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## **Ethnobotany and Vernacular Names of the Lycophytes and Ferns of Tafea Province, Vanuatu**

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## Ethnobotany and Vernacular Names of the Lycophytes and Ferns of Tafea Province, Vanuatu

TOM A. RANKER<sup>1</sup>

University of Hawai'i at Mānoa, School of Life Sciences, Honolulu, HI 96822, USA  
Email: ranker@hawaii.edu

MICHAEL J. BALICK

Institute of Economic Botany, New York Botanical Garden, Bronx, NY 10458 USA  
Email: mbalick@nybg.org

GREGORY M. PLUNKETT

Cullman Program for Molecular Systematics, The New York Botanical Garden, Bronx, NY 10458 USA  
Email: gplunkett@nybg.org

K. DAVID HARRISON

VinUniversity, Hanoi, Vietnam  
Email: david.h@vinuni.edu.vn

JEAN-PASCAL WAHE

Tafea Kaljoral Senta, Lenakel, Tanna, Vanuatu  
Email: boysouthmedia@gmail.com

MARTIAL WAHE

Tafea Kaljoral Senta, Lenakel, Tanna, Vanuatu  
Email: wahemarzii@gmail.com

**ABSTRACT.**—We conducted extensive fieldwork in the Tafea Province of Vanuatu from 2014 to 2021 as part of a long-term floristic study of plants and fungi as well as analyses of changes in forest structure and plant diversity in response to the category 5 cyclone Pam. As part of this work, we documented the vernacular names and/or uses of 10 species of lycophytes and 88 species of ferns. Vernacular plant names were documented in the languages endemic to the islands of Aneityum, Futuna, and Tanna, including Anejoñ, Futuna-Aniwa, Kwamara, Nafe, Naka, Netwar, Nahuai, and Whitesands. The uses reported by indigenous, Ni-Vanuatu, experts included: body decoration, cultural/spiritual, ornamental, clothing, food/food preparation, handicrafts, medicine, and fiber/construction.

**KEY WORDS.**—Vanuatu, Tafea Province, Aneityum, Futuna, Tanna, lycophytes, ferns, ethnobotany, linguistic diversity, biodiversity

Vanuatu is a South Pacific archipelago of more than 80 islands, situated roughly equidistant from New Caledonia, Fiji, and the Solomon Islands (Fig. 1A), all of which are globally recognized biodiversity hotspots (Conservation International, 2014). Vanuatu's biota establishes it as a global center of biodiversity, and the "Vanuatu rainforest" vegetation type is recognized as a distinct terrestrial ecoregion because of its unique blend of species (Wikrama-

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<sup>1</sup> Corresponding author



FIG. 1. A. Map showing location of Vanuatu relative to the other islands of Melanesia and Australia. B. Map showing delimitations of Vanuatu's six provinces, including the southernmost of

nayake, Dinerstein, and Loucks, 2002), with a threat status of Critical/Endangered (CEPF, 2012).

Despite its importance, Vanuatu's terrestrial flora and mycota remain poorly documented, leaving a significant gap in our knowledge of biotic and biogeographic relationships to neighboring regions. In 2014, we began a multidisciplinary collaborative project in Vanuatu that sought to address this gap, through botanical exploration as well as gathering data on the traditional uses of plants (ethnobotanical studies), local language names for the plants (linguistic studies), and carrying out training and other activities to support biocultural conservation (Balick and Plunkett, 2019). We decided to focus on the southern province of Tafea as it is thought to be the most diverse part of Vanuatu (Schmid, 1975), and current estimates suggest that this province contains roughly 50% of the botanical diversity of the country (C. Sam, pers. comm., 2012). We intend to expand the focus of the project to the rest of Vanuatu in the future.

Tafea comprises the southern "stem" of a Y-shaped archipelago, lying between 18° and 21° S (Fig. 1B). It comprises five main islands: the three larger, volcanic islands of Erromango, Tanna, and Aneityum, and two smaller raised-coral atolls, Aniwa and Futuna. The province is marked by a more seasonal climate than the rest of the archipelago, with cooler temperatures and less rain during the "dry" season (April to October), which contributes to a recognizable floristic difference from the remaining provinces, which all lie north of 18° S latitude (van Balgooy, 1971; Chew, 1975).

Vanuatu livelihoods and cultural practices are closely linked to biodiversity, particularly outside of the main cities of Port Vila and Luganville, and the inhabitants maintain a strong connection to their cultural traditions. Traditional lifestyles depend on the natural resources of forest (and marine) habitats for food, lodging, clothing, medicines, and traditional exchange and ceremonies. Customary stewardship of biodiversity resources has helped to maintain intact environments. Plant knowledge is uniquely encoded in local languages, through naming, taxonomies, plant-processing technologies, legends, and oral tradition. Such knowledge is structured in a language-specific fashion, and often cannot be effectively translated into any other language. As part of a language hotspot, Tafea Province also shows very high linguistic diversity, an index that often correlates positively with biodiversity (Gorenflo *et al.*, 2012). Nine languages are endemic to the province (Fig. 1C): Aneityum (or Anejoṃ) (900 speakers), Futuna-Aniwa (1,500 speakers), Nafe (also called

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Tafea. C. Map of the islands of Tafea showing the geographic distributions of the local languages. The language names follow those that were reported to us, not necessarily the Ethnologue names (Eberhard *et al.* [2021; i.e., Nafe rather than Kwamera, Netwar rather than Lenakel, etc.]). Here we list the Ethnologue equivalents in parentheses, followed by the ISO codes (see: <https://www.iso.org/iso-639-language-codes.html>): Ura (no other name), ISO: uur [Note: Ura is in gray on the map because it is moribund]; Sie (Erromangan), ISO: erg; Naka (North Tanna), ISO: tnn; Netwar (Lenakel), ISO: tnl; Narak (Whitesands), ISO: tnp; Nahuai (Southwest Tanna), ISO: nwi; Nafe (Kwamera), ISO: tnk; Futuna-Aniwa (no other name), ISO: fut; Anejoṃ (no other name), ISO: aty



FIG. 2. Members of the “Imaki Slow Food Mamas” group from Tanna Island demonstrating how to grate bananas with the bases of the stipes of tree ferns (*Cyathaceae*) during a recent *Kastom Skul* (Custom School) designed to teach young people the traditional ways of living. Photos: M. J. Balick



FIG. 3. Examples of ferns being used. A. Covering an earth oven with leaves of ferns and other plants over hot stones on which food has been placed, to distribute the cooking heat evenly. B. Japanesei Lalep, Titya Lalep, and Wopa Nasauman (left to right) display traditional Aneityumese chaplets made from a variety of fern and lycophyte species. C. A decorative armband made from strips of the rachis of *Calochlaena straminea*. D. “Imaki Slow Food Mamas” demonstrating how to grate carrots and ginger using tree fern stipes and rachises (Cythaeaceae). Photos: M. J. Balick (A, D); P. Dovo (B); T. A. Ranker (C).

Kwamera) (3,500 speakers), Lenakel (also called Netwar, Netvaar) (11,500 speakers), North Tanna (also called Naka) (5,000 speakers), Sie (1,900 speakers), Nahuai (called Naha or Southwest Tanna) (4,500 speakers), Ura (moribund, not more than 6 speakers), and Narak or Whitesands (7,500 speakers) (all speaker numbers from Eberhard, Simons, and Fennig, 2021; Lynch and Crowley, 2001).

The current study focused on the ethnobotany of lycophytes and ferns, listing their vernacular names in local languages and uses. To date, we have collected many more lycophytes and ferns than are found in this paper; here we report only on those that have local names or uses that were recorded from local experts in the communities where we worked.

