hiwa me ka lau, malo moelua, puua hiwa - hoolako a makaukau, e ope a paa e lawe e kiola i ka po ma ka waa ma waho o ka hohonu kuanalu, a hoi mai, alaila hana ka oihana a ke Kahuna.**

:146 Illness related to **`Aumakua:** Those illnesses explained before are physical illnesses diagnosed by the palpitation of the practitioner as are the **Pā`ao`ao** illnesses, too. The types of **`Aumakua, kumupa`a** illnesses, as follows, are also included [that they can be diagnosed by a practitioner];

During diagnosis the practitioner guides the hand to where the illness is suspected to be found and palpitation can be repeated, but if nothing is found there, then it is concluded that this is a type of **Kumupa`a** illness. At that moment the practitioner asks the patient and the parents of the patient, “Who is your **kumupa`a**?” The patient replies, “A shark, perhaps **Pele**, an owl, **Kānehekili**, or **Kihawahine**.”

The practitioner responds that the patient and his or her parents must do the treatment themselves, but the patient may answer that he or she is not competent to do so, then the practitioner must begin the treatment. For example for a shark, one **Niu hiwa**, one **pu`Awa hiwa** and leaves, a stripped loin cloth, dark black pig are supplied and prepared. They are tied up tight to be thrown into the darkness of night from a canoe outside in the deep where the surf breaks. Upon returning, then the skill of the practitioner are put to work.

:16 **Kumupaa Moo: Ina he Kihawahine ka moo e huli i ka Ilio lawakea, a i ole ia, he makue, me ke kapa, olena me kahi huluhulu awa. Owili a lawe i loko o ka loko i olelo ia he moo malaila i ka po mehameha loa, a kiola aku. Hoi mai me ka nana ole aku i hope, a ia Manawa e haha ke Kahuna aua koe ke kulana mai maoli, alaila e hana ka laau maoli e me kela mau moakaka maoli mua.**

:147 **Kumupa`a Mo`o:** If this lizard is **Kihawahine** then an white dog is sought or a dark brown, a **kapa**, and **`Ōlena** and **`Awa** roots. These things are rolled up and taken to [be thrown] inside of a pond or lake during a very quiet night where the **Mo`o** is said to be. Upon returning without looking back, the practitioner then diagnoses the patient by palpitation. The actual physical illness remains and so real medicines are used as has been before.

:16 **Kumupaa Pueo: E huli i Moa hulu Pueo, a poo Pueo paha, me ka Awa me ke Kalo Piialii, a Lauoa paha, me ka Uala, a e ahaaina a pau me ka ohana. Alaila, hana ke Kahuna ma ke ano lapaau ana kaulana mai maoli, e like me ke ano o ka mai e ike ia e ke Kahuna.**

:147 **Kumupa`a Pueo:** A chicken with owl like feathers is sought or a chicken with an owl shaped head, with **`Awa**, **Kalo pi`iali`i** or **lauoa** and **`Uala**. Everyone feasts with the family [on these cooked foods]. Then the practitioner begins the treatment in the manner of the famous medicinal treatments for the physical illness according to the type of illness diagnosed by the practitioner.

:17 **Kumupaa o Uli: Keia kumupaa o Uli, he akua keia e pili ana i na Kahuna anaana kuni. Oia o `Uli nana pono nana hewa`. He Puaa hiwa a eleele pu me na niho, me ka Awa hiwa lau. Kalua a moa ai me ka ohana Kalo piialii, he Uala kihi, ai ole e loa kela uala, o na Uala eleele mai waho a loko, he luau poni ka luau. Kalua keia mau mea a pau a moa. E ai ke kane ka wahine me na keiki pono i a ke Kahuna. Ai lakou a koe ua po nae, e kiola ke koena. No ke Kahuna kuni keia i loa i ka mai, aole no na mai e ae, a kaawale ia laau ma ke ano lapaau maoli, a i ola no hoi i kela hana ana, ua maliu mai ke Akua.**

I ka makaukau ana o ka ai, e olelo aku, ‘Eia ka Puaa me ka Awa, ka ai, Uala, luau. He uku na`u na ka mai ia oe, e Uli nana pono nana hewa, ina nau keia iha i lawe i ka eha, a ina na ka enemi mai e hoi no kana eha me ia. Amama, ua noa.’ Alaila ai.

:147-148 **Kumupa`a o Uli:** This **Kumupa`a Uli** is a goddess associated with the practitioners of **Anā`anā kuni**. That is ‘**Uli nana pono nana hewa** (*Lit.*, **Uli** who does right and wrong).’ A dark black colored pig too, with the teeth, **`Awa hiwa** leaves [are gathered]. They are baked until cooked and eaten by the family. **Kalo pi`iali`i**, **`Uala kihi** or if not then the **`Uala `ele`ele** that is black from the outside to the inside are obtained. The **lū`au** is the purplish **lū`au**. All these things are backed until cooked. The husband and the wife and children of practitioner feast [on these foods]. They eat until there are only

leftovers. When it becomes nightfall the leftovers are thrown away, because a practitioner of **kuni** has been sought for this illness and not for any other type of illness; hence this treatment is different from other types of cures, and a patient can be cured for such a treatment. God looks down with favor [upon the patient].

During the preparation of the food, it is said 'Here is the **Pua`a** and **`Awa**, the vegetables, **`Uala** and **lū`au**. It is my payment for the illness to you, oh **Uli nana pono nana hewa**. If the pain has come from you take it away. If an enemy has done this then return his pain to him. Ended. Freed.' Then everyone ate."

:17 **Oihana Lapaau Kuehukapa a Pahupu, ma ke kala ana.**

**Ma ke ano pahiuhiu a hoounauna mai a kekahi, i ka lapaau ana i ka mai ma ke ano aumakua a me ke kulana mai maoli, a ike ia e ke Kahuna. Ua komo mai ka mai a kekahi iloko o kekahi, ma ke ano hana kaina mai a ka mai, a i ka wa e kuehu kapa. Ai a noho kino ka mea kino ole iluna o ka mai, a olelo pu a kuhikuhi pono mai i ke ano o ka hana ana, alaila, hikiwawe ka lapaau ana."**

{nui na ano kaina, a laila ua wehewehe ia ka mea o lalo nei}

:21 **Kauhipu ke kaina: Ua uhi paa i (ke kapa) ka mai me ke kapa i (hoopalahalaha ia) hoomohala palahalaha ia mai ka loa mai ke poo a na wawae, a paa pono olelo iho, o "Kauhipu ke kaina." E huki no maluna a pau loa ke kapa, e kuehu no malalo ma ka aoao hema e heluhelu ai i keia mele pule.**

**'A Kukuilauania au i Hilo**

**Nana aku ia Waiakea**

**Hoakea ka aha o ka ua i ka lani**

**Ke momoku la no i ka piko o ka hanauna**

**Mea no a he lokoino a he loko waiakua.'**

**E hana mau ma keia i ke kakahiaka, ahiahi, a kualima, a mahope iho e pane i ka Moa lawa keokeo, he Piialii ka ai me ka luau me kahi Awa, no ke Kahuna nae ka Awa. Ina he wahine me kane, olaua wale no ke ai i ka Moa, aole na keiki pono i ai. Ina hoi no ke kane ka hana ana o ka wahine no ka hoa ai, a ina he mea kane ole a wahine ole, nana no e ai ka Moa.**

:148 The practice of **Kuehukapa** of **Pahupu**, through counter-sorcery.

Through these types of sorcery, **Pāhi`uhi`u** and **Ho`ounauna**, some could treat a patient afflicted with this type of **`Aumakua** illness and also actual physical illnesses as diagnosed by [medicinal] practitioners. An illness from another person entered into a patient by a type of incantation, and at times by **Kuehu kapa**. A spirit bodily possessed the patient, speaking and completely directing what is to be done, then the [medicinal] treatment was quickly done.

{Various types of incantations are described then the following}

:153-154 **Kauhipu** is the incantation: [see Gutmani 1983: pp.35-38 for Kelsey's translation]

The **kapa** completely covers the patient and the **kapa** has been spread over the length of the patient, from head to feet. When it is completely secured, it is said, '**Kauhipu** is the incantation.' The entire **kapa** is pulled on top and shook below on the left side while reciting this prayer chant.

When I am at **Kukuilau`aina** in Hilo

I looked towards Waiakea

The gathering of rain in the heavens was so wide

{It is shown widespread by the rains that have lifted – Gutmanis, 1983}

Cutting up the relationship (Lit. umbilical cord) of the relatives

Someone who is cruel and distant.

{in Gutmanis 1983, followed by **Ikuhi paha i ku`u`opio, he`opio iluna ke alo.**

**Iluna no ke alo, a hele no a.)**

This was constantly done in the morning and evenings, five times. And afterwards a light white colored chicken crowed. [**Pi`iali`i**] is the food eaten with some **lu`au** and some **`Awa**.



The `Awa is for the practitioner. If [the patient] was a woman with a husband, then only the two of them eat the chicken. Their children do not eat it. If [the patient] is a man, then it was his wife's task to light the fire [to cook the food], and if [the patient] was single, then only the patient eats the chicken.

:21-24 Oihana Kuni a Kuaana: Ua malama ko`u makuakane i keia oihana me ka noho malie loa me ka hale ole aku i ka hai. Aole makee i ka hai loa i noho loa i ke ao, i ao ia no hoi no ka pilikia mai a hai a pilikia ka ohana pono i a me ka pilikia o kekahi poe aku, a ua loa[a] hoi iau keia oihana me ka malama a noho malie loa. Aole pono keia oihana i ka me hikiwawe i ka huhu, a no ko`u manao e hoike pau i ka`u hana ke hai nei au me ka hookamani ole. Mai na `lii a na makaainana ka hana ana i keia oihana ke loa ka pilikia a ke lilo hoi ka maunu oia na mea pili i ke kino. He hana lepo, hana wai paha, kuha a luai paha, lauoho, a he kapa paha, he malo, hakina ai hakina ia.

Ma ka hailona ana e maopopo ai, ua lilo ka maunu, ma ka puu iliili ana, alaila ma ka ike i ka oihana kala e pau ai ka pilikia ke koe ka maunu, alaila pono ke kala, a ina ike ia, ua pau loa ma ke kuni ola ka hana ana. E kolu mea iloko o keia oihana. Ka mua. Ina ike ia aole i pau loa ka maunu, he oihana kala ka pono.

Ka lua. Ike ia ua pau loa ka maunu o ke kuni ola ka pono, i make mua ka mea nana i kolohe a me ka poe ike pu ia hana.

Ke kolu. O ke kuni i ka wa e make loa`[a] i ka mea minamina, i make ka mea a mau mea paha nana i kolohe.

I ka wa kahiko he mau hana nui keia i ku i ka pono ole, a i keia wa he pepehi kanaka kona inoa kupono loa.

He kala ana. Ke koe hapa ka maunu.

E olelo ke Kahuna i ka poe nana ka mai e huli i Moa lawa, i ole ia, he Ilio lawa, i ole ia he ia kea Amaama, Aholehole, he Weke, he Kala, he Palani, he Maomao, he Hee, he Ula, he Wana. Akoakoa keia mau mea apau me ka Moa. He Awa makea ka Awa. Makaukau keia mau mea apau imua o ka ai, e pule ke Kahuna penei.

‘Kala, kala, ke kala aku nei no ka maunu lilo. Ke uweke aku nei au no ka maunu lilo. Ke wehe aku nei au no ka maunu lilo, ia kahi ka po i o Kukahi e kala ai ia lua ka po i ka po i o Kulua e kala `[a]i, ia kolu o ka po i ka po i o Kukolu e kala `[a]i, ia ha ka po, i ka po i o Kaha e kala ai, ia lele ka po lele iluna e kala `[a]i, lele ka po ilalo e kala `[a]i, lele ka po lele i nae i nae e kala `[a]i, lele ka po lele i ka hikina i ka hikina e kala ai, lele ka po e lele i ke komohana i ke komohana e kala ai, a hala pa i ke kauila auwai la a mama lele wale aku la.’

No ke kuni ola.

E lawa ae i wahi lauoho o ka mai ke kuha me ka huamoa hookahi. E hui ka huamoa me ka lauoho, a o ke kuha paha e wahi ae i wahi pepa mawaho, e hia ke ahi iluna o ka laau oloma o ka aulima no ia, a a ke ahi e pulupulu iluna o ke kapuahi iloko o ka hale. He Auhuhu maloo a maka na wahie a i ole ia he Akia maloo, a lapalapa ke ahi e hoopuhi ae i ke ka Ipu awaawa mawaho o ke kapuahi, a e noho ke Kahuna ma kekahi aoao o ke kapuahi, o ka mea pili i ka mai ma kekahi aoao, a e hooleilei i kela hua i wahi ia me ka lauoho iwaena o ke okoko o ke ahi, pela e hooleilei mau ai. O ka pule ma ka waha o ke Kahuna, penei.

‘E Uli i ka lani, e Uli i ka po, e Uli i ke ao, e Uli nana pono, e Uli nana hewa. Eia ka hewa la. Po ia e Leapua i ka maka o ka mea nana i anaana e hele mai nei. Po ia e Leapua i ka ihu o ka mea nana i anaana e hele mai nei, i ka waha, i ka auwae, i ka ai, a ku i ka umauma hakahaka o ke kanaka a hala pa i ke kuaauwai la. Amama, lele wale, ua noa.’

Kupapau e wahi kino ana.

He o ka pule a ke Kahuna, ina he kupapau i nalo ka maunu ke lawe ia mai, e makaala ke Kahuna i ke ano o ka maunu, ma ka hailona ana. O pilikia ia he maunu ola paha ua lauwiki ia me ka maunu make. Ina ua huipu haalele loa, ina aole, e hana ke Kahuna, aole nae e haule ka apu Awa hiwa i keia mau hana apau, i mea inu no ke Kahuna.

‘E Uli iluna, e Uli ilalo, e Uli nana pono, e Uli nana hewa. Hoomaka o Uli i ke ka ana i ka upena i ka po io Kulu a lawa no i ka po o Kulu a holo no i ka alaihi i ka pa i o Kulu, a kau no ka pikoi i ka po i o Kulu, a kaa no i ka pohaku i ka po i o Kulu, a kuu no i ka po i o Kulu, a hei no ka ia o kana upena i ka po i o Kulu, he kane he wahine, he keiki kane no a he kaikamahine, he elemakule no a he luahine. Eia mai ka mea nana i anaana o A. ke iho aku la ilalo i o Milu la i o Wakea la, a popo ilalo, a ilo ilalo, a punahelu ilalo, a lehu ilalo, a ka ka, a ka upena punaweleele, hei aku la ka ia o kana upena, he kane he wahine, he keiki kane no he kaikamahine, he elemakule no, he luahine ka ia o kana upena, hei ma na maka ma na waha ka ia o kana upena. Eia mai ke iho aku la ilalo o A, i Milu la i o Wakea la, pop ilalo, ilo ilalo, punahelu ilalo, lehu ilalo, kaakihi kaa kae ana ka make i kapuahi a Uli. Eia mai ke iho aku la ilalo i o Milu la i o Wakea la ka mea nana i anaana o A, popo ilalo, ilo ilalo, punahelu ilalo, ilo ilalo, kaakihi kaa kae ana ka make i kapuahi a Uli. E Uli e hoolewa ia ka make iluna hoolewa ia ka make ilalo, hoolewa ia ka make i nae, hoolewa ia ka make i kai, hoolewa ia ka make iuka a pioioi ai. Eia mai ke iho aku la ilalo ka mea nana i anaana o A, ilalo a popo ilalo, a ilo ilalo a punahelu ilalo, a lehu ilalo a kaakihi kaa kae ana ka make i kapuahi a Uli. E Uli e hooko ia hooko ia ka makemake o ka holona i ko, e Uli e nana ia ka pono i pono, ilaila oe e Uli e noho ai me ka mea nana i anaana. Elieli kapu, elieli noa, ua noa, lele wale, - ’ Mai ka uhau ana o ka hui a ka o i ke kupapau e waiho ana ilauna o keia pule no, me ka malo keia nae ka Kahuna no keia mau hana, aole no ke kala, o ka maunu lilo i olelo ia maluna, e kii i ke kumimi me ka pea o ke kai me ka Ipu awaawa, me ka lau Ape i mea laulau ae no ke lehu a lawe i kahakai e hoolei ia.

He nui no na pule aole i pau. Aole no hoi i hana ia keia oihana a ka makua i ao mai ai. Ua malama wale ia no, a o ka hopena keia a ka`u olelo hoike.

:154-158 The Practice of **Kuni** belonging to **Kua`ana**: My father kept up this practice by keeping quiet and not passing it on to others. He had no desire for someone else [to learn this practice]. It was received through long hours of training, and it was also taught because of another person’s illness related problems, one’s own family related problems, and the problems of other people. I received this practice do to caring and keeping quiet. This practice is not right for someone who is temperamental. And because I have decided to completely reveal my skills I would like to say that I have no regrets nor feel hypocritical. The chiefs and commoners performed this practice when there was trouble and bait, the things close to the body, were lost. [The bait] could be excrement, urine, saliva and vomit, hair, a **kapa** (bark cloth), **malo** (loincloth), or scrap of food or fish.

It is through the divination of a pile of pebbles that one could discern what bait has been lost. Then, through the practice of **Kala** (counter-sorcery) could the trouble be ended and the bait left back. Then the **Kala** has worked and if it is known then [such troubles] can be completely ended through the skills of **Kuni ola**. There are three parts to this practice. The first [part]. If it is known that the bait is not completely destroyed, then it is proper to use the practice of **Kala**.

The second [part]. When it is known that the bait has been completely destroyed, then it is proper to use **Kuni ola** so the one who perpetrated the unscrupulous deed would die as would those who collaborated.

The third [part]. **Kuni** is used when the grieved one has died so the perpetrator and perhaps all those involved in the unscrupulous deed would die.

In the olden days, there were major tasks to be done when society degenerated, and today its proper name is murder.

A process of **Kala**. When part of the bait is left.

The practitioner says to those taking care of the patient to find a white colored chicken, a white or pale colored dog, or a white colored fish [such as], **`Ama`ama, Āholehole, Weke, Kala, Palani, Maomao, He`e, `Ula** and **Wana**. All of these creatures are collected with the chicken. The **`Awa** used is **`Awa makea**. All these things are prepared in front of the patient as the practitioner prays thus.

‘Absolve, release, I now seek to release [the patient] because of the lost bait. I now remove [the offense] because of the lost bait, at this first night of **Kūkahi** is the counter-sorcery done; at the second night of **Kūlua** is the counter-sorcery done; at the third night of **KūKolu** is the counter-sorcery done; at the fourth night of **Kaha** is the counter-sorcery done. The night moves on below, below when the counter-sorcery is done. The night move on, on to the east, to the east where the counter-sorcery is done. The night moves on, on to the rising of the sun, where the counter-sorcery is done. The night moves on, on to the setting of the sun, where the counter-sorcery is done, and flashing at the **kauila `auwai** (?). It is ended, only to fly away.’

Concerning **Kuni ola**.

A bit of the patients hair is taken with some saliva and a chicken egg. The egg and hair are mixed and perhaps the saliva, too, being then rolled up in some paper. A fire is started on the top of the Olomea rubbing stick. When the fire is alit and ignited on the top of the fireplace inside of the house, then green and also dried **`Auhuhu** or dried **`Akia** is used for firewood. The flames leap up and are encircled with bitter Ipu vines outside the fireplace. The practitioner sits on one side of the fireplace while someone related to the patient sits on the other side. The egg with the hair wrapped in it is pitched over [from the practitioner to the relative] in the midst of the blazing heat of the fire, and it is constantly pitched over. The prayer of the practitioner is recited as follows.

‘Oh **Uli** above, oh **Uli** of the heavens, oh **Uli** of the night, oh **Uli** of the daylight, oh **Uli** who does right, oh **Uli** who does harm. Here is the wrong. **Laepua** darkens the eyes of the perpetrator who has practiced **`Ana`ana** who comes here. **Laepua** darkens the nose of the perpetrator who has practiced **`Ana`ana** who comes here, darken the mouth, the chin, the throat, and appear in the chest cavity of that person and flashing at the **kua `auwai** (?). It is ended, only to fly away. It is freed.’

Burial when the body is bundled up.

The prayer of the practitioner is an o chant. If a burial has disappeared and bait is brought over the practitioner looks at what type of bait [it is] through divination. The trouble might be that if perhaps the bait is ‘living’ bait it might have been mixed up with ‘dead’ bait. If it has been mixed together then it has all together vanished. If not then the practitioner can proceed, however the **`Awa** hiwa cup must not be dropped during the entire process as it is for the practitioner to drink from.

‘Oh **Uli** above, oh **Uli** below, oh **Uli** who does right, oh **Uli** who does harm. **Uli** begins to toss the net during the night of **Kulu** and ties it secure in the night of **Kulu**, moving to the edges of the night of **Kulu**, and the wooden floats are placed in the night of **Kulu**, and is wielded upon the stone in the night of **Kulu**, and released in the night of **Kulu**, and the fish of her net is snared in the night of **Kulu**, and the fish of her net is snared in the night of **Kulu**, a male and a female, a boy and a girl, an old man and an old woman. Soon enough, So-and-so, the perpetrator of **`Anā`anā** shall descend down all the way to **Milu**, to **Wakea** down there, and rot down there. Be maggot infested and moldy and ashy down there. Striking the spider web net, snared are the fish of her net, a male, a female, a boy, a girl, and old man and old woman are the fish of her net. Snared in the eyes and the mouth are the fish of her net. Soon enough So-and-so descends down all the way to **Milu**, to **Wakea** down there to rot down there, to be maggot infested, moldy, and ashy down there. Twisting at the corners, twisting at the edges are the dead in the fireplace of **Uli**. Soon enough are descending all the way down to **Milu**, to **Wakea** down there will be the perpetrator of **`Anā`anā**, So-and-so, to rot

down there, to be maggot infested, moldy and ashy down there. Twisting at the corners, twisting at the edges are the dead in the fireplace of **Uli**.

Oh **Uli**, the dead are lifted up, the dead are lifted up below. The dead are lifted up to the easterly side. Lifted up toward the sea. Lifted up toward the uplands and are gone out of site. Soon enough the perpetrator of `**Anā`anā** will descend down below, below to rot below, to be maggot infested, moldy and ashy down there. Twisting at the corners, twisting at the edges are the dead in the fireplace of **Uli**. Oh **Uli** fulfill this, fulfill the desire of the unskilled to be fulfilled. Oh **Uli**, by whom, what is proper is done. There you are. Oh **Uli** dwelling with the perpetrator of `**Anā`anā**. Profound has been the kapu (observance of restrictions). Profound is the freeing. Only to fly away.'

From the offering of prayers of the crowd and the o chant to the burial as submitted upon this prayer to the malo kea (white loin cloth) of the practitioner were these tasks [done]. There being no **Kala**, [for] the lost bait mentioned above, then **Kūmīmī** crabs, and Pe`a starfish from the sea are gathered with the bitter Ipu and the `**Ape** leaf to make laulau leaf-wrapped bundle to be burn to ashes and taken to the beach to be scattered. There are so many prayers used. It is not complete as is this practice of [my] father who taught [me]. It has been only preserved, and is the end of my interview.

## **B**

**Poohina, Kahuna no Hamakualoa Maui.**

:27 **He nahu ka mai: E kii i ke kino ka lau ka hua o ka Uhipea. Kaulai a maloo e hao ae i mau lau me na hua 1 kauna pua hala me kahi huluhulu awa, hookahi ai ana, moni ko loko hamo mawaho mai luna a lalo, o ke ola no ia, a ina he nahu no waho mai e puoho no a noho kino. Kamailio wale no ka laau me ka olioli aku o ka lele no ia, he puua ka puku mahope he mea ai na ka lehulehu.**

:126 **Nahu** is the illness: Gather the stalks, leaf and fruit of the **Uhipe`a**. Many of the leaves and fruits are hung out and wind dried, four **Hala** flower bracts and `**Awa** rootlets. They are eaten once, swallowed and smeared externally, from top to bottom. This is the cure. If a pain has been contracted by sorcery which suddenly appears and infects the body then addressing with chant [to the `**Aumakua**] is the treatment for the `**aumakua** to fly away. A pig is the final offering [given] and afterwards [it serves] as food for everyone.

## **C**

**Haumea, he Kahuna no Wailuku, Maui.**

:34 [includes drawings] **Hoakaku: E loa ana no keia mai ma ka haha ana iloko o ka opu, ua pii ma kela aoao keia aoao a komo iloko o ka houpo ua kau ia e ke kea, e like me kela kii, a ua kapaia he Hoakaku, no kona like ana me he hoaka o ke pani puka hale, he mai make keia ua paa ka puka o ke ola, aohe laau e ola ai. Ina hoi i pii ma na aoao elua a pahupu i waena, he Waiopua ia, ua pili i ke kohe popo, eia ka laau e lele ai he apukalo, 6 kauna pohe, 1 kauna muo ulehala, o ke ihi a nui he ko ka wai kui a uwi kalana a maikai, inu ae pela e hana ai a kualima, o ke ola no ia, he wahi kowali aku.**

**Ina i ninau ke Kahuna i ka mai, Pehea mai oloko? Ka mai i ke Kahuna, he panao oloko, alaila, e kii i ka papaa hau, hohole a ihi i ka ili owaho, alaila, e mama a o kona wale ke uwi me kahi wai kalana a maikai, alaila, hookomo i huamoa, pela e hana ai a kualima, e inu ae.**

**Eia ka hope aku o kela apu, he apu no ka ea me ke Paaao 2 kauna mole uhaloa, wa`uwa`u ka ili a kui a e kiola ka iwi. 2 kauna kukui pulehu a papaa, 1 mana awa hui pu keia mau mea o ke ko ka wai. Uwi a pau kalana a maikai iloko o ka apu, e wa`uwa`u iho kahi ana a inu ae.**

:170 **Wai`opua: ...If two sides appear [on the patient] and are cut into two in the middle then it is called Wai`opua. It is related to Kohepopo. This is the treatment that can**

remove it: a **Kalo** portion, 24 **Pohe**, 4 **Hala** aerial root buds, a lot of **Thi** and **Ko** juice. [These ingredients] are pounded, strained until fine and drunk. [This treatment] is done five times and the patient is cured. **Wahi Koali** is taken next.

If the practitioner asks the patient, 'How do you feel inside?' and the patient replies, 'I feel parched.' Then **Hau** bark, in which the outer bark has been stripped and peeled, is chewed and the sap is squeezed with some water. It is strained until fine and then an egg is added to it and drunk five times.

This is what is done after that portion is done: an **`apu** for **`Ea** and **Pā`ao`ao**: 8 **`Uhaloa** tap roots with the bark scrapped off. They are pounded and the stems thrown away. Eight **Kukui** nuts are broiled until crisp and one root branch of **`Awa** [are prepared]. These ingredients are mixed together with **Kō** juice. The mixture is squeezed, strained until fine inside of this potion. It is scraped along the sides of the bowl with a finger and then drunk.

:36 **Kulana hou o ka Waiopua. Ina he Kukahi ma ka aoao akau a hema paha, he Wai`opua Kukahi keia ma ka hana ana e ano e ai, ina e loa ka iliili i kela mau mai nui hemo i ka luau me ka awa inu, e ahaaina imu kahi.**

:173 A new condition of **Wai`opua**. If the illness is isolated on the right side and it may be on the left side, then this illness is **Wai`opua kukahi** which can be diagnosed by its strange feel. If sores or lumps are contracted like those of other major illnesses then **lū`au** and drinking **`Awa** are abandoned {??????} and a feast is prepared.

## **D**

**Kupaiulu, he Kahuna Lapaa no Kalua, Wailuku, Maui**

:38 **No ke Kuni ana. I ka make ana o kekahi mea i minamina ai, no ka anaana ia mai e kekahi, e lawe mua mai ka mea nana ke kupapau i ka puaa a me ka awa i mohai na ke Kahuna a i ole ia he koi lipi paha, a eia ka ke Kahuna e olelo pu i ka uku me ka aoao kupapau a holo, alaila hana a loa ka uku i ke Kahuna...**

:175 Concerning Counter-Sorcery. When someone who is grieved over died because of **`Ana`ana**, caused by someone else, then the person who took care of the burial first took a pig and **`Awa** as offerings to a practitioner, or perhaps a **ko`i lipi** (kind of adze) [instead of pig]. This is what the practitioner {would say as} that he or she would be agreeable to the offerings {payment} and would help the side of the deceased and said, 'Go.' Then the practitioner received the offerings.

## **E**

**Aieono Kahuna o Waiehu, Maui**

:50-51 **Mai Kumupaa. E kii i mau ao luau owili elima e pulehu a moa ai kekahi hapa kiola kekahi hapa, e hana mau pela a kualima, a e apni ka huamoa e like me kela maluna.**

**A i puaa ka hope, e ai pu a pau me ka lehulehu, me ka awa, a pau ka puaa, e kala oia i ke kai Olena, me ka lau o ke Kukaepuaa.**

:191 **Kumupa`a** Illness. Gather five bundles of young **Kalo** leaves and broil them until they are cooked. Half of them are used and the other half is thrown away. This is done five times and a chicken egg is used to close things in the same way mentioned above.

A pig is the last [food to be cooked]. Everyone eats together drinking **`Awa** and when the pig is done, then [the practitioner] bless (**kala**) [the food or the people?] using sea water and **`Olena** juice and **Kukaepua`a** leaves.

## **F**

**Kaailau, Kahuna o Waiehu, Maui.**

:81 **Waiopua ka mai: Mai Niau – lua. ...He holoi waikea ka hope. Eia ka hope, oia ka paepae o keia mau mai elua, e olelo ke Kahuna, penei:**

**‘Auhea oukou e ua poe akua nei  
E pepehi e pepeha, e pai waena,  
Hoakaka ia, awa iki, awa nui, awa Kanaloa,  
Eia o Opu, E ola i ke lii nona keia aupuni,  
Amama.’**

:229 **Wai`opua** is the illness: **Ni`au-lua**. ...The **Waikea** is the last cleanser given. This is the end, that is the incantation (**pa`epa`e**) of these two illnesses. The practitioner said the following,

‘Hear me, those of you gods who are present,

**Pepehi, pepeha, pai waena** (?)

It is made clear, the small `Awa, the large `Awa, the `Awa of **Kanaloa**,

Here is **Opu**. Long live the chief for whom is the kingdom,

Ended.’”

:81 **Awailena ka mai. E loa keia ma ka haha ana a ke Kahuna, e moe kakai ana mai ka hope a ka puhaka, eia ka laau, e hoomoe ka apu kalo he ko ka wai me ka niu me ka mana awa, elima ao luau owili pulehu a moa, huipu me kela mau mea, kalana a maikai inu ae, elua a elima paha hoomoe ana o ke kalo, alaila ka hope aku o Kauikaea ka laau, oia ka moa o ke kuahiwi, e paila a moa, inu aku, alaila naha mai ka mai oloko.**

**Eia ka hope aku e holoi kai paa elua omole kai, e paila kekahi omole, koe kekahi a pai pu iloko, a holoi mai i pau kela koona laau mamua.**

:229-230 **Awailena** is the illness. The illness is diagnosed through the palpitation of the practitioner as it lies in a row from the rear to the waist. This is the medicine: the **`apu Kalo** is given to [make the patient] rest. **Kō** juice is used with **Niu**, and a chewed mass of **`Awa**. Five young **Kalo** leaves are rolled up and broiled until cooked. It is mixed with those ingredients, strained until fine and drunk. The **`apu Kalo** is taken two to perhaps five times, then the **Kau`ikaea** is the treatment that follows, that is the **Moa kuahiwi** which is boiled until cooked and drunk. It causes the illness inside to be purged out.

This is the last part [of the treatment] to use a salt water cleanser is given using two glass jars of salt water. One glass jar [of salt water] is boiled and the other glass jar is then added in. It is taken so to remove the residue of the previous medicines.

:81-82 **Awai-lalo. E loa ana keia mai ma ka haha ana a ke Kahuna e moe kapakahi ana mai ka puukole mai a pio ae i ka holu malalo o ka puhaka. Nolaila mai ka Manawa ino me ka hailepo, nolaila, hailepo ke kanaka ke nana `ku ma kona ano mawaho.**

**Eia ka laau, e hoomoe i ka apu kalo, me ka niu, me ka ihi me elua kauna muo ule hala, me ka akahi piha pono elima lau popolo, hookahi pupu limu kala o ke kai, a i ole ia, elua kauna pua kala me hookahi mole puakala, ku keia mau laau apau, huipu i kahi hookahi, he ko holookoa ka wai kalana a maikai a loko o ka apu inu ae.**

**He wahi kowali ka hope, e huipu me elima mana awa, he ko ka wai huipu kalana a maikai a loko o ka apu, alaila komo mai hookahi huamoa koiaia ae a hui inu aku. He holoi mai ka hope – he waikea.**

:230 **Awailalo**. The illness is diagnosed through the palpitation of the practitioner as it lies crooked from the Mon pubis and arches over the area diaphragm below the waist. It is from there that the upset feeling and an ash grey pallor comes from which makes the person look sick.

This is the medicine: the **`apu Kalo** is given [to make the patient] rest with **Niu**, eight tips of the **Hala** aerial roots, and a single handful of **pōpolo** leaves, one clump of **limu Kala** of the sea or eight **Puakala** and one **Puakala** tap root. All these ingredients are gathered and

mixed up into one batch. The juice of one type of **Kō** is used. The medicine is strained until fine and placed in a cup to drink.

The next step of the treatment is to take a **Kowali** potion. It is mixed with five chewed masses of **`Awa** and **Kō** juice is used. They are mixed and strained until fine and placed into the potion. Then one chicken egg is stirred and mixed. It is then drunk.

A cleanser is the last thing done – a **Waieka**.”

:87 **Haikala ka mai: O keia me he Haikalawawaikahi e loa no ma ka hana ana a ke Kahuna keia mai e moe kapakahi mai ana mai ka holu maluna o ka puhaka akau like me ka piko, he mai keikikane keia, ina e hala ana ka hana a ke Kahuna make no. Eia kona mau laau e pau ai, he kalo maka, he kalo moa, he ko ka wai he kanaha niu no keia mai hookahi niu hookahi apu kalo, pela e apu kalo mau ai a pau kela mau niu he kanaha, e huipu i keia mau laau me ke kalo ka wawaeiaiole [wawaeiaiole] kuahiwi, hookahi piha poho lima ke puili oe no ka apu hookahi, pela ka niu o ka moa, pela ka ihi awa, me ka ihi ai, pela ke nui o ke kakua o Hiiaka, elima kaunu mole ule hala, kui pau ia lakou kalana a maikai, huipu me ke kalo kalana hou a maikai a loko o ka apu, e kalana a pau loa ke oka iloko o ke ahuaawa i ki ia a maikai, inu aku, e hoomahanahana nae keia apu mamua o ka inu ana. A i hailepo a kaaweawe mai oloko e holoi me na omole kai paa eha, elua omole e mahanahana, a huipu me na omole elua i koe, alaila, holoi mai, naha mai ka naha he puholo mao, pau ka naha ana, e hoomoe hou ke kupele e like no me kela hana ana maluna, a inoino mai, holoi no e like me kela, pela mau no a pau kela mau niu he kanaha.**

**Eia ka laau hope loa, he wahi apu kowali 3 kauna mole kowali, elima mana awa, me wale o ka lala papipi me ke kae o ka wauke malalo okoa, huipu keia mau mea apau me ka wai o ke ko okoa kalana apau, kahee i ka apu, a komo mai hookahi hua moa iloko oia apu a inu ae, alaila e naha mai no ka mai, o ke ola no ia.**

**He mau puna ko elua i pulehu ia ka holoi ma hope, e ai no maluna keia mau puna ko pulehu.”**

:238-239 **Haikala** is the illness: The illness is [called] **Haikalawawaekahi** and is diagnosed by palpitation of the practitioner as this illness lies crookedly from the area of the lower abdomen above the right side of the waist [in the area of] the **piko** (navel). This is a boy's illness. If the practitioner's procedures are faulty then the child will die. These are the medicines that would end [the illness]: Uncooked **Kalo** and cooked **Kalo**, **Kō** juice, forty **Niu** for this illness: one **Niu**, one **`apu Kalo**, and that being the case **`apu Kalo** is regularly given until those forty **Niu** are used up. These medicines are mixed together with the **Kalo**, **Wawae(a)`iole kuahiwi**, one handful is taken for one **`apu**, and that is the same for the amount of **Moa**, **`Ihi `awa**, **`Ihi `ai** and also for the amount of **KakuaoHi`iaka**, 20 **Hala** aerial tap roots. They are all pounded, strained until fine. [They are] mixed with the **Kalo**, again strained until fine and [put into] the **`apu**. It is strained in **`Ahu`awa** fibers to remove (**pau**) all of its residue and squeezed until fine. It is drunk and this **`apu** is first warmed before drinking.

And [if the patient] becomes as ashened and has a choking sensation, [then the patient] is cleansed with four glass jars of salt water, two of those glass jars having been warmed, and mixed with the other two glasses, then it is used as a cleaner. Purging occurs resulting in the purging of **puholoma`o** (greenish colored matter). When the purging ceases, [the patient] given a **ku-pele**, which is prepared as done above, to rest. And [if] there are any bad affects [then the patient] is cleansed as before, and that is done until those forty **Niu** are used up.

This is the final treatment. **Kowali** is administered: twelve **Kowali** tap roots, five chewed masses of **`Awa**, the slimy juice of **Pāpipi** branch and the liquid from **Wauke malolo** bast and refuse that have been separately soaked. All these ingredients are mixed together with

**Kō** juice. It is all strained and poured into the `apu. One chicken egg is added into this `apu and it is drunk, then the patient begins to purge. That is the cure. Two sections of **Kō** are broiled and used as a cleanser afterwards. They are eaten.

## **G**

### **Kapu, Kahuna o Wailuku, Maui**

:93-94 **Make a hai. I ka nana ana i ka mea mai e waiho ana, ua kukupono ka lihilihi na kekahi mai ia make, alaila, e kii i keia mau laau – ka lau aweoweo me kona hua a piha na poho lima elua, me kahi wai uuku i ke poi, e lomi a hamo mawaho, a i oluolu, ua pono a i ole, e kii i kona hope, ka papaa o ka Olapa a puolo, hoi mai, kui a wali me kahi paakai a huipu me kahi wai, uwi a loko o ke poi, hamo mawaho a puni mai luna a lalo, loaa no ka oluolu, a i loaa ole ka oluolu, e kii i ka muo la-i owili, a hoi mai a hookomo aku kahi opiopio ma ka waha a loko o ka puu, alaila, e pii mai no ka luai, he male uaua, no ke kea oluna ia mai, a i pii mai ka lena, e like me ka lena o ka muo la-i kona kumu, alaila, ua pau, mamua nae o ka hookomo ana i ka muo la-i e pane ae ke Kahuna, - ‘E o i ka pua ki i luai mai i pau ka awahia komo ka ai.’**

**Eia ka hana hope, i ka wa e oluolu ai ka mai e hoomoe i ke alo iluna, a e kuehu ke kapa ma ke kala ana, a e pane ae ke Kahuna ma kona waha.**

1. **‘O momola no ke Koolau i ala ia e ka pali ka la e,  
O ka la o ko aloha i hiki ai,  
Eia no au ke noho nei,  
Ke ukali aku nei au i ka moe a kaua.’**
2. **‘Mano hahalua Wailuku i ka malie,  
Me he auwaalalua la ka puuone,  
Ka moku hinau o Keonelele,  
Ke ahua o Hopukoa i ka makani,  
Ka peleleu hihimanu i ka Hoolua,  
I ka ia koiele ia e ka makani,  
Pua haakea o Kekaha e leia nei – e,  
E lei mau oe i ke aloha,  
Mai moloa oe haalele.’**
3. **‘Kuu Kanepua Koolau,  
I hahai i ka ua ula a ka Apaa,  
E hoi maua ma ke kua o pili,  
I o maua hale i uka a Ahulu e,  
I o maua kini aloha i ka uka a,  
I ke kahuli leo lea o ka Pololei,  
Ia makani hoowi uwe laau,  
O ka leo ka laau ka`u i lono a,  
O ka leo o ka laau ke oe oe owe nei a.’**

**He mau pule kala me ke kuehu kapa ana i ke kapa.**

**Eia ka hope, e kii i ka awa lau hoi mai mama a wali hoka a maikai, alaila e kii i ke kapa keokeo hou puili kekahi poo a hou iho kekahi apu iloko o kela awa, a e uwi aku no ka wai awa iloko o ka awa, a maloo ae, e olelo aku i kekahi e huki ma ke poo o ke kapa i pulu a maloeloe, a i muku ole, ola ka mai, alaila e uhau aku i kela poo o ke kapa i pulu maluna o kahi eha o ka mai, a pau ia, alaila e paa ka lima ma kahi pulu o ke kapa, o kahi pulu ole e kuehu mai luna a lalo o ka mai, o kela mau pule maluna kai ka waha o ke Kahuna, a pau ia na ka mea e ae e inu kela awa.**

:246-247 Death caused by another person. [This can be diagnosed] by looking at the patient lying there who appears close to dying, one can see how the patient's eyelashes are straight up. Gather these medicines – the leaves of the `Aweoweo and his fruit, two handfuls, with



a little bit of water in the container. These are hand mixed and smeared externally to get some relief and works. If not, gather its alternate medicine: the bark of the **`Ōlapa** until getting a bundle full. Upon returning, pound it until it is soft with a bit of salt and mix it together with some water. It is squeezed into a container and smeared externally all over from top to bottom. [This should] bring some relief. If no relief is obtained then gather the young rolled up **Kī** leaf buds, and upon returning insert a young leaf into the mouth until reaching the throat, then this should induce vomiting. A sinewy mucus, due to the **kea** on above this illness, [is vomited]. When a yellowish matter appears it is like the yellowish color of the **Kī** leaf bud base. Then, the vomiting is over. Before the **Kī** leaf bud is inserted, the practitioner says – ‘Insert the flower of the **Kī** to cause vomiting so to ended the bitterness of the taste of food.’

This is the next treatment. When the patient has gotten some relief [he or she] rests facing upwards. A **kapa** (bark cloth) is shook during the **Kala** ritual and the practitioner says:

1. ‘Wasting time is the Ko`olau [wind?] blocked by the cliffs, the sun  
the day of our love that has come,  
Here I am sitting here,  
I am waiting for us to rest together.’
2. ‘Wailuku is like the **Hāhālua** (Manta ray, *Manta alfredi*) that are numerous  
in the calm,  
Like the **Auwa`alālua** (Paper nautilus, *Argonauta argo*) are the sand dune,  
The fish trap islet of Keonelele,  
The hillock of Hopuko`a in the wind,  
The **Hihīmanu** (Sting ray, *Actobatus narinari*) are like a fleet of canoes in  
the **Ho`olua** wind,  
The restless fish move back and forth blown by the wind,  
Whitish flower of **Kekaha** worn as a garland of love,  
You continually wear a garland of love,  
Don’t be wasting time, be off.’
3. ‘My Kānepua Ko`olau,  
When following the reddish rain of the **`Āpa`a**,  
Only you and I shall return to the back of **Pili**,  
To our house in the uplands of Ahulu,  
To our beloved people of the uplands,  
In the uplands is my man to the sound of the birds,  
To the clear sound of the **Pololei** land snail,  
To the wind blowing through the forest,  
The sound of the forest is what I hear,  
The sound of the forest that whistles and rustles here.’

These are the **Kala** prayers [used] with the shaking of the **kapa** (**Kuehu kapa**).

This is the final [part of the treatment]. Gather the leaves of the **`Awa** (**`Awa lau**<sup>58</sup>) and upon returning chew them until they are soft. Strain them through some fibers until the liquid is fine, then, get a new whitish **kapa** clasp a head [of the **kapa**] and dip one part into the **`Awa** liquid. The liquid is squeezed in the [container of] **`Awa** until [the **kapa**] is dry. Some thing is said and [the **kapa**] is tugged at the head that had been soaked until it is taut. If it does not break [then the patient] will be cured. Then the head of the **kapa**, that has been soaked, is placed on the area that is sore. When this is done, hold tight on the soaked part of the **kapa**. The other part of the **kapa** that is not wet is shook over the patient. Those prayers above are the ones recited by the practitioner. And when this is over the others [present] will drink the **`Awa**.

<sup>58</sup> see discussion on “Awa lau”

## **H**

**Hakau, Kahuna no Waiehu, Maui**

:100 He Luaiakoko. Aia malalo ponoī o ka umauma i ka houpō, mamua ponoī, e kau iliili ana. Eia kona laau. 2 kauna lau pala a lau maka o ka Akoko, e ai mau i kakahiaka a me ke ahiahi a paa mai ka luai-akoko ana, alaila pau ka ai ana, a i paa ole ia, e inu i ka apu awa he wai ko kea ka wai e kaa ahi a wela mahanahana inu ti mai hookahi no hana ana. Eia ka laau hoomaikai aku.

O ka apu kalo lauloa a ualehu, me ke ihi i kui ia a wali me ka wai ko me ka (mana or mauu) ahuawa, hana a maikai huli ke alo ilalo a inu mai a pela no a kualima a i inoino, mai oiai e inu ana ke kalo e holoi mai i ka wai huihui i hui ia me ke kukaepuaa lau a mahope i ke kalo e wahi i ke kowali hoio i ke ahiahi i kui ia me ke ko kea, a i ke kakahiaka ae e hui i k ka io me ke kauo o ka hua moa a inu ae. O ke kowali no e like me ka nui kupono o ka manao o ke Kahuna a me ka lehulehu paha o na mai a pela no ka hua moa, hookahi hua no ka mai hookahi, a i naha a inoino a kuhelehela, e hoopaa ma ka inu ana i ka wai a auau ana paha, a kalo hookahi mai ke inoino, mai i ka hloloi i olelo ia ma ka aoao mua.”

:255 Lua`i `ākoko. Directly below the chest on the diaphragm, just before it, there are many little bumps [which are symptomatic of this illness]. This is the medicine: eight ripe and young leaves of the `Ākoko. [These leaves] are regularly eaten in the morning and the evening until the vomiting is stopped, then the eating of the leaves is ended; [however, if the vomiting] is not stopped, [then] and `apu `Awa is drunk [filled] with **Kō kea** juice which is boiled and made warm and drunk as a tea. This is done once. The following is the medicine to make one well.

An `apu Kalo of the lauloa and Ualehu varieties [of Kalo] with `Ihi is pounded until soft and **Kō** juice [is made using] `Ahu`awa fibers to strain and make fine. The patient turns upside down (face downwards) and is given the potion to drink. This procedure is done five times, and if the patient is still ill, [then] while taking of the `apu Kalo [the patient] is cleansed using cool water mixed with leaves of the **Kūkaepua`a** grass. After the `apu Kalo has been taken, then **Kowali hō`i`o** (young fronds) pounded with **Kō kea** are administered. The next morning, the yolk and egg white are mixed and drunk. The **Kowali** is considered to be extremely important to the practitioner for perhaps many illnesses as is the use of eggs. One egg is used for each treatment and this results in the purging, a terrible felling (nauseous) and [feeling] weak. This can be stopped by drinking water and perhaps taking a bath. One `apu Kalo can be taken, when feeling ill, for cleansing as mentioned on the first page.

## **I**

**K. M. Kamai, Kahuna o Waiehu, Maui**

:108 Pā`ao`ao. ...E kikohu mau i keia wai popolo, i na ea pau a nui ke keiki, o ka pau keia o ka laau iluna o ke keiki, alaila, hoi ka hana i ka laau maluna o ka makuihine, a me ka makuakane.

E kii i ka pua kookoolau aole e nui loa i 10 lau Pamakani, ka lau o ka wiwi, 10 lau, 1 kauna hua popolo alamea, 10 lau kamanomano kuahiwi, 10 pua kukui, 1 kauna liko ohia hamau, 1 apana niu uuku, 1 kauna pua hala, 2 kauna hua mamaki, 1 mole makou, \_\_\_\_\_, 1 kauna lau pua aloalo, 1 kauna muo wauke malolo, 3 kauna muo lau ulei, me ka limu i ka wai, hookahi piha pupu o na maiao ke puili ae, aia i ka auwai keia limu, e wau iho i wahi ana iluna o keia poe laau, e wau i wahi oka o ka ea kahi lauoho, me na wahi hua aweoweo uuku, 1 kauna puupuu o ka awa ma ka pona, o ka awa ula e iniki ai, hoi mai me ka piha poho lima hua o ka moa kuahiwi.

