

## VII. Medicinal Plants

During our field research the use of medicinal plants emerged as an important domain of cultural knowledge and activity. Most of the following detailed material was gathered during our stay on Ofu; medicinal plants are gathered on Park land by many practitioners residing in Ofu village and herbal treatments are utilized by most of the population. Villagers who are participating in the National Park currently use plant-based medicinal preparations in the treatment of a variety of illnesses. Samoan medicine is dynamic, and current treatments include not only those handed down from previous generations, but also treatments developed to meet contemporary health needs. We begin by discussing the Ofu Unit, and conclude with briefer accounts for Ta'u and Tutuila.

### Ofu Unit.

The narrow strip of land that comprises the shore portion of this unit of the Park is extremely important as a source of medicinal plants for the villages of Ofu and Olosega. Plants preparations are used both by the general population to treat common minor ailments, and by specialists. Health specialists include fofo (massage healers), fofogau (bone setters), fa`atosaga (midwives), taulasea (herbalists), and taula`aitu (spirit healers) (Cox 1991: 160). All of these use at least some plant preparations. These specialists have a few conditions which they have the power to cure. The effectiveness of a treatment is not considered to lie in the medicinal preparation or in the treatment procedure alone. For a treatment to be effective, it must be performed by someone who is capable of healing because the power to do so has been passed down to them, usually from someone in their family. Particular families have the fofo for particular conditions. One woman described a treatment that she had watched her grandmother use a number of times. After her grandmother had died, a man came to her and requested that she treat him, since he knew that the fofo was in her family. She performed the treatment as she had seen her grandmother do, and it worked. In contrast, another healer, who treats infants and pregnant women, described learning her medicinal preparations not from a relative, but from a man who visited from another island. A healer will only perform his or her own treatment and will not perform others, but is often able to recognize what the particular condition is, and which healer the person needs to visit.

Samoan medicine continues to be important and is used for illnesses which are considered indigenous, or for which western medicine is not effective. The infant and childhood illnesses known as mumu, ila, and pala, some of which do not appear to have

a biomedical diagnosis (Whistler 1992: 60), are widely treated by traditional healers. Generally, mumu describes inflammations and swellings (Whistler 1992: 61), ila encompasses diarrhea, birthmarks and various rashes (McCuddin 1974: iv), and pala describes mouth infections (Whistler 1992: 61) or intestinal inflammations (McCuddin 1974: iv). Plant preparations are also frequently used to treat women after childbirth (failelegau), and to treat irregular menstruation. One description of the use of futu (*Barringtonia asiatica*) appeared to describe it being used as an abortifacient. Ma`i `aitu, illnesses thought to be caused by spirits, are also widely treated by specialists employing plant based preparations. A number of preparations are also used to treat chronic conditions such as backaches, diabetes (ma`i suka), and high blood pressure (toto maualuga). Table 3 summarizes the detailed data we collected on medicinal plants, their preparation, and uses.

In addition to specialized treatments, there are a range of medicinal preparations that do not require special curing power, and that people use for themselves, or their children. Many people report using the commonly known preparations, such as ma`anunu (*Tarenna sambucina*) for headaches, or fue fue sina (*Vigna marina*) for cuts, but visit a specialist for other preparations.

Healers use a variety of plants parts-- leaves, roots, rhizomes, stems, inner and outer bark scrapings, young shoots, and fruit. Leaves such as nonu (*Morinda citrifolia*) and ti (*Cordyline* sp.) are often used whole, massaged onto the body. Preparation methods often include chopping or grinding plant materials, then mixing with water and squeezing through clean fabric to extract the juice. Infusions are most often made with fresh water, but some are made with sea water. Water is usually used room temperature, but some preparations are made with boiling water. Plant preparations are often administered as combinations of several plants, or with several procedures being performed during a single treatment. Preparations are taken internally, applied topically, or dripped into the eyes or ears. In addition, plants material might be burned, with the smoke or ash being directed toward the wound. One treatment for eye injuries involved burning coconut husks, then flicking the ashes towards, but without touching the patient. Similarly, a treatment for mumu on a child's buttocks included lighting a hollow ulu (*Artocarpus altilis*) branch, then blowing through it and directing the smoke towards the mumu. Whistler describes this treatment as being used for what is apparently anal thrush (Whistler 1992: 126). The taulasea who described this smoke treatment to us, uses it in conjunction with juices extracted from the root of ti vao (wild *Cordyline* sp.), and the inner skin of mamae (*Musa* sp.) (slide 18).