#### MATERIALS AND METHODS

We obtained a research license from the Vanuatu Department of Environmental Protection and Conservation, Forestry Department and Vanuatu Cultural Centre, as well as an exemption from the Institutional Review Board of Swarthmore College, where co-author Harrison was affiliated from 2016 to

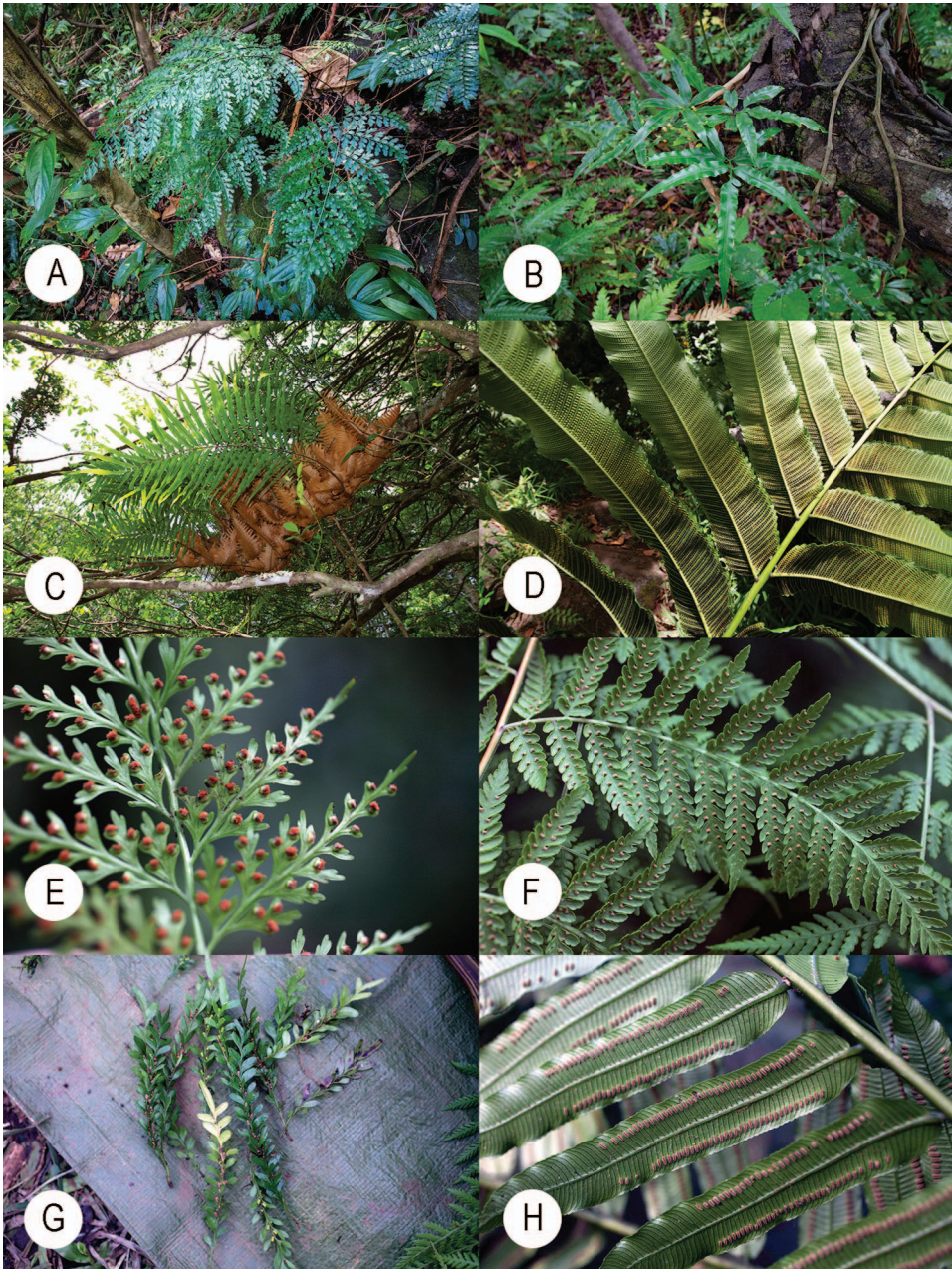


FIG. 4. Examples of ferns used in Tafea Province. A. *Asplenium laserpitiiifolium*. B. *Davallia pentaphylla*. C. *Drynaria rigidula*. D. *Menisciopsis rubrinervis*. E. *Asplenium gibberosum*. F. *Hypolepis elegans*. G. *Tmesipteris vanuatuensis*. H. *Angiopteris evecta*. Photos: T. A. Ranker



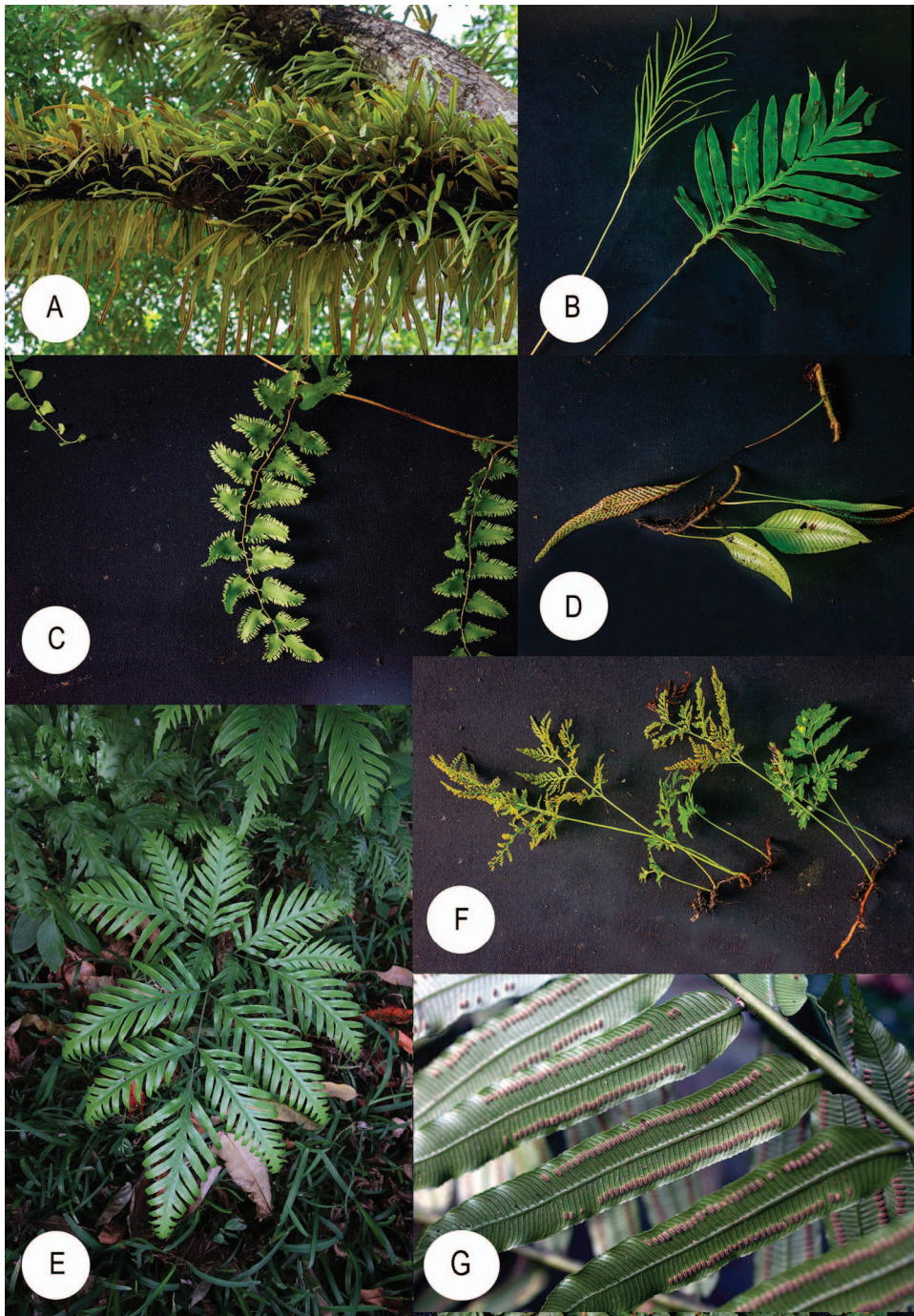


FIG. 5. Examples of ferns used in Tafea Province. A. *Pyrrosia longifolia*. B. *Austroblechnum melanocaulon*. C. *Lygodium reticulatum*. D. *Selligiea plantaginea*. E. *Pteris comans*. F. *Davallia pusilla*. G. *Ptisana smithii*. Photos: T. A. Ranker



FIG. 6. The preparation and use of *Lygodium reticulatum* for constructing a traditional house in Tanna; both photos were shot in the Iatukwei nakamal in South Tanna. **A.** Local experts heat-treat the fern vines to make them supple, before use on the roof. **B.** Villagers use the tangled vines to secure the ridge of the thatched roof of a traditional house. Photos: G. M. Plunkett.