Alaila kui keia mau mea apau loa a huipu ke oka iloko o ke poi, e mama i ke ko palani o ka wai ia, a i koe ke koena oia ko, na ka makuahine me ka makuakane no e ai, aole pono ka mea e, a i ole ia ko o na ko e ae no, a he kapu no ke koena.

Hoka a lomi i keia mau laau a huipu me ka wai ko, a loko o ke ahuawa i ki ia a maikai aeae, e uwi a loko o ka apu, a e inu like na maku elua i keia apu, a i ona a poniuniu laua pu ka opu lauoho a me ka make mau o ka laua mau keiki, a i ona hookahi makua oia makua ke inu hou aku mahope, elua inu ana iloko o ka mahina i ke keokeo ana mauka a me ka pouli makai mai.

E ona no ke inu hou aku na makua, o ka makuahine wale no ke inu i keia apu i laau no ke keiki, a hiki i ka nui ana. Eia na mai Paoao i puka mai no keia mau laau i hanai mua ia maluna.... ”

:265-266 **Pā`ao`ao**. ...The **Pōpolo** liquid is daubed regularly while the child is ill until he or she has grown up. This concludes the treatment for children; however the treatment for adults follows.

**Ko`oko`olau** flowers are gathered, but not a lot of them, with ten **Pāmakani** leaves, ten **Wiwi** (?) leaves, ten **Pōpolo** leaves, four ripe **Pōpolo** fruits, ten **Kāmanomano kuahiwi** leaves, ten **Kukui** flowers, four **Ōhi`a hāmau** leaf buds, one small piece of **Niu**, four **Hala** fruit keys, eight **Māmaki** “fruit”, one **Makou** ???(tap-root, four **Makou** leaves, eight **Ākia** “inner” leaves, eight **Īlie`e** leaves)???, eight **Pua aloalo** leaves, four **Wauke malolo** leaf buds, twelve **Ūlei** young, open leaf buds and fresh water moss, that is one full clump of the tips when it is pulled) out. This moss is found in water ditches. Some **Ana** is scraped on top of all the above ingredients and some small bits of powdery **Ea** (sea turtle) and some small **Āweoweo** fruits, four joints of **Awa`ula**, the red **Awa** that “pinches”, and a handful of **moa kuahiwi** fruit [are to be used].

All these ingredients are pounded and the sediment is put into a bowl. **Kō palani** is chewed to obtain the juice. The remaining residue of **Kō** could be eaten by the adult patients, but not by anyone else. If another variety of **Kō** is to be used, then the residue is considered **kapu** (prohibited or restricted).

All of these ingredients are to be squeezed and hand mixed with the juice of the **Kō** inside of the **Ahu`awa** fibers. The fibers are crushed, strained until [the liquid] is fine and then it is squeezed into a cup. The adults would drink it and if they both become drunk and dizzy it was an indication that they had **ōpūlauoho** and their infant children would probably die. If only one of the parents became drunk, then this parent would have to drink this liquid again afterwards. The liquid is drunk two times during the time that the moon is white in the uplands and the seaside is darken.

If the parents have become drunk when they drink the liquid again [then] only the mother drinks this potion of medicine [to feed it] to the child until he or she is big. The following are the **Pō`ao`ao** illnesses for which these medicines are first given [as described] above....

## **J**

**Kahili, Kahuna Lapaau no Wailuku, Maui**

:111 He nae ka mai. He liko lehua ohia hamau ka laau, kui a wali, alaila, hookomo iloko o ke kiahā, alaila inu e ae, o keia laau ua kupono i ke keiki opiopio loa a hiki i ka wa e nui ae ai ke loa i keia mai, alaila, a ina i hoomohola aku i ka Nae oloko o ka umauma, a ina aole e oluolu, alaila e kii ika hua pala o ke kuahiwi, wauwau a ke kiahā a o ka wale oia laau i wauwau ia [a]i, oia ka wa ma he pilalo`la [pilalo ala?], oia ka mea e inu aku ai a oluolu ae, a e ano maikai mai ana oloko, alaila o ke ola no ia.

He ho-ahaaina ka hope o ka hana ana i keia mau mea apau i kakau ia maluna na ka mai no, a me kona Ohana e ai. O ka awa a me ka luau ka ke Kahuna.

:269 Nae is the illness. **Lehua Ōhi`a hāmau** leaf bud is the medicine. The leaf buds are pounded until soft, then put inside of a glass. It is drunk. This treatment is the best for a

very young child, when he or she has gotten the illness, the child is grown up. Then, if the illness **Nae** develops inside of the chest, the child is irritable, then ripe mountain fruit [is gathered]. They are scraped into a glass. It is the sticky sap or juice [that is used from the fruit that has been] scraped off. This is the liquid that is like pilalo`la [pilalo ala?]. It is drunk to relieve the child and to ease the child internally, then, the child is cured. The end of this treatment is a feast for all the things that have been written above for the patient and for his or her family to eat. `Awa and cooked taro leaves are [prepared] for the practitioner.

## **K**

**Kawailupua, kahuna Lapaau o Waikapu, Maui**

:112-114 Hailona. Eia ka hailona. Mamua iho o ka lawelawe ana i ka mai, e hokaka awa iloko o na apu, alaila, pule ke kahuna i keia mau pule.

Na maka o ka hiamoe ke ike  
O koi a ka lani,  
O peaihopea ae ka kane,  
O kahunanaakapuna ka wahine,  
Kaea kona make e hele mai nei,  
Uhia kona maka iki a ohua a Lono,  
Akolu i kai, a hala pa i ke kua i au ia la,  
Elieli kapu, elieli noa, amama, ua noa.

No ka Hailona

E mama a pau ka puawa, alaila, e kahee iloko o na apu elima, a e hoaka aku ke Kahuna. Ina i ku ana ka mahele ana i na apu awa. 1. He apu awa no ka Aumakua. 2. He apu awa hoounauna. 3. He apu awa no ka make owaho. 4. He apu awa no ka anaana. 5. He apu awa no ka mai maoli. (Paaaoa or Akepau)

Ina i ku ke opu (Hua) i ke kahee ana iloko o ka apu awa o ka anaana, aole kupono ia`u ke lapaau, aka hoi i na i ku iloko o ka apu awa o ka make a waho (Paaaoa) a me ka make Aumakua, alaila, ua kupono ia`u ke lapaau.

No ka make a waho

Hookahi kapa keokeo, e kuehu. Ina he mai hiki ole ke ala, e hoomoe ka mai iluna ke alo, alaila, e hoomoe aku ke Kahuna i ke kapa maluna o ka mai, e like me ka loihi o ke kanaka a e ume mai ke Kahuna me ka pule pu, penei e pule ai.

Ku i ke kala,  
O Lono i ke uweke,  
Ka lala i lei,  
Wekea i ka hala,  
Kala ia e wehe kana puolo make,  
Paa no ka kakou he puolo ola,  
O ke hoi pu o laumaia ke milia,  
O laumaia ke nahae,  
A hemo kana puolo make,  
Paa no ka kakou he puolo ola.

Pela e hoomau ai ke kahuna i ke kuehu ana a kualima, a e hoomau ke Kahuna i ka inu awa, i hookahi apu awa i ke kuehu mua ana o ke kapa, pela a pau na kuehu ana elima.

A pau keia kualima o ke kuehu ana e lawe i ka mai e hoauau i ke kai, e luu ka mai i ke kai a hoi mai ma kapa, e komo i ke kapa, a hoi loa i ka hale a e hoomakaukau i wahi ahaaina.

Eia na ia. Elua awa hookahi puaula o ke kai, hookahi kauna hee, hookahi kauna lelo, hookahi kauna kikakapu, e kalua i keia mau mea i ka umu, a moa e mama i

hookahi puawa a makaukau e inu na mea a pau, alaila ai like, a pau ka ai ana e hookuu aku ke Kahuna i ka mai, o ke ola no ia.

No ka make Aumakua

Eia na mea e hiki ai ke wehe i keia mai, e kii 1 kauna ao luau i hookahi wahi, pela a pau ke kualima, i hookahi hana ana, a pau ia, e ninaninau ke Kahuna ma na hala, he hala ai a he hala ia paha, a he hala kapa paha a pela aku, a akaaka ka hala, alaila, e ninau aku ke Kahuna i ka mai, “Owai ke kumupaa o kou mau kupuna i malama ai?” Hai mai ka mai, “O Pele.” Eia kona pani he puaa, mama ka awa, ahaaina, o ke ola no ia.

No ke kala ana

“O Lono i ka uweke, kala i ka lili, kala ia i ka mai kaaku. I ka mai ka alo, i ka eho ku. I ka eho lana, i kakai, i kopili, i kikia, i ka o, i ke anu i ka li, i ke nahu. I kena mai a kou hoa hookapuhi. Ianei ka ai, i anei ke kapa, i anei ka malo, aohe ai, aohe ia, aohe kapa, aohe hale, aohe malo onei, aohe awa onei. Eia ka awa o onei, o ka huluhulu pukalukae, o ka okole no ke kano, o ke kukae no ka ai, o ka mimi no ka wai, ai a maona, hoi a kou hoa hookapuhi, nahua ma ka puu ma kahi haiki, aohe no kakou mamua, mahope no kakou.” E hoomau aku pela a hiki i ka oluolu loa ana, alaila, hookuu ke Kahuna i ka mai, ua pau ka hana u\_ ola loa.

:271-274 Omens and signs. These are the omens and signs. Before treating the patient,

`Awa is strained into cups, then the practitioners pray these prayers.

‘The eyes of sleep see,

Adze of the chief/heaven,

**Peaihopeaae** belongs to man,

**Kahunanaakapuna** belongs to the woman,

He/she lacks any desire to come here,

His/her small face/eyes are covered and ohua of **Lono**,

Three times seaward, and rising up at the back when swimming

Profound is the **kapu**, profound is the freeing, ended, freed.’

Concerning the omens and signs

The `Awa root is completely masticated, then it is pured into five cups and the practitioner casts a shadow [over the cups]. If [the shadow appears on one of the cups] the significance of these cups is: 1. An `Awa cup indicating the cause is the `Aumakua. 2. An `Awa cup indicating **ho`ounauna**. 3. An `Awa cup indicating death caused by an external source. 4. An `Awa cup indicating **Anā`anā**. 5. An `Awa cup indicating a physical illness. (**Pā`ao`ao** or **Akepau**)

If the clump or residue or froth appears in the pouring inside the cup indicating **Anā`anā**, then it is not proper for me to initiate any treatment, but if it appears in the `Awa cup indicating an illness caused by some external source (**Pā`ao`ao**) and the death related to **Aumakua**, then it is all right for me to treat [the patient].

Concerning death caused by an external force

A whitish **kapa** is used to shake. If it is an illness in which the patient cannot get up, then the patient rests with the face up. The practitioner places the **kapa** on top of the patient, to the length of the person. The practitioner pulls [the **kapa**] while also praying this prayer.

‘Appear when forgiven,

**Lono** at the opening,

**Ka lala i leli** (?),

Free the wrong doing,

Forgiven to open his bundle of death

Ours is held firm, a bundle of life,

**O ke hoi pu o maia** leaf when fondled

**Maia** leaf when torn,

And his bundle of death is let go,

Ours is held firm, a bundle of life.’

That is how the practitioner continued to shake [the **kapa**] five times, and the practitioner continued on to drink the **`Awa**. One cup of **`Awa** [is drunk] at each shaking of the **kapa**, and that is done until the **kapa** is shaken five times.

When the fifth time is completed, the patient is taken to bathe in the sea. The patient dives into the sea and returns back to the **kapa**. He or she puts on the **kapa** and returns directly to the house and then a small feast is prepared.

These are the fish. Two **Awa**, four **pua`ula** (young **Kūmū** of **`Āhuluhulu**) from the sea, four **He`e**, four **Lelo**, four **Kikākapu**. These marine organisms are cooked in the underground oven until they are fully cooked. An **`Awa** root is masticated and prepared to drink. Everything is eaten and when this is done, then the practitioner frees the patient who is cured.

Concerning death caused by **`Aumakua**

These are the things that can cure this illness. Gather four young **kalo** leaves into one bundle. This is done five times at one gathering. When this is done the practitioner asks what wrongs have been done. Perhaps it was something to do with eating, or eating fish or someone's **kapa** and so on. When the wrong has been identified, then the practitioner asks the patient, 'What is the **kumupa`a** of your ancestors that was kept [by them]?' The patient tells, 'It is **Pele**.' His offering to close the treatment is a pig. **`Awa** is chewed and there is a feast. The patient is cured.

Concerning the forgiving

**`Lono** is at the opening, forgive the jealousy. Forgive the illness at **kaaku** (?). The illness at the front, at the **`eho kū**, at the **`eho lana, kākai, kopili, kikia**, at the **o**, at the cold and the chill, at the biting pain. At the illness of your nurse. Here is the food, the **kapa**, the malo, there is no food, no fish, no **kapa**, no house, no **malo** for anyone here, no **`Awa** for anyone here. Here is the **`Awa** for anyone here, the **pukalukae** (?) hairs, the rump for the **kānoa** bowl [bowl used for **`Awa**]. Excrement is the food, urine is the liquid, eat until full and return to your nurse. Bitten at the throat at the narrow place, we all are not in back, we are in front.' This is done until the patient finds relief, then the practitioner frees the patient. The treatment is completed and the patient is cured.

## L

**Nakai (wahine) Kahuna o Waihee M[au]**

:155 **Ea opulauoho, oia ke ea Umalei.**[\_\_\_\_\_]

**E ike ia no keia mai ma ka nana ana a ke Kahuna Paaaoa a e kau ana elima kauna pulehu wahi a moa ai aku e like me ko ka luau awa ai ana.**

**Mahope aku e kii i ka lau o ka wiwi ako a nui a me ka lau o ka Pamakani, alaila, hoi mai pulehu a moa, alaila ai aku, he mau laau keia i ono ai ka ai.**

:275-276 **`Ea `ōpūlauoho**, that is **`Ea umalei**. This illness is noticeable when the practitioner of **Pā`ao`ao** examines [the infant] and there is a large, black colored vein up above and reaches to the infant's navel. These are the medicines [to be used]: a piece of **`Ohai** bark from the eastern and western [sides]. This is the native [endemic] **`Ohai, Kukae Koloea** or **`Ālelea** from the shore [Shellfish, *Turbo sanwicensis*]. It is similar to the **`Aoa** [Shellfish, *Melampus castaneus*]; however, that shellfish is whitish. It is broiled a bit until it is cooked. All the flesh of the animal is picked out of the shell, then some of the bark [of the **`Ohai**] from the eastern side is first chewed and it is placed (**pū`ā**) where there is saliva in the child's mouth until all of it is used. The same is done for the bark taken from the western side, and afterwards the broiled **`Ālelea** flesh is given (**lālau**) to the child to eat. After the last bit [two kinds] of bark [have been fed] then the child is fed again. After that has been done then this part of the treatment ends and directly following is this procedure. **`Ea** (?) bark is scraped (**e hana kahi o ia nei**) for the mother. Some **`Ana** (pumice) is also scraped into a glass and **Kūkaepua`a** grass blades are chewed. Its juice is mixed together with the residue of the previous scraped ingredients inside of the glass. The child's umbilical cord is brought and mixed into the ingredients inside of the glass. Bits of the father's and

mother's hair and some of their pubic hair (**kekahi mau hulu o nā pu`ukole**) were burnt in a fire until they were ashes. [These ashes] are sprinkled on top of the liquid (**e au a`e**, lit. 'to float'), mixed and given to the child to drink.

Afterwards, **Pōpolo** us gathered and chewed with the **`Awa** rootlets. Their juices are smeared externally, from the head to the feet using one application. After this is done, **Ko`oko`olau** leaves and flowers are gathered with the leaves and taproot of **Nehe**. All of these ingredients are pounded until soft and [this mixture] is pounded with eight ripe **Noni** fruits used for their liquid (**nā kāuna hua Noni `o`o`elua**). The mixture is bundled in a **Kī** leaf wrapper and broiled on a good fire until cooked. The cooked mixture is put into fresh **`Ahu`awa** fibers that have been gathered [and beaten] until fine. This warm liquid is squeezed into a **Kalo** or perhaps **`Uala poi** that has been designated for the sick child. This is the food that the child is regularly fed [when he or she is sick]. It will cause purging which is all right, and if there is no purging, [then] a lot of **Kauno`a** fruit is gathered. It is masticated until soft and fed. [This results finally] with purging which is good so that this treatment is regularly done.

If the **Kauno`a** does not work [resulting in purging], then 20 open leaf buds of the **Kowali** pehu [are gathered] and broiled in a wrapper until cooked. It is eaten like the eating of **lū`au lau `awa**<sup>59</sup>.

Afterwards, a lot of the cut leaves of the **Wiwi** (?) are gathered with the leaves of the **Pāmakani**, then until returning [they are] broiled until cooked and then eaten. These medicines help to stimulate the appetite.

## **M**

**Kaui, Kahuna lapaau o Waikapu, Maui**

:118 **No ka Neheku** (Papaku alua). He puhaka ka laau. E kii i ka lau o ka awa a nui e paa pono ai kahi o ka mai e moe ai, a e lawe hou mai i lau hou no ka opu, a makaukau, e kali iki a hiki i ka wa o ka mai e hoi ai e moe, alaila, e haliilii i ka lau o ka awa makahi moe, e hoomaka ka hali ana mai ka poohiwi mai, a hiki ma ka lemu, (kikala) a o ke koena o ka lau awa e uhi ma ka opu a paa, alaila, e hali hou aku i wahi kihei mama maluna o ka lau o ka awa, a moe aku ka mai, ina i moe ka mai a i kahe mai ka hou, alaila, oia ka maikai, alaila hoomakaukau ke kahuna i ka lapaau. A i ole e kahe mai ka hou o ka mai, alaila, aole pono i ke kahuna ke hana aole e ola, o ka haalele ka pono. A ina hoi i kahe ka hou o ka mai e kii ke kahuna i ka laau he kukuku (Pilo) o kona papaa e hana a nui a piha ka eke, a hoi mai e kui a wali, alaila e haliilii i ka lai malalo ma kahi moe o ka mai, alaila, e lu iho ka laau maluna o ka lai a paa pono, alaila e uhi hou i lai hou maluna iho a paa. E uhi hou iho i kehei maluna iho o ka lai, a moe iho ka mai. E uhi iho i ke kapa moe maluna iho, alaila, waiho aku i ka mai pela, ia Manawa e komo ana nei ka laau iloko o ka mai, a hoihoi ioko o ke kanaka, i kumu hoi e hiki ai i ke kahuna ke kii aku i ka laau kupono no loko, a wahi aku a pau ka mai oloko, a i hoi ka mai i loko e kii i ka laau. He apu kalo a e hookomo i wahi mana o ka papaa o ka maui (noni) iloko o ka apu kalo, e hoomau i ka hana ana a kualima. Alaila, e wahi aku ka apu o Paalii (kowali) a pau ia e hoomalu aku ke kahuna aole e ai i ka ia paakai, ka ia maka, aole hele i ka makani, oia na hoomalu a ke kahuna.

:279-280 [This translation was done by M.K. Pukui, of the B.P. Bishop Museum. Her handwritten notes are included and noted by her initials.] For the **Nehekū** (the second **papakū**) the treatment is mostly external. Take a quantity of **`Awa** leaves, enough to cover over the place where the patient sleeps. Bring more **`Awa** leaves to cover up the abdomen (**`ōpū**, MKP). When they are obtained, wait until the patient is ready to go to bed. Lay the **`Awa** leaves out on the bed beginning from under the shoulder to the seat; with the rest of

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<sup>59</sup> Refer to dictionary definition.

the **`Awa** leaves cover the abdomen (**`ōpū**, MKP) well. Cover over the **`Awa** leaves with a light coverlet, and let the patient go to sleep. If, when the patient sleeps, he perspires freely, it is a good sign and the **kahuna** continues to treat him. If he does not perspire then it is useless for the **kahuna** to continue the treatment, he is incurable. If the patient perspires, the **kahuna** fetches some **Pilo**, fills a sack of **Pilo** bark, takes it home, pounds it well, spreads **ti** leaves (**lā-ī**, MKP) where the patient is to sleep, sprinkles the medicine on the **ti** leaves until they are well covered. He covers over the medicines with more **ti** leaves, then a light coverlet over that, and then the patient lies down on it. The patient is then covered with a quilt and left alone. The medicine works itself into the patient pushing the sickness inward, so that it can be removed by medicine taken internally. When it goes inward, fetch the medicine used for it.

Place a ball of crushed **Noni** bark in soft, mashed taro (**`apu Kalo**, MKP) and give it to the patient. Do this for five times; then give a morning glory concoction (**`apu Kowali**, MKP). When that is done, that **kahuna** forbids the patient to eat salted or raw fish or to go out in the wind. These are all prohibited by the **kahuna**. The treatment continues.

## **N**

### **Hanae, Kahuna no Waiehu, Maui**

:125 **Kākailena**, ka Mai. E loa ka keia mai ma ka hahā ana a ke Kahuna e moe ana malalo o ka houpō, mai ka akau a ka hema, a e huai ka wela ma ke kua, olelo kekahi poe he kea ia, alaila, e apu Kalo Lauhoa, ka Niu, ke Ko ka wai, e hui pu me ka pupu Ihi ai, a i ole ia pupu Ihi makole me ka Pohe o ka loi, hookahi kauna muo ule hala hui pu keia mau mea a ka apu Kalo kalana a maikai, inu ae, a mow ke alo ilalo, kunihi ma na aoao, a huli ae ka mai, ua mohala kuu umauma, a i olelo mai ka mai, kaumaha no kuu umauma, alaila e hoomau aku ka pulima akau o ke kahuna i ke poi wai a komi aku mawaho o ka umauma a mohala ae, o ke koonā kalo o ka inu ana i ka apu e hapala iho ka lima o ke Kahuna, a hamo ae ma kahi o ke kua e huai ana ka wela, oluolu ae la ka wela o ke kua.

A ia manawa, nināu ke Kahuna pehea mai oloko ou, olelo mai ka mai, ua oluolu no oloko, ia manawa kii ka holoi wai huihuime kahi mana lau Kukaepuaa me kahi oka Awa au pu iloko oia wai, alaila holoi mai, a naha mai ka lena, ke poanaana kukaepau, alaila hoomoe hou aku ke Kalo, e like no me kela mau Kalo mamua. The treatment continues.

:287 [This interview was translated by M.K. Pukui of the B.P. Bishop Museum]

For **Kākailena**. This disease could be located by the **Kahuna**, lying below the breastbone from the right to the left with heat coming out on the back. Some people claim that this is caused by the accumulation of phlegm (**kea**, MKP). Take some soft, grated taro of the **Lauhoa** variety (**`apu Kalo Lauhoa**, MKP) juice of the sugar cane, mix them with a small ball of **`Ihi `ai** or some red stemmed **`Ihi** (**Ihi mākolē**, MKP), some **Pohe** that grows near taro patches and four tips of aerial roots of the pandanus. Mix all these ingredients with the taro, strain well and drink. Lie face down, then on both sides, then face upward and sit up. The **Kahuna** asks, 'How are you now?' The patient replies, 'My chest feels clear.' If the patient answers, 'My chest feels congested,' then the **Kahuna** thrusts the right hand into a basin of water and presses on the chest until the congestion is relieved. The dregs of the taro concoction (**ko`ona kalo**, MKP) that had been drunk is used by the **Kahuna** to rub over the feverish area on the back and the feverish condition will be relieved. The **Kahuna** asks again, 'How do you feel inside?' The patient answers, 'I am relieved inside.' Or he answers, 'I feel a turbulent pain (**Nahu au `o`olokū**, MKP) within.' Then takesome cold water (**wai huihui**, MKP), a ball of crushed **Kūkaepua`a** grass and a little **`Awa** root, mix all together and use as an enema. All yellowish discharges and pieces of dried excreta will be washed out. Take another dose of taro concoction (**`apu Kalo**, MKP) like that described before.



## APPENDIX 5

Desha, S.L. 2000. *Kamehameha and his Warrior Kekūhaupī`o*.

Kamehameha Schools Press, Honolulu, Hawai`i. Translation by Frances N. Frazier. Originally published in Hawaiian in *Ka Hoku o Hawaii* 12/16/1920 – 9/11/1924.

### A

:33 (3/17/1921) Also the implements of war were prepared and the armies were furnished with them. At this same time [King] Kalani`ōpu`u was preparing his armies he also cleansed the heiau of `Ōhi`amukumuku at Kahalu`u and of Keikipu`ipu`i at Kailua. He also commanded his chief kahuna Holo`ae to prepare the ceremonial offering[s] of `Awa (nā pāpāia`awa) to seek the help of his war god Kūkā`ilimoku.

### B

:77 (6/23/1921) When Ululani heard of the arrival of the young chief she emerged from her house and when she saw him ascending, she wailed a chant of remembrance and hospitality, beckoning with her hands to Kamehameha.

Auwē, he mai ho`i ē, auwē,  
`O `oe kā ia ē  
Kalaninuimehameha ē,  
E hea aku ana i ka `iwa kīlou mokulā.  
E komo ho`i ē,  
`A`ole wehewehena,  
`A`ole i waihona kona pō,  
`O ka hō`ā kēia lā.  
A`u lei o ka ua Hā`ao,  
E lele a`ela ma uka o `Au`aulele,  
E komo i ka hale o ke aloha lani,  
`Au`au i ke ki`owai kapu `o Pōnahakeone,  
E inu i ka `Awa a Kāne i kanu ai i Hawai`i,  
`Oia ia kini akua iā `oe lā.

Come hither,  
It is you, O Kalaninuimehameha,  
**The frigate bird which interweaves the islands is calling.**  
Enter,  
Dawn has not begun to break,  
Night has not departed,  
Touiches still burn.  
My garland [precious one] of the Hā`ao rain,  
Flying in the upland of `Au`aulele,  
Enter into the house of people who love their chief,  
Bathe in the sacred pool of Pōnahakeone,  
Drink the `Awa which Kāne planted in Hawai`i,  
The myriad of spirits are yours.

## C

:92-94 (7/28/1921) The young **ali`i** placed in the hands of Kekūhaupi`o's uncles asked wither they were going as their fourney began, and was told they were returning to the land of North Kohala. They proceeded straight from the land of Waio`ahukini to Manukā, a place adjacent to Kaulanamauna, the boundary of Kona and Ka`ū. It was said in the story of the famous kingdom conqueror that he was carried on their backs, showing how Kekūhaupi`o and his aforementioned uncles cherished their **ali`i**.

On their arrival at Manukā, they stopped for a breath and set Kamehameha down for a little rest. At this time Kekūhaupi`o prepared some `Awa for his foster son, and at this time Kamehameha questioned his guardians, "Are we the only ones going? Where are the rest of our people?"

Kekūhaupi`o did not reply to this question but continued to prepare the `Awa and when it was ready poured it into the cup, then he turned and said, "**E Kalani e!** Make offering (**uhau**) to your god. Here is the `Awa [which is your responsibility] to offer (**maukoli**) to your god, **Kūkā`ilimoku**."

Kamehameha immediately agreed, drank from the cup and sprayed the `Awa as an offering, with a prayer [directed (**kia**)] to **Kūkā`ilimoku**, [who was brought along] by one of his guardians. The prayer was as follows:

**Eia ka `Awa,**  
**E Kūkā`ilimoku,**  
**He `Awa lani wale nō,**  
**He `ai na ke kamaiki,**  
**Inu aku i ka `Awa o `Oheana,**  
**Pūpū aku i nā niu a La`a,**  
**Ua la`a, ua noa ka `Awa,**  
**Noa honua, noa ē.**  
**A ua noa lā.**

Here is the choicest `Awa,  
O **Kūkā`ilimoku**,  
`Awa for the heavens only,  
Food from the little child,  
Drink the `Awa of `Oheana,  
Accompany it with the coconuts of **La`a**,  
It is consecrated, the `Awa is freed,  
Freed, established, freed.  
It has been freed.<sup>60</sup>

When Pai`ea had completed the ceremonial offering, Kekūhaupi`o encouraged them to go, as it was not known what seceret harm might come after them, as some of the chiefs had treacherous thoughts. Because of this thought by Kekūhaupi`o he directed them to leave the customary pathway, and to travel where they could not be followed.

They climbed straight up from that place to a certain part of Mauna Loa and came down seaward at a certain part of Ka`ū named named `Ōhaikea. They spent the rest of the night in a cave called Alanapō. The next morning, after Kamehameha had made his ceremonial offering (**pāpāi`awa**) and prayer (**kahukahū**) to **Kūkā`ilimoku**, they left that place and climbed up another mountain trail till they reached the summit of Mauna Kea. At a place close to Waiau, Kamehameha again made an offering (**pāpāi`awa**). They were unable to remain there for long because of the cold, and so they descended to Waimea at a place called Moana by the ancients, going straight down to the plain of Waimea.

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<sup>60</sup> For a translation of this chant by M.K. Pukui see Barrere (1986:107)

## **D**

:106-109 (8/25/1921) When the king's body had been placed in the area prepared for it, a ceremonial offering of **`Awa** (**pāpāi`awa**) was made for Kīwala`ō and also to ceremonially cleanse the **kapu** corpse. We must understand at this place that this task was to be performed by Kamehameha because he was the one to whom the war god had been bequeathed, as well as the care of all the heiau. Kamehameha sat down and he himself chewed and strained the **`Awa** for himself and his kinsman Kīwala`ō.

These are the things which were combined with what Kamehameha chewed. When the pieces of chewed **`Awa** became soft, there stood ready two kinds of water: a container of spring water and water combined with turmeric (**ōlena**). Placed in these containers were **Mahiki** grass and **Nāwāhineikapumeka`a** grass.

The liquid strained into their **`Awa** cups was the water of the **Niu lelo** coconut and the juice of the **Pi`ihonua** sugarcane which had been squeezed. The first liquid was strained into the cup of Kīwala`ō, the second, with the **Pi`ihonua** sugarcane juice was put in Kamehameha's cup. The third cup was the one offered to the god. The liquid mixed with this cup of **`Awa** was the water of the **Niu hiwa**, or black coconut, that had been brought from Wailua, Kaua`i, which had become the water for Kalani`ōpu`u's war god.

Kamehameha poured the three cups. When they were ready he took hold of the third cup that was to be offered to the god, and he offered this prayer to the god (**i hahau aku ai i kēia pule i ke akua**).

Eia ka `ai e ke akua,  
He `Awa lani wale nō,  
He `ai na ke kamaiki,  
Inu aku i ka `Awa laulani,  
I ka `Awa a Kāne i kanu ai i Kahiki,  
A kā `ia a`ela, a mama `ia nō i ka waha,  
Kū i ke kāhe`e i ka `apu,  
`O Hoakaailanika`āinaola,  
Iā kini akua,  
Iā `oe ho`i e Kū, ua ola ho`i,  
Eia ke kaikū, ke kaiala, ke kaiola,  
Ke kai pupule, ke kai henahena, ke kai `ūlala,  
Kai `aumakua, kai nu`u, kai ea,  
Kai po`i, kai `īnana, ke kai pili`aikū ē,  
Ua puni,  
Ua puni ho`i nā moku i ke kai,  
`O hu`ahu`akai wale, `o napenape ka wai,  
`O ka wai `eli a ke koena.  
`O ke au miki, a `o ke au kā,  
Au kā iho, au kā aku,  
Au kā i uka, a au kā i kai,  
I ka `ale `ī, i ka `ale moe,  
I ka `ale hōkai ho`i ē,  
I Kahiki ē,  
`O ka lana a Kahiki,  
A hiki, he nei make,  
Iā `oe lā e Lono;  
Iā Kūikekala,  
Iā Lonoika`uweke,  
Iā Kāneikapōhāka`a,  
Hōka`a `ia mai ke alo o ka moku,

Eia, ka `Awa lā,  
 Iā Kanehoalani,  
 huli mai ko ka lani,  
 Iā Kānelūhonua,  
 Lū mai ko ka honua,  
 Iā Kānehuliko`a,  
 Huli mai nā ko`a `āina, a me nā ko`a kai,  
 Iā Kāneikawaiola,  
 Huli mai ke kai me ka wai,  
 Iā Kāneikapōhāka`a,  
 Ke ho`okō aku nei wau i ka `Awa,  
 Iā Lonomakua pau loa nā `aumakua a me ke akua,  
 Hele wale `o ke alaloa.  
 Ua noa ka `Awa lā,  
 E ho`i ke kapu a nā paeniho o `oukou,  
 `Amama, ua noa ka `Awa.

Here is the `Awa O god,  
 Choicest `Awa only,  
 Food for the child [the offerer],  
 Drink of the prized leafed `Awa,  
 Of the `Awa of Kāne, planted in Kahiki,  
 Which grew, leafed, and matured in Kahiki,  
 From him who chewed in his mouth,  
 [It] stands ready to be poured.  
 O heavenly being whose shadows fall upon the land of the living,  
 To the myriad gods,  
 To you, O Kū, you who are the life, here is the still sea, the living sea,  
 The crazy sea, the insane sea, the unbalanced sea,  
 Ancestral sea, billowy sea, rising sea,  
 Crashing sea, wrathful sea, overwhelming sea,  
 Which surrounds us,  
 The islands are surrounded by the sea,  
 Everywhere is the foam of the sea, the water ripples;  
 This is the water [to mix with the `Awa] and what remains of it.  
 O receding current, O rising current,  
 Smiting within, smiting without,  
 O current that runs ashore, that runs back to the sea,  
 O rising billow, flattening billow,  
 O billow that mingles and rises again,  
 At Kahiki,  
 O floated there at Kahiki,  
 Arrived there and be still,  
 Hearken O Lono;  
 O Kū the releaser,  
 To Lono who opens,  
 To Kāne of the rolling stones,  
 Roll hither to the presence of the moku [Kīwala`ō],  
 Here is the `Awa,  
 Hearken Kāne companion of the heaven,  
 Turn hither those of heaven,  
 O Kāne earth shaker,  
 Shake hither those of the earth,

To **Kāne** the coral overturner,  
 Turn hither land coral and sea coral,  
 O **Kāne** of the water of life,  
 Turn hither the salt and the waters,  
 O **Kāne** of the rolling stone,  
 I am fulfilling [the ritual of] the **`Awa** ceremony,  
 O parents of **Lono**, all the **`aumakua** and great gods,  
 Go [thou] on the long trail.  
 The **`Awa** [ceremony] has been made free,  
 Let the **kapu** return to you [lit. to your row of teeth],  
**`Āmama**, the **`Awa** [ceremony] is free [from **kapu**].<sup>61</sup>

When Kamehameha had completed the chant (**I ka pau `ana o kā Kamehameha kānaenae `ana i kēlā pule**) which has been shown, he took hold of an **`Awa** cup and gave it to his kinsman, Kīwala`ō, believing that he would drink it. Kīwala`ō took hold of the **`Awa** cup and gave it to his favorite friend, whose name was Kuikuipua, a grandson of Kalakauaehu [son of] Kamalālāwalu of the Bays of Pi`ilani [Maui], one of the rulers of Maui in times past.

When Kekūhaupi`o saw Kīwala`ō giving away that cup of the **`Awa** which Kamehameha himself had masticated, at the very moment that Maui ali`i lifted the cup to drink, Kekūhaupi`o dashed the cup from his hand so that the **`Awa** scattered and not a drop entered the mouth of that favorite of Kīwala`ō. At that same moment Kekūhaupi`o, the warrior of Ke`ei, spoke these fearless words to the ruler, Kīwala`ō:

“You have done wrong by this action – you two are the **ali`i** who have the land and the god, as you heard very well the word of your king who lies here. You alone are the lord, over your younger cousin (**pōki`i**) who is performing this priestly work of the saving of life from sorcery (**oihana kahuna pule kuni ola**)<sup>62</sup>. Your younger cousin (**kaikaina**) is your subject as high priest (**kahuna nui**). The food given to you, O **ali`i**, is for you and not for anyone else. You have done great wrong in debasing your younger brother (**pōki`i**).

**E**  
 (3/27/1924)

<sup>61</sup> M.K. Pukui translation in Barrere (1986)

<sup>62</sup> M.K. Pukui translation in Barrere (1986)

## APPENDIX 6

Gutmanis, J. 1983. Na Pule Kahiko. Limited Editions, Honolulu.

### A

:5-6 **Kāne** and **Kanaloa**. With the vigor and lustiness of young adventurers, **Kāne** and **Kanaloa** came to Hawai'i traveling on the surface of the ocean from Kahiki. Landing at Ke'ei, Maui, the pair flung themselves into the joys of exploring new lands and wherever they went they celebrated the pleasures of life with **`Awa**. As they wandered around the islands they left behind them many springs which were brought into being when **Kāne** struck an outcropping of rocks with his **kauila** staff. The water which gushed forth was used for mixing with the **`Awa** which they had carried with them. Before moving on they planted **`Awa** around these new springs.

Although constant companions in their many adventures, **Kāne's** name generally precedes that of **Kanaloa** in the stories about them as well as in the prayers to them.

In time, **Kāne** became the patron of fresh water and **Kanaloa** of the ocean, especially the deep ocean. Both are associated with canoes; **Kāne** as the builder and **Kanaloa** the sailor.

**Kāne** as **Kāne-koa** is associated with the increase of **`o`opu** fish in the streams while **Kanaloa** is the **`aumakua** of the squid and octopus. To some extent both are also associated with medicine.

The east is spoken of as the "high road traveled by **Kāne**" or the "red road of **Kāne**." The west is called the "much traveled road of **Kanaloa**." The route of the northern limit of the sun (summer solstice, the longest day of the year) is called the "glistening black road of **Kāne**" and the southern limit of the celestial ecliptic (winter solstice, the shortest day of the year) is the "road of **Kanaloa**."

Individually, **Kāne** is associated with sunlight, bamboo, taro, sugarcane, **wauke**, **pōpolo**, and coral; **Kanaloa** is associated with ocean winds and bananas. Both are associated with red roosters and black pigs. **Kāne**, the fair one, has at least seventy aspects, epithets, or forms associated with him. In Hawai'i, **Kanaloa** has no such known forms. (In other parts of Polynesia the traditions of **Kanaloa** are stronger and there he is, perhaps, the most famous of the gods.)

The prayer to **Kāne-i-ka-wai** (**Kāne-of-the-water**) is a prayer used when making **`Awa**.

**Ka wai laahia, e Kane-i-ka-wai.**

**Ka wai la ia, e Kane.**

**Ka wai i ka hikina, e Kane.**

**Nou Ka Wai Koo-lihilihi.**

**Ka wai i ka olo la hua`ina.**

**Kulia o lau mahu`e luna, o lau meha.**

**O na meha huli honua.**

**Hoouka kai hoe, e Kane,**

**A holo, e Kane, a kele, e Kane,**

**He kaua ka lua kaala hoku,**

**A hopu i ke aka, i ke aka o Kane.**

**A, kolo, i kolo a`e, kolo anuenue,**

**E ukuhi i ka wai**

**Pakahi ka lau na`ena`e, ka lau `ala o ka nahele.**

**Kihikihi oo ia,**

**Keekeehi iho no oe i ka hikina.**

**Owai ia alii o ka hikina?**

**O Kane alii oe la, o no Uli,**

**`Au`au i ka wai poni-hiwa, e Kane,**

**He aka-ku kau i ka Manawa,**

**Ku mai a`e la ipu hele, e Kane  
Ina ke oho o Mano ka hele ana, e Kane,  
I ke ala kapua`i akua, kapua`i o Hina.  
Eia ka pule, eia ke kanaenae nou, e Kane ke akua.**

The sacred water, o **Kane**-of-water.  
It is the water of **Kane**.  
The water in the east, o **Kane**.  
Yours is the water that supports the petals,  
The water in the long gourd gushing forth.  
Position the leaves wide open above, lone leaves.  
Lone leaves that face the earth.  
Put your paddle inside, o Kane.  
And go, o **Kane**, and sail away, o **Kane**,  
A war is the pit for sling stone stars,  
And hold the reflection, the reflection of **Kane**.  
And gently move along, move the rainbow,  
Pour out the water  
One by one the leaves, the fragrant leaves of the woodland.  
Projecting at angles  
Tread firmly to the east.  
Who is the chief in the east?  
You are chief **Kane**, of the Uli line.  
Bathe in the dark waters of **Kane**  
A vision placed on the top of the head,  
Caused the traveling gourd to land, o **Kane**  
Here the hair of Mano is going, o **Kane**,  
In the way of the footprint of deity, footprint of **Hina**.  
Here is the prayer, here is the chant of eulogy for you, O **Kane** the deity.<sup>63</sup>

## **B**

:6-7 **Lono**. **Lono**, the messenger, with restless eyes and many formed cloud-bodies, came to Hawai`i with the rushing of heavenly sound as a voice coming over the water. Landing first on Maui, he brought with him the techniques of the farmer and became patron of the fertility of the land. As such he was represented in the men's eating house of each family by a gourd covered with wickerwork and hung by strings attached to a notched stick. Food, fish, and **`Awa** were kept inside the gourd.

As the patron of agriculture, **Lono** is closely associated with sweet potatoes, pigs, gourds, rain clouds, and heavy rain. As **Lono-puha**, he is also the major patron of the **kahuna lā`au lapa`au** or herbal doctor. In this form he is associated with many medicinal plants. The following is a prayer to **Lono** said when offering food.

**E Lono-i-ka-po,  
E Lono-i-ke-ao.  
E Lono-i-ke-ka`ina o mua  
E Lono-nui-a-Hina  
Mai `aniha mao `oe iau, e Lono.  
E Lono maka hialele,  
A lele `oe i ka kai uli,  
A lele `oe i ke kai kea,\***

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<sup>63</sup> Emerson, n.d. Kelsey translation

I one huli la, i one `ele,  
 I mahinahina,  
 I ke one i hanana  
 O pipipi, o unauna,  
 O `alaelea, o naka,  
 O hee, o kualakai,  
 O ka pakii moe one `ula;  
 O ka `ulae niho wakawaka `oi;  
 O kama a `opihi kau-pali  
 O kulele poo; o helele`i ke oho  
 O waha-lau-alii; o Poli-hala;  
 O kahi i waiho ai o ka hua `olelo  
 O Pii-ma-lana o `Oheke;  
 O kama a Poepoe;  
 O ka wahine i ka ipu `olelo;  
 E kama e i ke-ola nui;  
 Eia ka `ai,  
 E Ku, E Lono, e Kane.  
 E Lono i ke ao uli e,  
 Eia ka ai...

O **Lono** of the night,  
 O **Lono** of the day.  
 O **Lono** of the leaning forward  
 O great **Lono** given birth by **Hina**  
 Do not be unfriendly to me, o **Lono**.  
 O **Lono** of the restless sleepless eyes,  
 You fly to the dark sea,  
 You fly to the light sea,<sup>64</sup>  
 To the sand that seeks the sun, to the black sand  
 In the pale moonlight,  
 At the sand that was overflowed  
 Of small mollusks, hermit crabs,  
 Of `alealea shellfish, of naka fish,  
 Of octopus, of sea slug,  
 Of the pakii flounder that lies on the red sand;  
 Of the lizard fish with serrated sharp teeth;  
 Of the offspring of the limpet that rests on the cliffs  
 Of the head that scatters, of the scattered hair  
 Of Waha-lau-alii, of Poli-hala;  
 Of the place that the word is left  
 Of Pii-ma-lana, together with `Oheke;  
 Of offspring by Poepoe;  
 Of the woman of the voice gourd;  
 O offspring of the great life;  
 Here is the food  
 O Ku, o Lono, o Kane.  
 O Lono of the firmament,  
 Here is the food...<sup>65</sup>

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<sup>64</sup> **Kai uli** refers to the deep ocean. **Kai kea** refers to the shallow places of the sea, the places of the waves. You see things at the bottom of **kai kea**. You do not see things at the bottom of the dark sea.



:11-12 **Pele**

**O Pele** la ko`u akua  
**Miha** ka lani, mihi ka honua,  
**Awa** iku, awa lani  
**Kai** `awa`awa, ka `awa nui a **Hii-aka**\*  
**I** ku i Maui-ola e, i Maui-ola,  
**He** `awa kaulu ola e na wahine  
**E** kapu, e kapu kai ka `awa e **Pele-honua-mea**,  
**O** ka la`e ka **Hau-mea**  
**O** ka wahine nana i ai a hohonu ka lua.  
**O** wau wahine a **Maka-lii**  
**O** lua wahine o ka lani  
**O** **Kuku`ena**, o na wahine i ka inu hana `awa  
**Kanaenae** a`u a he kua malihini\*2  
**Hele** ho`i ke ala mauka o **Ka`u**  
**Hele** ho`i ke ala makai o **Puna**.  
**I** **Ka-maamaama** la i **Ka-pua-lei**  
**Loaa** ka `awa la i `Apua,  
**Ka** piina i **Ku-ka-la`ula**.  
**Hoopuka** aku ka i **Puu-lena**  
**`aina** a ke kua i noho ai  
**Kanaenae** a`u a ke kua malihini a.

**Pele** is my deity

Silent the heavens, silent the earth,  
Ceremoniously dug `awa, heavenly `awa  
The large `awa of **Hii-aka** was bitter<sup>66</sup>  
That stood at Maui-ola,  
`Awa on the ledge of life by the woman  
Make ceremonially tabu, ceremonially tabu by the sea bath,  
The clearing up of the breath of Hau-mea  
The woman who ate the pit till deep.  
I am wife of Maka-lii  
Two women of the heavens  
**Kuku`ena** of the women who drink `awa while making it  
My chant is a supplication and eulogy, a chant of mine by a foreign deity<sup>67</sup>  
The road goes upland of **Ka`u**  
The road goes seaward of **Puna**.  
In the brightness of the sun **Ka-pua-lei**  
Got the `awa at `Apua,  
The rise at **Ku-ka-la`ula**.  
Come forth at **Puu-lena**  
Land in which the deity lived.  
I chant my **Kanaenae** by the foreign deity.

**Kuluwaimaka, n.d.**; Kelsey translation

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<sup>65</sup> Wise, John H. 6/6/1911. Partially identified clipping from the newspaper Ke Au Hou; Kelsey translation.

<sup>66</sup> The so-called bitterness of the `awa was a desirable characteristic.

<sup>67</sup> Pele, a late arrival in the Hawaiian islands, was frequently referred to as a malihini or a foreigner.

## **D**

### **:13-14 Na `Unihipili: The Spirits**

Among the great multitude of gods are the **`unihipili**. They are the spirits of deceased persons that have been wooed into staying in a “bundle.” The bundle, wrapped in tapa, contains bones and hair that had been removed from the body at the time it was being prepared for burial. Prayers and offerings were also made to court the spirit.<sup>68</sup>

The person who performs this ritual has the obligation of constantly attending the **`unihipili**. If not regularly cared for, it will turn against its guardian and become a renegade. Properly kept, the spirit will take on the good or evil character of its caretaker and will go on whatever mission it may be sent. Part of the care of the care of such a spirit is the regular serving of **`Awa** and food.

<sup>69</sup>Traditional offerings for this wooing of a spirit were two malo, a tapa, an **`Awa** cup, a choice piece of **`Awa** as well as red fish that had been salted, and a small calabash of **poi**.

**E Puhi, e ho`i mai,  
Eia kou ai,  
Eia kou i`a,  
Eia kou kapa,  
Eia kou `Awa,  
Eia kou malo,  
E ho`i mai a `ai a ma`ona,  
A hele a pa`ani a lelele,  
Amama, ua noa.**

**No Puhi, ka `uhane kino wailua, kino `uhane**

Return, O **Puhi**,  
Here is thy food,  
Here is thy fish,  
Here is thy **kapa**,  
Here is thy **`Awa**,  
Here is thy **malo**,  
Come and eat thy fill,  
Then go, play, leap about,  
**Amama**, it is freed.<sup>70</sup>

For Puhi, the disembodied spirit, a ghost

## **E**

### **:14-15 Na `Aumakua: The Guardians**

Since the **`aumakua** are intimate members of the human family, spiritual relationships with them are especially close and their presence is sought for feast and festivity as well as in time of crisis. They act as healers and advisors, counteracting troubles and punishing faults. The following are two prayers to **`aumakua** [only the one that has a reference to **`Awa** is included here]

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<sup>68</sup> Titcomb p150 from Emerson J.S. retranslated by Pukui

<sup>69</sup> Titcomb p150 from Emerson J.S. retranslated by Pukui

<sup>70</sup> Titcomb p150 from Emerson J.S. retranslated by Pukui

E na `aumakua mai ka pa`a iluna paa ilalo  
 Ka hooku`i a me ka halawai  
 E ka `ai, he `awa  
 `E `ike ia`u ia (inoa) ka `oukou pulapula  
 O ke ola mau loa no ko`u a kau i ka pua`aneane  
 A kanikoo, a pala lauhala  
 Kolopupu, a haumaka`iole  
 O ke ola ia a `oukou, e na `aumakua  
 `Amama, ua noa, lele wale.