Vai tua ula (slide 19) is prepared from ma`anunu (*Tarennia sambucina*). It was the only preparation that was mentioned as being dried and kept until needed. All other preparations described employ fresh plant materials. This makes knowledge of the location of medicinal plants, and access to them important. Plants that are regularly used as medicine are often planted in the village, but people continue to go to the bush (and into Park areas specifically) to collect plants to be transplanted closer to the village, or when particularly health plant parts are needed.

The specialties appear to follow the typical gender division described by Whistler (1992: 60). Except for fogogau and some taula`aitu, healers are mostly women, and female healers appear to employ a more extensive pharmacopeia. However, of the two very knowledgeable healers who discussed passing their knowledge on, one is teaching her son, and the other has taught both her daughters and her sons.

The patient will often give a healer a gift in appreciation for the treatment. Gifts of food were mentioned most often. Most expressly stated that payment for treatment is not made. One healer stated that a patient might offer twenty-five or thirty dollars, but that she would not accept money. Healing power is often characterized as a gift from God that would be lost if the healer sold it rather than shared with the village. One person explained it in the following way: the patient might offer a gift of money in an amount proportional to the seriousness of the illness. The healer refuses it, demonstrating that the treatment is not being sold, but that the he or she only wishes to help. The patient insists on giving the gift, and the transfer of the gift is analogous to a transfer of the ma`i. By giving the healer money, the patient is 'giving away' the illness.

In the To`aga area, the beach side of the road (i.e., the area inside the National Park boundary) was mentioned particularly as the source for the healthiest medicinal plants (slide 20). People regularly gather plants from this area to use in medicinal preparations. Medicinal plants that are regularly used are also gathered and planted in the village to provide convenient access. However, when medicinal plants growing in the village are sick, or the leaves worm eaten, they are not effective for medicinal preparations, and one goes to the To`aga area to collect "good" plants.

At least six different people in Ofu were referred to as healers with various specialties. These individuals are widely recognized as healers. In addition to their particular specialties, these individuals seemed to have more knowledge than the average person about the less specialized treatments that do

not rely on special healing powers. Two of these healers are male fogogau (treating aches, sprains, and broken bones). This is done primarily through massage, with some topical use of plant preparation, though a preparation of fisoa (*Colubrina asiatica*) was mentioned as being drunk specifically for aches. Some of the aches treated by one of these individuals are attributed to spirits, and a number of plant based preparations are used to treat these. Another man is a specialist in treating ma`i`aitu. He reportedly uses a variety of plant-based preparations, and collects these at To`aga.

One woman specializes in treating headaches, and uses ti and nonu leaves. She also uses a number of plants from To`aga for diabetes, rashes, and toothaches. Another woman specializes in treating infants and children with a wide range of plant based preparations. This healer named thirty-two plants that she uses. Many of these are from To`aga. The depth of her knowledge is perhaps even more impressive when one realizes that this is probably not a complete list. In addition to the many infants she treats in Ofu and Olosega (two to four daily, by her own estimate), she also has a considerable number of patients on Tutuila, where she spends much of her time. She brings medicinal plants with her when she goes to Tutuila, and sometimes has them send to her from Ofu.

#### Ta'u Unit.

Faleasao land was described as too remote for the collection of medicinal plants. In Fitiuta, medicinal plants are gathered from a variety of areas, including from the Saua area and other areas inside the Park boundaries. There were many references to the use of the widely known medicinal plants, such as ma`anunu, and fue fue sina. Specialized preparations were described to treat children, to treat women during pregnancy and after childbirth, and to treat ma`i aitu.

#### Tutuila Unit.

On Tutuila much more than in Manu`a, plant preparations were described in terms of Western medicine--headache preparations were described as "like Tylenol" and treatments for cuts were described as "antiseptics." There appears to be considerably less reliance on plant preparation on Tutuila as compared to Manu`a. People interviewed knew the common preparations (such as ma`anunu) but had generally not used them recently. It is possible that this impression is biased by having spoken to relatively few women in the Tutuila villages. Several men described plants medicines as a speciality of some women in their villages, but they could not name specific healers. It was their perception that plant medicines were used primarily for babies. One woman who actively treats infants in a Tutuila village made a

point of saying that she always advises mother to bring the babies she treats to the hospital. This contrasted to the situation on Ofu, where several people said that babies are bought to the dispensary only when they have a condition that the healer does not treat, and that the dispensary nurse sends infants to the traditional healer.

One person described a preparation that she was currently using. The preparation is made from a plant which this individual called pua same. This was described as a new medicine. Approximately five years before, a man who had prayed for his ill daughter dreamt of using this plant as a medicine. It is good for chronic back pain, diabetes, kidney infections, bowel problems, and high blood pressure. No botanical identification was found for this plant, and its use was not reported elsewhere.