2022. As part of our fieldwork, which is still ongoing, we began all visits to villages with a community meeting, explaining the purpose of the project, which in the Bislama language is called “*Plants mo Pipol blong Vanuatu*” (Plants and People of Vanuatu), and asked if there was interest in collaboration. Nearly always, we found that there was interest in learning about the plants and documenting their traditional names and uses, as most Ni-Vanuatu (the local name for the ethnolinguistic group of indigenous people native to Vanuatu) are keenly aware of the loss of this information, often through the passing of a family member who did not fully impart their knowledge to others. Many times during our initial conversations, people would recite the names of elders who were knowledgeable about many different realms of cultural information relating to plants, and lament that when these individuals passed, knowledge was lost. After our group presentations, it was not uncommon to hear “we have been waiting for a project like this all our lives” as the dangers posed by erosion of cultural memory are widely understood. We then discussed the details of the project, solicited local input as to what people wished us to record and who should be involved, and then obtained prior informed consent via a form signed by the community members that we worked with or their representatives. This project focused specifically on generalist information known by many at the community level and avoided gathering information on plant uses that were considered secret (*tabu*), proprietary, or of value to the family and where recording would diminish that value.

We conducted fieldwork on multiple expeditions from 2014 to 2021 and focused primarily on Aneityum (locally called Keamu) and Tanna, with a smaller number of collections made from Futuna. We collected a total of 468 collections of lycophytes and ferns (in duplicates of ca. 6 and including leaf tissue for DNA extraction). The first two sets of specimens were deposited in the Vanuatu National Herbarium (PVNH), a unit of the Vanuatu Department of Forestry, and the New York Botanical Garden (NY). Additional duplicates are in the process of being distributed to specialists as well as other herbaria with holdings in Pacific Island flora.

The herbarium specimens were used to voucher all of the cultural information, with collector’s initials and collection number indicated with the cultural information (Table 1).

Our team elicited plant names in all of the local languages, except for Sie and Ura, by consulting with experts who were shown plant specimens prior to pressing, and/or field photographs our team had taken. We then recorded these names in digital audio, and also transcribed them in our field notes using a combination of local orthography (where available) and IPA phonetic transcription. We also collected narratives about plant use, spoken in English, and recorded and transcribed these with accompanying metadata. The level of plant knowledge we encountered was quite impressive; even people who do not claim any plant expertise can name hundreds of plants, and some experts can name as many as 2,000. This feat is even more remarkable when we consider that these primarily oral cultures make limited use of writing, relying

almost exclusively on social transmission and memory to preserve botanical knowledge (Harrison, 2019). The plant photos, names, and use narratives were added to our suite of online Talking Dictionaries ([www.talkingdictionary.org](http://www.talkingdictionary.org)), which provide a platform for preserving linguistic and environmental knowledge. For most of these languages, the Talking Dictionary we created represents a first presence of this language on the internet, and is a source of pride for the community. An example of one of these is the Nafe (Kwamera) Talking Dictionary (<http://talkingdictionary.swarthmore.edu/kwamera/>) which has 3,233 entries, including several hundred plant names, as well as cultural objects (*e.g.*, traditional houses) that are made from plants. The Talking Dictionaries attribute each lexical entry to the individual who provided the word, and also lists them as co-authors, while stating that the entire content of the dictionary is the intellectual property of the community. Through this project, we are thus able to link linguistic diversity with biodiversity in a way that aids in the preservation of both.

In addition, the project has established a *Flora of Vanuatu* website (<http://pvnh.net>) to make specimen-based data from the Vanuatu National Herbarium more widely available and has recently completed a new checklist for all vascular plants (see Plunkett *et al.*, 2022).

#### RESULTS AND DISCUSSION

We documented vernacular names and/or uses of 98 species including 10 species of lycophytes and 88 species of ferns. The lycophytes represented two families and three genera. The ferns represented 23 families and 60 genera. All of the species were generally common. Twenty-five uses were documented for eight of the 10 species of lycophytes, distributed as follows: body decoration - 6; cultural/spiritual - 11; ornamental - 3; clothing - 4; medicine - 1. One-hundred-and-seven uses were documented for 54 of the 88 species of ferns, distributed as follows: body decoration - 4; cultural/spiritual - 32; ornamental - 1; food and/or food preparation - 26; handicrafts - 6; medicine - 23; fiber/construction - 15. Descriptions of these uses along with vernacular names are compiled in Table 1.

In comparing the uses of lycophytes and ferns that we have documented from the Tafea Province to similar published accounts from other islands of the Pacific, there is very little overlap in terms of species used (*i.e.*, the islands share few congeneric or conspecific taxa with demonstrated uses) and, in terms of actual uses, even for the same species. For example, Balick *et al.* (2009) described ceremonial and medicinal uses for *Phlegmariurus phlegmaria* on Pohnpei, Federated States of Micronesia, whereas on Aneityum and Tanna, the species is only used for decorative/ceremonial purposes (but it should be pointed out that ni-Vanuatu generally treat some medicinal uses as secret knowledge that is not shared with outsiders). *Palhinhaea cernua* has many uses on Pohnpei including decoration, medicine, magic, and hunting and is used for both medicine (Balick *et al.*, 2009) and decoration on Palau (Balick and Hillmann Kitalong, 2020), whereas in Vanuatu, it is only used for

TABLE 1. Vernacular names and uses of lycophytes and ferns. Lycophytes are listed first, followed by ferns, and species are listed alphabetically by family, genus, and species within each category. The classification system of PPG I (2016) is generally followed plus more recent revisions of some genera. Collectors's names are indicated by initials, as follows: AAM = Ashley A. McGuigan; GMP = Gregory M. Plunkett; KA = Kate Armstrong; MJB = Michael J. Balick; TAR = Tom A. Ranker. Multiple entries of the same collection number with different spelling of a vernacular name or other data, indicate that this was part of a separate interview with other people, on the same island. The language of each vernacular name is listed in brackets after the name.

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**LYCOPHYTES**
**LYCOPODIACEAE** (Fig. 3B)

***Palhinhaea cernua*** (L.) Vasc. & Franco

*Vernacular name:* negrecreipek or negregreipek [Anejoñ]

*Specimen:* GMP-3600, Aneityum Island

*Use:* This plant is used as an ornament in the hair and can be used by anyone.