O guardians from the solid above to the solid below<sup>71</sup>  
 From the zenith to the horizon.  
 Here is the food and the `Awa.  
 Take notice of me, your offspring  
 Let my life continue till I reach extreme old age  
 Until the cane sounds (and I am)  
 Bent with age, and blurred eyes of a rat.  
 It is life by you, O `aumakua  
 `Amama, free of tabu, flown away.  
 (Iokepa n.d.; Kelsey translation).

## **F**

:20-23 **Na Mohai `Awa:** `Awa Offerings ... The prayer said before a chief drinks `Awa socially may be said either by the chief himself or by a **kahuna**. The following is an `Awa drinking prayer for a chief.

E nu`a iluna,  
 E nu`a ilalo,  
 I mapunapuna,  
 I pae a mai`a,  
 I kuhi wale,  
 I hoope`a wale,  
 I ku`ina o ka aahu,  
 Ka ihu o ka puaa;  
 I ka a`e pa,  
 I ka wawahi pa,  
 No kela kau ka hewa.  
 Mamuli oe o makou.  
 O Ku-i-ke-kala,  
 O Ku-pulupulu,  
 O Ku-alana-wao,  
 O Ku-moku-halii,  
 O Laea, ka wahine,  
 Nana e kua ka waa,  
 A hina ilalo,  
 A no ke `eulu.  
 Ia ku-ele ka La,  
 Ia ku-ele ka Mahina,  
 Ia Ku-poo-loa,  
 Ia Ku-maka-aka,

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<sup>71</sup> The “solid above” refers to the heavens, the “solid below” refers to the earth.

**Ko loko, ko waho.**  
**Eia ka ai la, e ke akua.**  
**O ko ola no ko`u a loihi,**  
**A kolo-pupu, a hau-maka-iole,**  
**A pala-lauhala, a kani-koo,**  
**A ka i ke koko.**  
**Amama, ua noa.**

O thickly piled above,  
 O thickly piled below,  
 Surging emotion,  
 In the enclosure of a mountain banana patch,  
 Who simply points out,  
 The one who crosses another,  
 As the joining of the garment.  
 The nose of the pig;  
 Who surmounts obstructions,  
 Who breaks obstructions,  
 The wrong is of that (not this) season.  
 We are people because of you.  
 O **Ku**-in-the-forgiveness,  
 O **Ku**-kindling-in-the-forest,  
 O **Ku**-of-the-upland-offering,  
 O **Ku**-island-spreader,  
 O Laea the woman,  
 By him would be hewed the tree for a canoe,  
 Until it falls down,  
 And cut off the top.  
 Who causes the sun to stand darkly,  
 Who causes the moon to stand darkly,  
 To Long-headed-**Ku**,  
 To **Ku**-with-laughing-eyes,  
 Of within, of without,  
 Here is the food, o deity.  
 May I have long life,  
 Until I crawl with difficulty and with the blurred eyes of a rat,  
 Until (I am) weak of old age and sound the cane,  
 Until (I am) thrust into a carrying net.  
**Amama**, it is free of tabu.

If the drinker is a woman, the last four lines will be changed to the following:

**A kani ko`o, a kolo pupu**  
**A hau maka `iole;**  
**A `eia ke ole ia `oe, e ke akua.**  
**Amama, ua noa.**

Until the cane sounds, until bent with age  
 Until I have blurred eyes of a rat;  
 And that is the life to you, o god.  
**Amama**, it is free of tabu.  
 (Emerson, NB, n.d. Kelsey translation)

## **G**

:25-27&30 **E Ho`i Mai a Pale i ka `Ino**: To Return and protect from evil

When the forces of misfortune seem to be gathering, one should examine his thoughts and actions to see what the cause might be. If nothing has been done to justify such troubles, it may only be necessary to so inform the trouble-bearing spirits and assure oneself that nothing has been done to merit the bad luck. Then the malevolent spirit can be ordered back to its keeper. It is often sufficient to say something such as, "**Ho`i nō kāu me `oe**." "What you have given me, go, return to you (the sender)." Or one might say, "**Ho`i nō `ai i kou kahu**." "Go back and destroy your keeper."

If on examining his actions, the person suffering misfortune finds that he has offended a god, his `aumakua, a member of his family, or a friend, he must set things right before seeking relief. In the case of offending a god or `aumakua, the offender may require the help of kahuna. In the case of offending a human, the offender must go to the person and seek his or her forgiveness.

Tradition demands that forgiveness be given. If a curse has been given, it must be lifted. Not to do so is to invite the gods to act in the same manner in the future when forgiveness might be sought from them.

If a person who gives a curse dies without removing it, the curse can still be removed by going to the corpse before it is buried and saying, "**I mea ho`ōla nō ka ma`i o mea**." "Now you are gone, take all curses with you." If for some reason this **pule kala** or cutting [forgiveness?] prayer can not be said before the body is buried, the curse can still be removed by sincere prayer. It can also be removed by the family senior of the deceased who may agree to take the curse with him when he dies. Although a curse may remain in effect after the death of the giver, it cannot be inherited by the family of the cursed person.<sup>72</sup>

The following is a prayer that may be said when seeking forgiveness. It is said before making an offering of `Awa. After the prayer, the `Awa is shared with the family `aumakua and the person who gave the curse. After drinking the `Awa, food is offered and shared by all present, including the `aumakua.

**E Ku i ke kala,  
E Lono i kau weke kala,  
Weke puha ia,  
Kalakaua i Ahuena.  
Kapu ka aha o ke makala au e Kane.  
Kala weke puha ia.**

Oh **Ku**, the forgiving,  
O **Lono** who grants pardon,  
Undo the knot of our sins at **Ahu`ena**.  
Tabu is the ceremony presided over by you, **Kane**.  
Pardon is wide and free.  
(Malo 1951)

If the sufferer of misfortune has been possessed by a spirit sent from an enemy and he is not sufficiently strong to battle it by himself, he may enlist the help of a family member, his entire family, and/or the help of a kahuna.

The person chosen to help may kill and dress a white rooster, cooking it in an **imu**. He will then carefully feed the sufferer a part of the bird, telling the possessive spirit that the food is for it to eat. The spirit will then ask, perhaps so quietly that it cannot be heard, "**Heaha ka uku iā `oe no kou lokomaika`i**?" "What shall I do to repay you for your kindness?"

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<sup>72</sup> Pukui et al. 1972 pp 32-33.

The one who prepared the chicken will answer, “**Hele `oe i kou kahu, ka mea nana `oe i houna [ho`ouna] mai, ilaila kou hale, kāu `ai, kāu mea inu, kāu moena; e luku i kāu Kahu, a kāu uku ia iā makou.**” That is, “Go to your keeper, the one who has sent you here, there find your home, your food, your drink, your mats, destroy your keeper and that will be your gift to me.”<sup>73</sup>

The following two prayers are called **pule ho`ōla**. They are said to save one from trouble or to heal or cure the problems caused by an evil spirit. [only the prayer containing “**`Awa**” is given here]

**Lu`ulu`u Hana-lei i ka ua nui  
 Kaumaha i ka noe o Alaka`i.  
 Ke hele au a Manu`a-kepa  
 `Oi-ku i ka loa o Ko`i `alana.  
 Ke alaka`i `ia ka malihini  
 Hina au e palaha  
 Make au i ke akua hoounauna.  
 Kii mai `oe ia`u Hookala-ko`i,  
 Ala mai au a ku a hele,  
 Hele au me ku`u lanakila.  
 `Aole au make i koe  
 No ka mea ua kahea au ia Hookala-ko`i  
 A ku au a hele, a lanakila i ka la o kuu make.  
 Ke hele nei au me kuu lanakila.  
 A`ole au make i koe  
 Ke ho`i nei au a `aha`aina ia`u.  
 Ka `awa, pua`a, ka `uala  
 Ka mai`a, ke ko.  
 Pule au ia Hookalako`i  
 O kuu akua ia i ola ai.  
 Elieli ku elieli moe.  
 Kapu o, noa.**

Hana-lei is downcast with heavy rains  
 Heavy with the mist of Alaka`i.  
 I go to Manu`a-kepa  
 Pained by the distance of Ko`i-alana.  
 The stranger is led  
 I fall over, and flat  
 I die through the god of hoounauna.  
 You get me **Hookala-ko`i**,  
 I arose and stood up at the time to go,  
 I went with my victory.  
 I have no death remaining  
 Because I called **Hookala-ko`i**  
 And I stood up, and went, and was victorious on the day of my death.  
 I go with my victory.  
 I have no death remaining  
 I return and am feasted.  
**`Awa**, pig, sweet potato  
 Bananas, sugar cane.  
 I pray to **Hookala-ko`i**

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<sup>73</sup> Green and Beckwith 1926

My god through whom I live.  
Profound the standing, profound the lying down.  
**Kapu** o, it is finished.  
**Emerson NB, n.d.**; Kelsey translation

## **H**

:28&30 **Na pale i ka `ana`ana**: Prayers against `ana`ana

When a person feels the impact of the troublemaking prayers of another he can attempt to return the evil. If he acts promptly he may succeed without seeking the help of a **kahuna**. The following is a prayer against **anā`anā** or praying to death. It is said to make a "barrier impossible to break." It can also be used against **ho`opi`opi`o**, a form of sorcery, in which the practitioner touches a piece of his or her own body, thereby causing injury to his victim's body. The prayer may be said by either the intended victim or by a **kahuna**. If said by a **kahuna**, the victim makes offerings of **Awa** as well as black pig or red fish. It is necessary for the victim to say the prayer while away from home and then to sleep, eat, and change his clothing before returning home.

In this prayer the victim's body is compared to a house which, part by part, he seeks to protect.

**Nana i ka pou kua,  
I ka pou alo,  
I ke kauhuhu,  
I ke kau`iole,  
I ke kunakuna,  
Ka lapauila,  
I ka paepae,  
Ka pou hana.  
Ka uila i ka lani.  
Hekili i ka lani,  
Ka ho`i kua,  
Ka hoopa`a,  
La`i kau `a`i,\*  
Ka ho`i kua la i ka ua i Ka-hiki,  
Ia Kapa`ahu, Ka-hiki a Lono,  
Ku makaha i ka lani.  
`Ewalu i Kaua`i  
Pu`u o manu `ewalu i Hawaii  
Malaila `e ho`ea mai ai na hua`olelo,  
Ka-hiki a Lono la kau ai.**

Look at the back row of house-wall posts,  
At the front row of house-wall posts,  
At the ridge pole,  
At the upper ridge pole,  
At the side posts of the door frame,  
Also at the other side posts of the door frame,  
At the platform on which the rafters rest,  
The post is set in the middle of each end of the house.  
The lightning in the heavens,  
Thunder in the heavens,  
The returning from the back,

The making fast,  
Ti leaves on the neck,<sup>74</sup>  
The returning back to the rain in Ka-hiki,  
To **Kapa-ahu, Ka-hiki** of **Lono**,  
Stands as a sluice gate in the heavens.  
Eight in Kaua`i  
**Puu-o-manu**, eight in Hawaii  
There will arrive the words,  
**Ka-hiki** of **Lono** in place.

## I

:29-30 **Kuni**: Prayer with fire

**Kuni** is a form of sending death or misfortune to a person who has unjustly used **`anā`anā** to cause death or illness. There are two types of **kuni**: **kuni ola** and **kuni `anā`anā**, and both use fire in their ritual. **Kuni ola** is used when a person is very ill and shows symptoms characteristic of being prayed to death. **Kuni `anā`anā** is used after a person has been prayed to death.<sup>75</sup> The rituals in both cases are similar and take place for three successive days, the first of which is **Kaloa-kū-kahi**, which falls on the twenty-fourth of the moon-month. On the twenty-sixth of the moon-month, **Kaloa-pau**, the ashes of the burnt offerings are scattered at sea. Within five to ten days the person who caused the original illness or death will themselves die.<sup>76</sup>

When a person shows signs of being prayed to death, a family member or friend takes an offering of **`Awa** and, depending on his importance, one or more pigs, dogs, and/or chickens to a **kahuna kuni** who specializes in **`anā`anā**. When the gift is offered to **Uli**, a prayer such as the following is said.

Eia na puua (moa, ilio, etc.) i na hoalewa.

He puua ke`ia, e no hia aku ana, e make ka mea nana i ana`ana kau mea aloha.

**O kau i`a e Uli, a me Maka-ku-koae, a me Ka-alae-a-Hina e hoelewa ai.**

Here is the pig (chicken, dog, etc.), o **Uli** in the heavens.

This pig is to cause death of him who prayed to death my loved one.

It is yours (to do) o **Uli**, and **Maka-ku-koae**, and **Ka-alae-a-Hina** in the heavens.

[The process continues with more deeds and chants]

## J

:35-38 **Kuehu kapa**: Driving sickness off with **kapa**

## K

:53-55 **Ho`ola`a e Lono**: Dedication to **Lono**

## L

:57-60 **Ke kauhale**: The home. Once the house is complete, the ceremonial cutting of the **piko** (umbilical cord) takes place. The **piko** in ancient times was a small tuft of thatch. Today it may be a board left protruding to be cut in the same ceremonial way. Some say that the ceremony takes place before the house is furnished (Taylor, n.d.); other say that it takes place after the house is completely furnished (Handy and Pukui, 1958). In either case, the

<sup>74</sup> Ti leaves torn in long strips are used to ward off evil. In this case, two ti leaves are tied together by their stems and worn around the neck.

<sup>75</sup> Emerson NB, n.d. According to Iokepa (n.d.), one of the signs of having been prayed to death is that part or all the body turns black.

<sup>76</sup> Anonymous 1



first blessing is done with only members of the family present so that their **mana** will take possession of every part of the house. If an outsider is present, he will also leave some of his mana, giving him future claim on the house.

As part of the blessing, the family makes an offering of fresh-water fish, such as mullet, or red ocean fish, chicken, eggs, taro greens, **`Awa**, and salt. This food will supply the needs of the gods of the elements: fresh water, sea water, fire, and air. The prayers that accompany these offerings may be quite informal; any religious man may say them. He need only talk with the gods as a family member.

After the family blessing is over a feast is prepared. According to some traditions, the **imu** in which the food is cooked must be on either side of or front of the house. While the food is cooking, a red **kūmū** or **weke** fish and a white **`ama`ama** or **āholehole** fish are placed under the threshold. Then the **piko** is cut. The following are four ancient prayers that might have been said at the time...

[the four chants are omitted here because they had no specific reference to **`Awa**]

When the prayer is over and the **piko** cut, fresh greenery is placed around the house. These greens are gathered early in the morning in the forest. Great care is taken in their gathering, avoiding excessive damage to the plants from which they are taken and leaving the parent plant intact. During the gathering, informal prayers are said to the various gods of the forest, explaining the use for which the plants are being taken. Ferns, **maile**, **`ilima**, **`ie`ie**, and **tī** are the most desirable greens for the interior of the house, while bananas and **`Awa** are laid on the **paepae**, **lānai**, or today the porch. After the greens are in place, the **imu** is opened and the feasting begins. Nothing may be left. No part of the pig may be given to the dogs. Bones are burned or buried and all uneaten food is wrapped and given to the guests to take home with them.<sup>77</sup>

## **M**

:78-80 **Na wa`a**: The canoes. ... After the canoe was roughed out it was normally left to cure or age at a spot where it had been cut. When the rime came to haul the canoe to the shore for its completions, the **kahuna kālai wa`a** and his crew again returned to the mountains carrying offerings and supplies. Prayers on the way up were similar to those said on the way to cut the trees. After offering food to the gods and eating with the men, the **kahuna** chewed up a small portion of **`Awa**. Then he spit into the hollow of his hand and rubbed it over the cut on the stern end of the canoe to which the hauling rope would be attached. While doing this he said, "**Ua noa ka `aha, ua lele akula.**" "the assembly is free of tabu. It has flown away." He then said a prayer such as the following.

**E Ku-pulupulu,**  
**E Ku-alana-wao,**  
**E Ku-moku-halii,**  
**E malama `oe i keia wa`a;**  
**E malama `oe ia mua o ka wa`a;**  
**E malama `oe ia hope o ka wa`a;**  
**A hiki ma kahakai;**  
**E malama `oe a kau ma ka halau.**

**O Ku-pulupulu,**  
**O Ku-alana-wao,**  
**O Ku-moku-halii,**  
Care for this canoe;  
Care for its bow,

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<sup>77</sup> In ancient times men and women would not have eaten together nor would their food have been cooked in the same **imu**.

Care for its stern;  
Until it reaches the shore;  
Care for it until it is placed in the **halau**.

Emerson NB, from Peleioholani n.d.; Kelsey translation

Hauling the canoe down the rough mountain trails was hard work and may have taken several days. Along the way, many prayers were offered to make the work of hauling easier. The following are two such prayers... [The two prayers were omitted here because there was no mention of **`Awa** within them]

As time passed and canoe-building materials and techniques changed, most of the foregoing prayers ceased to be acceptable. Today, however the canoe may still be built, the gods are still called on to consecrate it.

The ceremony of consecrating a canoe is called **lolo `ana i ka wa`a**, or imparting brains to the canoe. According to some traditions, the canoe was held in the **hālau** for four **anahulu**, that is forty days after its completion. During that time it was bathed with salt water periodically. Other traditions called for immediate launching.<sup>78</sup>

Today, as in the past, whichever tradition is followed, the consecration takes place on the beach near where the canoe rests. There an **imu** is built and food prepared while the canoe is decorated with **tī**, fern, **maile**, and other forest greens. Then the **kahuna**, with a coconut shell filled with sea water, sprinkles the canoe saying, "**E kia`i, e alaka`i, e ho`ona`auao, e ho`olanakila, a pae ka wa`a i ke kula me ka lanakila.**" "Guard, guide, instruct, give success, until the canoe lands on the plain of the seashore with victory."

The **kahuna** then drinks a mouthful of the sea water and pours the remainder into the sand at the bow of the canoe. After that the **imu** is opened and the **kahuna** takes the ceremonial pieces of the pig's snout, tail, and four feet, a piece of meat, a red fish, a banana, and a piece of **`Awa** as an offering. The following is a prayer to accompany the offering.

**E Mokuhalī`i, Kupa`aike`e, Lea**  
**Eia ka pua`a,**  
**He uku, he makana, he `alana,**  
**He mohai ia `oukou.**  
**Ua pa`a ka wa`a (inoa)(`ano)**  
**A e ho`olana `ia aku ana i ke kai**  
**O kana i`a e huli ai i ka loa`a a me ka waiwai.**  
**E nana pono loa `oukou**  
**E maka`ala i na puko`a, na pu`upohaku o kahi laupapa**  
**Na nalu, na `ale o ka moana.**  
**Ho`oholo no `oukou i ka wa`a ma kahi hohonu o ke kai,**  
**I hele ai ka wa`a a nalukai**  
**A `apulu, a ulu ka limu pakaiea, a kaniko`oko`o.**  
**`Amama, ua noa.**

**O Mokuhalī`i, Kupa`aike`e, Lea**  
Here is the pig,  
A payment, a gift, an offering,  
A sacrifice to all of you.  
The canoe (name) is completed,  
A (type of canoe) floating in the sea.  
It is his fish to seek, to obtain wealth.  
Look very closely all of you.

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<sup>78</sup> John Haone 1980; Anonymous 2

Beware of the coral heads, the stone hills of the reef,  
The waves, the billows of the ocean.  
All of you direct the canoe to places of deep sea  
That the canoe goes over the waves of the sea.  
That the canoe may go till weather-worn, till worn out, and covered with **limu** and the cane sounds.

**`Amama.** It is free of tabu.

Anonymous 2; Kelsey translation

When the prayers were all over, all joined in the feasting<sup>79</sup>, eating until they can eat no more. After that, all the leftovers are gathered and placed in a coconut frond basket with a few rocks from the **imu**. Then the basket is placed on the canoe and all the men join in hauling it into the water. During a brief sail the basket is dropped in the water as an offering. The canoe then returns to shore where it is again hauled onto the sand and a prayer such as the following is said (Gutmanis, 1983).

**O kuwa o ka lani, o kuwa o ka honua,  
O kuwa o ka mauna, o kuwa o ka moana,  
O kuwa o ka po, o kuwa o ke au,  
O Malualani ke kuwa, o Maluahopu ke kuwa,  
Aia no ia koi la ke kuwa.  
Ka waa nei o ka luahine makua.  
Ka luahine! Owai?  
O ka luahine o Papa, wahine a Wakea.  
Nana i kuwa, nana i hainu,  
Nana i hele, nana i ae,  
Nana i hoonoanoa.  
Noa ke kuwa o ka waa o Wakea.  
O ka waa nei o ka luahine makua.  
Ka luahine! Owai?  
Ka luahine o Lea, wahine o Moku-halii.  
Nana i kuwa, nana i hainu,  
Nana i hele, nana i ae;  
Nana i hoonoanoa.  
Noa ke kuwa o ka wai o Mokuhalii.  
Hinu helelei aku,  
Hinu helelei mai.  
He miki oe Kane;  
He miki oe Kanaloa.  
O Kanaloa hea oe?  
O Kanaloa inu awa.  
Mai Kahiki ka awa,  
Mai Upolu ka awa,  
Mai Wawau ka awa.  
E hano awa hua,  
E hano awa puaka.  
Halapa i ke akua i laau wai la!  
Amama, ua noa.  
Lele wale aku la.**

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<sup>79</sup> In ancient times no women were allowed at this feast.

Uplifter of the heavens, uplifter of the earth,  
 Uplifter of the mountains, uplifter of the ocean,  
 Who has appointed the night, appointed the day,  
**Malualani** is the **kuwa** and **Maluahopu**,  
 The ax also is a **kuwa**.  
 This is the ax of our venerable ancestral dame.  
 Venerable dame! What dame?  
 Dame **Papa**, wife of **Wakea**.  
 She set apart and consecrated, she turned the tree about,  
 She impelled it, she guided it,  
 She lifted the tabu from it.  
 Gone is the tabu from the canoe of **Wakea**.  
 The canoe this of our ancestral dame.  
 Ancestral dame! What dame?  
 Dame **Lea**, wife of Moku-halii.  
 She initiated, she pointed the canoe,  
 She started it, she guided it;  
 She lifted the tabu from it.  
 Lifted was the tabu from the canoe of Mokuhalii.  
 Fat dripping here,  
 Fat dripping there.  
 Active art thou **Kane**;  
 Active art thou **Kanaloa**.  
 What **Kanaloa** art thou?  
 Kanaloa the `awa drinker.  
**Awa** from Tahiti,  
**Awa** from Upolu,  
**Awa** from Wawau.  
 Bottle up thy frothy **awa**,  
 Bottle up the well-strained awa.  
 Praise be to the highest heaven (**laau**)!  
 The tabu is lifted, removed.  
 It flies away.  
 Malo (1959)

--different translation--  
 The fatty grease drips here and there,  
 You are quick, **Kāne**,  
 You are quick, **Kanaloa**,  
**Kanaloa**, where are you?  
**Kanaloa** who drinks `Awa,  
 From Kahiki was the `Awa, from `Upolu, from Wawau,  
 Famous is the root of the `Awa,  
 Famous are all the `Awa, but,  
**The god is queasy due to the liquid of the plant (lā`au wai),**  
 Ended, freed, released.  
 (Malo 1996, Translation by Chun)

When the **kahuna** finishes the prayer, he asks, “**Pehea kēia lawelawe `ana, a kākou?**”  
 “How is this service of ours?” If no disturbance has been made during the prayer, the owner  
 of the canoe will answer, “**Maika`i ka lolo `ana.**” “Our service is good!” The **kahuna** will  
 then say, “**E `au ana `oe iloko o kēia wa`a me ka palekana, no ka mea ua maika`i ka**

**lawelawe`ana a kākou.**” “You will travel inside of this canoe with safety because it is good.”

## **N**

:86-89 **Ka hula:** The hula. ... After the greens have been placed on the altar<sup>80</sup>, the dancers retire to dress. As they prepare themselves, the **kumu** chants a prayer (**pule ho`oulu**) beginning with “**E ulu, e ulu.**” **Ulu** may mean growth in any form. In the case of the **hula**, the growth sought is that of talent and inspiration. The following is such a prayer.

**E ulu, e ulu kini o ke akua;  
Ulu a`e o Kane me Kana-loa;  
Ula ka `ohi`a<sup>81</sup> lau ka wai, ka `ie`ie,\*2  
Ulu a`e ke kua a noho i kona kahu  
Eia ka wai la, ka `awa, he wai ola.\*3  
E ola ia`u i ke kumu  
E ola i ke poo puaa  
E ola i ka paepae  
E ola i na haumana a pau  
Elieli kapu, elieli noa.**

Congregate, inspire, ye hosts of gods!  
Come together, inspire O **Kane, Kanaloa!**  
Live the **ohi`a**,\* the **ie`ie**, till many their sprinkling<sup>82</sup>  
Inspire the goddess to dwell within her keeper.  
Here is the water – the **awa** – the water of life.<sup>83</sup>  
Give life to the teacher  
Give life to the leader of the class  
Give life to the leader’s classmates  
Give life to all the students.  
Profound the tabu, profound its lifting.

Kekahuna, n.d. ?**Kuluwaimaka?**

As the dancers actually dress, special prayers (**pule ho`okomo lole**) are said. This is a prayer chanted while putting on the **pā`ū**.<sup>84</sup> the length of the prayer reflects the time it takes to put on the **pā`ū** (Gutmanis, 1983).

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<sup>80</sup> “Every morning the altar is sprinkled with water to keep the greens fresh. The water is gathered daily. Any water remaining after the sprinkling is thrown either into the ocean or the woodland. The container is left in the middle of the altar. It is a long gourd like a **hōkeo**, but smaller. If some of the greens are dry they should be replaced. When the **ohi`a** or **ie`ie** dry out all the greens must be replenished.” (Kuluwaimaka in Gutmanis 1983N)

<sup>81</sup> “**Ohī`a** here does not refer to the male or the water to women or children.” Kuluwaimaka, n.d.

<sup>82</sup> “This line does not refer to the amount of water but to the sprinkling. The feast of releasing is a pupu weuweu. When the leaves dry out they are burned.” (Kuluwaimaka, n.d.) Others say they should be thrown into the sea.

<sup>83</sup> This refers to the water used in sprinkling the altar, the giving of the water of life to the students, not the water for **awa**. The prayer for **awa** is different. The water sprinkled on the chiefs was also different. If there was **awa** that would do for them. Salt water sprinkling is different. (Kuluwaimaka, n.d.)

Ia kakua pa`u `ahu na kikepa i ka pa`u,  
 No`ano`a i ho`olu`ua, i ho`okakua `ia a pa`a luna o ka imu.\*  
 Ku ka hu`a o ka pali o Ka-wai-kapu  
 He kuina pa`u pali no Ku-pahu  
 I holoa, pa`alia, pa`a `e Hono-kane.  
 Malama `e Hilo i ka pa`u\*2  
 Holo iho la `ala o ka manu\*3 i na pali.  
 Pali ku kaha ko; ha ka `a`i i ke keiki pa`u pali o Kau-kini  
 I ho`onu`anu`a iluna o Ka`au-ana  
 Akahi ke ana, ka luhi i ka pa`u,  
 O ka ho`oio i na kapa ko`ele wai o `Apua,  
 I hopua i ka ua a noe Holo-po`opo`o  
 Me he pa`u `ele hiwa ala i na pali.  
 `Ohi`ohi ka pali, ku ka liko o ka lama,  
 I mama `ula `ia e ka ma`ino  
 E ka malo o `Umi i kui na huna.\*4  
 I `ike ai ua ma`awe wai olona.  
 E makili `ia nei o Wai-hi-lau  
 Holo ke olona i pa`a ke kapa, hu`a lepe `ole ka pa`u.  
 Nani ka ihona, makali`i ka `ohe.  
 Pa`a ka pa`u o Pua-kea i na pali.\*5  
 I ho`ohou kalena `ia e ka makani.  
 I kaomi pohaku `ia e Wai-manu  
 I na `ala kiolaola, i na `ale lele, pa`a ia Wai-manu.  
 O `oki Waipi`o, kau haehae ka `ohe ia `ohe-lau-li`i  
 `A`ole `i `oki`ia o mo ke kihi.  
 Malama ka hoaka, ka `apahu ia Po`e  
 O `ahiki `ia la e Maluo, he pola ia no ka pa`u,  
 I hi`ia mai e Ka-holo-kuaiwa,  
 I `ume a pa`a; wiliwili ka pa`u\*6  
 Kaupaku hale maluna o Hana-`awili.  
 I wili `ia mai a pa`a, ku ka `awahia,  
 Ka`a ka `ope`ope, uwa ka pihe.  
 Ho`okahi kamali`i a hana pilo ka leo i ka nahele i ka pa`u e.  
 Noho no i Puna, he maka ia no ke onaona.  
 He inu mahuna `ia e ka wahine.  
 I kanu popo kiele ia e ka wahine.  
 I ho`ope `ia i ka `ili la`au `ala o ka nahele  
 I `a`ala i ka hala me ka lehua.  
 Nono ia pa`u e ho`okakua `ia nei.  
 Ia Pili, ia Mau, ia Pa`a-e.  
 Pa`a ka pa`u o Pua-kea i na pali a—

Gird on the **pa`u**, put on the sarongs,  
 Beautifully dyed and girded tightly over the **imu**.<sup>85</sup>  
 Stands the rim of the cliff of **Ka-wai-kapu**<sup>86</sup>

<sup>84</sup> According to Jennie Wilson (n.d.) hula apparel could not be stored with that of ordinary wear.

<sup>85</sup> The imu refers to the private (**kahi huna**, hidden part) of the woman. (Kuluwaimaka, n.d.) The **imu** may refer to the womb. (Kelsey, n.d.) The **imu** is the privates of both men and women. (Akoni Mika n.d.)

A **pa`u** strung together of the cliff of Ku-pahu  
 That extended and was made fast, made fast by Hono-kane.  
 Hilo first took care of the **pa`u**.<sup>87</sup>  
 The fragrance of the bird<sup>88</sup> travels the cliffs.  
 Cliff that stands sheer, a shelf for the necks of the children of the **pa`u** cliffs of Kau-kini.  
 That are stacked above the morning bodies.  
 This is the first time of having enough, the weariness of the **pa`u**,  
 At the showing off of the tapa dyed in (the) water of `Apua,  
 That is seized by the rain **Holo-po`opo`o**  
 Like a pure black **pa`u** on the cliffs.  
 The cliffs collect their dues, the new leaves of the **lama** appears,  
 Chewed red by the defacement  
 By the **malo** of `Umi that strung together the secrets.<sup>89</sup>  
 That the thin trickles of `olonā water may be seen.  
 Come to light by Wai-hi-lau  
 `Olonā cord put through the top of the **pa`u**, the tapa held in place, the top edge of the **pa`u**  
 was undirected.  
 Beautiful is the descent, very fine is the cord.  
 Fastened to the “cliffs” is the **pa`u** of Pua-kea.<sup>90</sup>  
 Struck stretching by the wind.  
 Weighted down with a stone by Wai-manu  
 The `alā rocks thrown away one after the other, the flying `alā held fast by Wai-manu.  
 Cut off is Waipi`o, place the bamboo torn to bits before `Ohe-lau-li`i  
 Not broken and the top cut off.  
 Take care about the lower edge of the **pa`u**, conspicuous to people  
 Lest hidden parts be fully revealed by Maluo,  
 Embraced by Ka-holo-kuaiwa,  
 The **pa`u** is drawn tight and twisted up<sup>91</sup>  
 House roof above Hana`awili.  
 Twisted tight, there is harshness,  
 Roll the bundles, the shouting is loud.  
 The children make a noise and with troublesome voices in admiration of the **pa`u**.  
 They dwell indeed in Puna, the source of the fragrance.  
 A drinking by the god that is to the scaly appearance of the skin from `awa drinking.  
 Planted as a bunch of fragrance by the woman.  
 Perfumed with the fragrant bark of the woodland  
 Made sweet with **hala** and **lehua**.  
 Rosy is the **pa`u** that is here being girded on  
 To Pili, to Mau, to Pa`a.  
 The **pa`u** of Pua-kea is firm on the cliffs (legs).

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<sup>86</sup> **Ka-wai-kapu** refers to the privates of the woman. (Kuluwaimaka, n.d.) The body may represent a beautiful cliff and **Ka-wai-kapu**, the generative fluid. (Kelsey, n.d.)

<sup>87</sup> This refers to the people of Hilo who first fashioned the **pa`u**. (Kuluwaimaka, n.d.)

<sup>88</sup> **Manu** pertains to those doing the **hula** as if they flew here and there like birds. (Kuluwaimaka, n.d.)

<sup>89</sup> The **malo** of `Umi was left with his mother by Liloa. It was made out of **wauke**. High chiefs had their own designs as did different **halau hula**. (Kekahuna, n.d.)

<sup>90</sup> **Pa`u Pua-kea**, a white **pa`u**. A flower may represent a woman, and a foreign flower a foreign woman. In this case a foreign dancer may be represented. (Akoni Mika)

<sup>91</sup> When the dancer `**ami wiliwili ka pa`u**, the **pa`u** swings up by the head and the privates are exposed. Everyone yells when it comes to that part. You have to be a good dancer to make the **pa`u** come up. (Kekahuna, n.d.)

Kuluwaimaka, n.d.; Kelsey trans

...When praying for inspiration in performing the **hula**, some say it is the goddess **Laka** that one should approach first. Others say that it is **Kapo-`ula-kina`u** that should receive the first prayer. The first of the following prayers is to **Laka**; the second calls to **Laka** as a friend of **Kapo** (as **Kina`u**) and includes a call to **Lono**; the third is to **Kapo**... (only the third chant is included, the others have no mention of **`Awa**)

**Noho ana Kapo i ka ulu wehiwehi**  
**Ku ana i Mo`o-helaia**  
**Ka `ohi`a ku iluna o Mauna Loa.**  
**Aloha mai Kaulana-a-`ula ia`u**  
**`Eia ka `ula leo la he uku**  
**He uku, he mohai, ha alana.**  
**He kanaenae na`u ia `oe `e Kapo-ku-lani**  
**E moe hauna iki `e hea au ia `oe.**  
**`Aia la na lehua o Ka`ana**  
**Ke kui `ia mai la `e na wahine a lawa.**  
**I lei no Kapo.**  
**O Kapo ali`i nui o ia moku,**  
**Ki`eki`e, ha`aha`a ka la o ka `ike `e `ike aku ai**  
**He `ike kumu, he `ike lono,**  
**He `ike pu `awa hiwa,<sup>92</sup>**  
**He `ike a ke akua e—**  
**E Kapo ho`i, e ho`i a noho i kou kuahu ho`oulu `ia**  
**`Eia ka wai la, he wai e ola,**  
**E ola nou e.**

Kapo is sitting in the beautiful grove  
Standing on Mo`o-helaia,  
The **`ohi`a** that stand up on Mauna Loa.  
Kaulana-a-`ula gives love to me.  
Here is the voice appeal, a payment  
A payment, a sacrifice, an offering.  
A chant of affection by me to you, o Kapo-ku-lani.  
Let me sleep as a little offering for me to call you.  
There are the **lehua** of Ka`ana  
Strung by the women bountifully  
As a wreath for Kapo.  
O Kapo, great cheifess of the island,  
High and low is the sun of the seeing to see.  
A sight of reason, a sight of information,  
A sight of black `awa,\*  
A sight from the deity.  
O Kapo, return and dwell in your altar that is given growth.  
Here is the water, a water of life,  
That there be life for you.  
Emerson NB, n.d.; Kelsey translation

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<sup>92</sup> I would translate **`ike** as knowledge. See Pukui and Elbert (1986) under **`ike** for Pukui's discussion of the saying "**he ike pu`awa hiwa**"



## O

:91-92 **Hula** notes. It is interesting to note that Mrs. Pukui (n.d.2) has said, "I have not heard of heiau dedicated to **Laka**, the patron deity of the **hula**, outside of Kaua'i. The two whose sites were pointed out to me by Keahi Luahine Sylvester were Ka-ulu-o-Lono at Wahiawā and Ke-ahu-a-Laka beyond Hā'ena. The plants used on the **kuahu**, or altar, the dregs of **`awa** used in daily offerings to **Laka**, the remains of ceremonial feasts connected with the **hula**, and the skirts and **lei** worn at graduation were deposited in these **heiau**. The remains of a ceremonial feast to **Laka** were never thrown carelessly around lest they become defiled by being walked over or eaten by animals. On the other islands these were cast into the sea or in deep streams."

According to Kuluwaimaka (n.d.), the stone body of **Laka** is in the middle of the **hula** altar. The stone is an **`alā** stone, that is, dense volcanic stone that has been water worn. It is about the size of a hen egg. When the greenery for dedicating the altar is brought down from the mountain it is piled on the chosen stone. As part of the decorating, an altar is built of four **lehua** branches. Placed equal distance apart in a square, they are tied together in teepee fashion. The branches are long enough that the place where they are tied is higher than the **kumu**'s head with flowers and leaves above the tie. After all the preparations are completed, the stone is placed in the center of the square base.

While Emerson (1965:23) said that a block of **lama** wood was placed on the **hula** altar as a symbol of **Laka**'s presence, Jennie Wilson (Kealiinohomoku 1964:163) said that "the **lama** tree had nothing to do with **Laka**, but that a branch of the tree was placed on the altar because of the good meaning of its name, which is 'light'."

The two also differed on the role of the bowl of **`awa** during the training period. Emerson said the bowl of **`awa** on the altar of the **halau hula** was changed daily. Mrs. Wilson said no, that the coconut shell of **`awa** and all the green plants remained the same from the beginning to the end of the training period and were part of the miracle of a successful **hula** school.

According to **kumu hula** John Ka'imikaua (1982), **Laka** taught at Kā'ana, Moloka'i, that a block of **lama** wood would be used as a resting place for her spirit. **Maile** was placed on the altar to symbolize the umbilical cord. "One end is attached to **Laka** and the other to this earth or to the person. So you have connection, you have open communication to whom you are praying. From that, Hawaiians used it in many other ceremonies, because of the connection." **Lehua** was used because the wood, the tree, is male and the flower is female. "So, because those two things are connected, you put them on the altar and it allows male and female to dance." "**Pili** grass was the next to last thing put on the altar. It was tied in two bundles... The tops on one end had to go this way and one end had to go the other way... **Pili** means to cling, so that whatever you are taught it shall cling to you and you shall not forget it." The last thing that was put on the altar was **iliali** or sandalwood, ground to powder and spread all over the altar. The scent was to inspire the dancer to move in such a way as to "inspire and capture the people." He also pointed out that each island has its own special plants and that wherever **Laka** went, whatever plant captured her fancy she took as her own and used that plant on that island. "So from time to time, that's why we have all these differences."

## P

:98 **Lua**: Hand-to-hand combat

## Q

:108-109 **Ka`aina**: The land. All the people, chiefs and commoners, share a concern for the land that is shown most often in the prayers of the farmer. At times others, such as those who live on the island of Hawai'i, have a special concern for the land. Those are the times that the goddess **Pele** becomes visible in a volcanic eruption. If the eruption is in one of the

numerous calderas it has something of the quality of a friendly visit. However, at other times **Pele** rampages, spreading lava over the land. The following is a prayer that seeks the cessation of her devouring. It is said before eating.

**Pele, Pele, `ai la`au la**  
**O kau ke ahi iki o `Ula`ula-ke-ahi**  
**Pu`u-lena ka makani, he `awa ko Puna,**  
**`I pili`ia `i ka hala, `o ka hala hea la?**  
**Ka hala a ke akua i ho`omau ai**  
**Ia `oukou ia makou.**  
**O peke ka `aina a na ho`ali`i**  
**`Ai Pele ka malu, ka ho`ali`i**  
**He lapa, he uila, e lala ka honua.**  
**`E ola makou i kou lau kaula la**  
**`Eli`eli holo iloko o ke kapu,**  
**`Eli`eli holo iloko o ka noa.**  
**Noa.**

**Pele, Pele**, eater of trees  
Yours is the small fire, **`Ula`ula-ke-ahi**<sup>93</sup>  
**Pu`u-lena** is the wind,\* the **`awa** is of Puna,  
That is joined by the **hala**, the **hala** of where?<sup>94</sup>  
The **hala** the god continued  
For you deities, for us worshipers,  
Lest small be the land of the **Pele** worshipers  
**Pele** devoured the peace, the **Pele** worshipers<sup>95</sup>  
Let the lightning flash, warm the earth.<sup>96</sup>  
That we may live, your prophets  
Profoundly into tabu runs the prayer,  
Profound is the lifting of the tabu.  
The tabu is lifted.

Emerson, n.d.; Kelsey Translation

This is the second of the prayers to **Pele** to cease her devouring. It is recited after eating...  
(chant not included because there is no mention of **`Awa**)  
At times devotees to **Pele** called her to return to the volcano for a visit. The following is one  
of the prayers used on such occasions. It was said in 1925 when residents of the island of  
Hawai`i sought the return of the goddess to Kilauea. Two translations are given.

**O Pele la ko`u akua.**  
**Mihi ka lani, miha ka honua**  
**E kapu, i kapu kai ka `awa**  
**Ka`awa`awa, ka `awa nui a Hi`iaka**  
**Ka `awa, ka `awa o ola**

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<sup>93</sup> **Ulaula-o-ke-ahi**, The-flaming-of-the-fire, is the nickname of the fire of **Pele**, not a nickname of **Pele**. (Kuluwaimaka, n.d.)

<sup>94</sup> **Pu`u-lena** is called the love-snatching wind. It is a plea for **Pele** to give her aloha. (Kuluwaimaka, n.d.)

<sup>95</sup> This is an appeal to **Pele** for forgiveness of any slight the reciter may have committed. (Kuluwaimaka, n.d.)

<sup>96</sup> In this case, **ho`ali`i** refers to the **Pele** worshipers. (Kuluwaimaka, n.d.)

I ku ai, ku i Maui-ola  
 E loa ka wai apu  
 E Pele-honua-mea, E la!  
 Eia ka palala, he pule  
 O ka la'e ka o Haumea  
 O ka wahine i Kilauea  
 O ka wahine nana i ai a hohonu ka lua  
 O kahi noho no na wahine mai Porapora mai  
 Wahine o ka lani  
 Wahine lole kahi ahi  
 Eia mai ka `awa  
 Eia mai ka mohai pua`a  
 Ka pua`a `olomea  
 O ke ola no hoi ia makou pulapula  
 `Amama ua noa, ua lele wale akula.

O **Pele**, thou goddess mine  
 Heaven and earth i darkness dwell;  
 A heavenly water, saline water;  
 Bring hither **Hii**'s flowing `awa bowl,  
 That I may drink and be satisfied;  
 O thou gallant Mauiola,  
 Pour forth sacred water to thine `awa;  
 O Earth's mighty **Pele**, O Sun!  
 Here's thy gift, a prayer to thee,  
 Thou art of Haumea's female line,  
 Beautious goddess **Kilauea**  
 Who dug a mighty firey pit  
 Abode for maids of the Summer Seas;  
 Lovely woman of heaven,  
 Thou maid in firey apparel aglow,  
 An `awa bowl to grace a queenly maid.  
 Here is the sacrificial pig:  
 A lengthwise striped pig;  
 Save me, thou **Pele** goddess mine,  
 Amen, `tis free, fare the well.  
 Kalaiwaa, n.d.

O Pele la ko`u akua.  
 Mihi ka lani, miha ka honua  
 E kapu, i kapu kai ka `awa  
 Ka`awa`awa, ka `awa nui a Hi`iaka  
 Ka `awa, ka `awa o ola  
 I ku ai, ku i Maui-ola  
 E loa ka wai apu  
 E Pele-honua-mea, E la!  
 Eia ka palala, he pule  
 O ka la'e ka o Haumea  
 O ka wahine i Kilauea  
 O ka wahine nana i ai a hohonu ka lua  
 O kahi noho no na wahine mai Porapora mai  
 Wahine o ka lani

**Wahine lolo kōhi ahi**  
**Eia mai ka `awa**  
**Eia mai ka mohai pua`a**  
**Ka pua`a `olomea**  
**O ke ola no hoi ia makou pulapula**  
**`Amama ua noa, ua lele wale akula.**

**Pele** is my deity.  
 Silent is the heaven, silent is the earth  
 Make tabu the **`awa** with a ceremonial sea bath  
 The bitter **`awa**, the great **`awa** of Hi`iaka  
 The **`awa**, the **`awa** of life  
 That stood, stood at Maui-ola  
 Make long the water in the coconut shell cup.  
**Pele-honua-mea**, arise!  
 Here is the gift, a prayer  
 The clearing up of the genealogical vine stem of Haumea.  
 O woman of Kilauea  
 The woman who ate the pit until deep,  
 Abode for the women from Porapora.  
 Woman of heaven,  
 Woman in fiery apparel,  
 Here is the **`awa**.  
 Here is the sacrificial pig  
 The striped pig.  
 Grant me life, and long life to our descendants  
**`Amama**. It is free of tabu. It has simply flown away.  
 Keola, 1925.

## **R**

:111-112 **No ka la a me ka `ike**: For the day and knowledge. The gods, as man's ancestors, share every aspect of his life. They share his greetings to the day, give him the wisdom to live it well, and when needed, the ability to see the happenings in the days to come. ...“Set aside the night, commence the day.” For all, the manner in which one begins the day determines the quality of the day. These prayers acknowledge the presence of the gods and using allegory, express hope for a good day.

**E ala ua ao, ua malamalama**  
**Ua hele kanaka aia iluna**  
**Ua kaio ka ho`oka ula**  
**Ka ho`oka lei**  
**Nau i hoa i kau pu`awa,**  
**Pu-awa uli, pu-awa kea**  
**Moa kane, moa wahine**  
**Mahiki na kao, lele i ka lani**  
**Owau ka lio-lilo e-e, he aka.**  
**O ke aka no ia mai Kahiki-ku a Kahiki-moe**  
**Mai Kahiki-kapakapa ua e Kane**  
**Eia mai ka pule ka wai-oha**  
**Kanaenae ia oe, e ke akua**  
**E ola no e-e.**

Awake, it is day, it is light

Men are abroad  
The red dawn has shown itself  
The bloom of morning  
You have consecrated the `awa root  
The dark `awa, the light `awa  
The cock and the hen.  
**Na kao**<sup>97</sup> have arisen, have climbed the heavens  
I am a ghost, a spirit,  
Now men are awakening from the eastern to the western pillars of heaven  
From Kahiki-kapakapa in the rain of **Kane**  
Here is a prayer to the water of purification  
Adoration to you, o god  
Give us life we pray.

Emerson, N.B., n.d.; Kelsey trans

S  
:118 Annotated bibliography

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<sup>97</sup> **Na Kao**. The darts are the belt and sword in the constellation of Orion. The darts are said to be those brought by Paa from Kahiki. (Beckley, n.d.)

## APPENDIX 7

Handy, E.S.C.H. and Pukui, M.K. 1972. *Polynesian Family System in Ka`ū, Hawaii*. Charles E. Tuttle Company, Rutland, Vermont, and Tokyo, Japan.

### A

p9 “The {Hale} **Mua** or men’s eating house was a sacred place from which women were excluded. It was the place where the men and older boys ate their meals and where the head of the family offered the daily offerings of `awa to the family `aumakua. Here men and the family gods ate together, and that was why women, who were periodically unclean, were not allowed to eat here. The daily offering was never omitted and if the family was unable to perform his duty, he appointed someone to do it. The prayers were for the welfare of the ruling chief and for the family itself.

When a serious problem arose, such as a new venture to be attempted or sickness in the family, the head of the family slept in the **Mua**, where the family gods would give him directions as to what to do.”