One woman knows medicinal preparations that were passed down in her family for four generations. She used to use these medicines to treat family and neighbors, but stopped after she received some medical training about fifteen years ago. She believes that the traditional preparations are effective, but is now concerned about the non-sterile traditional preparations, and the possibility of bacterial contamination.

### Summary.

Medicinal plant knowledge is a Samoan cultural resource of major significance. This expertise is particularly concentrated on the island of Ofu, where local residents commonly seek treatment from herbal specialists. Medicinal plants are also taken from Park land by Fitiuta villagers on Ta'u. Herbal medicines are much less in evidence on Tutuila. On Ofu, the continuing practice and transmission of this specialized knowledge depends, at least in part, on minimal disturbance to the sandy strand lying between the road and the beach. The area where medicinal plants are gathered lies partly within the National Park. Park Service policy on use and development of this land should take into account the continuing cultural importance of the medicinal plants found there.

Table 3. Medicinal Use of Plants

plant	part used	preparation	application	use
<u>aoa</u>	roots	infusion made with boiling water	drunk	stomachache
<u>asi Toga</u>		mix with chalk	drunk	T.B. ( <u>mamapala</u> )
<u>ateate</u>	bark	(used with <u>pu`a</u> bark)		diarrhea
<u>ateate</u>	leaves	chopped, pounded, and squeezed for juice	drunk	itching, swelling, stomach pain, and bladder ailments; diabetes, high blood pressure
<u>`ava</u>	young leaves	chopped, pounded, and squeezed for juice	drunk; rubbed on body	body aches
<u>`ava`ava aitu (tu)</u>	leaves; small branches	infusion made with boiling water	drunk	headache, pain, often used for <u>failelegau</u>
<u>`ava`ava aitu (sosolo); fue magoni</u>	leaves	chopped, pounded and squeezed for juice	drunk	<u>ma`iaitu</u> and <u>saua</u> <sup>1</sup>
<u>`ava pui</u>	root	ground and mixed with water	drunk	stomachache; cough
<u>esi</u>	fruit		eaten	stomachache
<u>fala</u>	root	inner skin is scraped and an infusion is made with boiling water	drunk	flu, fever

<sup>1</sup> A ma`iaitu in children.

<u>fala`aina</u>	fruit	juice of the fruit is mixed with <u>mati</u> root	drunk	skin infections
<u>fatifati</u>	leaves	chopped, pounded, and squeezed for juice	drunk	<u>saua</u> and <u>ma`iaitu</u> in older people
<u>fau</u>				eye ailments
<u>fetau</u>	leaves	soaked in ocean water, and squeezed for juice	topical	sores on children
<u>fisoa</u>	leaves	chopped, pounded and squeezed for juice	topical; drunk	backache, sprains and bone pain; <u>ma`i gau</u>
<u>fuefue saina</u>	leaves	squeezed for juice	topical	cuts
<u>fuefue sina</u>	leaves	chopped, pounded, and squeezed for juice	drunk; squeezed on wounds	<u>mumu</u> , <u>saua</u> ; many other ailments
<u>fue</u> from around the <u>`ulu</u> tree (no other name known.)	leaves			<u>ila</u> , fever, chills
<u>fue magoni</u>	leaves	chopped, pounded and squeezed for juice	drunk	<u>ma`iaitu</u> and <u>saua</u>
<u>fue sosolo</u>	leaves	chopped, pounded and squeezed for juice	drunk	<u>ma`iaitu</u> and <u>saua</u>
<u>futu</u>	leaves	chopped, and infused in boiling water	drunk	<u>failelegau</u> , regulate menstruation
<u>gatae</u>				<u>nifo</u>
<u>ifi</u>	inner	bark	drunk	stomach

	bark	scrapings mixed with water		illnesses, diarrhea
<u>la`au pa`epa`e</u>	leaves			<u>mumu</u> , <u>saua</u> , boils, stomachache, fever, hemorrhoids, red eyes
<u>lau tasi (lau auta)</u>	leaves	chopped, pounded and squeezed for juice	drunk	<u>ila</u> ; <u>ma`iaitu</u> and <u>saua</u>
<u>ma`anunu (used to make the preparation known as vai tua ula)</u>	bark	bark scrapings are dried in the sun, then mixed with fresh water as needed	drunk	headache; body aches
<u>magamaga</u>	leaves	chopped, pounded and squeezed for juice	drunk	fever, stomachache
<u>mago</u>	leaves	chopped and infused in boiling water	drunk	toothache
<u>mago</u>	inner bark	infusion made with bark scrapings and boiling water	drunk	sore throat
<u>malili</u>				skin discoloration in children
<u>mamae</u>	inner skin	squeezed for juice, which is mixed with <u>ti</u> roots juice	drunk; rubbed on body. used in conjunction with <u>ti</u> root and <u>`ulu</u> smoke	<u>ila</u> , <u>mumu</u>
<u>matalafi</u>	leaves	chopped, pounded, and squeezed for	drunk; topical; dripped into	diabetes, high blood pressure;