*Indigenous expert(s):* Titiya Lalep, Wina Nasauman, Tony Keith, Ruben Neriam

*Vernacular name:* sikuak [Nafe]

*Specimen:* GMP-4653, Tanna Island (South)

*Indigenous expert(s):* Taya Ninneth, Naiwan Sam, Tan Danifer, Kayas Narko, Allan Rawi

***Phlegmariurus carinatus*** (Desv. Ex Poir.) Ching

*Vernacular name:* inlepeau inupotet [Anejoñ]

*Specimen:* GMP-4823, Aneityum Island

*Indigenous expert(s):* Wopa Nasauman, Martial Wahe

***Phlegmariurus oceanianus*** (Herter) A.R. Field & Bostock

*Vernacular name:* inlepei u inṗoded or inlepi unwunpoteth [Anejoñ]

*Specimen:* GMP-3287, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Marie Michelle

*Vernacular name:* naturana [Nafe]

*Specimen:* TAR-2624, Tanna Island (South)

*Use:* As a decoration for a man's arm, cut the stems and dry them, put around the arm and use during kastom [traditional] ceremonies

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Phlegmariurus phlegmaria*** (L.) Holub

*Vernacular name:* inlepeau inupotet [Anejoñ]

*Specimen:* GMP-4807, Aneityum Island

*Use:* Used to wrap around a person's head as a decoration.

*Indigenous expert(s):* Wopa Nasauman, Martial Wahe

*Vernacular name:* inlepei u inṗoded [Anejoñ]

*Specimen:* GMP-3664, Aneityum Island

*Use:* This plant is used to make a head garland, but if you are going hunting or fishing do not put this on your head as you will not be successful in your quest. This is the grass skirt for the spirits; you can hear them but you cannot see them.

*Indigenous expert(s):* Titiya Lalep, Wina Nasauman, Ruben Neriam

*Vernacular name:* inlepei u inṗoded or inlepei uwunpoteth [Anejoñ]

*Specimen:* GMP-3664, Aneityum Island

*Notes:* The difference between the male and female plants is the following. The male has stronger leaves and the stem is blackish and stiff, with no fertile cones as they dry up and die. The female has softer leaves, a flexible stem with cones on the tips that produce a lot of white powder that unless they fall off the plant and on to the ground, they grow more plants, which is why they are considered female. [Note: biologically, the sporophytes do not actually come in male and female forms, *i.e.*, this is an indigenous interpretation]

*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

*Vernacular name:* inlepei u inṗoded atamaiñ [Anejoñ]

*Specimen:* GMP-4104, Aneityum Island

*Use:* This plant is considered bad luck when hunting or fishing. When doing these activities, do not decorate your hair with this plant. This plant is used to weave the sheath portion of nambas [a traditional penis sheath]. First the stems are retted, then the inner portion of the plant removed. Once removed, the sheath is woven with the blanched fiber. This is considered the male version of this plant. See GMP-4105 [*Phlegmariurus squarrosus*], *Phlegmariurus* sp. for the female version. [Note: biologically, the sporophytes do not actually come in male and female forms, *i.e.*, this is an indigenous interpretation]

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* inlepei u inṗoded atamaiñ [Anejoñ]

*Specimen:* GMP-4104, Aneityum Island

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TABLE 1. Continued.

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*Use:* The name of this plant means a “women’s skirt for spirits”. People use this plant to decorate their hair, but not when hunting or fishing. The difference between the male and female plants is the following. The male has stronger leaves and the stem is blackish and stiff, with no fertile cones as they dry up and die. The female has softer leaves, a flexible stem with cones on the tips that produce a lot of white powder that unless they fall off of the plant and on to the ground, they grow more plants, which is why they are considered female. [Note: biologically, the sporophytes do not actually come in male and female forms, *i.e.*, this is an indigenous interpretation]

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nontap [Naka]

*Specimen:* TAR-2223, Tanna Island (North)

*Use:* Used to make ceremonial grass skirts for women of any age. Many plants are sewn and draped to form the body of the skirt.

*Indigenous expert(s):* Johnny Nakabue, Marie Kating Kew, Willie Nalin Nadikas, Kating Kew Enauta, Numake Tom Kapalu, Kuwau Tom Keuai, Nausan Kamsak

*Vernacular name:* naturauna [Nafe]

*Specimen:* GMP-4603, Tanna Island (South)

*Use:* The vine is dried in the sun, and wrapped around a person’s head and on their arms as a decoration during kastom ceremonies.

*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko, Rawi Amos

*Vernacular name:* naturena [Nafe]

*Specimen:* GMP-3023, Tanna Island (Southeast)

*Use:* After one week of being sun-dried, men will place this plant in their arm band during kastom ceremonies.

*Indigenous expert(s):* Jony Konapo, Nufunu Sakama, George Turiak, Jack Nakweren, Sam Nauka, Alick Rayris, Tom Kahi, Johnson Kamkari, Kasumartin, Moses Kahu

*Vernacular name:* naturana [Nafe]

*Specimen:* GMP-3023, Tanna Island (Southeast)

*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

*Vernacular name:* mankutu [Neuai]

*Specimen:* GMP-2883, Tanna Island (Southwest)

*Use:* Used for ceremonial dress for men and women. Worn over grass skirts for women. Worn around the arm for men. Plant is dried until white by exposure to the sun, boiling water, or sea water.

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

***Phlegmarius phyllanthus*** (Hook. & Arn.) R.D. Dixit J.

*Vernacular name:* namatanugi [Futuna-Aniwa]

*Specimen:* GMP-5113, Futuna Island

*Notes:* Name is related to the word matagi, meaning “wind.”

*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru

*Vernacular name:* natureuna [Nafe]

*Specimen:* GMP-5199, Tanna Island (South)

*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak

***Phlegmarius squarrosus*** (G. Forst.) Á. Löve & D. Löve

*Vernacular name:* inlepei u inpoded atahaeg [Anejōm]

*Specimen:* GMP-4105, Aneityum Island

*Use:* This plant is considered to bring bad luck when hunting or fishing. When doing these activities, do not decorate your hair with them. This plant is used to weave the sheath portion of nambas. First the stems are retted, then the inner portion of the plant removed. Once removed, the sheath is woven with the blanched fiber. This is considered the female version of this plant. See GMP-4104 [*Phlegmarius phlegmaria*] for the male version. [Note: Biologically, the sporophytes do not actually come in male and female forms, *i.e.*, this is an indigenous interpretation]

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* inlepei u inpoded atahaeg [Anejōm]

*Specimen:* GMP-4105, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

**SELAGINELLACEAE**

***Selaginella firmula*** A. Br. ex Kuhn

*Vernacular name:* necemas moso [Anejōm]

*Specimen:* GMP-3483, Aneityum Island

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TABLE 1. Continued.

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*Use:* This is a "message plant" (Plunkett and Balick, 2018) that signifies that there has been a death. The messenger holds one dried leaf or puts it on their head, goes to another person's house and hands it to the person they wish to convey the message to, without saying anything, and that person knows that someone has died. It can also be handed to that person. The person receiving the message then asks "who" and is told the deceased person's name.

*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* necemas moso [Anejoṃ]

*Specimen:* GMP-3483, Aneityum Island

*Use:* This plant is used in weather magic rituals to help produce more fog at the top of a mountain. It is used with another plant. Put these two plants in a hole in a sacred stone and let them ferment as the hole fills up with water. After the plants rot, there will be a lot of fog, which helps keep the garden plants moist and growing well. The name of the stone is "Naemoso" (certain stones are considered sacred in local cultures and may have proper names).

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

***Selaginella firmuloides*** Warb.

*Vernacular name:* nimtameuta [Nafe]

*Specimen:* GMP-4555, Tanna Island (South)

*Use:* This plant is wrapped around the head of males and females during kastom ceremonies, as a head lei.

*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko

*Vernacular name:* nimtameta [Nafe]

*Specimen:* GMP-2994, Tanna Island (Southeast)

*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

***Selaginella plana*** (Desv.) Hieron.

*Vernacular name:* necemas [Anejoṃ]

*Specimen:* MJB-4919, Aneityum Island

*Use:* This is a "message plant" that signifies that there has been a death. The person holds one dried leaf or puts it on their head, goes to another person's house and hands it to the person they wish to convey the message to, without saying anything and that person knows that someone has died. It can also be handed to that person. The person receiving the message then asks "who" and is told the deceased person's name.