### B

pp. 36-37 “Sharks”

Within the memory of a living descendant this shark Pakaiea has been seen accepting first offering of fish from the fishing spear of an elder kinsman who told her this story of his brother’s rescue at sea. His canoe broken by a storm, the brother was near exhaustion on his long swim homeward, when a body rose beneath him and carried him to shore. It was the shark Pakaiea. The grateful man rewarded him with bananas and `awa and the two became lifelong friends, aiding each other in fishing and sharing food. At the man’s death, pakaiea continued in the guardianship over the younger brother who in old age pointed out the family benefactor to the child.

### C

p29 (Pele’s Clan)

“**Kuku`ena-i-ke-ahi-ho`omau-honua** (The-burning-hot-one-in-the-eternal-fire-in-the-earth), is a younger sister who always prepared **Pele’s** `awa. She was also the maker of lei or flower garlands.”

### D

pp80-82 “Sacramental feast for the first-born”

Mrs. Pukui whose lineage and heritage is from the priesthood of **Lono** gives the following account of the “Sacramental feast for the first-born.”

“The `**Aha`aina Mawaewae** feast was celebrated within 24 hours after the child was born, for the first-born (**hiapo**), for its safeguarding and welfare. **Mawaewae** can be translated “path clearing.” If this ceremony which dedicated the child to the `aumakua (ancestral guardians) were not performed, the first-born, privileged and generally pampered by elders as he or she was, would be likely to grow up headstrong and unruly. So the feast not only “cleared the way”: it set the child’s feet (**waewae**) in the way (**ma**) of the spiritual flow or channels (au) of his responsible elders (**mākua**).

Furthermore, this consecration feast was very important because it blessed not only the **hiapo**, but all the succession of younger children that would born to the mother, who partook sacramentally of the special foods peculiar to this ritual.

This rite was strictly a domestic affair within the household. It really should be termed a psychic therapeutic sacrament rather than a “feast.” It was an occasion of worship rather than pleasure and festivity. When it was certain that the young mother had conceived in her first pregnancy, the father began raising a pig for the **māwaewae**. In seven months or so this pig, which was well fed, would be a big hog.

As soon as the child was born, someone was sent to the beach to secure certain special sea foods. Especially important among these were **`ama`ama** (mullet) and/or **āholehole** (*Dules sandvicensis*). Both of these can be caught near shore or even in streams and brackish pools. Mullet were raised in taro patches. These two fish were spoken of as “sea pigs” (**pua`a kai**), and as such, like the pig itself were “bodies” (**kino**) of **Kamapua`a**, who is the hog-form of the **akua Lono**. In rituals in honor of **Lono** where a pig was required, either of these fish might be offered as a substitute if a pig was not available. For the **mawaewae** it was necessary to have a taro leaf, which was one of a number of “plant forms” of **Lono**. [Presumably from the taro variety known as **Ipu o Lono**, **Lono**’s gourd cup, or some other variety sacred to **Lono**.]

For the **māwaewae** it did not suffice to have one or other form of **Lono** mentioned above: There must be offered and eaten an animal (the hog), sea (fish) and plant “form” or **kino** of **Lono**, all three.

In addition to these there must be also several other special sea foods. These were important because their names imply potency in “clearing the way” for the child. There must be shrimp, one name for which is **mahiki**, a word meaning to peel off like removing fish scales [or the skin of shrimp]. There must be **kala** seaweed: **kala** means “to loosen,” “set free.” There must be an **`a`ama** crab: **`a`ama** means to loosen a hold or grip. These three foods helped to free the child from malicious influences, thus preventing bad behavior and ill luck due to mischievous psychic effects. Another sea food that must be eaten was a chiton of the species called **kuapa`a** (*Acanthochiton viridis*), a bilaterally symmetrical mollusk with a shell consisting of eight traverse plates, found under the surface of stones in shallow water to which it “holds fast,” **pa`a**. This was the only occasion on which this shellfish was eaten: **pa`a** means to fix, hold fast, hence the implication that the **kuapa`a** would be instrumental in securing firmly through the mother and others who ate of it the goodness induced in the hearts of all present and especially of the child.

There may have been a special implication in the offering of the **`ama`ama** or mullet, and the **`a`ama** crab, for the first-born, in the fact that the word **`ama** means a first-fruits offering.

The food was cooked, never eaten raw. A cup of **`awa** was also prepared and when the hog was ready to serve, the **kahuna** cut off a piece from each of the four feet, the end of the tail, the top of the snout, the tips of the ears, a piece of the liver, spleen and lungs and placed them on a dish for the mother. Symbolically, she consumed the whole hog. A bundle of taro tops and the sea food described above, set aside for her, must all be eaten by the mother.

The remainder of the pork and other foods prepared for the occasion were eaten by the **`ohana** (relatives) and intimate family friends, who were gathered in the home on this notable occasion of the birth of the **hiapo**, or first-born.

It is evident from the foods that were eaten sacramentally in the **mawaewae** that this, the first ritual consecration of the mother of the **hiapo** or first-born and all subsequent children sealed the relationship to **Lono**, who was **akua** of rain, agriculture and peace. **Kamapua`a** (“Hog-offspring”) was one of the myriad life-forms of “leaf-forms” (**kinolau**) of **Lono**. The **mawaewae** sacrament called for animal (the ears of the hog), vegetable (the hog-ear shaped taro leaf) and marine (**āholehole**, a fish whose “snout” [**nuku**] is shaped like a hog’s snout) “bodies” of **Lono**. Subsistence, livelihood, peace and plenty came first. Later, after he entered the **Mua** or Men’s house, would come the training and consecration of the male **hiapo** in the warriors craft, and his entry into the cult of **Kū**.”

## **E**

pp95-98 “Entering the men’s house”

“The **Mua** was the men’s eating house, and their sanctuary. At one end was an alter (**kuahu**) dedicated to the family **`aumakua** whose effigies stood there. Here the head of the household prayed and performed necessary rites sometimes without, sometimes with the aid of a **kahuna pule**, when it came time for the rites of the life cycle such as birth, cutting the foreskin, sickness and death. Here the family rites during the monthly days of **kapu** were performed<sup>98</sup>. The common daily worship would seem to have consisted in a bit of food (**hānai `ai**) at the time of eating.

When a boy was four or five years old, there was celebrated one of the most important sacraments of his whole life cycle, namely his initiation and dedication to **Lono** the Provider, which marked his transference out of eating and living “in common” (**noa**) with the women folk and entering the company of men.

We have explained in the description of the **mawaewae** that the hog was a body-form (**kinolau**) of **Lono** the Provider. The gourd was likewise a body-form of **Lono**. The “Sacrament of the Gourd” (**Pule ipu**) dedicated the boy to **Lono** the Provider.

The father of the boy baked a pig and placed the head on the **kuahu**. An ear of the pig was cut off and put in a gourd referred to as “**Lono’s Gourd**,” suspended from the neck of a carving (**ki`i**) representing **Lono**. **`Awa** roots, bananas, coconut were laid there also. “... Here are the hog, the coconut, the **`awa** god **Kū**, **Lono**, **Kāne**, **Kanaloa**, and ye ancestral guardians” (**`aumakua**). The **Pule Ipu**, as will be seen, dramatizes the gourd vine, whose vigorous growth and great fruit is a symbol of abundance: these words are calculated to produce vigorous growth in the boy, to make him big and strong, like the gourd.

His prayer finished, the father sucked the **`awa** root which was said to **Lono’s** drinking of it. He then brewed a bowl of **`awa** and drank it, eating with it the other foods on the altar. This concluded the ritual and he declared the occasion **noa**, free, saying:-

Installed is the child, the **`awa** smitten against the brain. Free is the **`awa**; there is freedom to come and go; and kapu is entirely lifted. One is free to travel to the ends of the earth.

To celebrate the event the father and men present then feasted on the pork and the vegetables of which, presumably, the new husbandman of **Lono** – the child – consumed something as a token or symbol of his participation. (he did not taste pork at this time, however, for the eating of pork required a special consecration.) the child’s entry into the **mua**, or men’s eating house and shrine was referred to as follows: **Ua ka i ka mua**: [he] is cast in the **mua**.

The **Pule Ipu** (Malo, pp 120-121)

**Ala mai e Lono, i kou haina awa, haina awa nui nou, e Lono**  
**He ula mai, e Kea, he pepeiao puaa, he pepeiao ilio, he pepeiao aina**  
**nui – nou, e Lono!**  
**Halapa i ke maui! Kukala ia hale-hau! Mau, malewa i ka po; molia ia**  
**hai ka po.**

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<sup>98</sup> In old Hawaiian worship, in each lunar month the days and nights of the first two nights (**pō**) of the new moon were consecrated to **Kū** (one meaning of whose name means “to rise”); the days just preceding full moon were sacred to **Lono**, god of plenty on land. The twenty-third and twenty-fourth were sacred to **Kanaloa**, lord of the ocean. The twenty-seventh and twenty-eighth nights were sacred to **Kāne**. The four deities mentioned were worshipped in their temples and at the family shrines during the periods sacred to them respectively and labor, fishing and planting were **kapu**.



O ku`u ka ipu, o ku`u hua i ka ipu; hua i kakala ka ipu kakala; he  
 kalana ipu.  
 O hua i na mo`o Hi`i! I au i`a ko ia  
 Ahia la anoano a ke ahi-kanu, a kanu la, i pua i Hawai`i?  
 A kanu la o ka ipu nei; a ulu; a lau; a pua; a hua la o ka ipu nei.  
 Hoonoho la o ka ipu nei. Kekela o ka ipu nei.  
 O uha`i o ka ipu nei. Kalai la o ka ipu nei.  
 O oki, o kua i o ka piha o ka ipu.  
 O ka ipu ka honua nei; o po`i o ka lani o Kuakini.  
 A hou i hakaokao; kakai i ke anuenue.  
 O uhao i ka lili; o uhao i ka hala; o uhao i ka la manolele i ona!  
 O ka ipu o ka lua mua-a-Iku, o ka ipu a makani koha, a kau ka hoku  
 a`ia`i  
 Owahi! O kani mai, a hea o ka uka manu!  
 Ka lalau a ha`a ka manu; kalalau kulua i Wawau.  
 He malino a po, e Lono, i ka haunaele;  
 Na lili la i ka haunaele, na hala la i ka haunaele o mau kahuna o ke  
 makala ulua  
 Ulua mai, o Lono, ulua kolea ino o ma`a-ku-newa awa lilelile!  
 O makia, Lono, a hano, a hano wale no!  
 Kila i nei; muli o hala, muli ke kani o Waioha!

Translation by Pukui

Arise, O **Lono**, accept the offerings of `awa to you – an important offering, O  
**Lono**.  
 Grant abundance, O **Kea**. May there be an abundance of hog's and dog's ears – an  
 abundance for you to eat, O **Lono**.  
 Accept this plea in the place of life! Proclaim it to the sacred shrines! [May the good]  
 be lasting! Let it pass into the night – an offering acceptable to the gods!  
 Let down the gourd – the fruit of the gourd that it may bear from every branch – thus  
 becoming a field of gourds.  
 Let it bear to the lineage of **Hi`i**<sup>99</sup> - gourds as bitter as the gall of fish.  
 How many seeds have been planted o the field cleared by fire to flourish in Hawai`i?  
 Planted is the gourd; it grows; it leafs; it blossoms; it bears fruit.  
 Let it be set so as to be well shaped – may this be an excellent container.  
 Pluck it off the vine; carve it out;  
 Cut it and empty it of its contents.  
 The great world is a gourd, its lid in the heaven of **Kuakini**<sup>100</sup>  
 Pierce the edges [of the container]; use a rainbow for a handle.  
 Take out of it all jealousies; all wrong doings; the wild tendencies.  
 [Which resembles] the gourd in the cavern of Mu-a-Iku – the container of gusty  
 winds. Let it shine bright as a star.  
 Break forth with a resounding noise, let the bird of the mountain utter its call;  
 Grasp it as it crouches low; hold it high over Wawau.  
 The night has been peaceful, O **Lono**, from all disturbances,  
 The jealousies that lead to bickering; the bickering of the priests who use the hook for  
 the ulua fish.

<sup>99</sup> **Hi`i** – a shortened form of Hi`iaka.

<sup>100</sup> **Kuakini** – **kua** (back) and **kini** (multitude). Refers to the multitude of gods. ”

Take possession, O **Lono** – drive away the bad plovers of Ma`a-ku-newa, with their shiny bodies.  
Concentrate, O **Lono**, on goodness – only goodness!  
Bind it here; put the faults away in the background, back of the babbling waters of Waioha.

## **F**

pp. 112-115 “A New Home”

“When we speak of a new home we mean a new hale noa, which was the central living unit, built with care, for comfort in all seasons.

The building of the terrace faced with stone (**paepae**), cutting and erecting of timbers for the frame, and thatching were done by the men of the immediate family. There existed in Hawai`i no professional carpenters, or guilds, like those of the wood workers in the southern islands.

Relatives might be counted on to furnish the new home for the young people. They came from far and wide, bringing them gifts: mats, tapas, calabashes. In anticipation of the event, the head of the household had raised or aquired hogs, dogs, chickens. Relatives went out for fish, and brought taro, sweet potato and greens. A ground oven was filled with foods for the men; and another for the women, omitting the pork and dog.

Before the ovens were opened, the **piko** (umbilicus) of the house must be cut by trimming the thatch hanging over the doorway with an appropriate prayer, and offerings to the **akua** and **`aumakua**.

A red kumu or red weke, and a white `ama`ama or āholehole fish were placed under the threshold.

The householder then chopped back the rough thatch over the arched lintel with his adze, cutting down against a block of wood held beneath the thatch, making a smooth, recessed arch.

For this operation, here is a prayer that he recited as he did the cutting.

### **Pule Ho`ola`a Hale** (House Dedication Prayer)

**E `oki i ka piko o ka hale  
He hale Kū i ka `ele-ua, i ka `ele ao  
He hale noho ho`i no ke kanaka.  
E Lono e, eia ka hale la,  
Ua Kū i Maui-ola.  
E ola i ka noho hale,  
E ola i ke kanaka kipa hale,  
E ola i ke kanaka kipa mai  
E ola i ka haku-`aina  
E ola i na `li`i  
Oia ke ola o kauhale e Maui-ola,  
Ola a kolo-pupu, a haumaka `iole  
A papa lauhala, a ka i koko  
A kau i ka puaneane.  
Oia ke ola au e ke akua – [Amama ua noa].**

**E Kū, e Kāne, e Lono  
Ku`ua mai i ke ola,  
I na pomaika`i,  
A ea ka lani, ka honua  
Ea ia Kāne-i-ka-wai-ola**

**E ola mai kahi pae a kahi pae**  
**E ola mai luna a lalo,**  
**Mai kaupoku a ke kahua-**  
**E ola- a ola loa no.**

Cut the umbilical cord of the house  
A house that resists the rains and stormy elements.  
A house for man to dwell in.  
O Lono, behold the house,  
A house in the presence of the giver of life  
Grant life to those who dwell therein,  
Grant life to the visitors that come,  
Grant life to the landlord.  
Grant life to the chiefs,  
Let that be the life from the life-giver,  
Life until one creeps and is weak-eyed with age  
Until one sprawls like a withered hala leaf,  
Until one reaches the very extremity of life.  
Let this be the life granted to us by the gods.

**O Kū, O Kāne, O Lono,**  
Let down the gift of life,  
And all the blessings with it.  
Till the heavens and earth be heaped,  
Let them be raised up by **Kāne** of the living waters.  
May there be life from one boundary to the other  
From above to below  
From roof to foundation.  
May there be life- everlasting life.

When the new doorway stood clear and trim, with its fresh lintels showing and threshold in place, the mats and other interior furnishings were carried in and put in place. Then their new abode was beautified with fresh greenery and flowers of whatever kinds were available: in particular sweet-scented fern, maile vine, **`ilima**, pandanus seed lei, blossoms of lehua and the shiny foliage of **`ie`ie** from the uplands. These were an essential part of every ritual, bringing the life of the **wao akua** (hinterland of the gods) into the home, making it delightful for gods and guardian spirits, as for the people there. The people were all wearing leis of flowers, or maile vine interwoven with fragrant fern.

Banana and **`awa** were laid on the **paepae**. Then the ovens were opened and the food spread out on the paepae and in nearby sheds, and all set to with a will to enjoy the feast. Nothing must be left uneaten: every particle of food must be wrapped and taken away with them by the visiting kin and kith.

The householders in the new home immediately made full return for the courtesies received, by giving to the departing relatives and friends all that had been brought to it as gifts by those coming to the feast, everything except what was essential for furnishing and a few prized items that might be kept without offense. So the feast was a sharing of dedicated foods: and the giving and taking of presents was actually a general exchange in which the prestige and pleasure of giving and receiving was enjoyed by all concerned. It was a gay time, one to be remembered with **aloha**.

Family gatherings like this one often lasted several days. Even then every departing guest must be given a bundle of food to take home. This was called the **ho`ina** (return). A feast without a **ho`ina** was a poor one indeed.

While the merry makers were eating there was much banter, joking, relating of anecdotes, matching wits. No unpleasant or malicious talk was wanted, for the **poi** bowls were visible evidence of the presence of **Kāne** as **Hāloa**, the taro; and other **akua** and **`aumakua** in nature were right there in the greenery all about. The feasting and jollification roused some to rise here and there to dance a **hula**, as someone chanted a **mele**. The old people would be moved to chant **mele** and **oli** belonging to the family or the land, or relating to some event, or perhaps honoring a beloved **ali`i**. At family festivities in the old days the 'entertainment' was spontaneous, not rehearsed, except for formal festivities of **ali`i**, or during the **Makahiki** harvest festival in honor of **Lono**."

## **G**

pp. 132-134 "Spirits Speaking through Mediums"

"The **haka** [medium] was chosen by the spirit, or spirits, to serve as the 'speaking mouth.' The spirits, be it **`uhane**, **`aumakua**, or **akua**, was, in family séances, always one who to whose lineage the **haka** belonged: that is to say, the spirit was a relative. It is said that in the old days there was no lineage, or **`ohana**, which did not have someone who served as a channel of communication. We know of no Hawaiian today that is a true **haka**. We are, however, fortunate in having very full notes describing this phase of Hawaiian psychism from an old lady of Ka`u derivation who had served as **haka** for her **`ohana** for many years before she died.

Some **akua** imposed strict **kapu** of one sort or another, others did not. The **kapu** would forbid the eating of particular foods. The **haka** referred to above ate only vegetable foods, an even vegetables like the varieties of taro and banana whose sap was red, suggestive of blood, were forbidden. The **kinolau** of the **akua** were of course **kapu**. The person who helped the **haka** (**kanaka lawelawe**) was subject to the same rules. These were positive also in the matter of colors, suitable offerings, etc. White is **Pele**'s color, pink is **Hi`iaka**'s, red is **Kapo**'s. And it was necessary for the **haka** to avoid behavior that would be offensive to an **akua**; cursing, malicious talk, adultery, stealing. The **haka** would find herself deserted if the **akua** was angered.

The spirit would refer to the **haka** as **iwi** (bone) - i.e. a solid or substantial thing (**he mea pa`a**) upon which to sit or into which to enter. Where the **haka** lived and slept was **kapu**. No menstruating person might come there. A woman could become a **haka** only after menopause. There must be no filth, no treading about. The **haka**'s clothing was sacred, and must be kept clean and free from contact with pollution.

A helper (**kanaka lawelawe**) was charged with the duty of setting the mat on which the **haka** sat, preparing the cup of **`awa**, knowing the proper clothing for robbing the **haka** when the **akua** was to come. This attendant was also the one who prayed (**kanaka pule**), inviting the spirit, and the one who transmitted the message or carried out the commands. These weighed duties must be performed by a man, a pre-adolescent girl, or a woman past menopause.

In more recent times the place for the work (**papa hana**) would be a table and a spread of trade cloth, and glass tumblers for liquor. The tumblers, after the séance, were thrown into the sea or buried, and the cloth and mats were folded or rolled and put away in a high, clean place. But the true old Hawaiian way was a **kapa** mat, especially plaited. There was always the **`awa** bowl (**kānoa `awa**). On the mat was laid the mantle of bark cloth (**uhi kapa**), its color depending on the **akua**'s preference. In the middle of the **kapa** were laid **lā`i** (ti leaf) - one, two crossed at right angles, or three, perhaps, with points to center and stems out; or four braided flat like a mat. On this was set a bowl of **`awa**. Then all was sprinkled with salt water with **`ōlena** (tumeric) in it, for purification.

When the **akua** would come upon the **haka** he (or she) would fall into a deep sleep, like a person under ether. He knew nothing, heard nothing. Just before falling into this state a **haka** was conscious of some kind of weigh upon the shoulders before being entirely

‘covered’ (unconscious). Some **haka** have a sort of quivering at the time of covering. But while the **uhane** was in possession, there was a change of facial expression. If the **akua** were one youthful in body, then the **haka** looked youthful, even though the **haka** be old. If the **haka** were young and the **akua** coming had the body of an old woman or of an old man, the **haka** would exhibit the feebleness and shakiness of the aged spirit.”

## **H**

pp. 137-139 “Beneficial Mediumship”

“When **uhane ali`i** (as distinct from **uhane`ino**) were coming to dwell upon a **haka** it was customary for them to give the household a visible sign of their coming, and these signs made it plain which **akua** it would be.

.... If it is **Pele** coming, she also had a **kapu** back, and it is so hot that it is impossible to go back and forth behind the **haka** – thus making it perfectly clear that the **akua noho** is the **Ali`i Wahine of Kilauea**. If an **akua noho** claims to be **Pele** and the back of the **haka** is not hot, the those in the house may question indeed. From times way back this hotness of the back has been the sign. **Pele** likes **lu`au** (young taro greens) when she comes but not **lu`au** already cooked. Wrap the green **lu`au** in **la`i** (ti leaf). When the **akua wahine** sits on the **haka**, the body of the **haka** lies face down, and the package of **lu`au** is placed upon the back of the **haka** until the heat of her back has cooked it. When it is cooked, she (the **haka**) eats it all.

When it is **Kū** who comes, he makes his own **awa** grow before the eyes of the people who are looking on; and when grown he gives it to the **kanaka pule** to prepare and put in the **apu** (cup of **awa**). So it was with bananas that serve as **pupu** (food savory) to be eaten after the **awa** is drunk, the stalk grows right up before the eyes of the people looking on, and bears and is eaten right away: but it did not have much flavor in comparison with those that grew outdoors in the sunshine and rain.”

## **I**

pp. 139-142 “Prayer”

[“The following chant is really an invocation, although it is termed a mele rather than a pule.”] “... the following chant, which was used in the family of Mrs. Pukui for many years, by her grandmother with whom she spent her childhood, and by her grandmother with whom she spent her childhood, and by the priest of **Lono**, Kānekuhia, who was her grandmother’s foster-father.

**Noho ana Laka i ka ulu wehiwehi**  
**Ka ohī`a Kū i luna o Maunaloa**  
**E`aloha mai ia`u e Kaulana`ula,**  
**Eia la ka`ula leo.**  
**He kanaenae`aloha na`u ia`oe,**  
**E kaulana`ula,**  
**Ho`i mai kaua.**  
**Eia ka`ai la,`awa lau,**  
**He pu`awa hiwa, he ko kea,**  
**He ihilena, he aheahea,**  
**E hea ana`au ia`oe e`ai kaua**  
**Elieli kapu, elieli noa,**  
**Noa ke Kū, noa ka hele,**  
**Noa kanawai o ke akua.**

**Laka** dwells in a beautiful grove,  
As an ohī`a tree that stands on Maunaloa,

**Have compassion for me, O Kāne-i-kaulana-ula,**  
 Here is an offering, just the voice,  
 A prayer of love from me the thee, O **Kaulanaula,**  
 Come home to me.  
 Here is the food, the leafed **`awa,**  
 Some **iholena** bananas, some **aheahea,**  
 I am calling to you to partake of the food with me,  
 The **kapu** of the prayer was profound, the **kapu** is freed.  
 Freed that I may stand, freed that I may walk,  
 Freed is the law of the gods.

On occasions of crisis or festivity, when the presence of **akua** or **`aumakua** was desired because their help was needed, or required for reasons of ceremonial and ritual, the following was the **pule kāhea** (calling prayer) that was used by her relatives

**Eia ka `ai e ke akua,**  
**He `ai lani wale no.**  
**`Inu a ke kama iki**  
**I ka `awa lau lena o ke-ahi-a-laka**  
**Halawai akula me Pele,**  
**Ke `ako la i ka lehua,**  
**Ke kui la i kai o Hopoe e,**  
**He `awa no na Kāne o ka lani,**  
**He `awa no na wahine o ka lani,**  
**He `awa no na Kāne o ka Lua,**  
**He `awa no na wahine o ka Lua,**  
**Pela aku, pela mai.**  
**E mu ka waha,**  
**E holoi i ka lima,**  
**`Eli`eli kapu, `eli`eli noa,**  
**Noa ke Kū, noa ka hele,**  
**Noa kanawai o ke akua.**

Here is food, oh gods,  
 Only a morsel of heavenly food,  
 A gift from me, thy little child,  
 Of the yellow-skinned **`awa** of **Ke-ahi-a-laka.**  
 (My prayer) has gone to meet **Pele,**  
 Who is gathering lehua blossoms,  
 Who is stringing them into wreaths by the sea of Hopoe,  
 Here is **`awa** for the men of heaven,  
 Here is **`awa** for the women of heaven,  
 Here is **`awa** for the men of the Pit,  
 Here is **`awa** for women of the Pit,  
 Hither and yon,  
**Come rinse out your moths and wash your hands,**  
**This (rite) is sacred and profound, let the kapu be released,**  
 Freed that we may stand, that we may walk about,  
 Freed by the decree of the gods.

The effectiveness or **mana** of a **pule** lay partly in the words and names used. The words of a prayer, like those of a mele or dance-chant, had to be good words in their connotations, and not words whose composition or sounds might be offensive to **akua** or

**`aumakua**. And the proper names, be they personal or place names, must also be good in their connotations and pleasing to the beings listening to the prayer. The gods and guardians were relatives, more sacred and powerful than any living person. If a member of an **ali`i** family were chanting or dancing for the beloved (and, because of his **mana**, revered with awe) senior **ali`i**, the words and steps and gestures must be good and pleasing. Furthermore, the recital must be good and pleasing. Furthermore, the recital must be correct and unfaltering. A slip (**hala**, fault, error) of the tongue would naturally be displeasing to the **akua** or **`aumakua** listening to a **pule**, for it was disrespectful, and inaccurate. It would anger the god or guardian, as a forgetful or careless chanter or dancer would anger an **ali`i**, or faulty workmanship would be contemptuously discarded by a master canoe builder (**kahuna kālai wa`a**). Hence it was that the composition and reciting of prayers was a form of craftsmanship, exactly as was canoe or image adzing.

Equally important is praying is the breath (**ha**). The **mana** of the prayer was in the words and names, but it was the breath that carried the words and names.”

## **J**

pp. 150-151 “Controlled Spirits”

“... The conversion of a beloved departed soul into a controlled, mana endowed spirit (**`unihipili**) [is] by means of gifts which attracted and held the **`uhane**; and of causing it to have power (**ho`omana**) by a routine of prayer (**pule**). ... in olden times the primary offering was **`awa**, which was the gift most desired by **akua** and **`aumakua**; and which was the narcotic used by mediums as an aid to inducing the desired state of trance when the god or guardian spirit was summoned by prayer to ‘sit upon’ the **haka**. There was this difference, too: that in the old days the **ho`omana** was more effective because the **kapu** of the various **akua** and **`aumakua** were fully understood and rigorously respected, and the prayers were recited by an expert pray-er (**kahuna pule**), whose lifelong training in praying, and whose close relationship to his **akua** and **`aumakua**, gave him mana of a sort and to a degree, under the Hawaiian system of worship, that ceased to exist in later days when the old **kapu** and **pule** were only partially remembered and understood.

There were several ways of creating **`unihipili**. One was by keeping a portion of the body in the home and calling upon the departed morning and evening to come and partake of **`awa**. This method was called **kahukahu**.

The **kaku`ai** method was more elaborate. After the death of a person, his body was prepared with the proper sacrifices and taken to the dwelling place of his **akua** or **`aumakua**. Those who claimed **Pele** as their **akua** and wished to take their dead to her, took the bones of the deceased, wrapped in red and black **kapa**, to the priests of **Pele**. At the pit the **kahuna** chanted a long prayer, threw in prepared **`awa** and a cooked pig, and then last of all the bundle of **kapa** containing the bones. If the deceased was accepted by **Pele**, the bundle made a circuit of the pit without being burned and then burst into flames and vanished. A flame appeared on the surface later which was taken to be the spirit of the person just accepted by **Pele**.”

...{Pukui describes various other methods, none of which involve **`awa**}

## **K**

p. 153 “... The **`uhane** was then believed ‘to live with **Pele** for all time.’ If the dead was not accepted by **Pele**, that is if she would not recognize the kinship, the bundle was thrown back to the feet of the priest. It was then carried back to the cave.”

## **L**

pp. 136 “Spirit Sending”

“Another kind of **noho** (possession) is the **ho`oaunauna** (sending), coming from the ‘filth-eating **kahuna**’ (**kahuna `ai kukae**). The **`uhane** is sent by its keeper (**kahu**) to

enter the body of someone who is to be the victim of malicious torture. This kind of **`uhane** will hide itself, refusing to reveal its identity. If asked, "What do you want?", it will not reply. It will not reveal itself until seen by one with knowledge of such things; and until given something to eat and given to drink ( **`awa** or liquor – brandy or whiskey) and asked to have compassion and reveal what it is up to. Thus it can be induced to reveal its name, the name of its keeper or keepers, and the reason for its coming. When this revelation is made, the person troubled can be cured. But if the mischievous spirit stubbornly hides everything there is no hope except with the aid of a kahuna possessing real skill in 'peeling off' (**mahiki**). Sometimes these troublesome **`uhane** sit (upon a victim) in a swarm, and as one is 'peeled off' another sits in its place, and when that is 'peeled off,' still another sits. One who has a matured forehead (**lae o`o**) can peel them all off at once."

## **M**

p. 223 "Their Subsistence Economy"

".... On the **kula** slopes, or hillsides and mountainsides above the plains, and in the lower forests, upland taro and yam, arrowroot, tumeric, bamboo, **olona**, and **`awa** were planted in arable clearings."



## APPENDIX 8

Kamakau, S.M. 1976. *Ka Hana a Ka Poe Kahiko*. B.P. Bishop Museum Press, Honolulu. Translated from the newspaper *Ke Au Okoa*.

### A

:41-44 11/25/1869 The Cultivation of `Awa. `Awa was one of the choice foods of the planter. `Awa is a handsome plant, with nicely rounded leaves and stems and shiny joined sections like the short rounded sections of the red **papa`a** sugar cane. The low growing **papa`ele`ele** and **papa kea** varieties of `Awa grow to be very handsome and decorative; the stems of the **howa** and the **mō`i** varieties grow straight up with sections of those of the **honua`ula** sugar cane; **mākea** has dark green stems like the bamboo, and the **mokihana** stems grow thickly, like a clump of bamboo growing in a sunny place. These are some kinds of `Awa.

`Awa grows will on lands with plenty of rain, and on warm lands. It grows in gravelly soil where there is plenty of water seepage and in wooded places where the **kūkaepua`a** grass and the **ama`u** ferns grow. From of old there are places made famous by the intoxicating quality of their `Awa, such as Ko`uko`u on Kaua`i, Hena on O`ahu, Lanakila on Maui, and Puna on Hawai`i. In places where **wauke** and dry taro are planted, `Awa may also be planted. These plantings, together with those of bananas and sugar canes, were the pride of the farmer. In the old days, there were some `Awa fields, but most of the `Awa was planted on the borders of taro or **wauke** fields.

To plant `Awa, the planter first went to fetch stems and broke off a quantity of them. He carried them on his shoulder to a suitable place, where he broke them into sections, being careful not to break off the nodes on the joints, and laid them in a trench in a compost of muck and trash. He cut a lot of greenery (**pulu**) for mulch, and left these grasses until they had dried, then mixed them with soil. Then he fetched the stems that had been laid in the trench. Some of them had sprouted 'ears' (**pepeiao**; stipules), some had sprouted leaves, and some, fine roots. The farmer took them and planted them in the mulch, along with some plants that had been ground-layered before. When the root portion, the **pū`awa**, of the plant was big, the farmer layered the stems. By the time the **pū`awa** got very big, the layerings had put out new **pū`awa**, and when the first **pū`awa** matured, the layerings also matured. If the farmer wanted to keep the main **pū`awa**, then he pulled up only the layered plants. That is how `Awa is cultivated. It takes from two to three years for `Awa to mature, and it will keep on growing for many years and be a bequest to one's descendants.

`Awa was good for a farmer when he was weary and sore after laboring day and night, and for the fisherman who had been diving, paddling, pulling and stooping with his head down, until his thighs and buttock were chafed from rubbing the edge of a canoe. He went ashore, and in the evening the `Awa was prepared for the fisherman.

The `Awa was chewed and the **kānoa** bowl filled. Then the heads of the **kāhala**, **uku**, **mokule`ia** and **ulua** fishes, and the **kūmū** and `ōpule **lāuli** fishes which had been wrapped in **tī** leaves and cooked were taken out of the **imu** and laid on the eating mat. A bunch of dead-ripe bananas, sections of sugar cane just on the point of souring, sweet potatoes ridged in shape and deep red in color, were all ready at the eating place. Then the `Awa was strained through fibers. Water was added, and the `Awa stirred (**kuakuai**); the dregs gathered up in the straining fibers (**mau`u`uwi**) and squeezed until there were no dregs left, then the drinking cup. **apu**, was made ready and the `Awa poured in. When the cup was filled, a prayer was offered up with gladness – for the afflictions and the blessings received from the gods, and for their help to their offspring in this world and in the bright world beyond. The after-drink of noni juice and water (**aumiki**) at hand, the fisherman gulped down the `Awa and then reached for the gourd (**hewai aumiki**) and rinsed out his

mouth; spat out the mouthful of **noni** water taken to remove the bitter taste, grasped a section of sugar cane to eat to cool his throat, and then for a banana and a mouthful of sweet potato. Then he reached for the eyeball of the **uku** and the **mokule`ia** – so full of fat – and the cooked **kūmū** and **`ōpule lāuli**, and then for a piece of **imu**-cooked pork. By that time he felt a sharp ringing in his ears. He was given some water and he washed his hands. He could not eat another mouthful for nausea, he was felled because of the intoxication of **`Awa** (**ua `oki maila ka `ona o ka `Awa**).

The house in which the **`Awa** drinking took place was like a chief's house - there was no gaiety, no talking, no jollity, for these things would bring on vomiting. Burning **kukui** nuts were the only thing wanted; one or two of them would give warmth. There would be a whistling in the ear, like that of the **kāhuli** and the **pūpū-kani-oe** land shells, and, with sounds like musical instruments playing sweetly or strong winds roaring, the drinker would slip into peace and contentment.

Thus did the fisherman do, and as he slept until morning his aches and pains would ease. Then he would reach for his paddle, and the fishing gear and go off to fish. Or, if he were a planter, then he would grasp his **`ō`ō** and go off to his cultivating.

**Ka po`e kahiko** liked **`Awa** as a means of reducing weight. When a man saw himself growing too fat, or perhaps constantly being sick, then the **`Awa** was the thing to restore health or to slim the body. The way to do it was to drink **`Awa** like the **`aumakua** or the **kaula** prophets, that is, copiously, until the skin scaled.

Such a man looked for a place where grew very potent **`Awa**, **`Awa `ona**, and obtained a large quantity. When the drinking of the **`Awa** began, all foods - **`ai** and **i`a** – were prohibited until after the **`Awa** treatment had been taken; only then could he eat. It was also tabu to go out in the sun and rain, for the feet would crack if wet in water or mud. The first 'dose' (**apu `Awa mua**) was one cup of **`Awa**, which caused intoxication for two days; a second cup added to the first, had the same effect. This **`Awa `ona** was drunk in the evening and the next day, if the person were to drink water, or bathe, or eat, he would become very intoxicated. In two or three days his head would grow heavy and his eyes would pucker up. With the third cup, the effects of the **`Awa** would go down to his chest, and when the cups were continued, the effects would spread downward (**iho makawalu**), and he would feel sensations of solidity (**papa`aku**), of lightness (**puahilohilo**), and of rolling (**ka`a**). After this a medicinal **`Awa** was taken, which was like a fine meshed net (**naepuni**). This **`Awa** was drunk with a good purgative and acted like a two-fingered mesh net going gently down through the body. After three, four, or five cups, the body was spare. Then a pig was sought for an offering at the breaking of the **kānoa** bowl [dedicated to this treatment]; a feast was made and the **kānoa** broken. When the drinking of the **`Awa** ended, sea water was drunk. When the effects of the **`Awa** were gone, the body was slender, the illness gone, and the body restored to health.

**`Awa** is indigenous to Hawai`i, and from Hawai`i it spread to all the lands in the ocean. At the time when the earth and the Hawaiian archipelago were established, **`Awa** was not obtainable. It was held tabu by the gods. At the time when gods mingled with men and they talked to each other, the gods fetched this food down from Hoanianiku, a realm of the gods, and gave it to man to plant and drink.

**`Awa** was a refuge and an absolution. Over the **`Awa** cup were handed down the tabus and the laws of the chiefs, the tabus of the gods, and the laws of the gods governing solemn vows and here the wrongdoer received absolution of his wrongdoing. That was the way, and the priestly practice, of **ka po`e kahiko**. With **`Awa** they soothed and appeased the burning wrath of the gods. This was how it was recognized that the gods heeded the repentance of the people: they granted blessings to the race, they increased the 'food' and 'fish' and mankind; and they warded off misfortunes that might come, such as diseases, epidemics, contagious diseases, and sudden disasters."

## **B** FISHING

:61-62 (12/16/1869) Bag Nets. ... When the net was finished, **kukui** bark for dyeing was prepared, and the net immersed until it was brownish-red and then hung up to dry. This ended the work of making the net.

On the day before going fishing a feast for the new net was prepared, consisting of pig, dog, fowl, bananas, sugar cane, **mokopi`i** taro, sweet potatoes, and `Awa. The pig and the other things suitable for baking were cooked in an **imu**, the `Awa was chewed, and the feast laid. Then a prayer was uttered to the gods, in which were named those `aumakua of fishing who were related to this fisherman descendant of theirs. The main `aumakua of fishermen were **Kū`ula**, a great fisherman of ancient times; **Hinahele**, to whom the `ōhua fish in the sea were said to belong; **Kānemākua**, one of the forms (**kino**) of **Kāne** in the sphere of fishing who 'possessed' (**noo maluna**) a man by the name of **Kānemākua** in ancient times; 'the coconut shell of **Kapukapu**, 'ka pūniu o **Kapukapu**<sup>101</sup>; and, for some fishermen, **Kinilau**, and for others, **Kāneko`a**. There were a great many fishing `aumakua, each related to his descendants, and each raised above [all others] by his own descendants.

When the feast was over the fisherman lay down to sleep under tabu (**moe kapu**) and while dozing he would be shown the fortune he was to have the next day. He would rise up with eager anticipation, and the men would hear the indistinct voice of the fishermen undoing evil influences (**kala ana**) and bringing blessings for the next day. The net would need to surround the fish but once – whether it be a **lau lele**, **`aumaiewa**, **lau `apo**, or a **papa lau wahanui** net – and the canoes would be filled with fish. One or two canoes – or even ten to twenty – would not be enough for the haul. There would be so many fish that they would set up a stench, and would have to be fed to the pigs and the dogs; there would be too many to cut open, salt, and dry. Some would even be used as 'firewood' (**wahie**) to cook others. Such was the fishing of **ka po`e kahiko**; they were experts. There are no fishermen like that today – now their net fishing is just indiscriminate fishing (**kahi `upena laukua**).

## **C**

:66 (12/16/1869) **Kākā uhu** fishing. In reference to the feast in the **Hale Mua** after catching many **uhu**. Then came the fisherman's feast of sour **poi**, together with the 'closing mouthfuls' (**māna pani**) of sweet potato taken after the `Awa and slices of **uhu** mashed with fat liver of **uhu** and mixed with the salty juices of the **līpa`akai** seaweed; steamed **uhu**, its gravy glistening with the fat of its liver; **uhu** baked in the **imu** with pieces of liver inserted in it; and cups of `Awa besides. All ate heartily of the large pieces of steamed and baked **uhu** – ate until they were satiated.

## **D**

:73-74 (12/30/1869) Following **aku** fishing expeditions. In the old days four hundred (**he lau**) **aku** might be caught with the bait from one **malau**. When the double canoes, **kaulua**, or coupled canoes, **`auwa`a ho`apipi**, or large outrigger canoes, **kaukahi nui**, came in, there would be trading, peddling, and paying for **poi**, for pounded taro, sweet potatoes, bananas, sugar cane, breadfruit, and other kinds of foods; for `Awa, tapa, **pā`ū**, **malo**, and mats – for all the things the fishermen needed.

When the **aku** fishing canoes and **malau** canoes came ashore, the women would separate the tabu fish for the men's eating house from those for the free eating, **`ainoa**, of the household. First the head fisherman went ashore with fish in his right and left hands and went into the

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<sup>101</sup> The coconut shell of Kapukapu is a poetic epithet for the goddess Hina who, as Hina-ke-ka, took the form of a canoe bailer made of coconut shell. Compare with Beckwith (1951:123,127)

**Kū`ula heiau** to pay homage to the gods. He cast down the first fish for the male **`aumakua** and for the female **`aumakua**, and then returned to give fish to the canoe men, to those who had done the chumming, and to those who had done the actual fishing. A portion went to the owner of the canoe and of the fine-meshed nets, **nae puni**, that had been used to catch the bait and to those who had driven the bait fish into the nets. The rest was for the head fisherman or for the landholder, if it had been the land holder's fishing expedition. All these fish were carried to the houses; the tabu fish filled the men's houses, and the 'free' fish (**i`a noa**) filled the common houses (**nā hale noa**). The fisherman bathed himself, donned a dry **malo** and put on his shoulder covering. Others would light the oven to heat the stones for steaming the fish, bring the fish that had been cleaned by the fisherman's wife, steam the fish, and mash **`Awa**. When the food in the men's house was ready, the fisherman enjoyed its eating. The prayer was over, he drank the **`Awa** and filled up on fish and 'closing mouthfuls' (**māna pani**) [the foods taken after the **`Awa**], and the relaxing effects of the **`Awa** relieved his weariness from the sea spray. Meanwhile all the households set to work to cut open and salt the fish, which they would then rinse off and put out to dry in the morning.

## **E**

:80 (1/6/1870) Excerpt from Puna`aiko`e story. The land of Makaleha [O`ahu] produced much food – **kihi**, **lapa**, and **momona** sweet potatoes, **poi**, **`Awa**, and bananas; and the woman broiled the fishes of that land caught by torch fishing – the **kūmū**, **uhu**, **ula**, and others.

## **F**

:107-108 (1/20 – 1/27/1870) Entering the new house. Then the inside of the house was spread with mats; forest greens were arranged – **maile** and **`ie`ie** vines; **palapalai** fern; **`awapuhi** ginger; dark green leaves of the forest; hanging **lei**, **lei ho`olu`elu`e**, of **hala**, **lehua**, **maile**, and **`ilima** – and other things to beautify the house. The food was brought in, and when everything was ready the feast began. Bananas and **`Awa** were important foods at a housewarming. Foods of all kinds were heaped up on the **lanai** and in the other houses. When the feast was ready, a prayer was offered to the gods thus:

**E na akua, e Kane, e Ku, e Lono,**  
**E na aumakua o ka po,**  
**E na aumakua o ke ao,**  
**E na aumakua mai ka hikina a kaulana,**  
**Mai ka akau a ka hema,**  
**Mai ka paa iluna a ka paa ilalo,**  
**Mai ka hookui a ka halawai,**  
**I na aumakua kane, i na aumakua wahine,**  
**Eia ka ai-**  
**Eia ka puua, ka ilio, ka moa, ka ia, ka awa, ka maia,**  
**A me na mea a pau loa i hoolako ia no ka hale hou.**  
**O ke aka ke ali ia aku nei ia oukou,**  
**Ke hoali ia kau nei ka hale, ka waiwai ia oukou;**  
**A e nana mai oukou i na pulapula.**  
**E like me ke pale ana o ka hale i na poino a ka ua,**  
**A ka makani, a ke anu, a ka wela a ka la,**  
**A pela ke akua e pale aki ai i na poino**  
**E halawai mai ai i ko makou mau kino.**  
**O ka uku a ke akua-**  
**E ola i na pulapula a kanikoo,**

**A haumakaiole, a pala lauhala,**  
**A kanikoo a kau i ka puaneane;**  
**O lau ola ka hoi ia e ke akua.**  
**A papa iki, a papa nui,**  
**Elieli kapu, elieli noa,**  
**Ia lanahonua [ola honua].**  
**Amama, ua noa; lele wale akula.**

O gods, O **Kane**, O **Ku**, O **Lono**,  
 O **aumakua** of the night,  
 O **aumakua** of the day,  
 O **aumakua** from the east to the west,  
 From the north to the south,  
 From the heavens above to the earth below,  
 From the zenith to the horizon,  
 To the male **aumakua**, to the female **aumakua**,  
 Here is the food-  
 Here is pig, dog, fowl, fish, `**Awa**, and bananas,  
 All the things that have been supplied for the new house.  
 The essence is being offered to you:  
 Look to us, your descendants.  
 As the house shelters against injury from the rain,  
 The wind, the cold, the heat of the sun,  
 So may the gods ward off the misfortunes  
 That come to our bodies.  
 May the reward from the gods  
 Be life to the descendants until they lean upon canes,  
 Are weak-eyed with age, and yellow as dry **hala** leaves,  
 Leaning on canes until advanced old age;  
 This is the life that is yours to give, O gods.  
 To [all the gods of] lesser rank and greater rank,  
 Profound had ben the **kapu**, profound is the freeing.  
 May there be well being in this earthly life.  
 `**Amama**, the **kapu** of the prayer is free; the prayer goes on its way.

After that they drank the `**Awa** and ate of the pigs, the dogs, the fowl cooked in **tī** leaves, the fish, and all the things that have been provided for the housewarming. Food was given freely to all the visitors, but the most valuable things went to the [owner's] personal family and the household of intimate friends, a spouse's other mate or an adopted husband or wife.<sup>102</sup> These were the households that got the valuable things received at house-warmings. A piece of pig cooked in **tī** leaves, a container of **poi**, a bundle of fish, an `**Awa** root, or a whole pig or dog would be given to outsiders, **po'e owaho** – friends or others who happened to be passing by. The most valuable things, the canoe, the nets, fishlines, the **lau** net lines, the sleeping tapas, and the finest mats, rightfully belonged to those mentioned above. That is how the valuable things at the housewarmings in Hawaii nei were distributed.

## G

:131-132 (8/12/1865) **Heiau** of the People. The people (**maka`āinana**) built their **heiau** in different ways. If they were prominent people, their **heiau** would be large, if they were humble people, their **heiau** would be small.

<sup>102</sup> Handy and Pukui 1958:56&73.

All the male gods and the female gods would be prayed to, and appeals (**kalokalo**) made to this and that one. Then they would request 'life' for the ruler. If he were a good chief, they would pray for his health. Then they would request blessings for his family.

Here are some words of prayer:

O kau ola e ke akua,  
E nana mai i kau mau pulapula;  
E ola a kaniko`o, a haumaka`iole,  
A palalauhala, a kau i ka puaneane;  
Alaila, lawe aku oe ia`u i ke alo o Wakea.

Give life, O gods,  
Look to your descendants;  
[Give me] life until I walk with a staff, am blear-eyed like a rat,  
Yellowed as **hala** leaves, and reach extreme old age;  
Then, take me to the presence of **Wakea**.

The health of the body was the main thing prayed for by the people of Hawai`i. **Ka po`e kahiko** prayed constantly – in the morning, at midday, in the evening, in the middle of the night. They made tabu the place for the ceremonial offering of `Awa to the gods (**ua kapa ia he papaiaawa**), and that is why the women were kept separate in the house and the men were in the **mua**.

## **H**

:133-134 (2/17/1870) **Heiau** for the People. **Heiau ipu-o-Lono** were for the increase of food plants (**heiau ho`oulu `ai**). Some were large, but most of them were small.