		juice	eyes and ears	headaches; mumu; <u>ma`iaitu</u> and <u>saua</u>
<u>mati</u>	root	juice is extracted	drunk with pineapple juice	skin infections
<u>milo</u>	bark	infusion made with bark scrapings and boiling water	drunk	<u>pala</u> ; upset stomach
<u>moegalo</u>			used with ripe coconut	<u>laguia</u> <sup>2</sup>
<u>moli</u>	inner bark	infusion made with bark scrapings and boiling water	drunk	flu, fever; child's cough and sore throat
<u>moso`oi</u>	bark	scrapings are chopped, pounded and squeezed for juice	drunk	lower abdominal pain, to regulate menstruation
<u>namulega</u>	leaves	chopped, pounded and squeezed for juice	drunk	flu
<u>niu</u>	husk	chopped, pounded and squeezed for juice	drunk	child's cough and sore throat
<u>niu</u>	husk	burned for ash	ashes flicked toward the patient	eye injuries
<u>nonu</u>	leaves	chopped, pounded and squeezed for juice	drunk	<u>ma`iaitu</u>
<u>nonu</u>	leaves	moistened	massaged on head and forehead	headache; fever

<sup>2</sup> no further description of this illness; no information found in the literature.

<u>nonu</u>	leaves	heated	topical	abscess
<u>nonu</u>	fruit	left in a jar to ferment (one to several weeks)	drunk	diabetes, high blood pressure
<u>`o`a</u>	inner bark	scrapings mixed with water	drunk	stomach illnesses, diarrhea; as an expectorant for treatment of <u>pala</u>
<u>pu`a</u>	bark	(used with <u>ateate</u> )		diarrhea
<u>puasame</u>	branches (stripped of leaves)	infusion made with boiling water	drunk	back pain; diabetes, high blood pressure, stomachache, kidney infections
<u>pulu</u>	leaves	chopped, pounded and squeezed for juice	drunk; topical	<u>nifo</u> and <u>tui</u> <sup>3</sup>
<u>suni</u>	leaves	chopped, pounded and squeezed for juice	drunk	child's upset stomach
<u>tagitagi</u>	leaves			swollen legs and feet
<u>talafalu</u>	bark	bark scrapings are mixed with water and squeezed to extract juice	drunk used with <u>ma`anunu</u> and <u>to`ito`i</u>	backache
<u>talie</u>	bark	infusion made with bark	drunk	<u>pala</u>

<sup>3</sup> The nifo referred to here is the ma`iaitu. Tui was described as a very strong ma`iaitu.

		scrapings and boiling water;		
<u>talie</u>	inner bark	healer chews the bark scraping	the juice is spat into the child's mouth	phlegmatic sore throat
<u>talie</u>				eye ailments
<u>ti</u>	leaves	moistened	massaged on head and forehead	headache
<u>ti</u>	young leaves	chewed by healer to extract the juice	drunk	<u>tui</u>
<u>ti vao</u>	roots	juice is extracted	used with <u>lau mamae</u> and <u>`ulu</u> smoke	<u>ila</u> and seizure
<u>togo</u> and <u>taliga</u>	leaves	chopped, pounded, and squeezed for juice	drunk; topical	<u>mumu</u> ; fever, chills; <u>ma`iaitu</u> ; sores and bites
<u>to`ito`i</u>				rash caused by <u>`utu</u> <sup>4</sup>
<u>to`ito`i</u>	bark	bark scrapings are mixed with water and squeezed to extract juice	drunk used with <u>ma`anunu</u> and <u>talafalu</u>	backache
<u>`ulu</u>	small hollow branch	branch is dried and used like a straw. One end is lit, and blowing through it, the smoke ->	is blown toward the child's <u>mumu</u> . This is used in conjunction with <u>ti</u> root and <u>mamae</u> .	<u>mumu</u> , <u>ila</u>
<u>`ulu</u>	roots			intestinal

<sup>4</sup> According to Milner, `utu refers to lice, or a kind of fungal infection.

				ailment in children
<u>vi</u>	bark	infusion made with boiling water	drunk	child's sore throat
<u>vi vao</u>	leaves	crushed for juice	topical	cuts