*Indigenous expert(s):* Wopa Nasauman, Thomas Japanesai, Dick Matenekea

*Vernacular name:* necemas [Anejoṃ]

*Specimen:* GMP-3509, Aneityum Island

*Use:* This is a "message plant" that signifies that there has been a death. The person holds one dried leaf or puts it on their head, goes to another person's house and hands it to the person they wish to convey the message to, without saying anything and that person knows that someone has died. It can also be handed to that person. The person receiving the message then asks "who" and is told the deceased person's name.

*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* necemas [Anejoṃ]

*Specimen:* GMP-3509, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

*Vernacular name:* makauka [Futuna-Aniwa]

*Specimen:* TAR-2525, Futuna Island

*Indigenous expert(s):* Takaronga Kuautonga via David Harrison

*Vernacular name:* makauka [Futuna-Aniwa]

*Specimen:* MJB-5204, Futuna Island

*Indigenous expert(s):* Naumeta Rose, Paul Fatapa

*Vernacular name:* namtameuta [Nafe]

*Specimen:* GMP-5182, Tanna Island (South)

*Use:* When a person gets a burn from a fire, people chew the stem of this plant and spit it on the area of the burn to help heal it.

*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak

*Vernacular name:* neok messia [Neuai]

*Specimen:* GMP-2876, Tanna Island (Southwest)

*Use:* When brush is dry, burn bush then plant yam.

*Notes:* Neok means "yam". Messia means "dry".

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

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TABLE 1. Continued.

## FERNS

## ASPLENIACEAE

***Asplenium amboinense*** Willd.

*Vernacular name:* kata rihrikui [Futuna-Aniwa]

*Specimen:* GMP-5046, Futuna Island

*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru

*Vernacular name:* napluatu [Naka]

*Specimen:* TAR-2230, Tanna Island (North)

*Notes:* Name known only by elders.

*Indigenous expert(s):* Johnny Nakabue, Marie Kating Kew, Willie Nalin Nadikas, Kating Kew Enauta, Numake Tom Kapalu, Kuwau Tom Keuai, Nausan Kamsak

*Vernacular name:* kakurei akuurei [Nafe]

*Specimen:* GMP-5192, Tanna Island (South)

*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak

***Asplenium australasicum*** (J. Sm.) Hook.

*Vernacular name:* nejecjec [Anejoĩ]

*Specimen:* GMP-3650, Aneityum Island

*Use:* The younger, soft leaves are used to wrap local foods, for example bananas. To prepare a type of "local cheese," made from either fermented breadfruit or fermented banana, mix a bit of coconut milk and wrap these two fruits in the leaves and cook [ferment] in an earth oven (Fig. 3A). No specific details given about the way the food is fermented.

*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* nejecjec [Anejoĩ]

*Specimen:* GMP-3650, Aneityum Island

*Use:* The young leaves of this fern are edible when boiled for a few minutes. They can be mixed with meat and used as a vegetable. There is a fermentation process using this fern known as *namari*. Peel the skin of bananas and breadfruit, put in a basket of coconut leaves. Wash the breadfruit in sea water and the bananas in fresh water, for 2 nights, to dehydrate the fruits. Remove the basket from the water and spill out the water. Dig a hole in the ground, line it with coconut leaves first, then place laplap leaves on top of the coconut leaves. Fill the hole with either the breadfruit or banana fruit and pile laplap leaves over it. Add fresh water from time to time to keep the fruit moist and change the leaves on the top of the hole as needed. The process takes 2-3 months and then it can be eaten as food. To store this "local cheese", wrap the fern leaves around it and continue to add moisture and change the leaves. This food can be stored for many years as long as the leaves are changed and water is added, estimated to store for 10 or more years.

*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

*Vernacular name:* teheka [Nafe]

*Specimen:* TAR-2614, Tanna Island (South)

*Notes:* The predatory bird known as *kweria* (Swamp Harrier, *Circus approximans*) makes their nest in this plant as it forms a nice rosette.

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* matawekar [Neuai]

*Specimen:* GMP-2899, Tanna Island (Southwest)

*Notes:* Chickens lay eggs on it. Sometimes eggs are collected from these plants.

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

***Asplenium bipinnatifidum*** Baker

*Vernacular name:* napapotan [Anejoĩ]

*Specimen:* GMP-4089, Aneityum Island

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* napapotuan [Anejoĩ]

*Specimen:* GMP-4089, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* kuarun apen [Neuai]

*Specimen:* GMP-2864, Tanna Island (Southwest)

*Notes:* Considered a young version of GMP-2863 [*Asplenium laserpitiifolium*]. See also GMP 2879.

*Note:* Kuarun means "teeth". Apen means "black".

*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Asplenium caudatum*** G. Forst.

*Vernacular name:* toumauru [Futuna-Aniwa]



TABLE 1. Continued.

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*Specimen: GMP-5057*, Futuna Island  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru  
*Vernacular name:* karkwangen nui  
*Specimen: TAR-2617*, Tanna Island (South)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa  
*Vernacular name:* nekeskes apran [Nafe]  
*Specimen: GMP-3121*, Tanna Island (Southeast)  
*Indigenous expert(s):* Sam Nakua, Jean-Paolo Nawarao, Samuel Kehma, Tom Rafei, Jean Pascal Wahe  
*Vernacular name:* nekeskes apran [Nafe]  
*Specimen: GMP-3121*, Tanna Island (Southeast)  
*Indigenous expert(s):* Necky Malto, Kakurai Pita, Kapiri Joseph, Dan Dannifer  
*Vernacular name:* metak metak [Neuai]  
*Specimen: GMP-2862*, Tanna Island (Southwest)  
*Notes:* Note: Same name for small/young prawn. Same name as *GMP-2861* [*Tmesipteris vanuatensis*].  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Asplenium gibberosum*** (G. Forst.) Mett. (Fig. 4E)  
*Vernacular name:* tomauru [Futuna-Aniwa]  
*Specimen: GMP-5061*, Futuna Island  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru  
*Vernacular name:* nefuan-namel [Naka]  
*Specimen: TAR-2296*, Tanna Island (North)  
*Use:* Has an undisclosed kastom use.  
*Indigenous expert(s):* Jimmy Nakapue Asim, Yesua Nakapue  
*Vernacular name:* nefuan-namel [Naka]  
*Specimen: TAR-2311*, Tanna Island (North)  
*Use:* Has an undisclosed kastom use.  
*Indigenous expert(s):* Jimmy Nakapue Asim, Yesua Nakapue, Tom Johnson, Chessie Church, Samson Jimmy Nakapue, Greg Matai  
*Vernacular name:* manman [Naka]  
*Specimen: KA-600*, Tanna Island (North)  
*Use:* When this plant is growing along a river on an embankment, it suggests prawns are nearby.  
*Indigenous expert(s):* Numake Nakabue, Chief Samson  
*Vernacular name:* nimayuei [Nafe]  
*Specimen: GMP-5193*, Tanna Island (South)  
*Use:* This is a medicinal plant for an unspecified use. Take the leaves and mix with other leaves and squeeze together in cold water and pour into a cup. Drink in morning for two days.  
*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak  
*Vernacular name:* Kakurei akurei [Nafe]  
*Specimen: GMP-3016*, Tanna Island (Southeast)  
*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

***Asplenium laserpitifolium*** Lam. (Fig. 4A)  
*Vernacular name:* navamaei [Naka]  
*Specimen: TAR-2222*, Tanna Island (North)  
*Indigenous expert(s):* Kating Kew, Willie Nalin  
*Vernacular name:* kuarun apen [Neuai]  
*Specimen: GMP-2863*, Tanna Island (Southwest)  
*Use:* Used as an exterior leaf for wrapping laplap.  
*Notes:* Kuarun means “teeth”. Apen means “black”.  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Asplenium nidus*** L.  
*Vernacular name:* kauta [Futuna-Aniwa]  
*Specimen: TAR-2527*, Futuna Island  
*Indigenous expert(s):* Takaronga Kuaotonga

***Hymenasplenium excisum*** (C. Presl) S. Linds.  
*Vernacular name:* kakurei akurei [Nafe]  
*Specimen: GMP-3123*, Tanna Island (Southeast)  
*Indigenous expert(s):* Necky Malto, Kakurai Pita, Kapiri Joseph, Dan Dannifer  
*Vernacular name:* natengateng [Neuai]  
*Specimen: GMP-2901*, Tanna Island (Southwest)

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TABLE 1. Continued.