When trouble came to the land because of famine, when the earth lay baked in the sun, the streams ran dry, the land was barren, and many 'enemies' (**enemi**) plundered the growing things, the ruler inquired as to how the land might be revived, and the cultivated things be made to grow. Then those whose hereditary calling it was to inspire growth erected houses to the gods who had to do with rain and the land was revived by rain. There were few such rain **heiau**, **heiau hoouluulu ua**. **Makuku**, in Nu`uanu, was one of them. Their functions were not as many as in other **heiau**; they were only to bring rain.

The **heiau ipu-o-Lono** constantly maintained by the populace was the **hale mua**, the men's eating house, which every household had. In it was a large gourd container, and **ipu hulilau**, with four pieces of cord for a handle. Inside the gourd there was 'food' and 'fish' (**ai** and **i`a**) and outside, tied to the cord handle, was an `Awa root. This gourd was called an **ipu kua`aha**, or an **ipu-o-Lono**, or an **ipu `aumakua**. Every morning and evening the householder prayed and offered food to the god; then he would take the **ipu-o-Lono** from its hanging post, wall, or the rack – from whatever it was kept – and bringing it to the center of the house, take hold of the `Awa root from the handle, and pray to the god about the troubles or blessings, and pray for peace to the kingdom, to the king, the chiefs, the people, his family, and to himself. When the praying was ended, he sucked on the `Awa root, opened the gourd, and ate of the 'food' and 'fish' within. This gourd was also called an **ipu `ai** or **ipu kai**. It was sacred, and consecrated to the god.

**Heiau po`okanaka**, 'heiau of human heads' were very large and were called **luakini**, **waihau**, and **unu**<sup>103</sup>. They were built on hills, ridged, headlands, or on level ground

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<sup>103</sup> Kamakau seems to have made an unintentional error in including **waihau** and **unu heiau** in the **heiau** of human sacrifice. Kamakau (1964) applied the term **waihau** to the **heiau** for the **mo`o**, female deities, who were guardians of fishponds, and for the **akua mo`o**, the major gods of female chiefs (See Malo 1951 23:17). He first called **luakini heiau luakini po`okanaka** (1865), and then later, in 1870, stated that **luakini heiau** required human sacrifice for their dedication and so they

(**pu`uhonua**<sup>104</sup>) on the way from the seashore to the mountains where **heiau** had formerly been built. It was not right to build them just anywhere. There were many kinds of sites, **kahua**, on which to build **heiau**, and they were pointed out by those who knew their locations, the **po`e kuhikhui pu`uone**. There were sites for **heiau** for the increase of the population (**heiau ho`oulu kânaka**), for the health of the nation (**heiau ho`ôla lāhui**), for peace (**ka maluhia**), or for distant voyaging (**ka holo `ana i Kahiki**). A large number of **heiau** were built for successes in war (**heiau kaua**), or for success in rebellion (**heiau kipi `aupuni**). There were a great many of these sites dating mainly from the time of the warring between the chiefs of Hawai`i and Maui that could be pointed out by the **po`e kuhikuhi pu`uone**. Most of the human sacrifice **heiau** (**heiau mōhai kanaka**) were ‘war **heiau**,’ **heiau kaua**, and the corpses of those killed in battle, and those of captures chiefs, were placed on the lele atlars of these **heiau**.

Some people in ancient times died through being falsely accused, and some died deservedly, because they really had broken the personal tabus (**kapu kino**) of the chiefs, or had eaten things consecrated to a god. In addition, because of the many tabus that were associated with court life, people who lived in the household of a chief frequently encountered trouble, and died because they had been falsely accused of breaking a tabu concerning the chief’s tapas, his **malo**, his ‘food’ or his ‘fish,’ or some other thing **kapu** to the chief. It was the same with things dedicated to the gods. Because they must pay with death for such infringements, people (**kânaka**) were afraid to live in the households of the chiefs in the old days.

When a ruler built a **heiau po`okanaka**, not even sacrifices of a great number (**lau**) of pigs, coconuts, and innumerable offerings could free the **kapu**; only when a man was killed could it be free, **noa**. Therefore, if no lawbreaker, **kanaka lawehala**, or captive were available, one of the chief’s favorites, another chief perhaps, or a lesser chief, or even a favorite companion might be accused of breaking a tabu. No one could escape from the envious, or from the false accusers, **ka po`i imi hala**; not even the **mana** of the ruler could save him. At the `Awa drinking assembly, called `aha `Awa ko`o, the victim would be marked for death by the false accuser when the **lelea** prayer offering the `Awa to the gods was being said. During the process of the prayer, all would be bent on knees with buttocks against the back of the legs, and when the prayer came to the part called **Kumalolohia**, they had bent the head and body forward. If one moved, he died; if he coughed, he died; if he cleared his throat, he died; he dared not make a single move. Then the false accuser would dig his victim in the anus, or perhaps run his finger in, or perhaps pinch him. If he moved or made a star, it meant death. Nothing could save him. In this way a victim was obtained for the

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were also called **heiau po`okanaka**. **Waihau** and **unu heiau** dedications, he says, did not require human sacrifices (compare Malo 1951 37:9). Kamakau also says ‘Of the many **heiau** from Hawai`i to Kaua`i, some were **heiau po`okanaka**, most were **heiau waihau** and some were **heiau unu**,’ again distinguishing between **heiau po`okanaka** and the **waihau** and **unu**. Also, ‘Most of the human sacrifice **heiau** (**heiau mōhai kanaka**) were ‘war **heiau**,’ **heiau kaua**’ indicating that indicating that humans were sacrificed on **heiau** other than war **heiau**. Malo (1951 37:10) says ‘The **luakini** was a war temple, **heiau-wai-kaua**, which the king... built when he was about to make war...also when he wished to make the crops flourish he might build a **luakini**,’ and Ii (1959:34-45) describes the **kapu loulu** ceremonies on a **luakini heiau**, held to seek peace and prosperity to the kingdom.’ Other Hawaiian sources (Malo 1951 37:1-11; Ii 1959:33,35,39, 42,45; Kelou Kamakau in Fornander 1919 6:8,12,22,24), all agree that only a ruler of a chiefdom could build a **luakini** and that human sacrifices were necessary during these ceremonies of construction. They show that human sacrifices only took place under the rites of **Kū**. Were we to delete this passage of ‘**waihau** and **unu**’ from this passage of Kamakau’s, and read ‘**luakini heiau**’ where he merely says ‘**heiau(s)**’ here, then the entire passage would confirm to what he himself says elsewhere, and to what Malo, Ii, and Kelou Kamakau say concerning **luakini heiau**.

<sup>104</sup> See Sections of Roadways in Part One of Kamakau 1991.

**heiau.** A man from the country who came to live at court could easily get into trouble through not knowing the rules and regulations pertaining to the chief's residence.



## APPENDIX 9

Kamakau, S.M. 1991. Ka Po'e Kahiko. Bishop Museum Press, Honolulu.  
Translated from the newspaper Ke Au Okoa.

### A

pp. 13-14 (3/17/1870) Some **Kānāwai** of Gods and Chiefs

“The edict of **Kai`okia** was the ancient **kākāwai** given by the god after the subsiding of the **Kai-a-Kahulumanu**, or **Kai-a-Kahinali`i**. The edict pledged that the god would not again destroy the living things on earth and the breathing things that live in space; the sea would be ‘cut off’ (**ke kai`oki`ia**), and be kept separate from the land, and would not again rise up over it. The sign that the separation, that the **Kai-a-Kahinali`i** would not again rise over the land, was the **ala muku** rainbow. The god who set forth this **kānāwai** was **Kāne**, that is, **Kānenuiākea**.

The older generations of Hawai`i respected this great edict, and the **kānāwai Kai`okia** became an important one for this people. If a parent was angry with a child, or a husband with a wife, or a sibling with a sibling (**hoahānau**), of a father with his father, or a mother with her mother, and they came to dissension and breach, one of them would swear by this edict, which was extremely binding, that he would not see the one sworn against ‘until death.’ Only by making an atonement (**uku**) to the god, with offerings for the breaking of the oath could the person who had sworn by this **kānāwai** be freed from the anger (**lili**) of the god over the flouting of the oath taken under his **kānāwai**. The person who had sworn the oath by this **kānāwai** of **Kai`okia** atoned thus: he took a whole pig, a whole **`Awa** root (**pū`awa**), a complete **`Awa** plant (**`awa lau**), a tapa, a red fish, and many other things, and went to the one he had wronged and against whom he had sworn his oath. Then the one who had sworn the oath, and the one against whom it was sworn, made a dedicatory offering (**mōhai ho`āli**) of their love offerings (**mōhai aloha**) to the god for their wrongdoings, and so they were spared from the repercussions (**ho`ohiki`ino**) of the **kānāwai** of the god. Their offerings could be eaten by relatives and close friends after they too had eaten of the offerings for the forgiveness of their wrongs (**mōhai hala**).

...The **kānāwai Pu`ukoamakai`a** was a very revolting edict. It decreed that someone’s eye must be scooped out. The **kānāwai Pu`ukoamakai`a** might be pronounced (**kau`ia**) during an assembly, perhaps at a feast where the king would also be present when the god **Kaho`ali`i** possessed the man-god of his name (**noho iho la**). He wanted an eye, to be taken as a relish with the cup of **`Awa** [to be offered to the god in the body of the possessed **Kaho`ali`i**]. The assembly was dedicated to getting an eye, and they sat and looked at each other until the man was found whose eye was wanted – and his eye would be scooped out. It was a very harsh edict.”

### B

pp. 32-33 (3/3/1870) **Pōhaku o Kāne**

“The **Pōhaku o Kāne**, the stone of **Kāne**, was a place of refuge, a **pu`uhonua**, for each family from generation to generation. It was not a **heiau**, it was a single stone monument (**he wahi`eo`eo pōhaku ho`okahi**), and a **kūahu** altar with **tī** and other greenery planted about. There the family went to obtain relief. All the men and boys who belonged to the same family went there if the god [that is, the family’s **`aumakua** god] had stricken the family with death, with illness, or with misfortune because they had been irreligious (**`aiahulu**), or had been careless about the kapus (**`aia**), or had eaten or drunk water with persons who were defiled; also, if they had worn the tapas, or slept in the same sleeping place, or girded on the loincloth, or put on (**peu**) the clothing of a person who was

defiled with blood. All of these things were defiling, and the people had done wrong against the gods who were their **`aumakua** if they did any of them. The Hawaiians are said to be a people consecrated to the gods; the **`aumakua** gods were 'born,' and from them man was born (**he lāhui la`a i ke akua, hānau ke akua hānau mai ke kanaka**).

When trouble came upon a family for doing wrong against and **`aumakua** god, by being irreligious, or doing any of these defiling things, the cause for this trouble was shown to them by dreams, or visions, or through other signs sent by the god. It was pointed out to them what sacrifices to offer, and what gifts to present, to show their repentance for the wrong committed by the family. They were to go to the **Pōhaku o Kāne**, their **pu`uhonua**, where they were to make offerings to atone for their wrongdoing (**mōhai hala**) and to pacify the god (**mōhai hō`olu`olu**).

In the evening the fire-making sticks (**`aunaki**) were made ready, and in the morning the family went with a pig, red fish, tapas (**`a`ahu**), and some **kohekohe** grass. Very early in the morning the imu was lighted for the pig in front of the Stone of **Kāne**, and the red fish and the tapas buried in front of the stone, as a peace offering to the god. The pig and the **`oloa** tapa were the offerings for forgiveness (**mōhai kalahala**). The pig was put to bake, then the **`Awa** was chewed. This was done in silence; no one went to relieve nature or did any other defiling thing; no one moved about until the **`awa** was chewed and covered with straining fiber (**pau ka `awa i ka mama, a uhi ka `awa i ka mau`u**). then the **kapu** was lifted (**noa ke kapu**) and they would open the imu; the group would be seated, the pig cut up, the **`Awa** strained. When the pig had been cut up, the **`Awa** would be poured into cups and a prayer offered for forgiveness and repentance for the wrong done by the family. Then a prayer of praise (**pule ho`onani**) to the gods was uttered, and at the end of the prayer the [family] **kahuna** said, '**Amama**.' The **`Awa** was drunk and the feast eaten, under **kapu**. When one was satisfied, he must sit still until the **kapu** upon the eating was lifted. When it was lifted, the **tī** leaves used as covering (**kauwewe**) in the **imu**, and the trash and stone of the **imu**, were covered over. The remains of the feast were buried in front of the stone. Some part of the offerings might be taken home, but it was not to be shared with those who had remained at home and not 'sat in the smoke' for the purifying of the family.

When this purification of the family was ended, no medicine need be given to cure sickness, nor anything done for the misfortune and troubles that had come to the family. The family would be multiplied by the births of descendants, blessed with bodily health and freedom from accident; they would obtain good crops, and an abundance of fish and of all things. There would be no further trouble or misfortune...."

## **C**

pp. 59-60 (10/20 – 10/27/1870) **Akua `Aumakua** – The **`Aumakua** Gods

"...Because of the confusions (**pohihihi**) caused by people of later times, and people of this time, some people today are utterly 'mixed up' (**ua lauwili**). They acquire or contact the **`aumakua**, in accordance with what they have been told by their parents – or under the direction of certain kahunas or other persons who know – who say: 'So-and-so is your **`aumakua**' (**He mea kou `aumakua**). But they do not know how to contact the **`aumakua** and are told, or are directed by a **kahuna**: 'Thus must you do to please the **`aumakua**.' If the **`aumakua** is a mo`o, then get a reddish-brown dog, or a brown one, or a molted one, or a dog with a spot on each jowl, or one striped like a caterpillar, or a brindled dog, and whatever the persons directing them say in the way of tapas – a saffron yellow tapa (**`ōlena**), or a light yellow one (**he mahuna**), or one the color of ripening **hala** fruit (**he halakea**), or one the color of the blossom of the coconut (**he kapa pua niu**) – and other things, including a whole **`Awa** (**`Awa lau?**), and wrap all the sacrifices in a striped **kapa** (**kapa moelua**). Then, when all was quiet (**noho a hanu ka leo**), they might take the bundle to a pond fed by springs and hide it in the water. Or they might take it to the ocean, or to the mountains, or to the pit of **Pele** – wherever the **kahuna** or the one who had pointed out or had taught them was where the **`aumakua** was. Because they did not have the names of the **`aumakua** to

call on (**e ho`aumakua ai**), the names of the man's parents, or of the woman's parents, or that of a child of theirs who had died were used; and these became **`aumakua (lilo akula nō ia i mau `aumakua)**. These ways of contacting the **`aumakua (mau hana `aumakua)** were not the correct or true way. It was just a good way to seek a lessening of troubles, and, in the seeking, they found some relief – even in this false way of seeking it...”

## **D**

pp. 64-65 (3/24/1870) Volcanic Manifestations – **Pele**

“For a dead beloved one whom they wished to become a volcanic manifestation (**e lilo i pele**) of the crater (**luapele**) of Kilau`ea on Hawai`i, the Hawaiians would act in this way: they would take to the volcano the bones, hair, fingernails, or some other part of the dead body, sacrifices and offerings to the gods (**akua**), gifts for the priests and the prophets and guardians of the volcano, a pig, **`Awa**, and a tapa garment of whatever color the relatives to whom the body belonged chose to be a visible sign to them – whether striped, red and white, or red and black – and they would ascend to the pit of **Pele, ka lua o Pele**. There they would ritually kill the dedicatory pig (**ho`omoe kapu ka pu`a me ka ho`ohiki ana, he pua`a hana**) for the dead newcomer, the malihini, to become a native, a **kama`āina**, of Kilau`ea. If the ritual went well (**ina he maika`i ka ho`omoe `ana**), a pouring rain would pelt the uplands and the sounds of thunder would reverberate to the sea, as a sign of consent to the admission (**ho`ohui**) of the malihini. In the morning, the pig was roasted, the **`Awa** was chewed, and all would feast. Then the prophet of **Pele**, the **kaula Pele**, and the relatives of the dead, from 10 to 40 eyewitnesses, would take the corpse and the offerings – a live pig (**pua`a mōhai ola**) and some **`Awa** – to the very center (**`onohi**) of the fire, where the fires were quiet and where fiery lava (**ahi pele**) welled up (**hua`i**) instead of tossing about or rolling in great waves.

The prophet stood and pleaded (**kāhoahoa**) for the acceptance of the **malihini** and for being united with the **kama`āina** of the pit, and he recited the ancestry of the dead one so that his ancestors in the crater of Kilau`ea would know him as one of them. It was useless to make offerings to them, for they were just the **kama`āina** of the place, not the gods. When the **`Awa** and the pig were thrown in, they were immediately consumed. When the body of the **malihini** was thrown in, it was as though it were being fondly lifted by a procession of people and borne tenderly upon fingertips into Halema`uma`u, the home of the **kama`āina** chiefess of this place. She, **Pele**, had built this place to warm strangers who came with the mountain through icy mists. The body was born along for the distance of a chain or two without the tapa that covered it being scorched; then, like a swelling wave, a flame swept over it and the malihini vanished. Some minutes later a flame appeared and billowed, and a column of fire appeared, streaked with whatever color the relatives had chosen to wrap the body in. They would hear the sound of many voices making a din, chanting **hula** and **oli** and **mele**, and the colored column which was the malihini they had brought would move about joyfully. Then the people to whom the malihini belonged would wail and call out the name by which he had been known in life to say, ‘You live! You live!’ The ‘sign,’ **hō`ailona**, which the relatives saw was their beloved one; this was the body of their beloved.

Should Hawai`i be overrun by lava, if they saw the **hō`ailona** of their own volcanic spirit (**pele**) in the fountains of fire the people had no fear of death – it was their own **kama`āina** who surrounded them with fire. If they were within the blazing fires, they would come to no harm; they had their guide, and they could go forward victoriously (**hele i ka lanakila**) and without harm. Such was the belief of some people about volcanic spirits in the old days...

...The principal god among those there is the goddess **Pele (o ke kumu o kēia akua, he akua wahine o Pele)**. She has many lesser bodies, each with its own name. So do those called the ‘younger sisters’ (**kaikaina**) of **Pele** – the **Hī`iaka** sisters – and so do their brothers. **Haumea** was **Pele**’s mother, and **Kapalikū** her father; **Nāmakaokaha`i** was her older sister (**kaikua`ana**). These gods came from Kahiki. Some had human forms

and some had spirit (**akua**) forms. **Pele** and **Hi'iaka**, and also **Nāmakaokaha'i**, had both forms, but most of them had only spirit forms and did not take human forms. **Pele**, **Hi'iaka**, **Nāmakaokaha'i**, **Kapo**, another sister of **Pele**, and the **mo'o** goddessed, **Kalamainu'u**, **Walinu'u**, and **Walimānoanoa**, were among the group of gods (**pae akua**) and the line of goddesses (**lālani akua wahine**) that reached thousands upon thousands in number.

It is said that these gods were not of **Wākea**'s time; nor were they **Kānenuiākea** in visible form (**kino maoli**), that is, **Kānenuiākea** who made the heaven and the earth. But they had been made into 'hosts of heaven,' and had come down in their spirit forms. It is in this form, it is said, **Kāne**, **Kanaloa**, and **Haumea** came from Kahiki and from the firmament (**mai ka lewa mai**). They were first seen by a couple of fishermen outside of Ke'ei, in South Kona, Kūheleimoana and Kūheleipo were the two fishermen who first saw these spirits (**po'e akua**) coming over the surface of the sea. When the two men saw these wonderful beings they knelt in profound respect, and they gave them white fish and pointed out the **`Awa** plants mauka of `Alanapo (`Alanapō?) in Ke'ei. Those of us who study and understand clearly the prophetic chants (mele wānana) know that the name of Haumea was given to the woman who came with Kāne and his companions because she was a woman of mysterious and recurrent births (**no ka mea `o Haumea ka wahine hānau kupanaha a hānau wawā**). Here is a mele of the **po'e kahiko** that makes this clear:

**Holo mai Kane mai Kahiki,  
Holo a i'a iloko o ke kai,  
Ke kekele `au i ka moana;  
O Haumea ke kaikuahine  
O Kanaloa ia me Kane.**

**E ki'i i ka i'a kea i kai,  
La'a i ku`emake o Kane,  
La`ahia i ke kanawai,  
He mau lawai`a i ka moana,  
O Kūheleimoana O Kūheleipo,  
E kaka ana i ka malie,  
I ka la'i ku pohu malino,  
I na kai malino a `Ehu,  
Hukia i ka `upena luelue.**

**E ho'i kakou i uka,  
E `alana i ka pu`awa hiwa;  
Ha`awi i ke kaikuahine.**

**Elua `olua ko Haumea i ke keiki.  
I hanau i kana hiapo,  
O Ka`ulawena Konohiki Wananakalana.**

Here comes **Kāne** from kahiki,  
Coming like a fish in the sea,  
Gliding through the currents in the ocean;  
**Haumea** the sister  
And **Kanaloa** are with **Kāne**.

We get white fish from the sea,  
That is sacred to the eyebrows of **Kāne**,  
Consecrated to him by his edict,  
Two fishermen on the ocean,

Kuheleimoana and Kuheleipo,  
Who are deep-sea fishing in the calm,  
In the windless calm,  
In the calm seas of `Ehu,  
The bag net is drawn up.

We return to shore,  
And offer the choice `Awa;  
It is given to the sister.

There are two of you, and **Haumea** conceives a child.  
She gives birth to her first-born,  
**Ka`ulawena Konohiki Wananakalana.**”

## **E**

pp. 74-75 (4/14/1870) Shark Forms

“I will tell you about our ancestors who sailed the ocean, **Kaneakaho`owaha ma, Kaiahua ma, Kuakapua`a ma, and Luia ma**, and of the hundreds they led across the ocean, unafraid of storms, the south wind, the north wind, and all the winds of the ocean. They did not come to harm, nor did they fear death, for they were guided over the desolate waters like beloved children by a single great guide: the shark named **Kalahiki**. When it was stormy and the ocean was rough, he swam in front of the canoe fleet, and when land was out of sight, he lay with his head in the direction of land. A fire would be lighted on the lead canoe and **`Awa** and **aumiki**, the after-drink, would be prepared. The shark that was guiding the canoes would come up close and open its mouth and the **`Awa** would be poured into it. After it had partaken of the drink-offerings it had been fed, it would turn its head and in whatever direction the head turned, the canoe fleet would go. If there were forty canoes, they must all turn alike. If they had been becalmed, a good wind would instantly spring up; one that would bear them along until they sighted land.

The man who chewed the **`Awa** and offered the drink-offering to this shark died in 1849. He had sailed with Luia ma from Kaua`i to Hawai`i without any of them getting even the least glimpse of land because the fog and mist that covered the ocean. These people were famous for sailing the ocean, but the basis of their skill and knowledge was the shark. From Luia came down to us today the knowledge of the arts of fishing for flying fish and of steering canoes in the deep ocean. Many can testify to the deeds of Luia ma, and to their being guided by the shark.”

## **F**

pp. 76-78 (4/14/ - 4/21/1870) Shark Forms

“Because sharks save men in times of peril, protect them when other sharks try to devour them, and are useful in other ways, in saving lives at sea and on the deep ocean, some people were made into shark **`aumakua**, of guardian gods; they became forms of **Kamohoali`i, Kānehūnāmiku, Ka`uhuhu, Kaneikokala, Kanakaokai, Ka`ahupahau, Kuhaimoana**, or other ancestral shark gods. Thus, many sharks appeared who had been deified by man. Some were evil, some were man-eaters, some were as fierce and untamable as lions, who even devoured their own **kahu** who had transfigured and deified them. Such were **Kapehu (Pehu), Moanahila, Mikololou**, and other evil sharks. Others who were worshiped (**ho`omana `ia**) became beloved friends if their **kānāwai** were properly obeyed; they became defenders and guides in times of trouble and danger on the ocean, quieting the stormy ocean and bringing the people back to land. If their canoes came to grief and were smashed to pieces, their shark would carry them safely to shore. But those who had no such friend were like castaways without a guide; when land was out of sight, they would drift about until they died. If the canoe broke to pieces, their dead bodies would be cast up on

Lāna`i or at Hanauma. They were people who had no claim upon anyone in the sea (**po`e kuleana `ole iloko o ke kai**).

Some people would take a loved one who had died – a father, mother, child, or some beloved relative – to the keeper of a shark, a **kahu manō**, or to one who had shark **`aumakua**, to be transfigured into whichever shark **`aumakua** they wanted, and it was done according to their wishes. The gifts and offerings to the **kahu manō** were a sow, a bundle of tapa, and a clump of **`Awa**. If the **kahu** was satisfied with the gifts, he would command the persons who owned the body to prepare the ritual offerings for the god, as well as the gift offerings, for the body to become a shark. All was made ready on the sacred day of **Kāne**, the most important day of the kapu periods (**nā lā kapu Sabati**). At dawn of this day, a fire was lighted at the kuahu altar of the **ko`a** shrine or **heiau** of the ancestral shark, **Kamohoali`i**, **Kānehūnāmoku**, **Ka`uhuhu**, **Kaneikokala**, or whichever one it was. Then the owners of the body and the kahu of the shark god brought the sacrifices and offerings, the pig and the **`Awa** being the most important, and also the whole body of the dead person, or a bundle of his bones or some other part of the body, wrapped in a distinctive tapa. The shark would take on the character of the wrapping. If the tapa was a **pa`i`ula**, a red and white tapa, the shark would be reddish; if it was a **puakai** tapa, it would be all red; if it was a moelua tapa, it would be striped. The persons who owned the body would thus be able to recognize their own after it became a shark.

The fire was lighted at the ko`a shrine and the food and the offerings were made ready, the ‘wave’ offering of pig (**pua`a hō`ali**), and the sacrifice offering of pig (**mōhai kaumaha**), and the ‘wave’ and sacrifice offerings of **`Awa**. The ‘wave’ offerings of pig and **`Awa** were not offerings to be eaten (**mōhai `ai**), but were given to the god, and the bowls were filled with them as gift offerings to the god for changing the body into a shark. Then the person to whom the body belonged and the **kahu manō** went with the bundled corpse and all the offerings to be given to the shark, while the kahu **manō** murmured prayers. Then the shark appeared, of a size immeasurable. Beside the cliff was a place two or three anāna deep with a sandy floor, where the shark lay. When the **`Awa** and pig were taken there, the shark rose to the surface of the sea and opened its mouth and the **`Awa** and pig were poured into it. If the shark was very large it drank down the **`Awa** and the pig and bananas and other offerings besides. Then the body was given to it, being placed close to the ‘belly fin,’ the **halo**, of the shark. The **kahu manō** and the owners of the body returned to the **ko`a** and made ready their **mōhai** offerings and their **`Awa** and took the pig out of the imu. They offered [the essence] to the god (**kaumaha i ke akua**), and when they had finished eating of these **mōhai `ai** offerings they threw the remainder in to the sea. This ended, and they went home.

The **kahu manō**, however, took **`Awa** at dawn and at dusk for two or three days, until he saw clearly that the body definitely assumed the form of a shark and had changed into a little shark, with recognizable marks on the cheeks or sides like a tattoo or some earring mark. After two or three days more, when the **kahu manō** saw the strengthening of this new shark that had been transfigured, he sent for the relatives who had brought the body to go with him when he took the **`Awa**. If he had gone constantly, morning and evening, it strengthened quickly, and when the relatives came they would see with their own eyes that it had really become a shark with all the signs by which they could not fail to recognize their loved one in the deep ocean. If the relatives should go bathing or fishing in the sea, it would come around and they would all recognize the markings of their own shark. It became their defender (**pu`u pale**) in the sea.”

## **G**

pp. 80 (4/21 or 4/28/1870) Shark Forms

“This is why some of the old folks are so emphatic that their gods have **mana**, can talk with them, and can protect the lives of their **kahu** [guardians] up to the time when one ‘walks with a cane has eyes blurred like a rat’s, is yellows as a **hala** leaf, and reaches

extreme old age.' The reasons why people kept sharks (**mālama i ka manō**) were personal ones – for health and blessings to themselves, and for fish. When the men went fishing at their **ko`a** grounds with... nets, or other kinds of fishing, the **akua manō** would lead fishes right into them... all kinds of fishes. The fishermen would be urged to go fishing in a dream in the night by the words of the **akua: He malihini o ke kai** (there are fish in the sea). That is why the **po`e kahiko** [Hawaiians of old] cared for them”...

“The Jews are called the ‘Children of Abraham,’ and because Jehova first called Abraham to him, Jehova (Abraham?) is their **`aumakua** and **kumupa`a**. Jesus Christ was a ‘consecrated one,’ **he ho`ola`a `ia**, because he was born a god-man (**akua kanaka**) in human form. He was called a ho`ola`a and an **`unihipili** (deified one) in human form. In the same way those of Hawai`i nei believed that the real offspring (**pulapula maoli**) of real **`aumakua** (**`aumakua maoli**) did not need to be [ritually] transfigured; they were not deified by pig and **`Awa**. Their **`aumakua** came and took away their corpses, leaving not a scrap of bone, nothing but the tapa covering and the trough-shaped container (**holowa`a**) that had held the body. I have personally seen two instances of this kind, when only the tapa and the trough were left. This was something often seen, and there may be many people who have seen the god-spirits of this island group.”

## **G**

pp. 82-83 (4/28/1870) **Mo`o** Forms

“**Akua mo`o** were kept for the same reasons – for the health and welfare of the people, and to bring them fish. Some people put all their trust in the **akua mo`o**. On O`ahu, and similar lands, where there are walled ponds (**loko kuapā**) and large fresh-water ponds (**loko wai nui**) like Uko`a, Ka`elepulu, Kawainui, and Maunalua, some people depended entirely upon the **akua mo`o**. They were the guardians, the **kia`i**, of the ponds all around O`ahu.

The **mo`o** that were chosen to be worshiped were not the house or rock lizards (**mo`o kāula, mo`o ka`alā**) or any of those little creatures with which we are familiar. Not indeed! One can imagine their shape from these creatures, but these were not their bodies. The **mo`o** had extremely long and terrifying bodies, and they were often seen in the ancient days at such places as Maunalua, Kawainui, and Ihukoko (Ihukōkō?) at Uko`a. They were not seen just at anytime, but when the fires were lighted on the **ko`a** altars beside their homes. There was no doubting them when they were seen. They lay in the water, from two to five anāna in length, and as black as the blackest Negro. When given a drink of **`Awa**, they would turn from side to side like the hull of a canoe in the water.”

## **H**

pp. 85-873 (4/28 – 5/5/1870) **Mo`o** Forms

“When a [dead?] chief was to be transfigured, the first thing to do was to erect a separate house, a **moku hale**, with a wooden fence around it, and to collect in it offerings of light yellow and dark yellow tapa wraps and skirts – tapas dyed with **`ōlena** or **noni**. The house was called a **hale puaniu**, and in it the offerings were made with **`Awa**. Fires were lighted in the **imus**, and dogs and pigs were put in to bake, at the **waihau** and **ko`a** houses of these **`e`epa** beings of many forms. Then the corpse or bundle of bones, wrapped in yellow (**`ōlena**) tapa, was taken to be laid in the water at a suitable place for the transfiguring, together with a reddish-brown, brown, brindle, stripped or mottled dog (**`ilio maku`e, `ilio `i`i, `ilio mo`o, hulupe`elua, ulaia**). By the time the pigs and the dogs were cooked in the **imus** ready to be opened, there lay these fearsome beings in the water. All of them, large and small, were given **`Awa** to drink and fed dog and other foods while the **kahu mo`o** prayed. Then he took the bundle and placed it in front of the **`aumakua** to whom it had been decided to offer it, and it was borne away. Not more than two or three days would pass before the spirit would return and ‘sit on’ (**noho**) or utterly possess (**ke`ehi pa`a**) one of the relatives

and say, 'Drink **`Awa** constantly, and call on my name; eat and dedicated the food to my name. In your drinking and eating, we will be eating together, and this will strengthen my spirit. Then if you wish to see me, you shall see me.' By doing this the relatives were able to see him, and this put an end to any doubting. The first appearance of the spirit was the time to begin ritual prayers (**kuili**). The haka whom the soul of the dead possessed drank **`Awa** morning and evening, and he was the one who strengthened the spirit. Thus these many-bodied beings, the **kino lau `e`epa**, became very strong, and would reward the living by bringing them prosperity, saving them from trouble and accident, giving them fish and other material things, teaching them what medicines to take to cure family illnesses, and instructing them in the knowledge of seers, **kilokilo**, and prophets, **kāula**, and teaching them to interpret visions and to call up the spirits of the kupua people and of ancestors and relatives.

The people in general, the **maka`āinana**, did not erect puaniu houses for the transfiguration of the dead into **mo`o**. These houses were built by chiefs to hold bananas, coconuts, **`Awa**, yellow tapa wraps and skirts of **puaniu** and **halakea** tapa, and all the scented tapas. There the spirit was fed with constant offerings by the kahu akua to strengthen the souls of the dead persons. And they really did grow strong. Some of these spirits were of such great strength that when they came back that the house shook as if in a strong wind, and great stones were broken into pieces without a sign of human hands. The spirits sometimes came to possess their **haka** in that way. Some came like the flash of a shot from the mouth of a cannon, or a lightning flash. It was perhaps because of the many kinds of spirits that returned to the kahu akua that Kamehameha I believed in having many **kahu akua** and a great number of gods.

Some of the **maka`āinana**, however, erected small puaniu houses for transfiguring their dead, and brought **`ōlena** sleeping tapas and **`Awa** and a mottled brown dog (**`ilio`i`i ulaia**) to transform their dead into one of the many-bodied **mo`o**. for some, all went well; but some were not accepted, and they drifted about in their bundles of tapa without being changed into **mo`o** bodies."

## **I**

pp. 96-98 (9/15 – 9/29/1870) **Kahuna `Aumakua**

"Of the **kahuna `aumakua**, the **kahuna po`oko`i** were the most notorious; that was because they demanded a great price of the patient in the way of sacrifices and offerings. However, the foods provided by the patient and his relatives were for their consumption, and not for that of the **kahuna** and his relatives; but if, through **aloha**, the patient's family wished it, the **kahuna** and his relatives would eat of them to.

The offerings were a black sow, eight **kala** fish, eight **kūmū** fish, eight octopuses, a **weke** fish, a mullet, an **awa** fish, shrimps from the upland streams, shoots of the **pōhole (hō`i`o)** fern, a red chicken, a white chicken, a black chicken, a young coconut, tapa, a dog, sugar cane, spring water, a lei, some adornments for the body, and other things appropriate for a feast, such as sweet potatoes, taro, a pudding of sweet potatoes (**`uala pālau**), and **poi**. When all these things were prepared, including bananas of the **pōpō`ulu** and **iholena** varieties, and **`Awa** of the highest quality, then the feast was spread. This feast was the proper 'remedy' for a deathly illness sent by the **`aumakua**. It was not well to treat such an illness with medicines. But if the illness was a combination of **ma`i `aumakua** and a natural one of the body, **ma`i kia`i kino**, then it might well be treated with medicines after the **ma`i `aumakua** or **ma`i kumupa`a** were cured.

If the patient was a wealthy chief, he gave many sacrifices and offerings, 'several hundred' (**lau**) pigs, red fishes, dogs, coconuts, garments, **`oloa** tapas, and **`Awa** roots. Then the feast was spread with much rejoicing in a **hale lau**, a house thatched with leaves, which was a **moku hale**, a house built for just such a feast. The poor did not often make a feast; very few could afford one. A firestick, a little kindling, a taste of two taro leaves, a few sacrificial offerings, a bit of chicken or a bundle of fish – these were perhaps all they could



afford. These humble offerings were for the little misfortunes that came to a person of small account, and were proportionate to the insignificance of the person himself. Sometimes such small offerings were acceptable if the **akua** had compassion upon the giver.

The **kahunas** of this class, the **kahuna`aumakua**, have been called ‘pig-eating **kahunas**,’ **papa kahuna`ai pua`a**; liars, **kahuna ho`opunipuni**; and deifiers, **kahuna ho`omanamana** – and so they are at times. But many times they are right, and they cure many who are sick unto death. The reason some of them are called liars and deifiers is because they call upon their ancestors and pray to the dead and offer up sacrifices which they throw into the sea or into fresh water, or bury at **ko`a** fish altars and at **Pōhaku o Kāne**, or at **waihau** or **unu heiaus**, according to the forms of the **`aumakua**. These might be sharks, fishes, **mo`o**, thunder, lightning, earthquakes, spirits from the volcano, the sun, the moon, stars, fire, or god forms of certain chiefs or ancestors, perhaps. That is why there were so many **kuahu** altars for the gods; and it was not right to trespass on someone else’s altar. Those who were related to the **mo`o`aumakua** of **Kalamainu`u** took a reddish-brown or dark brown dog, a tapa dyed yellow with **`ōlena**, and an **`Awa** root, and took them to a deep freshwater pond, tied them to a stone and lowered them into the water with appeals to the **`aumakua** to release their descendants from the **ma`i`aumakua**, and that ended the trouble. The doings of such **kahunas** are to be seen to this day....

...A sickness caused by an **`aumakua** or a **kumupa`a** ancestral deity is a very resistant one, as both medical **kahunas** and **haole** doctors know. It is beyond the powers of their medicines or skill; it does not respond to the medicines, and there are not many of the **kahunas** who are able to work on it. If the work is to succeed, there must be very burdensome offerings made by the family of the sick person. If he is a poor man and has no one to help him (**kanaka`ole**), treatments involving so many offerings cannot go on. But if the sufferer is a wealthy man and has followers (**mākaukau i ke kanaka**), then the work of the **kahuna** can be done immediately. The **kahuna** is worthless who does not then set his patient free and save him from death.

Sacrifices and offerings to the **`aumakua** were not all the same. For minor punishments (**ho`opa`i li`ili`i**), such as illness suffered by a member of the family, a small fire [for a cooked offering] was made in the morning and evenings for five times (**kualima**), and then a final offering (**pani**) of a few **lū`au** leaves or an egg [chicken?] (**kahi moa**), and the illness would be ended. If it was a serious illness, one that confined the sufferer to the house, then the final offering was an **`Awa** plant (**pū`awa**) and a pig.

This was a customary thing to do, and was the work of the family; it could not be done by outsiders or strangers because their voices and appeals would not be heeded by the **`aumakua**. This work was known as **hana`aumakua** or **hana kumupa`a**.

The chiefs made offerings and sacrifices to the **`aumakua** in proportion to the wrongs committed against the god. Sacrifices alone were not the atonement (**uku**) to the god. The first thing to do was to build the **moku hale**. This house was a **hale lau lama**, a house of **lama** wood; the posts, rafters, and thatching sticks were of **lama**, and the cords to bind it together were of **`ie**. The thatching might be of **tī** leaves (**lau`ī**), banana fibers (**pa`a`ā**), **lama** leaves (**lau lama**), or of **pili** (**pili maoli**). When all material was in readiness, the house was built and thatched in one day, up to the roof top, and with a **lānai** and a fence. Some houses were large, and some small, with room enough for only four or five persons. When the **moku hale** was finished, it was **kapu** and could not be entered. The next day, the house was entered, and the offerings were placed (**ua ho`olūlū**) on the offering racks (**haka**). **Kahiki**, **pōpō`ulu**, and **iholena** bananas, many (**lau**) pigs, coconuts, red fishes, garments, and **ninikea** and **`oloa** tapas were offered, and **`Awa**, pig, banana, coconut, and red fishes were given in sacrifice to the god. The god would heed the offerings and sacrifices (**alana a me ka mōhai**), and death and troubles became as nothing.”

## J

pp. 114 (9/22/1870) Sea Water in medicine

“Another good use for sea water was to secure forgiveness (**huikala**). When someone in the family broke an oath sworn against another (**ho`ohiki`ino**) – a man against a wife, a mother against her children, relatives against relatives, ‘cousins’ against ‘cousins’ (**hoahānau**), and so on – then the **pīkai**, or sprinkling with salt water, was the remedy to remove [the repercussions of the oath]. This is how it was done. A basin or bowl of real sea water, or of water with which salt had been added, in which were placed `Awa rootlets (**huluhulu`Awa**) and `ōlena, was the water to absolve and cleanse (**kalahala e huikala**) the family for the defilement (**haumia**) caused by the one who had broken his oath.

Any defilement pertaining to the house, to fishing, tapa printing, tapa beating, farming, or **wauke** cultivation, from which the trouble had resulted, could be cleansed with **pīkai**; it purified and caused an end to the defilement. Implaments of labor could also be cleansed of their defilement by **pīkai**.”

## K

pp. 131-132 (5/19/1870) Story of **Pua ma** (example of building **hale lau**)

“Kaiaka, a prominent man of Kala`e and its vicinity, was said to have been a man without a god. He built a large new household below Kahanui and provided all kinds of food, such as **poi**, pig, `Awa, bananas, fish, and everything else necessary for a ‘house-warming’ (**o ka hale komo**). When the day came, Kaiaka’s wife and the other women were at the **hale noa**, the common house, and Kaiaka and the other men and the servers were at the **hale mua**, the men’s house. The **hale noa** was apart of the **hale mua**, which was surrounded by a **lānai**. Kaiaka was in the doorway of the **hale mua**, and while the feast was being prepared, he saw a long process of women coming over the plains of Ho`olehua to Pālā`au. They were dressed in yellow tapa skirts and yellow tapa shoulder coverings (**kīhei**), with variegated (**pāpahi**) leis of **ma`o** and `ilima crowning their heads. There was one man among them. The process went down to the spring, named Piliwale, and left their things (**he ukana**) there. These were a **pūniu hulihuli**, or a coconut shell container, and the women’s `alae bird bodies. When Kaiaka saw the many beautiful women in that company, he called out to them to come in and sit on the **lānai**, but they remained outside. Only the man who was with them approached and stood at the door of Kaiaka’s house and talked with him. Kaiaka offered them food, but the spirit man (**kanaka`ānela**) said they would not eat his food unless a leaf-thatched house, a **hale lau**, was built for them; then they would eat of his food. This man revealed that they were not humans, but ‘angels,’ but he told Kaiaka their names. **Pua** was his name, and **Kauluimaunaloa** (the-grove-at-Maunaloa, that is, **Kapo**) was the name of the chiefess who led the profession. He said that they would become Kaiaka’s gods if the **hale lau** was finished that day, and would give into his charge the **pūniu hulihuli**, their visible form (**ko lākou kino`ike maka`ia**), and all the paraphernalia to do their work (**kā lākou hana a pau**), which was inside it. The `alae birds were their bodies which they showed abroad (**kino hō`ike`ia iwaho**). After revealing these things to Kaiaka, the being vanished. Kaiaka went to the spring to look for the **pūniu** and got it; the `alae birds were resting there at the spring. That very day Kaiaka erected the **hale lau** and filled it with **poi**, `Awa, bananas, and tapas appropriate to these gods; that same evening it was dedicated (**ke kapu nō ia**). The food offerings (**ka`ai me ka`i`a**) and the `Awa were all consumed by the `alae birds, and they were well content with the food provided for them.”

## L

pp. 134-135 (7/14/1870) **Akua Kumuhaka** [**Akua Lele**?]

“**Akua kumuhaka** could be seen flying through the air like the fire rockets of the **haoles**. It was the nature of the **kumuhaka** gods to fly great distances, and this is how it

was done. When the kahu of the **kumuhaka** god wished to harm (**make**) a person, he would secretly take his god out in the evening and scratch the breast of the image on the left side. Even if the image was but the size of a hand, the **kumuhaka** god would fly from the house and stretch out, swelling and diminishing, swelling and diminishing, swelling and diminishing, and tapering off into a streaming tail. It would fly for miles this way. The reason for its flying was that the kahu had treated it harshly (**hana na`aupō**), and when he scratched it harshly (**wa`uwa`u na`aupō**), the god was hurt, and it showed itself in its spirit form (**hō`ike ke akua i ke akua**). This flying of the **akua kumuhaka** was a common thing from the time of the abolition of the kapus until 1830, deaths were frequently known to have been caused this way. This is the way it was kept quiet. Coconuts and red fishes, pig and **`Awa** were procured, the god was shut up in its coconut-shell container, and the offerings made. Then, if it were scratched, it would not fly.”

## **M**

pp. 136-137 (7/21/1870) Kamehameha’s care of the **Kālaipāhoa** gods

“Why was Kamehameha not killed by **Kālaipāhoa**? Because of the righteousness (**pono**) of Kamehameha. His offerings of many (**lau**) pigs, coconuts, tapas, and red fishes were seen by the gods, and they looked upon him with favor. But if he had not respected their **kapus** ( **`aiāhulu** – sp?), or had sent the gods to destroy the life of some chief among them, he would have wronged the gods, and they would not have helped to protect his life. Blood for blood; life for life. All the symbols of a god left with man as visible tokens will not help to save the life of a wrongdoer. There have been signs of gods constantly, from ancient times down to the time of Christianity. A person who looks after (**mālama**) a god, without doing wrong against holy things, the god will take care of and help; but the person who disregards the things made holy and set down by the god’s laws, the god will not help. In this time, those who tread upon the laws of God are the wrongdoers. When the **Kālaipāhoa** god-images (**po`e akua Kālaipāhoa**) were to be anointed (**poni**) it was necessary to secure many coconuts, chew the coconut meat, pour off the coconut water, and with it fill as many containers as there were **Kālaipāhoa** images; and also roast fine fat pigs, and prepare (**māmā**) a large quantity of **`Awa**. The **po`e akua** were then anointed and wrapped up well in tapas. These **po`e akua** were never kept on display nor set up like most images in the **heiaus**. **Kālaipāhoa ma** were not images of gods, **akua ki`i** – they were themselves the gods, **he akua**. They were kept wrapped up in long bundles and laid on a shelf (**olo`ewa**) until the time came for their anointing. Then they were fetched and anointed with the masticated meat of coconut. When the anointing and the bathing with coconut water were through, then they were adorned with tapas and set up for the feast for the anointing of the gods, the **`aha`aina poni akua**. **`Awa**, pigs, fishes, and other things were provided for the feast.

At that time one of the kahu ate some scrapings from the body of **Kālaipāhoa**, which had been scraped into a cup of **`Awa**. The other **kahu** drank the rest of the **`Awa**. The **kahu** who drank the cup of **`Awa** into which the body of **Kālaipāhoa** had been put recited the prayer for the offerings, the prayer for the dedication of the food of the gods, and the prayer for the life of the king, the chiefs, and the people. He ended the prayer with the **`amama**, and then drank the cup of poison, while all the **kahu** of the gods drank their cups of **`Awa**. The one who drank the poisoned cup took it hurriedly, the mark of the person about to die by **Kālaipāhoa**. He turned red and his sight grew dim, and he gasped as if with his last breath. Then the healing bark of **Ma`iola** was applied to his lips, and he recovered like a man who has plunged into water and has come up to breath fresh air again. Only last year a man died who was accustomed to eating the scrapings of **Kālaipāhoa** when **Kālaipāhoa ma** were anointed.”

## **N**

pp.138 (9/15/1870) Remedies for illnesses sent by **Pua ma**

“For an illness caused by **ho`opi`opi`o**, **ho`ounauna**, or **kaina** sorcery, a piece of **Kauila** wood, from three to six feet long, rolled, whirled, and set upright (**he ka`a a he`ōniu a he kūkulu**), or a white tapa or tī leaf passed over the patient (**kuehu**), was used to exorcise (**wehe**) the evil spirits (**nā mea**) which had been made slaves of by devils and wicked souls. The victim of **ho`opi`opi`o** sorcery was made well by such a treatment. The prayers used were **oli** or **mele**. Such an illness could not be cured by the medical **kahunas** of **Lonopuha**, nor by the **kahuna pā`ao`ao**, nor did the symptoms respond to medicines or purgatives. Such remedies would result in **pilikia** and eventually in death. However, such an illness was but a mere trifle (**ma`i pālau`eka**) to those who knew **ho`opi`opi`o** [counter] sorcery. Such **kahunas** did use some remedies as medical potions ( **`apu**), such as **`ohe** (bamboo), stripped of its leaves and grated; grated **olonā** and **`Awa** rootlets; **`uhau**; **`kūka`i makani**; root of the **mālena** [**manena**?]; bark and key of the **painahala** (**hala**); leaves and blossoms of **kanaka maika`i** ( **`ilima**); tuber of the **hāloakea** (**lauloa**) taro; bark of the **`puhilani**, **`ma`iola**, **`ki`ikea**, and **`ki`i`ula**; bark and trunk of **`pua**, **`kapo**, and **`kahuilaokalani**, bark and fruit of the **`hualewa** ( **`ōh`ia`ai**); and some others.\* the **kahunas** of this sort went into metaphors and hidden meanings (**nanenane a me nā`ōlelo huna**) in their important work of expulsion (**kaiehu`a`a**), and some of them were truly gifted.