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*Use:* Used as part of kastom ceremony to harvest taro. This has the same use as GMP-2857 [*Hymenophyllum macgillivrayi*], 2858 [*Crepidomanes bipunctatum*], 2859 [*Crepidomanes saxifragoides*], 2870 [*Adiantum diaphanum*], and 2911 [*Anthoceros* sp.; Anthocerotaceae, a bryophyte].

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

**ATHYRIACEAE**

***Diplazium harpeodes*** T. Moore  
*Vernacular name:* nesal [Naka]  
*Specimen:* TAR-2218, Tanna Island (North)  
*Use:* Young tips are eaten once cooked. Commonly prepared as a soup. Not consumed raw.  
*Indigenous expert(s):* Johnny Nakabue, Marie Kating Kew, Willie Nalin Nadikas Kating, Kew Enauta, Numake Tom Kapalu, Kuwau Tom Keuai, Nausan Kamsak

*Vernacular name:* manam manam [Neuai]  
*Specimen:* GMP-2927, Tanna Island (Southwest)  
*Use:* Young, top leaves are eaten as food by cooking with coconut milk in a saucepan.  
*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

***Diplazium melanocaulon*** Brack.  
*Vernacular name:* namna huum [Nafe]  
*Specimen:* MJB-5155, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Diplazium oblongifolium*** (Hook.) Jermy  
*Vernacular name:* inpain [Anejoñ]  
*Specimen:* GMP-4086, Aneityum Island  
*Notes:* The name describes a sea bird, whose long legs are similar in shape to the stipe of this fern.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* inpauin or necñanpaiñ [Anejoñ]  
*Specimen:* GMP-4086, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

**BLECHNACEAE**

***Austroblechnum melanocaulon*** (Brack.) Gasper & V.A.O. Dittrich (Fig. 5B)  
*Vernacular name:* nukwiri pran  
*Specimen:* TAR-2615, Tanna Island (South)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* natokian, or tapen [Neuai]  
*Specimen:* GMP-2865, Tanna Island (Southwest)  
*Use:* Natokian means cloudy. Do not touch this plant if you intend to travel to the mountains; touching this plant will lower clouds and, because of the cloud cover, hinder the distance a person can see.  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru, Kataua Kati

***Blechnopsis orientalis*** (L.) C. Presl  
*Vernacular name:* numujced [Anejoñ]  
*Specimen:* GMP-3577 & MJB-4983, Aneityum Island  
*Use:* Join two of the inrolled fronds together at the part where the frond is opening such that the leaves are held together by their unfolding growing tips. Place this along the path that is frequented by a wild pig and when the pig passes these two leaves, and is chased by a hunter's dogs, these leaves in this formation are said to sap some of the pig's energy and thus allow the dogs to catch up with it. This was explained to Tony by another person who mentioned it as a sort of magical power possessed by this type of fern.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

*Vernacular name:* not given  
*Specimen:* MJB-4983, Aneityum Island  
*Use:* When a person wants to collect a plant in another place, such as the hills or forest, they take one of the inrolled leaves and put it behind each ear; this will keep the person "hidden" from the spirits that might hinder their collection of the plant. For men, if you do not do this you might not find the plant at all, or if you find it the power of the plant to cure will be reduced—it will not be strong medicine. For women, sometimes the male spirits make women sick, with headaches, swollen eyes, and an irregular menstruation. Use this fern for protection in the forests, gardens, and hills by taking one inrolled leaf and put it behind each ear and it will prevent the male spirits from harming the woman. This practice is important to do when a woman leaves her village.  
*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

***Cranfillia glabrescens*** (T.C. Chambers & Sykes) Gasper & V.A.O. Dittrich  
*Vernacular name:* nomojced [Anejoñ]  
*Specimen:* GMP-3285, Aneityum Island

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TABLE 1. Continued.

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*Indigenous expert(s)*: Wopa Nasauman, Lalep Thomas Japanesei.

***Oceanopteris gibba*** (Labill.) Gasper & Salino  
*Vernacular name*: nampowei [Anejoṃ]  
*Specimen*: GMP-3644, Aneityum Island  
*Indigenous expert(s)*: Titiya Lalep  
*Vernacular name*: nampowei [Anejoṃ]  
*Specimen*: GMP-3644, Aneityum Island  
*Use*: This is considered a sacred plant and is said to help keep crops and food in good condition, protecting people from famine and loss of their crops. It grows wild along rivers and people leave the plants there and sometimes also move the plants to their homes, growing them with *Cordyline fruticosa*, and other unspecified plants to offer protection for their gardens. For example, when a person goes to their garden, take the planting pole and poke it near these ferns and then your garden will be protected as you work in it and use the planting pole to plant crops.

*Indigenous expert(s)*: Wina Nasauman, Tony Keith, Ruben Neriam

***Parablechnum milnei*** (Carruth.) Gasper & Salino  
*Vernacular name*: nukwiri yarman [Kwamara]  
*Specimen*: TAR-2608, Tanna Island (South)  
*Indigenous expert(s)*: Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa  
*Vernacular name*: noukwiuri [Nafe]  
*Specimen*: GMP-4611, Tanna Island (South)  
*Indigenous expert(s)*: Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko  
*Vernacular name*: tarouur [Nafe]  
*Specimen*: GMP-4616, Tanna Island (South)  
*Indigenous expert(s)*: Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko  
*Vernacular name*: nukuiuri [Nafe]  
*Specimen*: GMP-3065, Tanna Island (Southeast)  
*Indigenous expert(s)*: Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

**CYATHEACEAE** (Figs. 2, 3D)

***Alsophila vieillardii*** (Mett.) Tryon  
*Vernacular name*: nesjau [Anejoṃ]  
*Specimen*: GMP-3693, Aneityum Island  
*Use*: The petiole of the leaf is cut and tied with 1-2 others to make a tool to grate banana and other foods. The spines act as the grater. The young leaves at the top of the plant are edible. Boil them in water for 5 minutes until soft, then they can be eaten as a vegetable. The brown scales on the leaf petiole bases are collected and stuffed in cloth bags to make pillows. It is said that ancient people ate the inner white part of the stem as a survival food but the process used to prepare the food was not specified.  
*Indigenous expert(s)*: Wina Nasauman, Ruben Neriam  
*Vernacular name*: nesjuau [Anejoṃ]  
*Specimen*: GMP-3693, Aneityum Island  
*Indigenous expert(s)*: Ruben Neriam, Wina Nasauman, Tony Keith

***Cyathea affinis*** (G. Forst.) Sw. [Note: some authors treat this species as *Alsophila tahitensis* Brack.]  
*Vernacular name*: Karsapang [Nafe]  
*Specimen*: GMP-3007, Tanna Island (Southeast)  
*Indigenous expert(s)*: Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

***Cyathea cf. affinis*** (G. Forst.) Sw.  
*Vernacular name*: karsapang [Kwamara]  
*Specimen*: TAR-2610, Tanna Island (South)  
*Indigenous expert(s)*: Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Cyathea decurrens*** (Hook.) Copel.  
*Vernacular name*: nithwunitei [Anejoṃ]  
*Specimen*: GMP-4100, Aneityum Island  
*Notes*: There are two kinds of this plant. This is considered the black one. See GMP-4102 [*Cyathea* sp.], which is considered the white one.  
*Indigenous expert(s)*: Titiya Lalep, Wopa Nasauman, Thomas Japanesai  
*Vernacular name*: nidwuniteiu [Anejoṃ]  
*Specimen*: GMP-4100, Aneityum Island

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TABLE 1. Continued.

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*Use:* It is said that the ancestors used stems of this fern to make a fence around the garden of their homes. Also, during the period of tribal wars before the arrival of the missionaries, people would make a wall of this stem, about 3.5 m tall, to keep their enemies out. The “wood” of this stem is very hard. Tribal war was said to be once a year when the warriors fought each other. The presence of the fence meant that the women and children were behind it and were protected, so it was one of the codes of conduct of the warriors that they respected the fence and what it protected. The inrolled leaves are edible; this will help with hunger if a person is in the forest. There is no taste to the leaves but it will help until there is a chance to get food

*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

**Cyathea sp.**

*Vernacular name:* natemehas [Anejom̃]

*Specimen:* GMP-3269, Aneityum Island

*Indigenous expert(s):* Wopa Nasauman, Lalep Thomas Japanesei.

**Cyathea sp.**

*Vernacular name:* nithwunitei [Anejom̃]

*Specimen:* GMP-4102, Aneityum Island

*Notes:* There are two kinds of this plant. This is considered the white one. See GMP-4100 [*Cyathea decurrens*], which is considered the black one.

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesei

*Vernacular name:* nithwuniteiu [Anejom̃]

*Specimen:* GMP-4102, Aneityum Island

*Use:* The inrolled leaves are edible; this will help with hunger if a person is in the forest. There is no taste to the leaves, but it will help satisfy a person until there is a chance to get food.

*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

**Sphaeropteris lunulata** (G. Forst.) Tryon

*Vernacular name:* nimto [Whitesands]

*Specimen:* TAR-2248, Tanna Island (Central)

*Use:* Rachis is used to “scratch” taro, manioc, yam. Adults use two rachises, whereas children use one. Exudate from rachis used for light-duty gluing, such as sticking paper to a wall. Food: The entire frond used to wrap laplap. The inner pith of the stem used to make a soft soccer ball. The outer stem used to make furniture or floor covering.

*Indigenous expert(s):* Kapyul Ben Nambo

*Vernacular name:* noukwetaw or nukwetaw [Nafe]

*Specimen:* MJB-5086, Tanna Island (Southeast)

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* nusjau or nesjuaw [Anejom̃]

*Specimen:* MJB-5014, Aneityum Island

*Use:* The trunk of this plant is used to make food. Cut the stem in 2-3 foot long pieces, peel the outer stem, put the peeled stems in an earth oven (Fig. 3A) to cook for the afternoon through the night—about 12 hours. It will be ready the next day. Peel off any remaining fibrous tissue, slice the stems and eat. They are said to taste like sweet potato. The young fronds are boiled for 5 minutes and coconut milk is added; this mixture is then eaten. It is important to collect only the inrolled fronds that have not yet fully opened. The fronds are used to make the roof of temporary houses when camping in the bush. To make a cassava grater, take 2-3 pieces of the frond stipe, connect them together by piercing them on the sides with a piece of bamboo or any stick such that they are held together in parallel fashion, and use this to grate uncooked cassava to make laplap and to grate banana or any food that needs to be processed in this way. The thorny part of the stipe grates the food.

*Indigenous expert(s):* Tony Keith, Wopa Nasauman, Wina Nasauman

*Vernacular name:* not given

*Specimen:* MJB-5014, Aneityum Island

*Use:* Ancestors would make balls for playing games out of the stem of this fern. Take a piece of the trunk, carve it down so that only the white part in the center of the trunk remains, shape it into a ball and dry it in the sun until it is light and can be used for playing. In ancient times, people would seek out the fallen stems of this plant, to carve spear tips from it. For fishing and hunting spears, they would take 4-5 pencil shaped pieces and tie these to the end of a piece of wild cane using a bush vine. Then they would sharpen the tips of these pieces and use them for fishing and hunting. To make arrows, they would use 1-2 pencil shaped pieces of this palm [fern] stem and sharpen them. The tips are said to be very strong.

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nukwetuwou [Nafe]

*Specimen:* MJB-5197, Tanna Island (Southeast)

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TABLE 1. Continued.

*Use:* The base of the petiole is used to grate bananas and other foods such as carrots. The fiber [scales at base of petiole] from the leaves, as well as inrolled leaves are collected and used to stuff pillows. The stems are used to make the floor of a house.

*Indigenous expert(s):* Johnson Noar, Peter Nisian

#### DAVALLIACEAE

***Davallia pentaphylla*** Blume (Fig. 4B)

*Vernacular name:* nakup [Naka]

*Specimen:* KA-603, Tanna Island (North)

*Use:* To facilitate the birthing process, when labor cannot be induced at the hospital, juice from 10 cm of rhizome is squeezed into one cup of water. This drink is consumed once a day for two days. The baby is then delivered with “oil”. Before using this medicine, there is less “oil”, which prevents the birth.

*Indigenous expert(s):* Numake Nakabue/ Chief Samson

*Vernacular name:* nukuk [Nafe]

*Specimen:* GMP-3138, Tanna Island (Southeast)

*Use:* This is a secret medicine and the use for it cannot be discussed.

*Indigenous expert(s):* Sam Natou, Sam Nauka, Philip Wahe

*Vernacular name:* nukuk [Nafe]

*Specimen:* GMP-3138, Tanna Island (Southeast)

*Indigenous expert(s):* Necky Malto, Kakurai Pita, Kapiri Joseph, Dan Dannifer

*Vernacular name:* nukmera [Nafe]

*Specimen:* GMP-3063, Tanna Island (Southeast)

*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

*Vernacular name:* nukuk [Neuai]

*Specimen:* GMP-2869, Tanna Island (Southwest)

*Use:* Used for male sexual health. Large diameter rhizome, 2 cm in length is split and scraped into a green nukura leaf. Add some water and drink. Consumed by males after intercourse with menstruating female. This drink is consumed before the first urination following intercourse. Note: There are two types of nukuk. See GMP-2847 [*Goniophlebium persicifolium*]. This nukuk (GMP-2869) is used for medicine; GMP-2847 is not.

*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neu

***Davallia pusilla*** (Mett.) Carruth. (Fig. 5F)

*Vernacular name:* napaeccei [Anejom̃]

*Specimen:* GMP-3291, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Marie Michelle

*Vernacular name:* napakai [Anejom̃]

*Specimen:* GMP-4097, Aneityum Island

*Notes:* The name means “wood cover”, alluding to the habit of this plant. It grows only on the bark of trees.

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* napakuai or napaicei [Anejom̃]

*Specimen:* GMP-4097, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nanmhi kiusuwās [Nafe]

*Specimen:* GMP-4695, Tanna Island (South)

*Indigenous expert(s):* Name not available

#### DENNSTAEDTIACEAE

***Dennstaedtia flaccida*** (G. Forst.) Bernh.

*Vernacular name:* nanep or nanab [Naka]

*Specimen:* KA-580, Tanna Island (North)

*Use:* Worn ceremonially by mothers as part of the circumcision process. When worn, mothers indicate awareness that the boys have “gone to the river”. All mothers wear the leaves at the same time.

*Indigenous expert(s):* Numake Nakabue/ Chief Samson

*Vernacular name:* mananup [Neuai]

*Specimen:* GMP-2905, Tanna Island (Southwest)

*Use:* Leaves used as toilet paper. Leaves used as a sleeping mat in the bush.

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

*Vernacular name:* mananib [Neuai]

*Specimen:* GMP-2937, Tanna Island (Southwest)

*Use:* The fronds of this plant are used to cover laplap as it is being prepared in a ground oven (Fig. 3A). The cover provided by this plant traps the steam and allows the food to cook.

*Indigenous expert(s):* John Pasua, Samuel Herwaen, Joseph Kema, Benjamin Tom

TABLE 1. Continued.