The names in quotes are medical terms, ‘trade names,’ for certain plants, just as **kanaka maika`i** is the ‘trade name’ for **`ilima**, and not all are identifiable. “**Uhou**” is perhaps the **uhauko** (**pāwale**); “**hualewa**” is the **`ōh`ia`ai**. “**Ma`iola**,” “**pua**,” “**kapo**,” and “**kahuilaokalani**” are **kinolau** (plant body forms) of the **Kālaipāhoa** gods of the same names, but not necessarily the trees the gods “entered.” For instance, the **mane** (**a`e**) is a **kinolau** of the god **Ma`iola**, as is the **pānini**, the common wild cactus.”

## APPENDIX 10

Kekahuna, H.E.P. 1956. Recorded interview with Kenneth Emory. In B.P. Bishop Museum archives.

### A

Kekahuna: ....for instance some people say they are connected to Pele. Well, I'd like to know how. Many of these people they claim that they are close to Pele, that is to Pele cult. Well, I know that myself. I know my folks went over to Puna twice. Grandfolks, my mother, they went over. If you belong to Pele, the way they do it out there, you have maybe three months ahead of time before you take your trip. You plant `awa root, you plant sugar cane, you raise the pig, black pig. There's two kind pig that they take. There's the dark, pure black, or stripped yellow. That's olomea. That's the only two kinda pig you can use, yellow strip one the side. You raise the pig, or dog, or cane, or taro, or whatever may be, or tapa for offering. You cannot take to Pele anything that has been used, or what we call second hand. Its strickly tabu. I seen my folks, they plant the `awa root, and they plant sugar cane, and when the cane grow they bunch that cane. That's sign of tabu. You and I can get cane, any other cane, but the cane that is bound, they call "pū`ā." You cannot take, get that cane. And the day you go to Hawai'i, they, you gotta get this `awa root, get the cane, pull that there `awa root nicely and wrap in bananas, then wrap your tī leaf outside. That's what they call "awalau." See the young `awa root, three or four months old, there's not no tuber down there, there's no root. Its just the root, the young root. But the leaves, if two, three, four leaves, they call `awalau. Then you take the sugar cane, whatever sugar cane, then the new tapa you beat, prepare. And then this pig, take as it is, leave. Then they sail to Hilo, and then to Puna, and then they walk up to the volcano, that there crater. See, and when they get up to crater they go to chanting. But the chant might be an hour before they throw their offering. And that's when they do the offering. They don't take anything in the house, no. Its very strict, tabu. You gotta help that thing, plant it and care, and everyday you care that plant, they pray, after they pray then the last, the words out of their moth is, "For you o Pele." That's how they do. They don't go down and get anything from the store like we so today and throw the offering. No, no can, very strict. Some of these people talk about Pele but they don't know what they are talking about. They are only trying to show that they are connected, but to tell you the truth, many of these people would say they are connected. Why right here in Kā`ū, year after year they are damaged, every year and they can't do nothing. What they did in 1868, Reverend Ka`uhane told me himself, grandfather of Noble Ka`uhane. When that earthquake, he was living, he was the preacher of Waianu. When that earthquake come, and that tidalwave in 1868, what do these people could do? They went crazy in Waianu, in Fort Selda(?), that's when the Dion Perish was living, he first live in Ka`ū, the Parish family. ... Why didn't they go and... stop Pele? Because they were not keeping the tabu of Pele. Because they broke the tabu. And they were living, most of the people at that time in Ka`ū, too much good times, gambling, drinking always. Because I went in 1905 in Ka`ū, I was 24 years old.....

### B

.....It's a great thing, in the old days, they tell stories at night. See one would start to tell the story and when he got through another would tell a story, in those days. The old people,

most of the old people, they don't read so naturally, you(r) turn tonight and if you don't finish the story you continue tomorrow. And at the end or during Saturday they have a big feast. They tell story first about midnight (**aumoe**), then they start to drink **`awa** root and eat everything... and then they do. So whenever you see them, the houses light, in our house light. And all that they are doing is telling story. And, well, its part of their life, see, you enjoy. So I was young chap at that time when I sit up and listen to the old folks as much as I can then if I sleep I go sleep. So I get a lot of information from their life. But when I go, whatever place, I rechat with the old timers of the land.

## C

Same thing with Puna. One time a man was sitting, everyday, he said well, "You can't beat Puna **`awa**," it's the strongest narcotic **`awa**. I said, "What kinda **`awa**?" He said, "That grows on tree." I say, "What kinda tree?" I say, I act like you know. Its funny, you (style?) people grow in Puna here. My people in Maui they know. I told if the **`awa** root grow on the akia what is it? You die! That poison! He didn't know. I said, "You try!" The **`awa** root that grows on **akia**, you drink that **`awa** root you die. And I told, **`awa** root that grow on **pūohala** tree, it dry. And I told, if you drink **`awa** grow on **kukui** tree, its bitter. You have that sap. And happened one Maui man was living there, Kapukini(?), see he belonged to Waihe'e. And he asked me what is **`awa** root that makes Puna famous? I told him **`awa** root that grows on **`ōhi`a lehua** tree. That's the **`awa** root. Then that man from Maui, Kapukini, told me then, "You all right. It takes a young man to come and show these people, of their own country." I knew all these things from my folks. In that they talk about **`awa** root that grows on the tree.

... If you remember that **`ōhi`a lehua** and **`iliahi**, plant together, and feed eachother, that's the best **`iliahi**. Well that is same, is true with any other, so with the **`awa** root. Because my father was in the **`awa** root business for many years up until the time he dead. He used to send 100s of ton **`awa** root here to Honolulu here. So my father had **`awa** root for years and years up 'til his death.

# APPENDIX 11

Kekahuna, H.E.P. 1963. Unpublished papers in the State of Hawai`i archives.

## A

### The Ceremonial `Awa Drink

The most highly esteemed liquor of ancient Hawai`i was the `**awa** drink, favorite beverage of the gods, priests, and chiefs, and a first and most essential of the offerings to deity... There are approximately two dozen Hawaiian varieties, some of which are known by different names in different localities, each of which shares its name with the drink it produces.

The most sacred of these varieties were the `**Awa hiwa**, with dark green somewhat long stem internodes, dark at each node when mature; and the `**Awa mō`i**, with dark stems and internodes not quite as long as those of the `**Awa hiwa**. The drink from these varieties was especially offered to mighty Volcano-Goddess **Pele** and other deities. A chant was offered, and then the drink itself. This involved dipping one's finger into the `**Awa** and snapping it either upward, backward, or both. The essence of the drink (**ke aka**, literally the shadow) was first offered to the gods, whereupon it was the duty of the priests (**kahuna**-s) to ceremonially consume the remaining substance (**ke kino**, the body; **ka `i`o**, the flesh).

The great chiefs, for their pleasure, also imbibed the sacred `**Awa**, permitting only the use of non-sacred varieties to the humble commoner, unless a **kahuna** used a sacred variety to treat a sickness.

## B

### The `Awa Shrub

Cool moist uplands are the best for the growth of the `**Awa** shrub, though with care it can be grown at lower levels. Dry lands produce weak drink, as is the case with the **Ti** plant. Too much rain makes the `**Awa**-root watery (**kāwai**), and it becomes rotten (**palahū**). In days of old special lands on the different islands were famed for `**Awa** of greatest excellence. Such a land was Ka`ele-ku, district of Hāna, island of Maui, where grew `**Awa** for chiefs. Massive `**Awa** roots, well yellowed with great age, perhaps two or three centuries old, were found there. One such huge root might take two men all day to dig out (**kā `awa**), and require their combined strength to lift it from the hole. Such a root produced `**Awa** drink unexcelled, of highest quality, most potent, and of finest flavor.

In the rich soil of Maui, under best conditions, one giant root, sometimes termed a parent root (**pū`awa makua**), might make from about 8 to 10 chunks (**pū`awa**), weighing from 8 to 10 pounds each, even 12 such pieces. A general measure in the modern sale of `**Awa**-root was eight such chunks, or one **walu** (eight).

In contrast, `**Awa**-root grown in poor soil, such as is found in part of the island of Hawai`i, may yield only 1 or 2 chunks of regular size.

**The `Awa is of slow growth. A small `Awa plant with only a few leaves and a little white root, not large enough to chew for `Awa drink, is called an `awalau from the time it bears leaves till it is about 3 years old. The small plants were prized, and their value increased with age. They were used by priests (kahuna-s) as an offering to the gods. Seekers of aid from medicinal kahuna-s (kahuna lapa`au) would pull up `awalau, wash them, and present them to these medical doctors. The whole plants were pounded up for portions (`apu) called `awalau, and secret ceremonies were performed in connection with treatment to insure protection from harm, or to bring good luck.**

From about 20 years of age, when the root was still white, to 30 years, when it was somewhat yellowed, its weight would range from about 8 to 10 pounds. When dried in the sun for about a week to remove wateriness, the `Awa drink from it would be acceptable as offerings to the gods, and to grace the `Awa drinking parties of the great chiefs.

## **C**

### Replanting

**The ancient Hawaiians were careful to replenish their sources of food and other products from land and sea. Therefore when a large `Awa root was removed it was replaced by one or more cuttings (kiwi), or tiny plant-sprouts (aka), or sprouts from the stems (lālā) bent to the ground and weighted (kākiwi `ia). Or the stems of the removed shrub might be chopped up and strewn in the nearly filled hole, then lightly covered with earth, to obtain sprouts called pigs'-teeth (niho pua`a).**

## **D**

### The Nature of `Awa Drink

The `Awa drink is a stupefying narcotic, gray or greenish if prepared from the roots of very young shrubs, never clear. It is slightly bitterish (**malamala**) but not bitter (**mu`e**), and gives a feeling of thickness and especially numbness to the mouth.

A cupful of medium or normal strength `Awa, with two quids of chewed `Awa-root to a cup of water, drunk from a **kilu** or coconut-shell cup made by cutting the shell in two lengthwise, as distinct from a **pu-niu** or small container made by cutting off the top, was sufficient to give relaxation, invigoration, and relief from soreness after a hard day's work such as fell to the lot of the commoner.

A cupful of strong, or double-strength `awa, with four quids of chewed root to a cup of water, could cause intoxication for two or three days, but if one slept all night, took a cold bath in the early morning, and refrained from drinking water which was a principal renewer of intoxication, he would be well recovered from the effects (**Ua māhia i ka `ona o ka `Awa**).

Intoxication from `Awa, unlike that from modern strongly alcoholic liquors, does not cause loud talk and brawling, but induces sleep.

Unlike our alcoholic liquors, too, `Awa does not form a habit that is difficult to break.

## **E**

### `Awa as Medicine

Anciently `Awa was of great medicinal value. The medical doctor of old Hawai`i (**kahuna lapa`au**), put it to many uses. Its moderate use improved health, soothed the nerves, steadied the pulse, did not raise the temperature, acted as a tonic, and induced refreshing sleep. It remedied chills, hard colds, coated tongue, sharp headaches, difficult urination, kidney trouble, displacement of the womb, weakness from conditions during virginity, affections of the skin, overweight, and disordered stomach of children. The juice of the nēnē variety was used as a soothing syrup for fretful infants.

To cure headache bits of `Awa-root were frequently chewed, and the leaves wrapped around the head. By chewing small pieces of the root, too, thirst was relieved, and a pleasant, cool, aromatic, numbing effect produced in the mouth.

Miscarriage is said to have been induced by the insertion of `Awa leaves into the vagina.

Mashed `Awa-root was used as a poultice for boils.



## **F**

**`Awa** as a Cosmetic

A very effective cosmetic, popular with both men and women, was [the] **`Awa drink**. For a month or two the beauty seeker drank considerable **`Awa** till scaly skin (**mahuna**) appeared. A good purgative was then taken, and sea bathing engaged in for about a week, whereupon the scales disappeared. Coconut oil was then rubbed over the body. The delightful outcome was a soft, fair new skin (**ma`ili ka `ili**) like that of a child.

## **G**

Effects of **`Awa** Drinking in Excess

**`Awa** drink is harmful in excess. It reduces control of the arms and legs. The mind is temporarily dulled, though it remains clear till the drinker sleeps. Continued excess debilitates, causes underweight, and eventually a withered body. The eyes become inflamed, bleary, bloodshot, squinty, and suppurated; the lips become cracked and dry. After several weeks the skin becomes rough, shiny, ulcerous, and scaly (**mahuna**).

## **H**

Treatment of a Big **`Awa** Root

A huge **`Awa** root, sometimes termed a parent root (**pū`awa makua**) was tough, somewhat spongy, and roughly gnarled. Smaller roots, perhaps an inch thick, adhered to it. Other small roots (**huluhulu `awa**) broke off in the ground, and were carefully dug out with the rest to contribute to making of finest **`Awa** drink.

When the dirt was scraped off the big root it was washed, chopped into sizeable chunks (**pū`awa**) with sharp stones, and about an equal amount of smaller roots to each chunk, including those broken off, braided together (**hili `ia**) before they got dry and stiff. The chunks were then dried in the sun (**ho`omaemae `ia**) for about three or four days, when they were hung in a shed (**hālau**) to prevent them from becoming over dry.

## **I**

Purification Before Preparing **`Awa** Drink

As **`Awa** was a sacred beverage when offered to the gods there was much tabu (**kapu**) or inviolable sanctity associated with it. Those who prepared the **`Awa** drink washed their hands before and after the process. Everything used in this work had to be kept in its special place and used for its special purpose only. It would be sacrilege, for instance, to put food into an **`Awa** bowl.

The **`Awa** drink of chiefs, too, demanded the performance of certain preparatory purification. That for the **`Awa**-root chewers was particularly exacting. They rinsed their mouths with water, and further purified them by chewing sugar cane, of which the **Kō kea** (white sugarcane) variety was one of those especially used, as were also certain others of which the names had significance as good omen, such as the **manulele**, or flying bird variety, suggesting that great trouble fly away (**lele ka pōpilikia**), and the **Kō pilimai** for contracting good fortune (**pili mai ka pōmaika`i**).

At the seashore the **`Awa** folk chewed special kinds of seaweed, particularly the coarse **Limu kala** (**kala**, to forgive, in one sense), or an acceptable substitute, carefully shunning those with unpropitious names, lest the ancestral guardians (**`aumākua**) exact retribution (**nanahu**, bit and bite again). Sea-urchins, with the exception of the **`ina** (*Echinometra* spp.) and **wana** (*Centrechinus paucispinus* or *Echinothrix diadema*) which possessed sharp spines that could prick evil spirits, were not to be eaten. Shellfish, too, were forbidden (**kapu**).

## J

### Cutting Up or Crushing the `Awa root to Make Drink

The first work in preparation for making the esteemed `Awa drink was to cut up the chunks of root with sharp stones, and cut up the smaller, more tender roots, with bamboo knives. Modernly the chunks were crushed fine with stone or iron in a mortar called a poho `Awa, or `Awa cavity, made from a short section of a hard-wood tree, usually breadfruit, with a straight-sided hole in the top about a foot deep. Just enough water was added to prevent particles from flying.

## K

### Chewing the `Awa Root for Drink

Most important of the makers of `Awa drink were those who chewed the `Awa-root (**mama i ka `Awa**). The honored professional `Awa-chewers of the chiefs were called **ha`ae** (drool). Boys and girls were trained for this very special work. As long as the girls were virgins (**pu`upa`a**), up to commencement of menses and their consequent pollution (**haumia**), they were sought as `Awa chewers. No woman in her menstrual period was allowed to touch the `Awa, or anything connected to it.

Mouthfuls of the root were chewed to sizable quids of pulp (**māna `Awa**) for chiefly `Awa drinking feasts, or somewhat smaller quids for religious ceremonials. Two of the larger quids to a cupful of water made `Awa drink of medium strength, and four quids strong `Awa. The quids were deposited in an `Awa bowl (**kānoa `Awa**), generally a large circular wooden bowl with a place in the edge for pouring, or a canoe shaped bowl (**holowa`a `Awa**) for the same purpose, though a gourd was sometimes used as a **kānoa**.

When a quid of `Awa-root was properly chewed it was not dry and tasteless (**mālo`o-hāhā ka māna `Awa**) but firm yet retaining juice and flavor (**maumau**).

At many an `Awa party mischievous persons who chewed would suck out and swallow the juice of their quids, leaving them in dry condition (**mālo`o-hāhā**). Such persons became intoxicated more quickly than others, and would therefore soon be detected by expert chewers, and not trusted as an `Awa chewer thereafter. As `Awa feasts were customarily held in the evening any quids sucked dry could escape detection more readily than at feasts held in the daylight.

It was a special sin to suck quids dry when the `Awa drink was being prepared for the ceremonial ritual of some deity. The offender, too, would fear the punishment of the gods.

The chewing of `Awa-root required considerable practice. In the mouths of beginners there was generally too great a flow of saliva.

Quids were chewed one after the other without any emptying of juice from the mouth.

`Awa-root grown in a place too dry has not much juice for drink, and if in a place too wet the drink is watery (**kāwai**). When such deficient `Awa-root was used a proportionally larger number of quids were required for drink of sufficient strength with the amount of water used. This was determined by expert chewers.

## L

### Stirring, Squeezing, and Straining

When the correct amount of water for the desired strength of `Awa drink was poured onto the quids in the `Awa-bowl it was stirred about with the hand to break up the quids and dissolve their juice. The settled pulp (**ke oka**) was then squeezed with both hands to extract remaining juice. If, however, the drink was for a single medical portion of a **kahuna**, instead of for a company of people, in which case only two quids would likely be sufficient, one hand would be used for stirring and squeezing. Myriad root particles was called **hoka (hoka i ka**

**`Awa**), which word has been misapplied to the strainer itself, known by the name of the material used.

## **M**

### **The Strainer**

The best, most usual, most available strainer, was a good sized bunch of the strong fibers of the **`Ahu`awa** or **Ehu`awa** plant (*Cyperus laevigatus*), a kind of sedge generally found near the seashore, and planted about the houses for use as a strainer, and for the making of a stout cordage especially used by fishermen for such purposes as tying on sinkers (**pākā**), for which **Koali** (or **Kowali**)-vine (*Ipomea* sp.) cordage was sometimes used, and tying on fishhooks (**makau**) and fish-net floats (**`ikoi**).

A good modern substitute for **`Ahu`awa** strainer is the fibers of the small manila rope, but they do not last as long.

In making the strainer the stems of sedge were pulled out one at a time, the tops (**puapua`Ahu`awa**) cut off, and the lengths of stem, about a yard long, crushed singly between two sticks drawn back and forth, or beaten, till the fibers were well exposed. The pulp was then thoroughly washed out, and fibers dried in the sun.

The name **`Ahu** (or **ehu**)-**awa** signifies that when used for straining it gathered together (**ho`ahu**) innumerable root particles suspended in the liquid, comparable to dust blown into the air (**ehu lepo**) or sea-spray (**ehu kai**).

Also used as ancient strainer was the fiber of the young aerial roots (**uleule hala**) of the **hala**, (*Pandanus odoratissimus*), a single tree of which is a **pūhala**. Beating out the fiber was more work than making **`Ahu`awa** strainer.

Used anciently as strainers, too, were certain grasses (**mau`u**), especially **Pu`ukoa** (*Rhynchospora laxa*) a species of sedge-like plant of the **`Ahu`awa** class that bears medicinal seeds, and the shorter stemmed **Kili-o`opu** (*Cyperus auriculatas*) used to string small fish.

## **N**

### **The Dregs**

Just before the **`Awa** was strained, the dregs, which had been squeezed to further remove the juice as they lay on the bottom, were lifted to the surface, squeezed out into the liquid that was to become the original brew (**mahu**), and then either discarded or placed on a mat to be dried in the sun for a second brew called a **kua**. They were soaked for a couple of hours before being strained for drinking.

The drinking of the **kua** was beneath the dignity of priests and chiefs, who considered it comparable to eating something contaminated by being bitten into by someone else (**`ai palaniho**). It was drunk by **kahu**-s, or body servants. Scaly skin resulted more quickly from the drinking of the **kua** than from drinking the **`Awa** of the original brew.

It is said that when **`Awa** was scarce there might be a second brew called a **hope**, or last, and a third called **kua**. These terms are evidently interchanged. Surely the second of three brews would not be called the last! A third brew would probably be so watery (**kāwai**) that one might about as well drink plain water.

## **O**

### **Straining**

When the settled pulp had been removed countless particles of floating root were strained out by drawing a tangled bunch of strainer again and again through the liquid till well filled with particles, whereupon it was wrung out into the brew, then shaken out (**kaka`ia**) away from it. People who were **kāpulu**, or not properly particular, used the same strainer for restraining at the time of pouring (**ninini ana**). Those of high class usually washed out the first strainer and dried it in the sun ready for the next occasion, and for pouring used an extra strainer, one or more of which were usually kept on hand. Strainers

were not to be mixed. One for pouring medical potions of **`Awa** (**`apu `Awa**), for instance, was not to be used at an **`Awa** feast.

When a strainer was discarded it was burned, or thrown into a stream, or into the sea, to prevent it from being secured by an enemy who might take it to a sorcery **kahuna** (**kahuna `anā`anā**) to be used for bait (**maunu**) for praying to death its former possessor.

## **P**

### **Serving the `Awa Drink**

When the **`Awa** was strained ready for serving it was again strained by being poured from the **`Awa**-bowl, through a notch at the top, into a strainer, usually for that purpose only, twisted into the shape of a bird's nest. For a small number of participants seated about a mat, which would be of dimensions according to the number of guests present, the **`Awa** would be poured into the cup (**kilu**) of each, but for a large assembly the cups would be filled at one place. When all had been served they commenced to drink at the same time each first offering a prayer for blessings from his ancestral spirit guardians (**`aumākua**) and to the gods for the well-being of his king.

At an informal party the highest chief was served first, and the others according to rank, but at a ceremonial party, it is said, the chief second in rank was served first, and the last cup, strongest and richest in remaining sediment (**ko`ana**), was reserved for the highest chief. Ordinarily a pourer would seek this for himself.

Ordinarily the **`awa** drink of the chiefs was prepared for them by their body servants (**kahu**) both before and between meals. It was customary, however, to drink **`Awa** after and not directly before meals, as the effect of **`Awa** might cause one to lose one's way to his mouth and put some food on some other part of his face.

## APPENDIX 12

Pukui, M.K. n.d. Unpublished notes in the Gutmanis Family private Archive. [Resembles contributions to Beckwith's (1940) section on `Awa.]

### A

As an offering for any and all ceremonies the `**aumakua** and `**unihipili** liked `**Awa** the best. It was considered food for the gods and essential for the nourishment and growth of the spiritual beings, just as **poi** and fish were essential to man. The `**unihipili** and `**aumakua** were family spirits, and the families to which they belonged offered them `**Awa** daily. This was their food for strength and growth and procured their good will.

### B

After the `**Awa** was prepared and poured into the cup, the person offering the `**Awa** called upon his `**unihipili** or `**aumakua** to come and partake of the `**Awa** with him. Accompanying prayers began with such words as, "**Eia ka `ai e ke akua**," or "Here is food, O gods." Some Hawaiians tossed a little `**Awa** out of the front door, but others dipped the index finger into the liquid and flicked it upward snapping the fingers. The flicking upward by pressing and releasing quickly the finger against the thumb is called **pana**. Each `**aumakua** was addressed separately, an offering gesture for each.

### C

The care of the `**Awa** cups and containers used for ceremonies and daily offerings was strict. They were hung up or placed on a high place where they would not be touched except when in use. The `**Awa** for offerings was also kept out of reach until needed.

### D

In divination (**hailona**) the `**Awa** in the cup was closely watched for air bubbles. The lack of air bubbles was a negative answer while their presence signified success. The movement of the bubbles indicated the time it would take to be fulfilled or the length of time it would last.

### E

If, while the `**Awa** was being dug or put out to dry, someone stepped over it, that `**Awa** was thrown away as being unfit for use. It was defiled. It was not given away, as the `**aumakua** was likely to tell his keeper what had taken place, thus creating an ill feeling, and it would also be bad for the donor if the other person's `**aumakua** was the same as his. His punishment would be heavy, either disease or death.

### F

The best liked `**awa** for offerings were the hiwa, the papa and the moi. Whole `**awa** root (pu`awa) was more highly considered than one that was divided. That is, when the root was dug out of the ground, the undivided root was set aside for the offering. It might be cut up to make it easier to dry, but every part of the root must be kept together.

### G

The dregs of the `**awa** after the juice had been extracted were never carelessly discarded but were bundled carefully, and thrown into the sea or a running stream.

## H

There were times when the **`aumakua** revealed, either in a dream or in a séance, the special kind of **`Awa** it wanted as an offering. The **`awa lau** or **`awa-i-kū** was the term given to the shoots that grew up beside the parent plant, and had a single root, a single stalk, a single leaf, and a leaf bud. It sometimes required much hunting to find such a shoot and the owner of the plant was always handsomely paid. After money was introduced, five dollars was the usual price even for a very young plant of this description. I remember seeing a **pū`awa** root washed, dropped into a container of water, taken into the mouth, chewed and the juice swallowed in one gulp.

## I

Some Hawaiians dedicated an **`Awa** patch to an **`aumakua**, offering prayers while planting the stalks and never allowing any one to take any of the **`Awa** when it matured. The **`Awa** in the patch belonged to the **`aumakua**. Although this dedication of a patch was not rare, it was dangerous unless the planter was always on guard.

## J

A man in Ka`ū had a patch of **lele** bananas and **honua`ula** sugar cane which he dedicated to **Kalani**, a shark **`aumakua**. These were Kalani's favorite foods, which he ate after he was given his offering of **`Awa**. One day, in the planter's absence, some relatives came and, seeing the ripe bananas and flourishing sugarcane, ate them. It worried the planter so that he became insane.

## K

In rare cases when **`Awa** was unattainable the **Pōpolo** plant was substituted. I remember once in Hilo when it was imperative to find a young **`Awa** to be used as an offering when a child was ailing, a **Pōpolo** plant growing alone was sought as a substitute and found. The **kahuna** then addressed it as **`Awa pōpolo** and used the same prayer that is sometimes uttered when getting the **`Awa**.

**E ka `Awa a Kāne**  
**I ulu i Kahiki,**  
**I mule i Kahiki,**  
**I a`a i Kahiki,**  
**I kumu i Kahiki,**  
**I lālā i Kahiki,**  
**I lau i Kahiki,**  
**I mu`o i Kahiki,**  
**I pua i Kahiki,**  
**I ki`i mai nei au i ko kino**  
**I la`au no \_\_\_\_\_**  
**E Kāne e, ho mai i ola.**

**O `Awa of Kāne,**  
That grew in Kahiki,  
Rooted in Kahiki,  
Bore rootlets in Kahiki,  
Grew a stalk in Kahiki,  
Branched in Kahiki,  
Leafed in Kahiki,  
Bore leaf buds in Kahiki,

Blossomed in Kahiki,  
I have come to take your body  
To be used as medicine for \_\_\_\_  
O **Kāne**, grant him health.

## L

After alcoholic liquors were introduced and the use of **`Awa** declined, liquor was considered a good substitute. Why, I don't know. Tobacco, too, became recognized as an appropriate gift to the goddess **Pele**. Tales were told of her fondness of smoking and of her asking for some.

Prior to the Papa flow in Kona, a relative of mine took two Mormon elders to see some Mormons in the upland mauka of Waiohinu and when the trip was ended and the Mormons had left, he sat down by the horses to enjoy a smoke. Knowing that the Mormons did not smoke, he too had refrained until they were gone. Suddenly a woman appeared and asked for a cigarette. He rolled one, lighted it and gave it to her. With one puff or two it was gone and she asked for another and then another. Finally she stood up and said, "You'll hear news from Kona next week." All the while the horses snorted, and pawed the ground as though afraid of something. When she left he noticed that she did not walk on the ground but a few inches from it. When news came of the Papa flow the following week, he was positive that he had conversed and smoked with **Pele** herself.

Some of **Pele**'s devotees kept tobacco and special wooden or ivory pipes in boxes or trunks out of the reach of any outsider. A woman once went to an old couple whom she had never met before and asked for tobacco. They told her that they hadn't any as they were not smokers. She replied that there was some in a wooden box on a high shelf. The pipe and tobacco were wrapped in red calico. The old folks were amazed for all she said proved true. They recognized her at once as another devotee of **Pele** to whom she revealed secrets. The woman was a **kahu**, one who served as a haka when the later was in a trance.

## M

An offended **`aumakua** could sometimes be appeased by the proper offerings, but there were times when it would **hulikua** (turn the back), and no amount of pleading could make it give heed except by a favorite devotee, someone whom it dearly loved. It took some time and patience to win back the favor of an **`aumakua** who was thoroughly angry. One who was merely vexed would very often reveal the appropriate offerings. For minor offenses it was usually a hen's egg a tightly rolled taro leaf called **ao lū`au**. They were wrapped separately in **tī** leaf bundles and cast into the fire. Should the egg burst with an exploding sound, the offering was accepted and the offense forgiven, but if it did not, then another offering must be sought. Eggs were never eaten by my people in the olden days but used as suitable offerings to the **`aumakua**, for an egg was the symbol of a whole chicken. My grandmother could never eat an egg without feeling as though she was devouring a whole undressed chicken. The taro leaf was thought to be one of the plant forms of a pig and therefore could be used to represent that animal. If any part of the offering was to be eaten, it was appropriate to eat the young, taro leaves cooked in a separate bundle from those cast into the fire as offerings.

## N

Offerings to the **`unihipili** were often composed of the things he or she had liked best in life. If the deceased had been fond of a particular fish, that fondness carried over with him into the afterlife. Sometimes that fondness was willed to a relative before the passing of the deceased. This willing of one's fondness to another was called **puni kauoha**. I knew a woman in our district who received such a "willed fondness," from her mother. She was hardly ever without bananas in the house and would eat them even after they had turned

black and soured a little. Living in the upland, she seldom could get squid to eat, but when she did, she never threw away any, not even when the odor was too much for others to bear.

Color in pigs, dogs or chickens played an important part in the selection of offerings for the **`aumakua**. Whether a male of a female animal had to be offered depended on the **kahuna**'s specification, the revelation in a dream or the sex of the object which one wanted to attain. In lua fighting, the offering was preferably a sow that had borne several litters, **kumulau pua`a**. Sometimes a coal black hog was chosen instead.

If the fowl or animal was one's own it could be offered freely, but if it belonged to someone else, that person had to be well paid before it could easily be offered to the **`aumakua**. As a child I was very fond of pets, particularly chickens of different colors and would exchange with relatives so that I could have one of every color I could find. The breed and the size mattered not in the least to me. My aunts and uncles seldom objected to exchanging for it was noticed that a hen or a rooster that I had asked for always died suddenly if the exchange were refused. Not that I had anything to do with them. Among my chickens were the pure white (**lawakea**) or **uakea**), the ashy grey (**lehu**), the coal black (**hiwa**), the red (**ulahiwa**), the speckled, like our modern Plymouth Rocks (**nēnē**), the light yellow (**puahau**) and those that were speckled with many colors (**pulepule**). Sometimes there were the combinations of two or more colors. When other Hawaiians discovered that I had every color to be found among chickens, they came to buy of me. Perhaps elsewhere, the owners set the prices but among my people, the buyer offered what he could afford, so I often received from one to five dollars apiece for them. When it was understood that the fowl or animal was to be used as a **mōhai** (offering) or in our daily speech **i mea hana** (something for a ceremonial rite), the money or article offered in exchange had to be accepted, otherwise the purpose for which it was required would be non-effective. Although a chicken might be given to a friend for a ceremonial purpose, the original owner was still the rightful one until an article had been accepted in trade. A man's property belonged also to his **`aumakua**'s, in a sense, and could not be offered to the **`aumakua** of another.

The following might help to illustrate the point. For several years I had given chants to a friend to use in programs. A mutual relative came to see me one day and mentioned the success of this friend of mine and then asked what he had given me after each performance for the chants he used. "Nothing," I said, "I gave them to him." "Indeed!" she replied, "He and his **`aumakua** eat of the fruits thereof, while you and your **`aumakua** go without." I said again, "I gave them to him." "Oh indeed!" she answered, "Crazy fool, can't you look to see who is at your back once in a while? Do you think your **`aumakua** will stand for it continually? Either it will resent the other person for coming to you, or you for not valuing your chants more highly."

Before an offering was cooked, it was laid out on **tī** leaves and with prayers dedicated to the **`aumakua**. Each article was touched with as it was mentioned. The dedicatory prayer was something like this, "O **`aumakua** of the [day and of the] night, from the sun rise to the place of rest; from the north to the south; from the zenith to the horizon. Here is the red fish, here is the **`Awa**. An offering a gift to you." And then mention was made of the purpose of the offering. After the fish was cooked and the **`Awa** prepared, another prayer was offered before eating. At this time the words, "**O ke aka kā`oukou, o ka`i`o kā mākou**," (the essence is yours, the material is ours) were included in the prayer. The offering was consumed by the members of the family; the **`aumakua**, their invisible guests, partook of the "shadow" or essence.

A pig, dog or chicken was held by the priest and dedicated before it was killed. Many tales have been told of animals that expired under the **mana** of the prayer but I never witnessed such an occasion. "**I ka pule nō a make**," (the prayer alone killed it) was an expression I heard in childhood and have several of my friends who claim to have seen it.

Unlike the foreigners, the Hawaiians did not bow the head nor close the eyes in prayer. They looked up and chanted or talked as though the **`aumakua** were visible and present.



One of my delights was to go to the old Lunalilo Home at Makiki several years ago, and join the inmates in their worship. Some prayed to the Christain God in the same manner as had their people before them to the **`aumakua**, with open eyes and in familiar conversation, as to a dear friend who understood all.

## APPENDIX 13

Fornander, A. 1916-1920. *The Fornander Collection of Hawaiian Antiquities and Folklore*. Volumes 4-6. Bishop Museum Press, Honolulu.

Originally in English and Hawaiian, but only the English is included here.

### A

V:606-611 By John Mana

#### History of the Awa

This plant is plentiful in Hawaii nei, and perhaps in other lands also; it is so large underneath, and its branches which are jointed like the sugar-cane; it has large leaves, though there are some with small leaves.

#### Where the Awa is Found

It is said that this plant was brought to from Kahiki by Oilikukaheana. He brought it for fishing plant (sic). When he came and landed on Kaua`i, he saw a beautiful woman, Kamaile; she became his wife, and the plants were cared for by her. Afterwards she threw them away and they grew at Wai`ale`ale. Some were pulled up by Moikeha and brought by him from Kaua`i; and without his knowing of the kinds of plants they were, he planted them at Halawa, on O`ahu. When Moikeha saw that (sic) the plants he grew he went and told the owner, Oilikukaheana, who said the name was Paholei. Moikeha waited until the plants grew large, and because he had forgotten the name he went to Ewa. This was the time when Ewa and Halawa were living separately; Halawa was not available to everyone, hence the saying: "Halawa is not to be seen; 'tis a land at the end of Ewa," etc.

He went to Ewa, and she told him to go and get the plant. So he went for some, and found that the roots had grown large. So he pulled up the plants, roots, and leaves, and brought them to Ewa. She said: "Let me first eat of this plant, and should I die, do not plant it, for it would be valueless; but should I not die, then we will be rich." When Ewa ate it she became drunk and was intoxicated all day. When she awoke she called the plant, "**awa**"; from thence forward this plant was called **awa**, the **awa** of Kaumakaeha, the chief.

There are many other places mentioned as to where **awa** came from. It is said that birds brought it and planted it in the forests of Puna, Hawai`i. Others say that a som of Hiilei brought it. But this is what I have been told by friends as to the origin of the **awa**.

#### How it is Propagated

It is said that the **awa** is propagated from the joints (**aka**), that is, the branches (**lala**); it is pressed down (**kaomi ia**) and weighted with a stone until the rootlets develop; then it is taken to where it is desired to be planted. Again, when the **awa** roots are being dug up (**ka ia**), that is, when it is pulled (**uhuki**), the branches are chopped up (**poke**) and thrown back into the holes from where the roots had been taken, then covered over with soil, and when the sprouts appear (**omaka**), called **Nihopuaa**, they are taken and planted. The method of planting that I have seen is the same as that followed in the planting of cane.

#### Names of Various Awa

**Papa**, **Makea**, and **Mokihana**: these have white branches and large leaves. Should the **Papa** be planted it would produce (**puka mai**) **Papa** and the root (**puawa**) **Moi**; these

have black (**eleele**) skin on their branches. There is also the **awa** root (**puawa**) **Hiwa**. These are the principal kinds that I have learned.

#### Value of the Awa Root (**Puawa**), The Part from which the Branches Sprout (**Ulu**)

**Awa** was a valuable article in the olden time; a great deal of it was bought by the people (**na kanaka**) for drinking and medicinal purposes. This is what is done if for a sick person: it is used as a medicine together with a black pig for its accompaniment. **Awa** is chewed (**mama**) and placed in a container (**kanoa**), and when it is sufficient it is mixed and strained and pured into the cups, then the priest (**kahuna**) prays to the guardian spirit (**aumakua**), sprinkling (**pi**) some **awa** for them. Then drink (**wala**) of the **awa**, and eat of the fat pig. This will cause one to see things hazily (**hoonoe**) at night, and sleep heavily during the day. So it is with those who are possessed (**hoonohono**) by the gods. When the god comes on a visit and sits (**noho**) on one, **awa** is quickly gotten ready for the deity; it is hastily chewed, prepared and drunk up. Every time the god visits the same process is gone through until one gets inflamed; and when you see someone blear-eyed it reminds you of the following saying: "Inflamed! Inflamed! First you will go down to Piheka. What food will you have to eat? **Awa. (Makole! Makole! Akahi hele i kai o Piheka, he aha ka ai e ai ai, he awa)**"

Again if you have sinned (**hewa**) against your guardian spirit, with the root of the **awa** (**kahi huluhulu awa**) you could be forgiven; then the anger of the guardian spirit would be appeased. If you have a house to move into do not forget the **awa** root (**kahi huluhulu awa**). The drinkers desired their skin to be rough just as if they had been daubed over with poi and it had dried; then it becomes: "Stained is the white, the dark has won (**Hapala ke ke-a, na ka ele ka ai**)."

Again if one has sworn not to talk to another, and later they wish to make up, they must use some **awa** root. There are other things where **awa** root is needed and used. Another thing, it is not proper to eat food before drinking the **awa**; drink the **awa** first, then eat the food; then one becomes intoxicated.

**Awa** root is one of the valuable things sold in our kingdom. You can see the quarters disappearing frequently evening after evening, to secure that which would cause profound sleep at night.

#### The Value of the Leaves

The leaves are large and flat, somewhat like those of other plants. Here is the value, when one is sick, spread the leaves underneath and lay the patient on them and the illness will disappear, provided it is such as can be cured by that medicine.

#### Places Famous for this Plant

At Kamaile, Kauai; at Halawa, Oahu; at Maui are the root of **Eleio**, but I do not know where they grow; at Puna, Hawaii, if I mistake not; whereat on Molokai I do not know. Another famous place is Hakipu'u, Oahu, at a place called Hena; there is located a stone **awa** container and a stone **awa** cup. A man named Kapuna went there and drank some **awa**; and when he came home he was drunk and went to sleep, and died from the intoxication of **awa**; and where he died there appeared two ridges, the ridges were joined at some place; those were the legs; and there is also a small hill at that place; that was the head of the man. This place is known as Kapuna; this place is mauka of Hakipuu, Oahu. This place is also now called Hena, where the **awa** is noted for its intoxicating quality. This is what I have gleaned from friends through inquiry.

John Mana

## **B**

VI: 272. “During a season of great fertility he sent his messengers all over the country and collected all the food they could get at and stored it up in Makali`i’s storehouses and forts. A famine followed, but Makali`i was stingy and had all the food gathered up in nets and hung out of reach, and great distress came over man and animals. The rats scoured the earth and climbed up on the black shining cloud of **Kāne** ... and on the rainbow and from there they nibbled at Makali`i’s nets until they broke and tore them, so that the food fell out on the earth again; and thus the earth was restocked with potatoes, taro, yams, etc.”

## **C**

VI:278. “One time when they (Hawai`iloa and his company) had thus been long out on the ocean, Makali`i, the principal navigator, said to Hawai`iloa: ‘Let us steer the vessel in the direction of Iao, the Eastern Star, the discoverer of land ... There is land to the eastward, and here is a red star ... to guide us ...’ So they steered straight onward and arrived at the easternmost island ... They went ashore and found the country fertile and pleasant, filled with `Awa, coconut trees ... and Hawai`iloa, the chief, called that land after his own name ...”

# APPENDIX 14

Table 5-07. Data from cultivar 1: Mahakea

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.8   | 3.3    | 10     | woody | woody         | absent     |
| 1    | 2     | 4.3   | 3.2    | 15.1   | woody | woody         | absent     |
| 1    | 3     | 4.5   | 3      | 22.5   | woody | woody         | absent     |
| 1    | 4     | 4.5   | 2.6    | 22     | 6     | S & S         | absent     |
| 1    | 5     | 4.5   | 2.5    | 19     | 6     | S & S         | absent     |
| 1    | 6     | 4.4   | 2.5    | 18.5   | 6     | S & S         | absent     |
| 1    | 7     | 4.1   | 2.4    | 15.4   | 6     | S & S         | absent     |
| 1    | 8     | 4.1   | 2.4    | 13     | 6     | S & S         | absent     |
| 1    | 9     | 3.7   | 2      | 11.8   | 6     | S & S         | absent     |
| 1    | 10    | 3.5   | 2.2    | 11.6   | 6     | S & S         | absent     |
| 1    | 11    | 3.9   | 1.9    | 11.5   | 6     | S & S         | absent     |
| 1    | 12    | 4.5   | 2      | 13     | 6     | S & S         | absent     |
| 1    | 13    | 3.9   | 1.6    | 12.1   | 6     | S & S         | absent     |
| 1    | 14    | 3.5   | 1.9    | 10.3   | 6     | S & S         | absent     |
| 1    | 15    | 3     |        |        |       |               |            |
| 2    | 1     | 3.4   | 2.3    | 13     | woody | woody         | absent     |
| 2    | 2     | 3     | 2.5    | 13.8   | woody | woody         | absent     |
| 2    | 3     | 3.3   | 2      | 15.8   | woody | woody         | absent     |
| 2    | 4     | 3.2   | 2.2    | 15.6   | woody | woody         | absent     |
| 2    | 5     | 3.5   | 1.9    | 12.4   | woody | woody         | absent     |
| 2    | 6     | 3.3   | 2      | 11.3   | 6     | S & S         | absent     |
| 2    | 7     | 3     | 1.9    | 10.2   | 6     | S & S         | absent     |
| 2    | 8     | 2.9   | 2      | 8.3    | 6     | S & S         | absent     |
| 2    | 9     | 2.5   | 1.5    | 7.1    | 6     | S & S         | absent     |
| 2    | 10    | 2.4   | 1.6    | 6.1    | 6     | S & S         | absent     |
| 2    | 11    | 2.5   | 1.5    | 6.2    | 6     | S & S         | absent     |
| 2    | 12    | 2.6   | 1.3    | 5.5    | 6     | S & S         | absent     |
| 2    | 13    | 2.1   | 1.3    | 5.4    | 6     | S & S         | absent     |
| 2    | 14    | 2.3   | 1.6    | 5.6    | 6     | S & S         | absent     |
| 2    | 15    | 2.5   | 1.8    | 4.7    | 6     | S & S         | absent     |
| 2    | 16    | 2.2   | 1.4    | 5.3    | 6     | S & S         | absent     |
| 2    | 17    | 2.6   | 1.1    | 5.2    | 6     | S & S         | absent     |
| 2    | 18    | 2.5   | 1.1    | 6.1    | 6     | S & S         | absent     |
| 2    | 19    | 2.4   | 1.3    | 6.3    | 6     | S & S         | absent     |
| 2    | 20    | 2.5   | 1      | 5.6    | 6     | S & S         | absent     |
| 2    | 21    | 2.3   | 1      | 5      | 6     | S & S         | absent     |
| 2    | 22    | 2.3   |        |        |       |               |            |
| 3    | 1     | 3.6   | 2.8    | 14.5   | woody | woody         | absent     |
| 3    | 2     | 3.8   | 2.5    | 19.4   | 6     | S & S         | absent     |
| 3    | 3     | 3.4   | 2.3    | 21.6   | 6     | S & S         | absent     |
| 3    | 4     | 3.7   | 2      | 18.5   | 6     | S & S         | absent     |

|   |    |     |     |      |   |       |        |
|---|----|-----|-----|------|---|-------|--------|
| 3 | 5  | 3.5 | 1.6 | 17.6 | 6 | S & S | absent |
| 3 | 6  | 3.4 | 2   | 12.7 | 6 | S & S | absent |
| 3 | 7  | 3   | 2   | 11.6 | 6 | S & S | absent |
| 3 | 8  | 3.3 | 1.5 | 10.2 | 6 | S & S | absent |
| 3 | 9  | 2.9 | 1.3 | 11.1 | 6 | S & S | absent |
| 3 | 10 | 3   | 1.5 | 11.5 | 6 | S & S | absent |
| 3 | 11 | 3.1 | 1.3 | 11   | 6 | S & S | absent |
| 3 | 12 | 2.9 | 1.7 | 6.9  | 6 | S & S | absent |
| 3 | 13 | 2.7 | 1.2 | 6.1  | 6 | S & S | absent |
| 3 | 14 | 2   |     |      |   |       |        |

Table 5-08. Data from cultivar 2: Hiwa

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node # | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|--------|-------|--------|--------|-------|---------------|------------|
| 1    | 1      | 3.1   | 1.7    | 19.5   | 2     | uniform       | absent     |
| 1    | 2      | 3.1   | 1.9    | 24.5   | 4     | S&S           | absent     |
| 1    | 3      | 3.1   | 1.9    | 20.3   | 4     | S&S           | absent     |
| 1    | 4      | 3     | 1.7    | 16.8   | 3     | S&S           | absent     |
| 1    | 5      | 3.2   | 1.7    | 20     | 3     | S&S           | absent     |
| 1    | 6      | 3.2   | 1.6    | 21.1   | 3     | S&S           | absent     |
| 1    | 7      | 3.1   | 1.6    | 15.6   | 3     | S&S           | absent     |
| 1    | 8      | 2.9   | 1.5    | 9.7    | 3     | S&S           | absent     |
| 1    | 9      | 2.5   | 1.5    | 10.7   | 3     | S&S           | absent     |
| 1    | 10     | 2.2   |        |        |       |               |            |
| 2    | 1      | 3.2   | 2      | 25.8   | woody | woody         | absent     |
| 2    | 2      | 3.3   | 2      | 20.9   | 3     | S&S           | absent     |
| 2    | 3      | 3.2   | 1.9    | 21.6   | 3     | S&S           | absent     |
| 2    | 4      | 3.4   | 1.6    | 18.6   | 3     | S&S           | absent     |
| 2    | 5      | 3.4   | 1.4    | 15.7   | 3     | S&S           | absent     |
| 2    | 6      | 2.8   | 1.2    | 16     | 3     | S&S           | absent     |
| 2    | 7      | 2.7   | 1.2    | 9.2    | 3     | S&S           | absent     |
| 2    | 8      | 2.3   |        |        |       |               |            |
| 3    | 1      | 3     | 1.9    | 9.3    | woody | woody         | absent     |
| 3    | 2      | 3     | 2.1    | 8.2    | woody | woody         | absent     |
| 3    | 3      | 3     | 1.7    | 11.4   | woody | woody         | absent     |
| 3    | 4      | 2.8   | 1.3    | 10.4   | woody | woody         | absent     |
| 3    | 5      | 2.9   | 1.2    | 9.4    | 4     | S&S           | absent     |
| 3    | 6      | 2.6   | 1.3    | 9.5    | 4     | S&S           | absent     |
| 3    | 7      | 2.6   | 1.3    | 9.8    | 4     | S&S           | absent     |
| 3    | 8      | 2.8   | 1.3    | 9.5    | 4     | S&S           | absent     |
| 3    | 9      | 2.4   | 1.2    | 9.3    | 4     | S&S           | absent     |
| 3    | 10     | 2.2   | 1.1    | 8.5    | 4     | S&S           | absent     |
| 3    | 11     | 2.3   | 1.1    | 6.8    | 4     | S&S           | absent     |
| 3    | 12     | 2.5   | 1      | 9.1    | 4     | S&S           | absent     |
| 3    | 13     | 2.5   | 0.9    | 9.5    | 4     | S&S           | absent     |
| 3    | 14     | 2.7   | 0.9    | 7.5    | 4     | S&S           | absent     |
| 3    | 15     | 2     |        |        |       |               |            |

Table 5-09. Data from cultivar 3: Zack's mutant

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| <b>Stem</b> | <b>Node #</b> | <b>NT cm</b> | <b>INT cm</b> | <b>INL cm</b> | <b>Color</b> | <b>Configuration</b> | <b>Pubescence</b> |
|-------------|---------------|--------------|---------------|---------------|--------------|----------------------|-------------------|
| 1           |               | 3            | 2.1           | 20.8          | Woody        | woody                | absent            |
| 1           | 2             | 2.9          | 2             | 22.9          | 3            | S&S                  | absent            |
| 1           | 3             | 3.1          | 2             | 26.2          | 3            | S&S                  | absent            |
| 1           | 4             | 3.5          | 1.7           | 22.8          | 3            | S&S                  | absent            |
| 1           | 5             | 3.5          | 1.8           | 17.1          | 3            | S&S                  | absent            |
| 1           | 6             | 3.2          | 1.8           | 15.2          | 3            | S&S                  | absent            |
| 1           | 7             | 3            | 1.7           | 12            | 3            | S&S                  | absent            |
| 1           | 8             | 2.6          | 1.3           | 10.7          | 3            | S&S                  | absent            |
| 1           | 9             | 2.1          | 1.1           | 10.3          | 3            | S&S                  | absent            |
| 1           | 10            | 1.9          |               |               |              |                      |                   |
| 2           | 1             | 3.1          | 2             | 12.8          | Woody        | woody                | absent            |
| 2           | 2             | 3.4          | 2.1           | 17.6          | Woody        | woody                | absent            |
| 2           | 3             | 3.6          | 2             | 22.1          | 3            | S&S                  | absent            |
| 2           | 4             | 3.3          | 2             | 19.9          | 4            | S&S                  | absent            |
| 2           | 5             | 3            | 1.9           | 13.3          | 4            | S&S                  | absent            |
| 2           | 6             | 3.1          | 1.7           | 14.6          | 4            | S&S                  | absent            |
| 2           | 7             | 3.2          | 1.4           | 15.8          | 4            | S&S                  | absent            |
| 2           | 8             | 3.2          | 1.4           | 13.2          | 4            | S&S                  | absent            |
| 2           | 9             | 2.8          | 1.2           | 10.5          | 3            | S&S                  | absent            |
| 2           | 10            | 2.8          | 1.1           | 8.5           | 3            | S&S                  | absent            |
| 2           | 11            | 2.4          | 0.9           | 7.9           | 2            | S&S                  | absent            |
| 2           | 12            | 2.1          |               |               |              |                      |                   |
| 3           | 1             | 3            | 2.1           | 13.7          | Woody        | woody                | absent            |
| 3           | 2             | 3.1          | 1.9           | 15.8          | 3            | S&S                  | absent            |
| 3           | 3             | 2.8          | 1.8           | 22            | 3            | S&S                  | absent            |
| 3           | 4             | 2.8          | 1.6           | 16.9          | 4            | S&S                  | absent            |
| 3           | 5             | 2.8          | 1.7           | 12.2          | 4            | S&S                  | absent            |
| 3           | 6             | 3            | 1.5           | 16.3          | 4            | S&S                  | absent            |
| 3           | 7             | 3            | 1.4           | 13.5          | 3            | S&S                  | absent            |
| 3           | 8             | 2.9          | 1.2           | 12            | 3            | S&S                  | absent            |
| 3           | 9             | 2.5          | 1.3           | 8.1           | 3            | S&S                  | absent            |
| 3           | 10            | 2.1          | 1.3           | 8.5           | 3            | S&S                  | absent            |
| 3           | 11            | 2.1          | 1             | 7             | 3            | S&S                  | absent            |
| 3           | 12            | 1.5          |               |               |              |                      |                   |



Table 5-10. Data from cultivar 4: Amy Greenwell's Hiwa

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node # | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|--------|-------|--------|--------|-------|---------------|------------|
| 1    | 1      | 4.6   | 2.6    | 28.4   | woody | woody         | absent     |
| 1    | 2      | 4.2   | 2.4    | 25.9   | 3     | S&S           | absent     |
| 1    | 3      | 4     | 2.2    | 19.1   | 4     | S&S           | absent     |
| 1    | 4      | 4     | 2.4    | 16.4   | 4     | S&S           | absent     |
| 1    | 5      | 4     | 2.4    | 13.9   | 3     | S&S           | absent     |
| 1    | 6      | 3.9   | 2.4    | 14.9   | 3     | S&S           | absent     |
| 1    | 7      | 3.9   | 2      | 10.5   | 3     | S&S           | absent     |
| 1    | 8      | 3.9   | 1.9    | 12.2   | 3     | S&S           | absent     |
| 1    | 9      | 3.8   | 1.9    | 13     | 3     | S&S           | absent     |
| 1    | 10     | 3.8   | 1.9    | 12.8   | 3     | S&S           | absent     |
| 1    | 11     | 3.5   | 1.8    | 11.3   | 3     | S&S           | absent     |
| 1    | 12     | 3.2   | 1.5    | 8.4    | 3     | S&S           | absent     |
| 1    | 13     | 2.9   |        |        |       |               |            |
| 2    | 1      | 3.5   | 2.6    | 19.8   | woody | woody         | absent     |
| 2    | 2      | 3.5   | 2.4    | 26.3   | 3     | S&S           | absent     |
| 2    | 3      | 3.5   | 2      | 23.7   | 3     | S&S           | absent     |
| 2    | 4      | 3.4   | 2.1    | 16.4   | 3     | S&S           | absent     |
| 2    | 5      | 3.5   | 2.1    | 13.1   | 3     | S&S           | absent     |
| 2    | 6      | 3.5   | 2.1    | 13.1   | 3     | S&S           | absent     |
| 2    | 7      | 3.8   | 2      | 10.5   | 3     | S&S           | absent     |
| 2    | 8      | 3.5   | 2      | 12     | 3     | S&S           | absent     |
| 2    | 9      | 3.4   | 1.9    | 10.9   | 3     | S&S           | absent     |
| 2    | 10     | 3.4   | 1.8    | 12.1   | 3     | S&S           | absent     |
| 2    | 11     | 3.5   | 1.7    | 11.6   | 3     | S&S           | absent     |
| 2    | 12     | 3.4   | 1.8    | 11.5   | 3     | S&S           | absent     |
| 2    | 13     | 3.3   | 1.5    | 9      | 3     | S&S           | absent     |
| 2    | 14     | 2.8   |        |        |       |               |            |
| 3    | 1      | 3.5   | 2.3    | 17.7   | woody | woody         | absent     |
| 3    | 2      | 3.5   | 1.8    | 24.3   | woody | woody         | absent     |
| 3    | 3      | 3.3   | 1.8    | 24.5   | 3     | S&S           | absent     |
| 3    | 4      | 3.1   | 1.7    | 18.3   | 4     | S&S           | absent     |
| 3    | 5      | 3.3   | 1.6    | 13.3   | 4     | S&S           | absent     |
| 3    | 6      | 3     | 1.7    | 13.4   | 4     | S&S           | absent     |
| 3    | 7      | 3     | 1.8    | 12.9   | 4     | S&S           | absent     |
| 3    | 8      | 3.3   | 1.5    | 13.1   | 3     | S&S           | absent     |
| 3    | 9      | 3     | 1.5    | 11.6   | 3     | S&S           | absent     |
| 3    | 10     | 3     | 1.4    | 11.2   | 3     | S&S           | absent     |
| 3    | 11     | 3     | 1.3    | 9.5    | 3     | S&S           | absent     |
| 3    | 12     | 2.5   | 1.3    | 7.9    | 3     | S&S           | absent     |
| 3    | 13     | 2.4   |        |        |       |               |            |

Table 5-11. Data from cultivar 5: Alia Point mutant

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| <b>Stem</b> | <b>Node#</b> | <b>NT cm</b> | <b>INT cm</b> | <b>INL cm</b> | <b>Color</b> | <b>Cofiguration</b> | <b>Pubescence</b> |
|-------------|--------------|--------------|---------------|---------------|--------------|---------------------|-------------------|
| 1           | 1            | 3.2          | 1.8           | 11.7          | 2            | S&S                 | absent            |
| 1           | 2            | 2.7          | 2.1           | 16.8          | 3            | S&S                 | absent            |
| 1           | 3            | 2.8          | 2.1           | 13.6          | 4            | S&S                 | absent            |
| 1           | 4            | 2.9          | 1.7           | 17            | 4            | S&S                 | absent            |
| 1           | 5            | 3.1          | 1.5           | 16.9          | 4            | S&S                 | absent            |
| 1           | 6            | 2.7          | 1.2           | 11.2          | 4            | S&S                 | absent            |
| 1           | 7            | 3            | 1.2           | 10.2          | 4            | S&S                 | absent            |
| 1           | 8            | 2.8          | 1.1           | 13.4          | 4            | S&S                 | absent            |
| 1           | 9            | 2.6          | 0.9           | 9.6           | 3            | S&S                 | absent            |
| 1           | 10           | 2.6          | 0.9           | 10            | 3            | S&S                 | absent            |
| 1           | 11           | 2.3          | 1             | 7.6           | 3            | S&S                 | absent            |
| 1           | 12           | 1.9          |               |               |              |                     |                   |
| 2           | 1            | 2.6          | 1.8           | 12.2          | 2            | S&S                 | absent            |
| 2           | 2            | 2.7          | 1.9           | 18.6          | 3            | S&S                 | absent            |
| 2           | 3            | 3            | 1.5           | 15.9          | 3            | S&S                 | absent            |
| 2           | 4            | 3            | 1.5           | 19.5          | 3            | S&S                 | absent            |
| 2           | 5            | 2.7          | 1.2           | 17            | 3            | S&S                 | absent            |
| 2           | 6            | 2.7          | 1.2           | 14.7          | 3            | S&S                 | absent            |
| 2           | 7            | 2.4          |               |               |              |                     |                   |
| 3           | 1            | 2.1          | 1.7           | 12.8          | 2            | S&S                 | absent            |
| 3           | 2            | 2            | 1.5           | 17.7          | 2            | S&S                 | absent            |
| 3           | 3            | 2.5          | 1.5           | 22.2          | 3            | S&S                 | absent            |
| 3           | 4            | 2.7          | 1.4           | 19.3          | 3            | S&S                 | absent            |
| 3           | 5            | 2.3          | 1.1           | 17.2          | 3            | S&S                 | absent            |
| 3           | 6            | 2.1          |               |               |              |                     |                   |

Table 5-12. Data from cultivar 6: Lu'ukua

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Cofiguration | Pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 3.1   | 2.1    | 5.6    | woody | striated     | absent     |
| 1    | 2     | 2.7   | 1.8    | 6      | 4     | striated     | absent     |
| 1    | 3     | 2.7   | 1.7    | 6      | 3     | striated     | absent     |
| 1    | 4     | 2.8   | 1.4    | 6      | 4     | striated     | absent     |
| 1    | 5     | 2.7   | 1.4    | 6      | 5     | striated     | absent     |
| 1    | 6     | 2.5   | 1.7    | 6      | 5     | striated     | absent     |
| 1    | 7     | 2.8   | 1.5    | 6      | 5     | striated     | absent     |
| 1    | 8     | 2.5   | 1.4    | 6.5    | 5     | striated     | absent     |
| 1    | 9     | 2.9   | 1.7    | 6.2    | 5     | striated     | absent     |
| 1    | 10    | 2.8   | 1.2    | 7.3    | 5     | striated     | absent     |
| 1    | 11    | 2.4   | 1.2    | 6.2    | 5     | striated     | absent     |
| 1    | 12    | 2.4   | 1.2    | 4.5    | 5     | striated     | absent     |
| 1    | 13    | 2.3   | 1.2    | 3.1    | 4     | striated     | absent     |
| 1    | 14    | 2.2   | 1      | 2.3    | 3     | striated     | absent     |
| 1    | 15    | 2.1   |        |        |       |              |            |
| 2    | 1     | 2.6   | 2.3    | 7.6    | 3     | striated     | absent     |
| 2    | 2     | 2.9   | 1.9    | 9.4    | 3     | striated     | absent     |
| 2    | 3     | 3     | 1.9    | 9.6    | 4     | striated     | absent     |
| 2    | 4     | 3.2   | 1.8    | 11.6   | 4     | striated     | absent     |
| 2    | 5     | 2.9   | 1.7    | 11.6   | 4     | striated     | absent     |
| 2    | 6     | 2.9   | 1.3    | 10.9   | 5     | striated     | absent     |
| 2    | 7     | 2.7   | 1.6    | 8      | 5     | striated     | absent     |
| 2    | 8     | 2.5   | 1.5    | 4.2    | 4     | striated     | absent     |
| 2    | 9     | 2.5   | 1.3    | 3.1    | 4     | striated     | absent     |
| 2    | 10    | 2.5   | 1.5    | 2.7    | 5     | striated     | absent     |
| 2    | 11    | 2     | 0.9    | 2.4    | 3     | striated     | absent     |
| 2    | 12    | 1.8   |        |        |       |              |            |
| 3    | 1     | 3.6   | 2.4    | 9.2    | woody | woody        | absent     |
| 3    | 2     | 3.5   | 1.8    | 9.9    | 3     | striated     | absent     |
| 3    | 3     | 3.1   | 2.2    | 7.2    | 3     | striated     | absent     |
| 3    | 4     | 2.8   | 1.8    | 6.4    | 4     | striated     | absent     |
| 3    | 5     | 2.8   | 2.2    | 5.4    | 4     | striated     | absent     |
| 3    | 6     | 2.9   | 2.1    | 5      | 4     | striated     | absent     |
| 3    | 7     | 2.8   | 1.9    | 4.4    | 4     | striated     | absent     |
| 3    | 8     | 2.8   | 1.9    | 5.3    | 4     | striated     | absent     |
| 3    | 9     | 2.8   | 2.1    | 5.2    | 4     | striated     | absent     |
| 3    | 10    | 2.7   | 1.8    | 5.4    | 4     | striated     | absent     |
| 3    | 11    | 2.5   | 1.7    | 3.7    | 4     | striated     | absent     |
| 3    | 12    | 2.1   | 1.4    | 3.5    | 4     | striated     | absent     |
| 3    | 13    | 3     | 1.2    | 2.5    | 4     | striated     | absent     |
| 3    | 14    | 1.9   |        |        |       |              |            |

Table 5-13. Data from cultivar 7: S.I.G. Kolekole

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| <b>Stem</b> | <b>Node#</b> | <b>NT cm</b> | <b>INT cm</b> | <b>INL cm</b> | <b>Color</b> | <b>Cofiguration</b> | <b>Pubescence</b> |
|-------------|--------------|--------------|---------------|---------------|--------------|---------------------|-------------------|
| 1           | 1            | 3.4          | 2.4           | 11            | Woody        | woody               | absent            |
| 1           | 2            | 3.3          | 2.2           | 17            | 5            | S&S                 | absent            |
| 1           | 3            | 3.2          | 2.3           | 15.7          | 5            | S&S                 | absent            |
| 1           | 4            | 3.4          | 1.6           | 12.4          | 5            | S&S                 | absent            |
| 1           | 5            | 3.3          | 1.2           | 10.5          | 5            | S&S                 | absent            |
| 1           | 6            | 2.7          | 1.3           | 6.4           | 5            | S&S                 | absent            |
| 1           | 7            | 2.3          |               |               |              |                     |                   |
| 2           | 1            | 3            | 2.1           | 9.4           | 5            | S&S                 | absent            |
| 2           | 2            | 2.8          | 1.8           | 13.1          | 5            | S&S                 | absent            |
| 2           | 3            | 3.3          | 1.6           | 15            | 5            | S&S                 | absent            |
| 2           | 4            | 3            | 1.3           | 14.2          | 5            | S&S                 | absent            |
| 2           | 5            | 2.2          | 1.1           | 9.9           | 5            | S&S                 | absent            |
| 2           | 6            | 2            | 1.5           | 6.6           | 5            | S&S                 | absent            |
| 2           | 7            | 2.3          | 1             | 5             | 6            | S&S                 | absent            |
| 2           | 8            | 1.7          |               |               |              |                     |                   |
| 3           | 1            | 3            | 2.6           | 4.2           | Woody        | woody               | absent            |
| 3           | 2            | 2.8          | 1.9           | 6             | Woody        | woody               | absent            |
| 3           | 3            | 2.8          | 2             | 6.5           | 5            | S&S                 | absent            |
| 3           | 4            | 2.8          | 1.8           | 6.3           | 5            | S&S                 | absent            |
| 3           | 5            | 2.9          | 1.8           | 6             | 5            | S&S                 | absent            |
| 3           | 6            | 2.9          | 1.9           | 6.4           | 5            | S&S                 | absent            |
| 3           | 7            | 3.1          | 1.7           | 6.5           | 5            | S&S                 | absent            |
| 3           | 8            | 2.9          | 1.7           | 6.5           | 5            | S&S                 | absent            |
| 3           | 9            | 3            | 1.7           | 6             | 5            | S&S                 | absent            |
| 3           | 10           | 3            | 1.6           | 6             | 5            | S&S                 | absent            |
| 3           | 11           | 3.3          | 1.5           | 7             | 5            | S&S                 | absent            |
| 3           | 12           | 3            | 1.3           | 7.6           | 5            | S&S                 | absent            |
| 3           | 13           | 3            | 1.3           | 6             | 5            | S&S                 | absent            |
| 3           | 14           | 3.1          | 1.2           | 5             | 6            | S&S                 | absent            |
| 3           | 15           | 2.8          | 1.1           | 3.4           | 6            | S&S                 | absent            |
| 3           | 16           | 1.6          |               |               |              |                     |                   |

Table 5-14. Data from cultivar 8: S.I.G. Pana‘ewa

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Cofiguration | Pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 3.2   | 2.2    | 4.6    | woody | woody        | absent     |
| 1    | 2     | 3.6   | 2.1    | 4.1    | woody | woody        | absent     |
| 1    | 3     | 3.2   | 1.7    | 6.8    | 7     | S&S          | absent     |
| 1    | 4     | 3.2   | 2      | 3.6    | 7     | S&S          | absent     |
| 1    | 5     | 3.3   | 1.7    | 4.7    | 7     | S&S          | absent     |
| 1    | 6     | 3.2   | 1.5    | 5.4    | 7     | S&S          | absent     |
| 1    | 7     | 2.9   | 1.5    | 4      | 7     | S&S          | absent     |
| 1    | 8     | 3     | 1.3    | 3.7    | 7     | S&S          | absent     |
| 1    | 9     | 2.9   | 1.8    | 4.2    | 7     | S&S          | absent     |
| 1    | 10    | 2.3   | 1.3    | 2.5    | 7     | S&S          | absent     |
| 1    | 11    | 2.3   | 1      | 2.4    | 7     | S&S          | absent     |
| 1    | 12    | 2     |        |        |       |              |            |
| 2    | 1     | N/A   | N/A    | N/A    | N/A   | N/A          | N/A        |
| 3    | 1     | N/A   | N/A    | N/A    | N/A   | N/A          | N/A        |

Table 5-15. Data from cultivar 9: Puna Green

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Cofiguration | Pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 3.3   | 2.2    | 11.2   | woody | woody        | absent     |
| 1    | 2     | 3.2   | 2.3    | 14.3   | 7     | S&S          | absent     |
| 1    | 3     | 3.1   | 2.3    | 15.7   | 7     | S&S          | absent     |
| 1    | 4     | 3.2   | 2.1    | 16     | 7     | S&S          | absent     |
| 1    | 5     | 3.2   | 2      | 14     | 7     | S&S          | absent     |
| 1    | 6     | 3     | 1.7    | 11.7   | 7     | S&S          | absent     |
| 1    | 7     | 2.7   | 1.7    | 8.1    | 7     | S&S          | absent     |
| 1    | 8     | 2.4   |        |        |       |              |            |
| 2    | 1     | 2.2   | 1.4    | 9.2    | 7     | S&S          | absent     |
| 2    | 2     | 2.5   | 1.2    | 12     | 7     | S&S          | absent     |
| 2    | 3     | 2.5   | 1.2    | 13.2   | 7     | S&S          | absent     |
| 2    | 4     | 2.5   | 1      | 15.3   | 7     | S&S          | absent     |
| 2    | 5     | 2.2   |        |        |       |              |            |
| 3    | 1     | N/A   | N/A    | N/A    | N/A   | N/A          | N/A        |

Table 5-16. Data from cultivar 10: Joel Lau 2

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Cofiguration | Pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 3     | 2.6    | 5.4    | woody | woody        | absent     |
| 1    | 2     | 2.9   | 2.2    | 8.2    | woody | woody        | absent     |
| 1    | 3     | 2.9   | 1.9    | 10.6   | 3     | striated     | absent     |
| 1    | 4     | 3.3   | 2      | 8.8    | 3     | striated     | absent     |
| 1    | 5     | 3.2   | 2.2    | 8      | 3     | striated     | absent     |
| 1    | 6     | 3.4   | 2.3    | 6.1    | 3     | striated     | absent     |
| 1    | 7     | 3.3   | 2.4    | 6.2    | 3     | striated     | absent     |
| 1    | 8     | 3.2   | 2      | 5.6    | 3     | striated     | absent     |
| 1    | 9     | 3.1   | 1.9    | 4.4    | 3     | striated     | absent     |
| 1    | 10    | 2.8   | 2      | 3.5    | 2     | striated     | absent     |
| 1    | 11    | 2.7   |        |        |       |              |            |
| 2    | 1     | 3.6   | 3      | 3.8    | woody | woody        | absent     |
| 2    | 2     | 3.6   | 2.9    | 4.1    | woody | woody        | absent     |
| 2    | 3     | 3.6   | 2.8    | 4.7    | woody | woody        | absent     |
| 2    | 4     | 3.9   | 2.6    | 4.4    | woody | woody        | absent     |
| 2    | 5     | 3.8   | 2.5    | 4.5    | 3     | striated     | absent     |
| 2    | 6     | 3.9   | 2.6    | 6.6    | 4     | striated     | absent     |
| 2    | 7     | 3.8   | 2.6    | 6.9    | 4     | striated     | absent     |
| 2    | 8     | 3.8   | 2.3    | 5.1    | 4     | striated     | absent     |
| 2    | 9     | 3.7   | 2.6    | 5.1    | 4     | striated     | absent     |
| 2    | 10    | 3.8   | 2.3    | 35.2   | 4     | striated     | absent     |
| 2    | 11    | 3.5   | 2.1    | 4.4    | 4     | striated     | absent     |
| 2    | 12    | 3.6   | 2.1    | 4.5    | 3     | striated     | absent     |
| 2    | 13    | 3.4   | 2      | 4.6    | 3     | striated     | absent     |
| 2    | 14    | 2.9   | 1.8    | 2.7    | 3     | striated     | absent     |
| 2    | 15    | 2.8   | 1.8    | 2.2    | 3     | striated     | absent     |
| 2    | 16    | 2.2   |        |        |       |              |            |
| 3    | 1     | 3.8   | 2.8    | 4      | woody | woody        | absent     |
| 3    | 2     | 3.5   | 3      | 3      | woody | woody        | absent     |
| 3    | 3     | 3.2   | 2.6    | 4.6    | woody | woody        | absent     |
| 3    | 4     | 3.5   | 2.4    | 5      | woody | woody        | absent     |
| 3    | 5     | 3     | 2.4    | 4.7    | woody | woody        | absent     |
| 3    | 6     | 3.4   | 2      | 6.8    | 5     | striated     | absent     |
| 3    | 7     | 3.4   | 1.9    | 7      | 5     | striated     | absent     |
| 3    | 8     | 3.6   | 2      | 6      | 5     | striated     | absent     |
| 3    | 9     | 3     | 1.9    | 6      | 5     | striated     | absent     |
| 3    | 10    | 3.1   | 1.9    | 5.3    | 5     | striated     | absent     |
| 3    | 11    | 3.3   | 1.9    | 4.8    | 5     | striated     | absent     |
| 3    | 12    | 3.1   | 2      | 5.5    | 5     | striated     | absent     |
| 3    | 13    | 3     | 1.9    | 5.5    | 4     | striated     | absent     |
| 3    | 14    | 2.9   | 1.5    | 5.3    | 4     | striated     | absent     |
| 3    | 15    | 2.5   | 1      | 3.8    | 4     | striated     | absent     |
| 3    | 16    | 2.1   |        |        |       |              |            |

Table 5-17. Data from cultivar 11: Alia 3

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.1   | 1.6    | 5.5    | woody | woody         | absent     |
| 1    | 2     | 3.1   | 1.7    | 5.5    | woody | woody         | absent     |
| 1    | 3     | 2.7   | 1.9    | 5.5    | 4     | striated      | absent     |
| 1    | 4     | 3.1   | 1.7    | 4.5    | 4     | striated      | absent     |
| 1    | 5     | 3     | 1.9    | 5.5    | 5     | striated      | absent     |
| 1    | 6     | 2.9   | 1.6    | 6      | 5     | striated      | absent     |
| 1    | 7     | 2.9   | 1.9    | 4.8    | 5     | striated      | absent     |
| 1    | 8     | 2.2   | 1.6    | 5.5    | 5     | striated      | absent     |
| 1    | 9     | 2.7   | 1.6    | 6.2    | 5     | striated      | absent     |
| 1    | 10    | 3.1   | 1.5    | 5.8    | 5     | striated      | absent     |
| 1    | 11    | 3.1   | 1.5    | 6.4    | 5     | striated      | absent     |
| 1    | 12    | 2.5   | 1.5    | 6      | 4     | striated      | absent     |
| 1    | 13    | 2.5   | 1.6    | 4.2    | 4     | striated      | absent     |
| 1    | 14    | 2.6   | 1.4    | 4.2    | 3     | striated      | absent     |
| 1    | 15    | 2     | 1.4    | 3.4    | 3     | striated      | absent     |
| 1    | 16    | 2     |        |        |       |               |            |
| 2    | 1     | 2.8   | 1.9    | 4      | woody | woody         | absent     |
| 2    | 2     | 2.6   | 1.7    | 5      | woody | woody         | absent     |
| 2    | 3     | 2.6   | 1.5    | 5.5    | 5     | striated      | absent     |
| 2    | 4     | 2.8   | 1.4    | 5.3    | 5     | striated      | absent     |
| 2    | 5     | 2.9   | 1.7    | 6.4    | 5     | striated      | absent     |
| 2    | 6     | 2.7   | 1.9    | 5.2    | 5     | striated      | absent     |
| 2    | 7     | 2.6   | 1.5    | 7.1    | 5     | striated      | absent     |
| 2    | 8     | 2.8   | 1.8    | 6.5    | 5     | striated      | absent     |
| 2    | 9     | 2.7   | 1.8    | 6.4    | 5     | striated      | absent     |
| 2    | 10    | 2.8   | 1.5    | 6      | 5     | striated      | absent     |
| 2    | 11    | 2.7   | 1.3    | 5.4    | 4     | striated      | absent     |
| 2    | 12    | 2.5   | 1.2    | 4.7    | 4     | striated      | absent     |
| 2    | 13    | 2.7   | 1.2    | 3.6    | 3     | striated      | absent     |
| 2    | 14    | 2.3   | 1.2    | 3      | 3     | striated      | absent     |
| 2    | 15    | 1.8   |        |        |       |               |            |
| 3    | 1     | 2.7   | 1.6    | 6.7    | 3     | striated      | absent     |
| 3    | 2     | 3     | 1.5    | 11.5   | 3     | striated      | absent     |
| 3    | 3     | 3     | 1.4    | 11.9   | 3     | striated      | absent     |
| 3    | 4     | 2.9   | 1.4    | 11.9   | 3     | striated      | absent     |
| 3    | 5     | 2.6   | 1.3    | 7.9    | 3     | striated      | absent     |
| 3    | 6     | 2.6   | 1.4    | 4.2    | 4     | striated      | absent     |
| 3    | 7     | 2.3   | 1.5    | 4.2    | 3     | striated      | absent     |
| 3    | 8     | 2.4   |        |        |       |               |            |

Table 5-18. Data from cultivar 12: Wailau

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Cofiguration | Pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 3.3   | 2.2    | 27.1   | 7     | S&S          | absent     |
| 1    | 2     | 3.5   | 2      | 20.9   | 7     | S&S          | absent     |
| 1    | 3     | 3.4   | 1.9    | 16.5   | 7     | S&S          | absent     |
| 1    | 4     | 3.6   | 1.8    | 15.2   | 7     | S&S          | absent     |
| 1    | 5     | 3.2   | 1.6    | 17.1   | 7     | S&S          | absent     |
| 1    | 6     | 3.1   | 1.5    | 16.8   | 7     | S&S          | absent     |
| 1    | 7     | 2.9   | 1.4    | 10.2   | 7     | S&S          | absent     |
| 1    | 8     | 2.6   | 1      | 9.3    | 7     | S&S          | absent     |
| 1    | 9     | 2     |        |        |       |              |            |
| 2    | 1     | 3.4   | 2.2    | 22.2   | 7     | S&S          | absent     |
| 2    | 2     | 3.5   | 2      | 29.2   | 7     | S&S          | absent     |
| 2    | 3     | 3.4   | 1.9    | 20.4   | 7     | S&S          | absent     |
| 2    | 4     | 3.3   | 1.6    | 16     | 7     | S&S          | absent     |
| 2    | 5     | 3.4   | 1.5    | 14.7   | 7     | S&S          | absent     |
| 2    | 6     | 3.2   | 1.5    | 19     | 7     | S&S          | absent     |
| 2    | 7     | 2.9   | 1.4    | 17.8   | 7     | S&S          | absent     |
| 2    | 8     | 2.5   | 1.1    | 12.43  | 7     | S&S          | absent     |
| 2    | 9     | 2.5   | 0.9    | 8      | 7     | S&S          | absent     |
| 2    | 10    | 2.1   |        |        |       |              |            |
| 3    | 1     | N/A   | N/A    | N/A    | N/A   | N/A          | N/A        |



Table 5-19. Data from cultivar 13: Kahuna Valley Short

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Cofiguration | Pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 2.7   | 2.1    | 10.9   | 7     | S&S          | absent     |
| 1    | 2     | 3     | 1.7    | 15.5   | 7     | S&S          | absent     |
| 1    | 3     | 3.3   | 1.5    | 12.4   | 7     | S&S          | absent     |
| 1    | 4     | 3.2   | 1.4    | 10.1   | 7     | S&S          | absent     |
| 1    | 5     | 2.9   | 1.4    | 9.5    | 7     | S&S          | absent     |
| 1    | 6     | 2.5   | 1.4    | 10.3   | 7     | S&S          | absent     |
| 1    | 7     | 2.3   | 1.3    | 7.9    | 7     | S&S          | absent     |
| 1    | 8     | 2.4   | 1.3    | 5.5    | 7     | S&S          | absent     |
| 1    | 9     | 2.2   | 1.1    | 3.5    | 7     | S&S          | absent     |
| 1    | 10    | 2.2   |        |        |       |              |            |
| 2    | 1     | 2.8   | 1.7    | 11.9   | 7     | S&S          | absent     |
| 2    | 2     | 2.6   | 1.4    | 16.9   | 7     | S&S          | absent     |
| 2    | 3     | 2.6   | 1.3    | 12     | 7     | S&S          | absent     |
| 2    | 4     | 2.5   | 1.2    | 11.6   | 7     | S&S          | absent     |
| 2    | 5     | 2.5   | 1      | 11.5   | 7     | S&S          | absent     |
| 2    | 6     | 2.2   | 0.9    | 9      | 7     | S&S          | absent     |
| 2    | 7     | 2     | 0.9    | 6.6    | 7     | S&S          | absent     |
| 2    | 8     | 1.7   | 0.8    | 4      | 7     | S&S          | absent     |
| 2    | 9     | 1.5   |        |        |       |              |            |
| 3    | 1     | 2.5   | 1.9    | 5      | 7     | S&S          | absent     |
| 3    | 2     | 2.5   | 1.9    | 5.7    | 7     | S&S          | absent     |
| 3    | 3     | 2.6   | 1.7    | 6.2    | 7     | S&S          | absent     |
| 3    | 4     | 2.7   | 1.8    | 9.7    | 7     | S&S          | absent     |
| 3    | 5     | 2.9   | 1.4    | 9      | 7     | S&S          | absent     |
| 3    | 6     | 2.7   | 1.3    | 9.6    | 7     | S&S          | absent     |
| 3    | 7     | 2.7   | 1.3    | 8      | 7     | S&S          | absent     |
| 3    | 8     | 2.5   | 1.1    | 9      | 7     | S&S          | absent     |
| 3    | 9     | 2.4   | 1      | 8.5    | 7     | S&S          | absent     |
| 3    | 10    | 2.2   | 1      | 5.2    | 7     | S&S          | absent     |
| 3    | 11    | 2     | 0.9    | 2.8    | 7     | S&S          | absent     |
| 3    | 12    | 1.7   |        |        |       |              |            |

Table 5-20. Data from cultivar 14: Papakea

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.6   | 2.5    | 7.2    | woody | woody         | absent     |
| 1    | 2     | 3.8   | 2.5    | 5.9    | woody | woody         | absent     |
| 1    | 3     | 3.6   | 2.3    | 6.4    | 7     | uniform       | absent     |
| 1    | 4     | 3     | 2.1    | 7      | 7     | uniform       | absent     |
| 1    | 5     | 2.9   | 2.1    | 6.5    | 7     | uniform       | absent     |
| 1    | 6     | 3     | 1.9    | 6.6    | 7     | uniform       | absent     |
| 1    | 7     | 2.8   | 1.9    | 6.1    | 7     | uniform       | absent     |
| 1    | 8     | 3     | 1.9    | 5.6    | 7     | uniform       | absent     |
| 1    | 9     | 3     | 1.9    | 12.8   | 7     | uniform       | absent     |
| 1    | 10    | 2.8   | 1.6    | 5.4    | 7     | uniform       | absent     |
| 1    | 11    | 2.7   | 1.6    | 5      | 7     | uniform       | absent     |
| 1    | 12    | 2.7   | 1.6    | 3.5    | 7     | uniform       | absent     |
| 1    | 13    | 2.1   | 1.2    | 3.4    | 7     | uniform       | absent     |
| 1    | 14    | 2     | 1.3    | 3      | 7     | uniform       | absent     |
| 1    | 15    | 1.9   |        |        |       |               |            |
| 2    | 1     | 3.3   | 2      | 6.5    | woody | woody         | absent     |
| 2    | 2     | 3.1   | 1.9    | 5.5    | woody | woody         | absent     |
| 2    | 3     | 3     | 1.8    | 6.2    | 7     | uniform       | absent     |
| 2    | 4     | 3     | 1.7    | 6      | 7     | uniform       | absent     |
| 2    | 5     | 3     | 1.7    | 5.7    | 7     | uniform       | absent     |
| 2    | 6     | 3     | 1.7    | 5.4    | 7     | uniform       | absent     |
| 2    | 7     | 2.8   | 1.5    | 5      | 7     | uniform       | absent     |
| 2    | 8     | 2.6   | 1.4    | 5.3    | 7     | uniform       | absent     |
| 2    | 9     | 2.7   | 1.4    | 4.9    | 7     | uniform       | absent     |
| 2    | 10    | 2.5   | 1.4    | 5.4    | 7     | uniform       | absent     |
| 2    | 11    | 2.6   | 1.5    | 5.4    | 7     | uniform       | absent     |
| 2    | 12    | 2.3   | 1.2    | 3.7    | 7     | uniform       | absent     |
| 2    | 13    | 2     | 1.2    | 3.1    | 7     | uniform       | absent     |
| 2    | 14    | 1.7   |        |        |       |               |            |
| 3    | 1     | 3.2   | 2.7    | 7.5    | woody | woody         | absent     |
| 3    | 2     | 2.8   | 2.4    | 7.1    | woody | woody         | absent     |
| 3    | 3     | 2.8   | 2      | 7.2    | 7     | uniform       | absent     |
| 3    | 4     | 2.7   | 1.8    | 8      | 7     | uniform       | absent     |
| 3    | 5     | 2.7   | 1.9    | 5.9    | 7     | uniform       | absent     |
| 3    | 6     | 2.7   | 1.7    | 4.4    | 7     | uniform       | absent     |
| 3    | 7     | 2.7   | 1.6    | 4.3    | 7     | uniform       | absent     |
| 3    | 8     | 2.7   | 1.6    | 5.4    | 7     | uniform       | absent     |
| 3    | 9     | 2.7   | 1.3    | 5.6    | 7     | uniform       | absent     |
| 3    | 10    | 2.4   | 1.3    | 5.5    | 7     | uniform       | absent     |
| 3    | 11    | 2.4   | 1.2    | 3.8    | 7     | uniform       | absent     |
| 3    | 12    | 2.1   | 1      | 2.7    | 7     | uniform       | absent     |
| 3    | 13    | 2     | 1      | 2.7    | 7     | uniform       | absent     |
| 3    | 14    | 1.9   |        |        |       |               |            |

Table 5-21. Data from cultivar 15: Oahu 237

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.2   | 2.9    | 5.7    | 7     | S&S           | absent     |
| 1    | 2     | 3.1   | 2.8    | 6.7    | 7     | S&S           | absent     |
| 1    | 3     | 3     |        |        |       |               |            |
| 2    | 1     | 3     | 2.3    | 5.8    | 7     | S&S           | absent     |
|      | 2     | 2.9   |        |        |       |               |            |
| 3    | 1     | N/A   | N/A    | N/A    | N/A   | N/A           | N/A        |

Table 5-22. Data from cultivar 16: Makea

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | N/A   | N/A    | N/A    | N/A   | N/A           | N/A        |
| 2    | 1     | N/A   | N/A    | N/A    | N/A   | N/A           | N/A        |
| 3    | 1     | N/A   | N/A    | N/A    | N/A   | N/A           | N/A        |

Table 5-23. Data from cultivar 17: Honokāneiki

(NT= Node thickness), (INT= Internode thickness), INL= Internode length) note:raised lenticils

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.7   | 2.5    | 20.8   | 7     | S&S           | absent     |
| 1    | 2     | 3.5   | 2      | 24.5   | 7     | S&S           | absent     |
| 1    | 3     | 3.1   | 2      | 17.7   | 7     | S&S           | absent     |
| 1    | 4     | 2.5   |        |        |       |               |            |
| 2    | 1     | 2.8   | 1.4    | 15     | 7     | S&S           | absent     |
| 2    | 2     | 2.3   | 1.4    | 13.8   | 7     | S&S           | absent     |
| 2    | 3     | 1.9   |        |        |       |               |            |
| 3    | 1     | N/A   | N/A    | N/A    | N/A   | N/A           | N/A        |

Table 5-24. Data from cultivar 18: Spotted Hiwa

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.3   | 2.5    | 13.1   | 2     | spotted       | absent     |
| 1    | 2     | 3.3   | 2.1    | 18.8   | 3     | spotted       | absent     |
| 1    | 3     | 3     | 2.3    | 18.8   | 4     | spotted       | absent     |
| 1    | 4     | 3.3   | 2      | 16.3   | 5     | spotted       | absent     |
| 1    | 5     | 3.1   | 1.9    | 15.6   | 5     | spotted       | absent     |
| 1    | 6     | 3.4   | 1.9    | 16.9   | 5     | spotted       | absent     |
| 1    | 7     | 3     | 1.7    | 16.9   | 5     | spotted       | absent     |
| 1    | 8     | 3.3   | 1.8    | 15     | 5     | spotted       | absent     |
| 1    | 9     | 3.7   | 1.9    | 16.3   | 5     | spotted       | absent     |
| 1    | 10    | 3.7   | 1.8    | 16.9   | 4     | spotted       | absent     |
| 1    | 11    | 3.4   | 1.9    | 17.5   | 4     | spotted       | absent     |
| 1    | 12    | 3.4   | 1.6    | 15     | 4     | spotted       | absent     |
| 1    | 13    | 2.5   | 1.3    | 10     | 4     | spotted       | absent     |
| 1    | 14    | 2.4   | 1.6    | 6.3    | 4     | spotted       | absent     |
| 1    | 15    | 1.8   |        |        |       |               |            |
| 2    | 1     | 3.7   | 2.4    | 19.5   | 3     | spotted       | absent     |
| 2    | 2     | 3.1   | 2.3    | 20.5   | 4     | spotted       | absent     |
| 2    | 3     | 3.2   | 2.3    | 20     | 5     | spotted       | absent     |
| 2    | 4     | 3.8   | 2.2    | 13.5   | 5     | spotted       | absent     |
| 2    | 5     | 3.7   | 1.8    | 13.5   | 5     | spotted       | absent     |
| 2    | 6     | 3.2   | 1.7    | 13.5   | 5     | spotted       | absent     |
| 2    | 7     | 3.6   | 1.6    | 16.9   | 5     | spotted       | absent     |
| 2    | 8     | 3     | 2      | 18.9   | 5     | spotted       | absent     |
| 2    | 9     | 3.7   | 1.2    | 19.5   | 5     | spotted       | absent     |
| 2    | 10    | 3.6   | 1.1    | 14     | 5     | spotted       | absent     |
| 2    | 11    | 3     | 1.6    | 9.4    | 4     | spotted       | absent     |
| 2    | 12    | 2.7   | 1.7    | 6.3    | 5     | spotted       | absent     |
| 2    | 13    | 2.6   |        |        |       |               |            |
| 3    | 1     | 3     | 1.9    | 22.2   | 2     | spotted       | absent     |
| 3    | 2     | 3.7   | 1.9    | 23.7   | 2     | spotted       | absent     |
| 3    | 3     | 3.3   | 2.3    | 23.7   | 3     | spotted       | absent     |
| 3    | 4     | 3.9   | 2      | 22.6   | 3     | spotted       | absent     |
| 3    | 5     | 3.5   | 2.1    | 17     | 3     | spotted       | absent     |
| 3    | 6     | 3.3   | 1.5    | 12.6   | 3     | spotted       | absent     |
| 3    | 7     | 3.5   | 1.6    | 9.8    | 3     | spotted       | absent     |
| 3    | 8     | 2.5   |        |        |       |               |            |

Table 5-25. Data from cultivar 19: Kasaakau

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 4.4   | 3.3    | 18.6   | Woody | woody         | absent     |
| 1    | 2     | 4     | 3.1    | 19.3   | Woody | woody         | absent     |
| 1    | 3     | 4.1   | 3      | 23.5   | 3     | spotted       | absent     |
| 1    | 4     | 4.3   | 2.9    | 26.5   | 3     | spotted       | absent     |
| 1    | 5     | 4.5   | 3      | 18.5   | 3     | spotted       | absent     |
| 1    | 6     | 4.3   | 2.6    | 15.5   | 3     | spotted       | absent     |
| 1    | 7     | 4.8   | 3.1    | 15     | 4     | spotted       | absent     |
| 1    | 8     | 4.3   | 2.9    | 15.5   | 4     | spotted       | absent     |
| 1    | 9     | 4.8   | 2.5    | 14.5   | 3     | spotted       | absent     |
| 1    | 10    | 4.9   | 2.3    | 14     | 3     | spotted       | absent     |
| 1    | 11    | 4.6   | 2.5    | 11     | 3     | spotted       | absent     |
| 1    | 12    | 4.6   | 2.7    | 9      | 3     | spotted       | absent     |
| 1    | 13    | 4.6   | 3.3    | 9      | 3     | spotted       | absent     |
| 1    | 14    | 3.9   | 2.2    | 7.5    | 3     | spotted       | absent     |
| 1    | 15    | 3.8   | 1.8    | 7.5    | 3     | spotted       | absent     |
| 1    | 16    | 3.5   |        |        |       |               |            |
| 2    | 1     | 3.2   | 2.3    | 11.3   | Woody | woody         | absent     |
| 2    | 2     | 3.7   | 2.5    | 19.1   | Woody | woody         | absent     |
| 2    | 3     | 3.8   | 2.2    | 24.8   | 4     | spotted       | absent     |
| 2    | 4     | 4.2   | 2.1    | 22.6   | 4     | spotted       | absent     |
| 2    | 5     | 4     | 2      | 20.6   | 4     | spotted       | absent     |
| 2    | 6     | 4     | 2.3    | 20.5   | 4     | spotted       | absent     |
| 2    | 7     | 3.9   | 1.9    | 19.7   | 4     | spotted       | absent     |
| 2    | 8     | 4     | 2.2    | 10.9   | 3     | spotted       | absent     |
| 2    | 9     | 3.8   | 2      | 8.6    | 3     | spotted       | absent     |
| 2    | 10    | 3.5   |        |        |       |               |            |
| 3    | 1     | 3.8   | 3      | 8.7    | Woody | woody         | absent     |
| 3    | 2     | 3.5   | 2.6    | 14.3   | Woody | woody         | absent     |
| 3    | 3     | 3.2   | 2.6    | 15.2   | Woody | woody         | absent     |
| 3    | 4     | 3.5   | 2.3    | 20     | 4     | spotted       | absent     |
| 3    | 5     | 3.8   | 1.9    | 14.1   | 4     | spotted       | absent     |
| 3    | 6     | 3.7   | 1.7    | 15     | 5     | spotted       | absent     |
| 3    | 7     | 3.8   | 2      | 14     | 5     | spotted       | absent     |
| 3    | 8     | 3.3   | 2      | 13.2   | 5     | spotted       | absent     |
| 3    | 9     | 3.6   | 2.2    | 14.9   | 5     | spotted       | absent     |
| 3    | 10    | 3.8   | 2.1    | 13     | 4     | spotted       | absent     |
| 3    | 11    | 3.7   | 1.8    | 12.5   | 4     | spotted       | absent     |
| 3    | 12    | 3.5   | 2.1    | 10     | 3     | spotted       | absent     |
| 3    | 13    | 3.1   | 1.5    | 6      | 4     | spotted       | absent     |
| 3    | 14    | 3.3   |        |        |       |               |            |

Table 5-26. Data from cultivar 20: Joel Lau 6

(NT= Node thickness), (INT= Internode thickness), INL= Internode length) note: triangular stem cross-section

| Stem | Node# | NT cm | INT cm | INL cm | color | cofiguration | pubescence |
|------|-------|-------|--------|--------|-------|--------------|------------|
| 1    | 1     | 4.2   | 3.4    | 4.2    | woody | woody        | absent     |
| 1    | 2     | 4.3   | 3.5    | 7.8    | woody | woody        | absent     |
| 1    | 3     | 4.5   | 2.9    | 7.9    | woody | woody        | absent     |
| 1    | 4     | 4.9   | 2.6    | 8.1    | woody | woody        | absent     |
| 1    | 5     | 4.5   | 2.8    | 7.8    | 5     | spotted      | absent     |
| 1    | 6     | 4.6   | 2.9    | 8      | 5     | spotted      | absent     |
| 1    | 7     | 4.3   | 2.9    | 8.1    | 5     | spotted      | absent     |
| 1    | 8     | 4.7   | 2.8    | 6.4    | 5     | spotted      | absent     |
| 1    | 9     | 4.2   | 2.9    | 6.1    | 5     | spotted      | absent     |
| 1    | 10    | 5     | 2.8    | 6.6    | 5     | spotted      | absent     |
| 1    | 11    | 4.9   | 3.3    | 6.8    | 5     | spotted      | absent     |
| 1    | 12    | 4.7   | 3      | 6.6    | 4     | spotted      | absent     |
| 1    | 13    | 4.9   | 3      | 7.2    | 5     | spotted      | absent     |
| 1    | 14    | 5.1   | 3      | 6.4    | 5     | spotted      | absent     |
| 1    | 15    | 4.4   | 2.7    | 6.8    | 3     | spotted      | absent     |
| 1    | 16    | 4.5   | 2.2    | 6.6    | 4     | spotted      | absent     |
| 1    | 17    | 4     | 2      | 5.8    | 4     | spotted      | absent     |
| 1    | 18    | 3.5   | 2.2    | 3.9    | 3     | spotted      | absent     |
| 1    | 19    | 3.4   |        |        |       |              |            |
| 2    | 1     | 3.9   | 3.5    | 4.2    | woody | woody        | absent     |
| 2    | 2     | 3.8   | 3      | 6.3    | woody | woody        | absent     |
| 2    | 3     | 3.9   | 3.2    | 6.6    | woody | woody        | absent     |
| 2    | 4     | 3.9   | 2.8    | 6      | 5     | spotted      | absent     |
| 2    | 5     | 3.6   | 2.6    | 6.8    | 5     | spotted      | absent     |
| 2    | 6     | 3.2   | 2.4    | 7.3    | 5     | spotted      | absent     |
| 2    | 7     | 3.3   | 2.5    | 7.8    | 5     | spotted      | absent     |
| 2    | 8     | 4.1   | 2.5    | 7.5    | 5     | spotted      | absent     |
| 2    | 9     | 4     | 2.5    | 9.7    | 5     | spotted      | absent     |
| 2    | 10    | 3.5   | 2.7    | 8.7    | 5     | spotted      | absent     |
| 2    | 11    | 4     | 2.2    | 7.8    | 5     | spotted      | absent     |
| 2    | 12    | 3.8   | 2.8    | 7.5    | 5     | spotted      | absent     |
| 2    | 13    | 3.8   | 2.4    | 6.9    | 5     | spotted      | absent     |
| 2    | 14    | 3.8   | 2.2    | 6.8    | 4     | spotted      | absent     |
| 2    | 15    | 3.5   | 2.1    | 6.5    | 4     | spotted      | absent     |
| 2    | 16    | 3.5   | 2.3    | 7.4    | 4     | spotted      | absent     |
| 2    | 17    | 3.6   | 2      | 6.1    | 4     | spotted      | absent     |
| 2    | 18    | 3.9   | 2      | 3.7    | 4     | spotted      | absent     |
| 2    | 19    | 2.9   |        |        |       |              |            |
| 3    | 1     | 3.1   | 1.8    | 7.1    | woody | woody        | absent     |
| 3    | 2     | 2.7   | 1.8    | 7.5    | woody | woody        | absent     |
| 3    | 3     | 3.2   | 1.7    | 5.6    | woody | woody        | absent     |
| 3    | 4     | 3.1   | 2.1    | 4.4    | woody | woody        | absent     |

|   |    |     |     |     |       |         |        |
|---|----|-----|-----|-----|-------|---------|--------|
| 3 | 5  | 2.8 | 1.8 | 4.1 | woody | woody   | absent |
| 3 | 6  | 3   | 2.1 | 5.7 | woody | woody   | absent |
| 3 | 7  | 3   | 1.8 | 6.4 | woody | woody   | absent |
| 3 | 8  | 2.9 | 1.8 | 5.3 | woody | woody   | absent |
| 3 | 9  | 3.2 | 1.5 | 6.6 | woody | woody   | absent |
| 3 | 10 | 3   | 1.5 | 6.2 | woody | woody   | absent |
| 3 | 11 | 3.3 | 2.1 | 4.4 | 5     | spotted | absent |
| 3 | 12 | 3   | 2   | 4   | 5     | spotted | absent |
| 3 | 13 | 2.8 | 1.6 | 4.6 | 5     | spotted | absent |
| 3 | 14 | 3.3 | 1.8 | 3.8 | 5     | spotted | absent |
| 3 | 15 | 3.3 | 2   | 3.8 | 5     | spotted | absent |
| 3 | 16 | 3.4 | 1.5 | 5.6 | 5     | spotted | absent |
| 3 | 17 | 2.8 | 1.6 | 4.7 | 5     | spotted | absent |
| 3 | 18 | 3.2 | 1.7 | 4.8 | 5     | spotted | absent |
| 3 | 19 | 2.8 | 1.6 | 4.3 | 5     | spotted | absent |
| 3 | 20 | 2.6 | 1.3 | 4   | 5     | spotted | absent |
| 3 | 21 | 2.3 | 1.4 | 5.3 | 5     | spotted | absent |
| 3 | 22 | 2.6 | 1.3 | 4.6 | 5     | spotted | absent |
| 3 | 23 | 2.3 | 0.8 | 4.3 | 5     | spotted | absent |
| 3 | 24 | 1.9 |     |     |       |         |        |

Table 5-27. Data from cultivar 21: Hanakāpī`ai

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 4     | 3.3    | 13.4   | woody | woody         | absent     |
| 1    | 2     | 3.6   | 2.9    | 21.3   | woody | woody         | absent     |
| 1    | 3     | 3.5   | 2.2    | 23.8   | 5     | spotted       | absent     |
| 1    | 4     | 3.5   | 2.5    | 18.3   | 5     | spotted       | absent     |
| 1    | 5     | 3.8   | 2.5    | 15.6   | 5     | spotted       | absent     |
| 1    | 6     | 4.3   | 2      | 15.4   | 5     | spotted       | absent     |
| 1    | 7     | 3.9   | 2.2    | 11.7   | 5     | spotted       | absent     |
| 1    | 8     | 3.8   | 2.2    | 11.9   | 5     | spotted       | absent     |
| 1    | 9     | 4     | 2.1    | 11.1   | 5     | spotted       | absent     |
| 1    | 10    | 4     | 2.2    | 12.8   | 5     | spotted       | absent     |
| 1    | 11    | 3.9   | 2.3    | 11.8   | 5     | spotted       | absent     |
| 1    | 12    | 3.8   | 1.9    | 11     | 5     | spotted       | absent     |
| 1    | 13    | 3.3   | 1.8    | 9.8    | 5     | spotted       | absent     |
| 1    | 14    | 3.4   | 1.6    | 7.8    | 5     | spotted       | absent     |
| 1    | 15    | 3     |        |        |       |               |            |
| 2    | 1     | 3.1   | 2      | 14.8   | woody | woody         | absent     |
| 2    | 2     | 3.1   | 2.2    | 17.5   | 5     | spotted       | absent     |
| 2    | 3     | 3.5   | 1.6    | 19.4   | 5     | spotted       | absent     |
| 2    | 4     | 3.3   | 1.6    | 18.5   | 5     | spotted       | absent     |
| 2    | 5     | 2.9   | 1.9    | 14.1   | 5     | spotted       | absent     |
| 2    | 6     | 3.2   | 1.4    | 13.7   | 5     | spotted       | absent     |
| 2    | 7     | 3.1   | 1.2    | 16.3   | 5     | spotted       | absent     |
| 2    | 8     | 2.7   | 1.5    | 12.7   | 5     | spotted       | absent     |
| 2    | 9     | 2.5   | 1.1    | 15.5   | 5     | spotted       | absent     |
| 2    | 10    | 2.6   | 1      | 10.5   | 5     | spotted       | absent     |
| 2    | 11    | 2.1   |        |        |       |               |            |
| 3    | 1     | 2.7   | 2      | 19.2   | woody | woody         | absent     |
| 3    | 2     | 3.3   | 1.8    | 14.6   | woody | woody         | absent     |
| 3    | 3     | 3.1   | 2.1    | 12.1   | woody | woody         | absent     |
| 3    | 4     | 2.9   | 2.2    | 14.5   | woody | woody         | absent     |
| 3    | 5     | 3     | 2      | 12.7   | woody | woody         | absent     |
| 3    | 6     | 2.8   | 2.1    | 8.7    | 5     | spotted       | absent     |
| 3    | 7     | 3     | 1.7    | 6.9    | 5     | spotted       | absent     |
| 3    | 8     | 2.5   | 1.7    | 6.7    | 5     | spotted       | absent     |
| 3    | 9     | 2.7   | 1.7    | 5.5    | 5     | spotted       | absent     |
| 3    | 10    | 2.5   | 1.8    | 6.1    | 5     | spotted       | absent     |
| 3    | 11    | 2.1   | 1.4    | 7.3    | 5     | spotted       | absent     |
| 3    | 12    | 2.4   | 1.6    | 4.8    | 5     | spotted       | absent     |
| 3    | 13    | 2.3   | 1.2    | 4.6    | 5     | spotted       | absent     |
| 3    | 14    | 2     | 1.6    | 5.7    | 5     | spotted       | absent     |
| 3    | 15    | 2     | 1.5    | 4.6    | 5     | spotted       | absent     |
| 3    | 16    | 2.4   | 1.2    | 4.7    | 5     | spotted       | absent     |
| 3    | 17    | 2.4   | 1      | 5.9    | 5     | spotted       | absent     |
| 3    | 18    | 1.9   |        |        |       |               |            |



Table 5-28. Data from cultivar 22: Nēnē

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3     | 2.1    | 13.8   | woody | woody         | absent     |
| 1    | 2     | 2.9   | 2      | 16.7   | woody | woody         | absent     |
| 1    | 3     | 2.8   | 1.6    | 15.8   | woody | woody         | absent     |
| 1    | 4     | 3.3   | 1.8    | 13     | 7     | spotted       | absent     |
| 1    | 5     | 3.2   | 2      | 12.5   | 7     | spotted       | absent     |
| 1    | 6     | 3.9   | 1.6    | 11.5   | 7     | spotted       | absent     |
| 1    | 7     | 3.4   | 1.7    | 11     | 7     | spotted       | absent     |
| 1    | 8     | 2.8   | 1.4    | 8.4    | 7     | spotted       | absent     |
| 1    | 9     | 2.4   | 1.6    | 9.5    | 7     | spotted       | absent     |
| 1    | 10    | 2.5   | 1.2    | 10.2   | 7     | spotted       | absent     |
| 1    | 11    | 2.7   | 1.3    | 8.5    | 7     | spotted       | absent     |
| 1    | 12    | 1.9   | 1.1    | 6      | 7     | spotted       | absent     |
| 1    | 13    | 1.7   |        |        |       |               |            |
| 2    | 1     | 3.5   | 2      | 15     | woody | woody         | absent     |
| 2    | 2     | 3.6   | 1.9    | 16.8   | 7     | spotted       | absent     |
| 2    | 3     | 3.3   | 1.8    | 15.6   | 7     | spotted       | absent     |
| 2    | 4     | 3.1   | 1.9    | 13.4   | 7     | spotted       | absent     |
| 2    | 5     | 3.6   | 1.8    | 12.8   | 7     | spotted       | absent     |
| 2    | 6     | 3.8   | 1.9    | 11.8   | 7     | spotted       | absent     |
| 2    | 7     | 3.4   | 1.8    | 10.6   | 7     | spotted       | absent     |
| 2    | 8     | 3.3   | 1.6    | 10.6   | 7     | spotted       | absent     |
| 2    | 9     | 3.5   | 1.6    | 11     | 7     | spotted       | absent     |
| 2    | 10    | 3     | 1.7    | 10.9   | 7     | spotted       | absent     |
| 2    | 11    | 2.7   | 1.7    | 10.1   | 7     | spotted       | absent     |
| 2    | 12    | 2.7   | 1.6    | 7.4    | 7     | spotted       | absent     |
| 2    | 13    | 2.6   | 1.6    | 6.6    | 7     | spotted       | absent     |
| 2    | 14    | 1.9   |        |        |       |               |            |
| 3    | 1     | 3.8   | 2.2    | 15.9   | woody | woody         | absent     |
| 3    | 2     | 3.7   | 2.2    | 17.8   | 7     | spotted       | absent     |
| 3    | 3     | 3.6   | 2      | 19.1   | 7     | spotted       | absent     |
| 3    | 4     | 3.7   | 2      | 14.8   | 7     | spotted       | absent     |
| 3    | 5     | 3.8   | 2.2    | 13.4   | 7     | spotted       | absent     |
| 3    | 6     | 3.7   | 2      | 11.6   | 7     | spotted       | absent     |
| 3    | 7     | 3.6   | 1.9    | 11.1   | 7     | spotted       | absent     |
| 3    | 8     | 3.7   | 2.1    | 11.5   | 7     | spotted       | absent     |
| 3    | 9     | 3.6   | 2.3    | 8.2    | 7     | spotted       | absent     |
| 3    | 10    | 3.2   | 2      | 8.2    | 7     | spotted       | absent     |
| 3    | 11    | 3.8   | 2      | 9.9    | 7     | spotted       | absent     |
| 3    | 12    | 3.5   | 1.2    | 9.5    | 7     | spotted       | absent     |
| 3    | 13    | 3.1   | 1.5    | 7.8    | 7     | spotted       | absent     |
| 3    | 14    | 2.5   | 1.6    | 6      | 7     | spotted       | absent     |
| 3    | 15    | 2.5   | 1.3    | 5.1    | 7     | spotted       | absent     |
| 3    | 16    | 2.4   |        |        |       |               |            |

Table 5-29. Data from cultivar 23: Iwi

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 2.2   | 1.5    | 18.8   | 7     | spotted       | absent     |
| 1    | 2     | 2.6   | 1.3    | 27     | 7     | spotted       | absent     |
| 1    | 3     | 2.4   | 1.5    | 26.9   | 7     | spotted       | absent     |
| 1    | 4     | 3.2   | 1.5    | 19     | 7     | spotted       | absent     |
| 1    | 5     | 2.7   | 1.3    | 13.7   | 7     | spotted       | absent     |
| 1    | 6     | 2.3   | 1.2    | 7.3    | 7     | spotted       | absent     |
| 1    | 7     | 1.8   |        |        |       |               |            |
| 2    | 1     | 3.1   | 2.2    | 24.7   | woody | woody         | absent     |
| 2    | 2     | 3.2   | 2.4    | 23.7   | 7     | spotted       | absent     |
| 2    | 3     | 3.3   | 1.7    | 20     | 7     | spotted       | absent     |
| 2    | 4     | 3.3   | 1.9    | 13.7   | 7     | spotted       | absent     |
| 2    | 5     | 3.1   | 1.8    | 11.8   | 7     | spotted       | absent     |
| 2    | 6     | 3.5   | 1.6    | 8.7    | 7     | spotted       | absent     |
| 2    | 7     | 2.8   | 1.5    | 5.7    | 7     | spotted       | absent     |
| 2    | 8     | 2.4   | 1.7    | 4.8    | 7     | spotted       | absent     |
| 2    | 9     | 2.5   |        |        |       |               |            |
| 3    | 1     | 3     | 1.6    | 15.9   | woody | woody         | absent     |
| 3    | 2     | 3     | 1.5    | 12.8   | 7     | spotted       | absent     |
| 3    | 3     | 3     | 1.7    | 10.2   | 7     | spotted       | absent     |
| 3    | 4     | 2.6   | 1.6    | 6      | 7     | spotted       | absent     |
| 3    | 5     | 2.7   | 1.9    | 6      | 7     | spotted       | absent     |
| 3    | 6     | 3     | 1.7    | 7.2    | 7     | spotted       | absent     |
| 3    | 7     | 2.6   | 1.5    | 8.1    | 7     | spotted       | absent     |
| 3    | 8     | 3.2   | 1.5    | 8.2    | 7     | spotted       | absent     |
| 3    | 9     | 3.1   | 1.1    | 7.8    | 7     | spotted       | absent     |
| 3    | 10    | 3.1   | 1      | 6.1    | 7     | spotted       | absent     |
| 3    | 11    | 2.8   | 1      | 7.9    | 7     | spotted       | absent     |
| 3    | 12    | 2.4   | 1      | 4.4    | 7     | spotted       | absent     |
| 3    | 13    | 2.1   | 0.8    | 4.7    | 7     | spotted       | absent     |
| 3    | 14    | 2.1   |        |        |       |               |            |

Table 5-30. Data from cultivar 24: Isa

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| <b>Stem</b> | <b>Node#</b> | <b>NT cm</b> | <b>INT cm</b> | <b>INL cm</b> | <b>Color</b> | <b>Configuration</b> | <b>Pubescence</b> |
|-------------|--------------|--------------|---------------|---------------|--------------|----------------------|-------------------|
| 1           | 1            | 3.1          | 2.1           | 19.6          | 7            | spotted              | present           |
| 1           | 2            | 3.1          | 2.2           | 24.8          | 7            | spotted              | present           |
| 1           | 3            | 3.1          | 2             | 27.7          | 7            | spotted              | present           |
| 1           | 4            | 3.2          | 1.6           | 16.2          | 7            | spotted              | present           |
| 1           | 5            | 3.4          | 1.7           | 10.3          | 7            | spotted              | present           |
| 1           | 6            | 3            | 1.5           | 7.8           | 7            | spotted              | present           |
| 1           | 7            | 2.8          |               |               |              |                      |                   |
| 2           | 1            | 2.1          | 1.6           | 19.5          | 7            | spotted              | present           |
| 2           | 2            | 2.4          | 1.2           | 24.7          | 7            | spotted              | present           |
| 2           | 3            | 2.6          | 1.3           | 24.9          | 7            | spotted              | present           |
| 2           | 4            | 2.4          |               |               |              |                      |                   |
| 3           | 1            | 2.9          | 2.2           | 16.6          | 7            | spotted              | present           |
| 3           | 2            | 2.7          | 2.2           | 19.5          | 7            | spotted              | present           |
| 3           | 3            | 2.7          | 2.2           | 15            | 7            | spotted              | present           |
| 3           | 4            | 3.1          | 2             | 7.9           | 7            | spotted              | present           |
| 3           | 5            | 3.2          | 2             | 7.7           | 7            | spotted              | present           |
| 3           | 6            | 3.1          | 1.7           | 8             | 7            | spotted              | present           |
| 3           | 7            | 3.1          | 1.9           | 7             | 7            | spotted              | present           |
| 3           | 8            | 3            | 1.9           | 6.2           | 7            | spotted              | present           |
| 3           | 9            | 2.9          | 1.9           | 5.7           | 7            | spotted              | present           |
| 3           | 10           | 2.6          |               |               |              |                      |                   |

Table 5-31: Data from cultivar 25: Rhamwanger

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| Stem | Node# | NT cm | INT cm | INL cm | Color | Configuration | Pubescence |
|------|-------|-------|--------|--------|-------|---------------|------------|
| 1    | 1     | 3.2   | 2.2    | 15.5   | 7     | spotted       | absent     |
| 1    | 2     | 3     | 2.2    | 17     | 7     | spotted       | absent     |
| 1    | 3     | 3.2   | 2.1    | 13.2   | 7     | spotted       | absent     |
| 1    | 4     | 3.2   | 1.7    | 11.8   | 7     | spotted       | absent     |
| 1    | 5     | 3.3   | 1.4    | 10.8   | 7     | spotted       | absent     |
| 1    | 6     | 3.2   | 1.3    | 11.5   | 7     | spotted       | absent     |
| 1    | 7     | 2.9   | 1.3    | 10.8   | 7     | spotted       | absent     |
| 1    | 8     | 2.9   | 1.6    | 10.2   | 7     | spotted       | absent     |
| 1    | 9     | 2.8   | 1.6    | 9.6    | 7     | spotted       | absent     |
| 1    | 10    | 2.7   | 1.5    | 8.6    | 7     | spotted       | absent     |
| 1    | 11    | 2.5   | 1.3    | 8.8    | 7     | spotted       | absent     |
| 1    | 12    | 2.4   | 1.2    | 7      | 7     | spotted       | absent     |
| 1    | 13    | 2.1   |        |        |       |               |            |
| 2    | 1     | 3     | 2      | 17.4   | 7     | spotted       | absent     |
| 2    | 2     | 3.1   | 2.3    | 22     | 7     | spotted       | absent     |
| 2    | 3     | 2.8   | 1.6    | 26     | 7     | spotted       | absent     |
| 2    | 4     | 3.1   | 1.8    | 20.5   | 7     | spotted       | absent     |
| 2    | 5     | 3.2   | 1.6    | 15.5   | 7     | spotted       | absent     |
| 2    | 6     | 2.9   | 1.1    | 11.3   | 7     | spotted       | absent     |
| 2    | 7     | 2.2   | 1.4    | 7.5    | 7     | spotted       | absent     |
| 2    | 8     | 1.9   |        |        |       |               |            |
| 3    | 1     | 2.4   | 1.7    | 7.4    | 7     | spotted       | absent     |
| 3    | 2     | 2.5   | 1.4    | 11.6   | 7     | spotted       | absent     |
| 3    | 3     | 2.1   | 1.6    | 10     | 7     | spotted       | absent     |
| 3    | 4     | 2.5   | 1.2    | 12     | 7     | spotted       | absent     |
| 3    | 5     | 3     | 1.2    | 9.3    | 7     | spotted       | absent     |
| 3    | 6     | 3.1   | 1.1    | 10.9   | 7     | spotted       | absent     |
| 3    | 7     | 2.9   | 1      | 10.2   | 7     | spotted       | absent     |
| 3    | 8     | 2.6   | 1      | 9.7    | 7     | spotted       | absent     |
| 3    | 9     | 2.5   | 0.9    | 10.9   | 7     | spotted       | absent     |
| 3    | 10    | 2     | 1      | 9.7    | 7     | spotted       | absent     |
| 3    | 11    | 2     | 0.8    | 8.9    | 7     | spotted       | absent     |
| 3    | 12    | 1.9   | 0.7    | 8.1    | 7     | spotted       | absent     |
| 3    | 13    | 1.9   |        |        |       |               |            |

Table 5-32. Data from cultivar 26: Lekahina

(NT= Node thickness), (INT= Internode thickness), INL= Internode length)

| <b>Stem</b> | <b>Node#</b> | <b>NT cm</b> | <b>INT cm</b> | <b>INL cm</b> | <b>Color</b> | <b>Configuration</b> | <b>Pubescence</b> |
|-------------|--------------|--------------|---------------|---------------|--------------|----------------------|-------------------|
| 1           | 1            | 2.5          | 1.8           | 11.5          | 7            | spotted              | absent            |
| 1           | 2            | 2.6          | 1.7           | 19            | 7            | spotted              | absent            |
| 1           | 3            | 2.9          | 1.9           | 20.5          | 7            | spotted              | absent            |
| 1           | 4            | 2.9          | 1.3           | 17.4          | 7            | spotted              | absent            |
| 1           | 5            | 2.9          | 0.9           | 12.4          | 7            | spotted              | absent            |
| 1           | 6            | 2.7          |               |               |              |                      |                   |
| 2           | 1            | 2.1          | 1.2           | 11.8          | 7            | spotted              | Absent            |
| 2           | 2            | 2.1          | 1.4           | 13.2          | 7            | spotted              | Absent            |
| 2           | 3            | 3            | 1.4           | 12.4          | 7            | spotted              | Absent            |
| 2           | 4            | 2.1          |               |               |              |                      |                   |
| 3           | 1            | 1.9          | 1.3           | 12.8          | 7            | spotted              | Absent            |
| 3           | 2            | 2.2          | 1.7           | 13.7          | 7            | spotted              | Absent            |
| 3           | 3            | 2.3          | 1.6           | 12            | 7            | spotted              | Absent            |
| 3           | 4            | 2.1          |               |               |              |                      |                   |

# GLOSSARY

## Index to Hawaiian Words and Terms

**`Ahu`awa\***: Probably the sedge *Mariscus javanicus* (Houtt.)

**`ai**: Food or food plant, especially distinguished from *i`a*, meat of fleshy food;... (Pukui and Elbert 1986).

**`ailolo**: Ceremony usually marking the end of training, so called because the student ate (**`ai**) a portion of the head, and especially of the brains (**lolo**), of a fish, dog, or hog offered to the gods... (Pukui and Elbert 1986).

**`Akia\***: Possibly *Wikstroemia* sp.

**akua**: God, goddess, spirit... (Pukui and Elbert 1986).

**akua lele**: Flying god, usually a poison god sent to destroy, sometimes in the form of fireballs (Pukui and Elbert 1986).

**ali`i**: ...ruler , monarch, ... noble, aristocrat, king, queen, ... (Pukui and Elbert 1986).

**`Ana**: Pumice (Pukui and Elbert 1986).

**`anela**: Angel; designation for Hawaiian gods and spirits by those converts to Christianity who had kept some of the old gods (Pukui and Elbert 1986).

**`aumakua**: Family or personal gods, deified ancestors who might assume the shape of sharks, owls, hawks, **`Elepaio**, **`Iwi**, mudhens, octopuses, eels, rats, mice, dogs, caterpillars, rocks, cowries, clouds, or plants. A symbolic relationship existed; mortals did not harm or eat **`aumākua**, and **`aumākua** warned and reprimanded mortals in dreams, visions, and calls (Pukui and Elbert 1986).

**`Awa hiwa**: A variety of **`Awa** with long internodes and dark-purple stalks, much desired for offerings.

**`Āwai**: Also known as **`Āwaiahiki** which is a "Swelling in the groin, bubo; to have such swelling," Qualifiers: **lena** (yellowish) (said to be the same as **luna** (Pukui and Elbert 1986).

**`Āwailena**: see **`Āwai**

**`Āwailalo**: see **`Āwai**

**`awalau**: A young kava plant (roots, stems, and leaves) usually used as an offering to the gods (Pukui and Elbert 1986).

**`Āweoweo\***: Probably *Chenopodium oahuensis* (Meyen) Aellen.

**`Ea** (turtle): Hawksbill turtle, (*Chelone imbricata*), both land and sea species; the shell of this turtle (Pukui and Elbert 1986).

**`Ea**: A general term for infections and infectious diseases; coated tongue, sometimes accompanied by sore throat, the Thrush disease in children. Any diseases of miscellaneous nature beginning with **`Ea** ... Qualified by the terms ...

**`ōpūlauoho** (a strange malady, the only symptoms of which were fine tracing of blood vessels on the stomach at birth which vanished shortly afterward), ... **umalei** (literal: a lei for the chest)... (Pukui and Elbert 1986).

**`Ea `ōpūlauoho**: see **`Ea**

**`Ea umalei**: see **`Ea**

**Haikala**: Severe cramps, said to have often proven fatal (Pukui and Elbert 1986).

**hailona**: Divination... (Pukui and Elbert 1986).

**Haku ala**: Unknown disease

**Hala\***: Probably *Pandanus tectorius* Parkinson ex Z.

**hālau hula**: Long house, as for canoes or **hula** instruction, meeting house (Pukui and Elbert 1986).

**hale mua**: Men's eating house (Pukui and Elbert 1986).

**heiau**: Pre-Christian place of worship, shrine; some **heiau** were elaborately constructed stone platforms, others simple earth terraces (Pukui and Elbert 1986).

**hula**: The traditional dance form of the Hawaiian people that exists in an evolved form today.

**i`a:** 1) Fish or any marine animal. 2) Any food eaten as a relish with the staple (poi, taro, sweet potato, breadfruit), including meat, fish, vegetable, or even salt (Pukui and Elbert 1986).

**`ilio:** dog

**`Ihi`ai\*:** Possibly *Oxalis* sp.

**`Ilie`e\*:** Probably *Plumbago zeylanica* (L.)

**`Ilima\*:** Probably *Sida falax* Walp.

**Ipu-o-Lono:** Container for sacred objects; gourd calabash covered with a sennit net and suspended by a handle that consisted of four cords; food offerings were placed inside for the god **Lono** (Pukui and Elbert 1986).

**kahu:** Honored attendant, guardian ... (Pukui and Elbert 1986).

**kahuna:** Priest, ...minister, expert in any profession (whether male or female) (Pukui and Elbert 1986).

**kahuna (lā`au) lapa`au:** Medical doctor, medical practitioner, healer. *Lit.*, curing expert (Pukui and Elbert 1986).

**Kalo\*:** *Colocasia esculenta* (L.) Shott

**Kāmanomano kuahiwi\*:** Possibly *Cenchrus agrimonioides* Trin.

**kānaenae:** A chanted supplicated prayer, and as a chant of eulogy or praise. In such a chant the chanter hesitates at regular intervals to recover breath. Tone variation is greater and pitch may be higher than in the **olioli** style (Pukui and Elbert 1986).

**kanaka (pl. kānaka):** Human being, man, ...laborer (Pukui and Elbert 1986).

**kaona:** Hidden meaning, as in Hawaiian poetry; concealed reference... (Pukui and Elbert 1986).

**kapu:** Taboo, prohibition... sacredness... (Pukui and Elbert 1986).

**Kapo-`ula-kīna`u:** A goddess of **Hula**.

**kinolau:** Many forms taken by a spiritual body... (Pukui and Elbert 1986).



**Kō:** Sugarcane *Saccharum officinarum*

**Koali\*:** Probably *Ipomea* sp.

**Kohepopo:** An ancient sickness characterized by a foul smelling vaginal discharge (Pukui and Elbert 1986).

**Ko`oko`olau\*:** Probably *Bidens* sp.

**kuahu:** Altar (Pukui and Elbert 1986)

**Kūkaepua`a\*:** Probably *Digitaria* sp.

**Kukui\*:** Probably *Aleurites moluccana* (L.) Willd.

**Kumulipo:** One of the cosmogonic creation chants of the Hawaiian people.

**kupuna** (pl. **kūpuna**): Elders, ancestors

**Laka:** Patron goddess of **Hula**

**Limu o ka wai\*:** A fresh water seaweed often found in irrigation ditches in the 19<sup>th</sup> century

**lomi:** massage

**lua:** A Hawaiian martial art form

**Lua`i koko:** Vomiting of blood; hemorrhage (Handy et al. 1934).

**Luhi:** Weary, tired, fatigued... (Pukui and Elbert 1986).

**Lumaha`i\*:** Said to be **Na`ena`e** or even **`Ihi`ai**, but reported to be a different plant, even a tree with bark like **`Ōhi`a`ai**. Identification was linked to the island of Kaua`i (Chun 1994II).

**Mai`a:** Banana; *Musa acuminata* x *balbisiana* hybrids, as well as other *Musa* spp.

**Maka`ā:** Insomnia (Chun 1994I)

**maka`āinana:** Commoner, populace; people in general... (Pukui and Elbert 1986).

**Makoa\*:** Unknown plant

**Makou\***: Probably *Peucedanum sandwichense* Hillebr.

**Māmaki\***: Probably *Pipturus* spp.

**mana**: Supernatural or divine power... (Pukui and Elbert 1986).

**māna**: A chewed mass, as of Kava for drinking... (Pukui and Elbert 1986).

**manō**: General name for shark... (Pukui and Elbert 1986).

**Mā`opa`opa**: Tired, aching, of legs... (Pukui and Elbert 1986).

**Ma`uhā**: Weary, aching tired... (Pukui and Elbert 1986).

**mele**: Song, anthem, chant of any kind; poem... (Pukui and Elbert 1986).

**Mimi pa`a**: Inability to urinate... (Pukui and Elbert 1986).

**Mimi kulu**: Urination trouble. *Lit.*, Dripping urine.

**Moa**: Chicken

**Moa kuahiwi\***: Probably *Psilotum* spp.

**mōhai**: Sacrifice, offering; to offer a sacrifice (Pukui and Elbert 1986)

**mo`o**: Lizard, reptile of any kind... (Pukui and Elbert 1986).

**mo`olelo**: Story, tale, myth, history, legend... (Pukui and Elbert 1986).

**Nahu**: Pain, as of a stomach-ache or of childbirth (Pukui and Elbert 1986).

**Nī`aulua**: Unknown disease.

**Niu\***: Probably *Cocos nucifera*

**`Ōhi`a `ai\***: Probably *Syzygium malaccensus* (L.) Merr. & Perry

**`Ōhi`a hāmau\***: Probably *Metrosideros* spp.

**`Ōlena\***: Probably *Cucurma longa* L.

**oli**: Chant that was not danced to, ... (Pukui and Elbert 1986).

**Pā`ao`ao:** Latent childhood disease, with physical weakening; a general term for ailments ... qualified by the terms *kakua* (overexposure to the sun)... (Pukui and Elbert 1986).

**Pā`ao`ao kakua:** see **Pā`ao`ao**

**Pāmakani\*:** Possibly *Iphyllanthus distichus* Hook. & Arnott

**pāpāi`awa / pāpāia`awa:** A ceremonial offering of Kava for religious purposes.

**Pāpipi\*:** Probably *Opuntia ficus-indica* (L.) Mill.

**pā`ū:** Woman's skirt, sarong, ... (Pukui and Elbert 1986).

**Pele:** A late arriving family was that of the volcano goddess **Pele**. Her family was split when **Pele** had a love affair with the husband of **Nā-maka-o-ka-ha`i**, her **kaikua`ana** (older sister or female cousin). Then the family left their ancient homeland and came to Hawai`i in two groups. **Pele's** father and several brothers and sisters traveled with her as they searched for a new home. The other group traveled with the outraged **Nā-maka-o-ka-ha`i**, following **Pele** as she moved down the island chain. From Kaua`i to Hawai`i they destroyed each site at which **Pele** attempted to establish a home until she finally found safety at **Hale-ma`uma`u** (Gutmanis 1983).

**Pili\*:** Probably *Heteropogon contortus* (L.) P. Beauv. Ex Roem. & Schult

**Pōhaku-o-Kāne:** Stone monuments that were places of refuge (pu`uhonua) where families made offerings, such as pig, red fish, kava, and tapas, to atone for wrong doing (Pukui and Elbert 1986).

**Pōpolo\*:** Probably *Solanum* spp.

**Po`o hua`i:** Splitting headache (Pukui and Elbert 1986).

**Puaaloalo\*:** Probably *Hibiscus arnottianus* A. Gray

**pua`a:** pig

**Pua`a hiwa:** A solid black pig, much desired for sacrifice (Pukui and Elbert 1986).

**Pū`ao kole:** A disease probably linked to the female reproductive system.

**Pū`ao pelu:** Fallen womb (Pukui and Elbert 1986).

**pū`awa:** Kava plant or root portions, formerly used as offerings (Pukui and Elbert 1986).

**pule:** Prayer, ..., incantation, blessing, ...; to pray, worship... (Pukui and Elbert 1986).

**Pu`upa`a:** A disease probably affecting the kidneys.

**Pūwahanui\*:** Probably *Broussaisia arguta* Mill.

**Tī\*:** Probably *Cordyline fruticosa* (L.) A. Chev.

**`Uala\*:** Probably *Ipomea batatas* (L.) Lam.

**`Uhaloa\*:** Probably *Waltheria indica* L.

**Uhipe`a\*:** Unknown plant

**`Ūlei\*:** Probably *Osteomeles anthyllidifolia* (Sm.) Lindl.

**`unihipili** – Spirit of a dead person, sometimes believed present in bones or hair of the deceased and kept lovingly. **`Unihipili** bones were prayed to for help, and sometimes sent to destroy an enemy (Pukui and Elbert, 1986). Pukui (n.d.): Offerings to the **`unihipili** were often composed of the things he or she had liked best in life. If the deceased had been fond of a particular fish, that fondness carried over with him into the afterlife. Sometimes that fondness was willed to a relative before the passing of the deceased. This willing of one's fondness to another was called **puni kauoha**. I knew a woman in our district who received such a "willed fondness," from her mother. She was hardly ever without bananas in the house and would eat them even after they had turned black and soured a little. Living in the upland, she seldom could get squid to eat, but when she did, she never threw away any, not even when the odor was too much for others to bear.

**Wai`ōpua:** A disease similar to pulmonary consumption; Lecucorhea (Pukui and Elbert 1986).

**Wauke\*:** Probably *Broussonetia papyrifera* (L.) Venten.

**Wiwi\*:** Possibly *Conyza* Less., nom. Sons. spp. (Chun 1994II)

\*These plants names were collected without the accompaniment of herbarium vouchers. It is impossible to say what species these equate to in the Linnaean system.

## EXTENDED REFERENCES

References with information on `Awa are distributed throughout a wide range of sources, including many that are difficult to access. This includes unpublished manuscripts, Hawaiian language newspaper articles from the 1800's, and tape-recorded interviews. In order for the reader of this thesis to be able to reference many of these, but not have to wade through lengthy excerpts in the main text, the list of references has been extended with some of the more important quotes that are cited. Sources that are readily available in libraries around the world are mostly limited to their titles and standard bibliographical reference. A few writers, whose long descriptions of cultural practices are needed in their entirety to understand the role of `Awa within the culture, are included in the appendices. These include, "The Polynesian Family System in Ka`ū, Hawai`i" by Handy and Pukui (1972), works by Kamakau (1976, 1991), and others.

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He `awa keia no`u no Awini,  
He kanaka lawai`a au  
No na pali hula`ana nei  
O Laupahoehoenui me Laupahoehoeiki,  
Na Kane me Kanaloa i kanu,  
No`u akua o ka lewa lani, ka lewa nu`u,  
O ka `awa popolo a Kane i kau iluna,  
I ulu iluna, i lau iluna, i o`o iluna,  
I hului ia e Makali`i pa`a iluna  
I ki`ina ia i ka `iole moku ka `alihi  
Helelei ilalo nei, ulu laha i ka honua  
Aha`i ka manu kau iluna o ka la`au  
Iho mai ka `awa hiwa me ka makea  
Elua laua.  
O ka papa`ele me ka papakea  
Elua laua.  
O ka mo`i me ka mokihana,  
Elua laua.  
O ka nene me kawaimakaakamanu,  
Elua laua.  
Ho`awa ko `awa e Kane i ka wai  
Ina ka `awa, pupu i ka i`a  
No ko pulapula no Hanoalele  
Amama ua noa, lele wale ho`i.

Here is `awa from me, Awini,  
A fisherman I am  
Of the inaccessible cliffs  
Of greater Laupahoehoe of lesser Laupahoehoe,  
A plant set out by **Kane** and **Kanaloa**,  
My gods of the heavens above and the heavens below,  
The `awa popolo of **Kane**, that existed above,  
Grew above, leafed above, ripened above.  
It was seized by Makali`i and hung on high.

The rat ascended and chewed the rope that held it.  
 Down it fell, multiplied and spread over the earth.  
 The birds carried some up into the trees,  
 The `awa hiwa and the makea came down,  
 A pair were they.  
 The dark papa and the light papa,  
 A pair were they.  
 The mo`i and the mokihana,  
 A pair were they.  
 The nene and the ka-wai-maka-a-ka-mau,  
 A pair were they.  
 The `awa of Kane is mixed with water,  
 The `awa is drunk, fish is eaten for aftertaste.  
 This is for your offspring, Hanoalele,  
 Amama, it is freed, it has flown.

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3/16/1917

**Kena akula o Imaikalani i kona mau mama awa, e hoka mai i ka awa, a ke noho mai nei no hoi ka papa kahuna, na kanaka no hoi, mai na kane a na wahine, a aia no hoi ka pukaua o ua alii omokoko nei, oia o Namakaokaia ame kahi kukini me Keaalele, ke akoakoa like la, no ka mea he po nui ia no ke alii, he po no ka hauoli, no ka ike aku i ke keiki kana u`i, ma kekahi la ae. O ke kahee ia hoi ia o ka awa, a ku ana iloko o na apu, ia wa i kaa aku ai ka hana iloko o ka lima o na kahuna, aia no na apu awa ke waiho malie la me ka inu ole ia, ia wa i nee mai ai kekehi kahuna imua, hopu akula i ka apuawa o ke alii, a hoomaka ae la e kanaenae:**

Imaikalani ordered his `Awa masticators to strain the `Awa. The order of kahuna; as well as the lay people, from the men to the women; the general, too, Nā-maka-o-ka-i`a, of this blood sucking ruler; and the messenger, Keaalele, were all gathering together because this was a an important night for the ali`i, a night of joy, because the next day he was to meet the young hero. The `Awa was poured and filled the coconut shells, and then the ceremony was in the hands of the kahuna. The coconut shells were being calmly left undrunk, and then the kahuna moved forward, grabbed the `Awa cup of the ali`i and began to chant (kānaenae).

**Eia ka ai e Ku, e Lono, e Kane, Kanaloa,  
 Kanehekili, Kanewawahilani,  
 Kaneikapohakaa, Kaneluhonua,  
 Kaneholokai, Kaneholouka,  
 Kaneikokala, Kaneikapualena,  
 Kauilanuimakaehaikalani, Kanehulihia,  
 Hulihia i Kahikiku, i Kahikimoe,  
 Hulihia i ka alenuu, i ka alelani,**

E huli mai oukou apau i o`u nei,  
 E na aumakua o ka po,  
 Na aumakua o ke ao.  
 E na Ku kane, na Ku wahine,  
 A e nana mai oukou ia`u nei.  
 Owau keia o Hawea he kahuna nui,  
 Homai ka ike ho mai ka mana,  
 Homai he ola, e ola ia`u i ke kahuna,  
 A pela hoi i ka oukou pulapula nei,  
 Iia o Imaikalani,  
 I hale ai, i hale i`a, i hale kapa.  
 O ko oukou ola ka hoi ka ke akua.  
 O ke ola no a kanikoo a palalauhala,  
 A haumakaiole, a ka i ke koko,  
 O ka oukou ola ka hoi ia ka ke akua,  
 Nolaila, eia ka ai, eia ka i`a,  
 Elieli kapu, elieli noa.

Here is the food O **Kū**, O **Lono**, O **Kāne**, **Kanaloa**,  
 Kanehekili, Kanewawahilani,  
 Kaneikapohakaa, Kaneluhonua,  
 Kaneholokai, Kaneholouka,  
 Kaneikokala, Kaneikapualena,  
 Kauilanuimakaehaikalani, Kanehulihia,  
 Overturned at Kahiki-kū, at Kahiki-moe,  
 Overturned is the `alenu`u, the `alelani,  
 All of you turn towards me here,  
 O `Aumakua of the night,  
 `Aumakua of the day,  
 O the masculine **Kū** (plural), the feminine **Ku** (plural),  
 And look upon me, here,  
 It is I, Hawea, the great **kahuna**,  
 Give forth knowledge, give forth spiritual power,  
 Give forth life, that I may live,  
 And thus to your descendant,  
 To Imaikalani,  
 In houses of food, fish, and **kapa**,  
 A life which you, the gods, grant,  
 Life until the cane sounds, until yellow as an old **hala** leaf,  
 Until blurry eyed as a rat, until carried in a net,  
 A life which you, the gods, grant,  
 Therefore, here is the food and the fish,  
 Profound is the taboo, profound is its lifting.

Hakalia no a pau ke kanaenae ana a ke kahuna o ka haawi mai la no ia i ka apu  
 awa o ke alii, o ka wala ae la no ia o Imaikalani i kona apu, a pela no kahuna, ame  
 kekahi poe e ae i makemake e inu awa; alaila lalau akula ua alii nei i na oopu  
 pulehu ame la lawalu oopu, i pupu no kona awa, o ka iliki iho la no ia, ke iho la ko  
 ka akau, iho no ka hema.

Iho mai koluna poe,  
 Hikikii ka ua o Ena.



As soon as the **kahuna's** chanting (**kānaenae**) was done, the **ali'i's** **`Awa** cup was given to him and Imaikalani threw it back (drinking motion), and so did the **kahuna-s** and all others who wanted to drink **`Awa**. And then the **ali'i** reached for the broiled **`o`opu** and the **`o`opu** cooked in **Ti** leaves as a chaser for his **`Awa**. The effects struck suddenly as a great downpour of rain, those of the right descended, those on the left descended.

Those from above have descended,  
Leaning back as the slanted rain of Ena.

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Upon looking at the kind of men and women the eyes go to the defiled, smutty, the dandruff (kepia) and the gum of the breadfruit, they see the long eyelashes (lihilihi), all above and below, and get this chant of Kama-pua`a to Pele [sic].

Red eyes, red eyes the first  
Go to the place of inflamed (Piheka)  
What is the food to eat?  
A border eaten by the god.

Here is the thing that I saw in this valley, the complete freedom (noa) of the selling `Awa, sold in the village like hard pounded taro, undiluted. Where is the policeman that will arrest this troublemaker? No policemen. All of them are drinking `Awa, and will fear of the assembly, said this land of Hana-pēpē here.

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He `Awa i kanu `ia e ke akua,  
Ua lono Kaua`i i ka `Awa,  
E kani ka pū makaiaiu,  
Kukulu ka ua mai ka lani mai,  
Kulu ē, he ānuenue, he uila,  
Kapeau kona kuhi a,  
A kuhi aku kuhi mai,  
Kuhi i ka lapalapa.  
Ua inu ke akua  
I ka `Awa lā.  
Make `ona i ka `Awa lā,  
Kūlou `ona i ka `Awa lā,  
Hiamoe `ona i ka `Awa lā,  
Ala mai, `ona i ka `Awa lā.  
E ke akua ē,  
`Eli`eli kau mai!

The `Awa planted by the gods,  
Kaua`i has heard of the `Awa.  
The thunder peals aloud,  
The rain drops from the sky,  
A rainbow appears, the lightning too,  
It streaks downwards,  
Streaking there, streaking here,  
Streaking with the flashes.  
The goddess has drunk,  
Has drunk the `Awa.  
She is drunk with `Awa,  
She droops with the effects of `Awa,  
Sleeps under the influence of `Awa,  
Awakens, still drunk with `Awa.  
O goddess,  
Awe possess us!

P.K. Kuhi (k) Kalihikai, Kaua`i. Born 1861, in Honolulu, O`ahu.

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Ai: ...4) Ma ka oihana kahuna, ua lilo ka awa he ai ia na ke Akua, a pela hoi ke kanaka i mohaia i ka lele. E loa ana ma ka pule a Laka i pule aku ai ia Lono, loa keia mau lalani olelo penei...

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### 1/19/06

I ke ahiahi ana iho, holo akula o Kamehameha a me Kekuhaupio a pae ma Kapauai ma Honaunau; a hele akula laua mai laila aku a hoea i na halau mua o ke alii ka Moi Kiwalao.

I ke komo ana aku o Kamehameha i loko o ka mua, e hoomakaukau ana ka aha inu awa a ka moi. Ia wa o ke noi akula no ia o Kekuhaupio i ka moi, ia Kiwalao, ma ka olelo ana aku, “Ho mai kou awa no ia nei e mama (Kamehameha).”

A laila pane maila o Kiwalao, “He aha hoi ka iala mea e mama ai?”

Pane akula o Kekuhaupio, “O ia kauoha ia a na makua o olua. E noho kanaka aku kekahi keiki o olua ma lalo aku o kekahi, ke ku kekahi o olua i ka moku.”

A mama ihola o Kamehameha i ka awa. A pau ka mama ana, aumiki no hoi a maikai, a kahee no hoi a ku i ka apu.

O ko Kamehameha hahau ihola no ia i ka pule a noa, lalau maila ka moi i ka apu awa mua a paa i kona lima a haawi aela i ke aikane aloha ana.

A i kona (oia hoi u a aikane la a ke alii) hapai ana ae i ka apu awa no ka inu ae, o ka wa no ia a Kekuhaupio i pai aku ai i ka apu awa a lele ana i kahi e. A o ka pane akula no ia o Kekuhaupio i mua o ka moi: “Hewa ke alii! Aole paha i mama ko kaikaina i ka awa, e, no ke kanaka. Nou, no ke alii.”

O ko Kekuhaupio wa no ia i peku aku ai ia Kamehameha me ka i ana aku, “Hoi aku kaua a kau i luna o ka waa.”

O ko laua nei hoi maila no ia a hiki i kahi i hekau ai o ka waa o laua, a ko laua kau ihola no ia a hoi maila no Keei.

Ua lilo keia hana ana a Kekuhaupio i mea nune nui ia e ko ke alo alii o Kiwalao. Ua ahewa kekahi poe ia Kekuhaupio, a ua apono kekahi poe ia ia, a ua hooili aela i ka hewa ma luna o ka moi o Kiwalao.

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When Kamehameha entered the man's house (mua), the chiefs drinking gathering (ka `aha `Awa o ke alii) was being prepared for. Kekuhaupio suggested to the ruling ali'i, Kiwala'o, "Let Kamehameha prepare you `Awa." Kiwala'o asked, "Why should he?" and Kekuhaupio answered, "That was the will of your father, that one of you should serve the other, and one stand at the head of the government."

Kamehameha chewed the `Awa, strained and poured it into a cup. He offered a prayer and after freeing the kapu, the ruling ali'i Kiwala'o took the first cup in his hand and gave it

to a favorite friend. When the friend raised the cup to drink it, Kekūhaupi`o slapped it away from him and said, "You are wrong, O ali`i, your younger cousin did not chew the `Awa for anyone but you." Kekūhaupi`o pushed Kamehameha with his foot and said, "Let us go ... " This act of Kekūhaupi`o was much discussed by the attendants of Kīwala`ō. Some blamed Kekūhaupi`o and some approved, and laid the blame on Kīwala`ō.

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