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<b><i>Dennstaedtia samoensis</i></b> (Brack.) T. Moore
<i>Vernacular name:</i> narvatou [Neuai]
<i>Specimen:</i> GMP-2923, Tanna Island (Southwest)
<i>Use:</i> Young, top leaves are eaten. Cooked with coconut milk in a saucepan.
<i>Indigenous expert(s):</i> David Kapwia, Joseph Dabuah, Tupun Alexis
<b><i>Histiopteris incisa</i></b> (Thunb.) J. Sm.
<i>Vernacular name:</i> neluka [Anejom̃]
<i>Specimen:</i> TAR-2486, Aneityum Island
<i>Indigenous expert(s):</i> Titiya Lalep, Wopa Nasauman, Thomas Japanesai
<b><i>Hypolepis elegans</i></b> Carruthers (Fig. 4F)
<i>Vernacular name:</i> kuankuankua [Neuai]
<i>Specimen:</i> GMP-2842, Tanna Island (Southwest)
<i>Indigenous expert(s):</i> Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru
<i>Vernacular name:</i> kuankuankua [Neuai]
<i>Specimen:</i> GMP-2850, Tanna Island (Southwest)
<i>Indigenous expert(s):</i> Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru
<b><i>Pteridium esculentum</i></b> (G. Forst.) Cockayne
<i>Vernacular name:</i> netjeñ or netjeg [Anejom̃]
<i>Specimen:</i> GMP-3592, Aneityum Island
<i>Indigenous expert(s):</i> Titiya Lalep
<i>Vernacular name:</i> Nnetjeñ [Anejom̃]
<i>Specimen:</i> GMP-3592, Aneityum Island
<i>Use:</i> The roots of this fern are used as a survival food during famine and difficult times. Roast the roots on charcoal fire and eat.
<i>Indigenous expert(s):</i> Wina Nasauman, Tony Keith, Ruben Neriam
<b>DICKSONIACEAE</b>
<b><i>Calochlaena straminea</i></b> (Labill.) M.D. Turner & R.A. White (Fig. 3C)
<i>Vernacular name:</i> nitei nitei
<i>Specimen:</i> TAR-2616, Tanna Island (South)
<i>Indigenous expert(s):</i> Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa
<b><i>Dicksonia brackenridgei</i></b> Mett.
<i>Vernacular name:</i> nakeaphuen [Nafe]
<i>Specimen:</i> GMP-4609, Tanna Island (South)
<i>Indigenous expert(s):</i> Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko
<b>DRYOPTERIDACEAE</b>
<b><i>Bolbitis quoyana</i></b> (Gaud.) Ching
<i>Vernacular name:</i> kakeakei [Nafe]
<i>Specimen:</i> GMP-3253, Tanna Island (South)
<i>Use:</i> Used as a medicine to treat children who cannot walk. Rub smashed leaves on the knee of a child, “he will walk.” For a child about 1 year old, rub the leaves on the knee and underside of the foot. This will make the child walk “easily and quickly”, and will make the leg “lighter”.
<i>Indigenous expert(s):</i> Rawi Ames, Kaias Yauiko Nerkahoro, Kasu Janet
<i>Vernacular name:</i> kewakei akei [Nafe]
<i>Specimen:</i> GMP-3253, Tanna Island (South)
<i>Use:</i> Wrap this leaf over a baby’s leg to make them walk quickly.
<i>Indigenous expert(s):</i> Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko
<b><i>Dryopteris hasseltii</i></b> (Blume) C. Chr.
<i>Vernacular name:</i> rukwuak [Nafe]
<i>Specimen:</i> GMP-4696, Tanna Island (South)
<i>Indigenous expert(s):</i> Natao Numruken
<i>Vernacular name:</i> natakuiuan [Nafe]
<i>Specimen:</i> GMP-4610, Tanna Island (South)
<i>Indigenous expert(s):</i> Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko
<b><i>Lomagrumma polyphylla</i></b> Brack.
<i>Vernacular name:</i> namarinu
<i>Specimen:</i> TAR-2297, Tanna Island (North)
<i>Use:</i> Used to indicate the stage of circumcision healing process. When the sore of young boys show signs of healing, mothers are told their sons are “coming better”. This fern is then worn by the mothers to show to the village their children’s status. Kava, pigs, and taro are then prepared when every young boy in the group is ready.
<i>Indigenous expert(s):</i> Jimmy Nakapue Asim, Yesua Nakapue

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TABLE 1. Continued.

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*Vernacular name:* Namarinu [Nafe]  
*Specimen:* TAR-2297, Tanna Island (North)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* Namarinou [Nafe]  
*Specimen:* GMP-2999, Tanna Island (Southeast)  
*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

**EQUISETACEAE**

***Equisetum ramosissimum*** Desf.  
*Vernacular name:* inyiriñwei or inyirigwei [Anejoñ]  
*Specimen:* GMP-3642, Aneityum Island  
*Use:* As a local toothbrush, take two pieces of stems, bend them and use to brush teeth with water. This plant acts like sandpaper to clean the teeth. Can also be used to wash pots, by using a handful of leaves.  
*Indigenous expert(s):* Titiya Lalep, Rosalina Niiæ

*Vernacular name:* inyiriñwei [Anejoñ]  
*Specimen:* GMP-3642, Aneityum Island  
*Use:* The stems of these plants are somewhat like sandpaper and used to wash pots and also as a toothbrush.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

**GLEICHENIACEAE**

***Dicranopteris linearis*** (Burm f.) Underw.  
*Vernacular name:* nelka [Anejoñ]  
*Specimen:* GMP-3501, Aneityum Island  
*Notes:* These ferns can cause injury during the dry season as they can stick into a person and puncture their skin, so they are intentionally burned to avoid this.  
*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* nelka [Anejoñ]  
*Specimen:* GMP-3501, Aneityum Island  
*Notes:* Snakes, in the dry season, make their homes in this plant as they look for cool, shaded areas.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

***Sticherus oceanicus*** (Kuhn) Ching  
*Vernacular name:* niteinituei [Nafe]  
*Specimen:* GMP-4665, Tanna Island (South)  
*Indigenous expert(s):* Taya Ninneth, Naiwan Sam, Tan Danifer, Kayas Narko, Allan Rawi

**HYMENOPHYLLACEAE**

***Callistopteris apiifolia*** (C. Presl) Copel.  
*Vernacular name:* naṗat or napwat [Anejoñ]  
*Specimen:* GMP-4099, Aneityum Island  
*Notes:* The name means “cloud”. The plant is usually found on high ridges, in areas where there is often high moisture.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* naṗat or napwat [Anejoñ]  
*Specimen:* GMP-4099, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nithwumitei [Anejoñ]  
*Specimen:* GMP-3268, Aneityum Island  
*Notes:* The same name is used for two very different ferns. This is considered the black one. See GMP-4102 (*Cyathea* sp.), which is considered the white one.  
*Indigenous expert(s):* Wopa Nasauman

*Vernacular name:* naṗat [Anejoñ]  
*Specimen:* GMP-3268, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith, Marie Michelle

*Vernacular name:* kwarwiasuru [Nafe]  
*Specimen:* GMP-4590, Tanna Island (South)  
*Use:* This plant is said to bring rain when touched. Knowing this, people are careful when they touch it.  
*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko, Rawi Amos

***Cephalomanes atrovirens*** C. Presl  
*Vernacular name:* ruwan ruwan [Neuai]  
*Specimen:* GMP-2887, Tanna Island (Southwest)

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TABLE 1. Continued.

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*Notes:* Name refers to “prawns”.

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

***Crepidomanes bipunctatum*** (Poir.) Copel.

*Vernacular name:* natengateng [Neuai]

*Specimen:* GMP-2858, Tanna Island (Southwest)

*Use:* Used as part of kastom ceremony to harvest taro.

*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Crepidomanes saxifragoides*** (C. Presl) P.S. Green

*Vernacular name:* natengateng [Neuai]

*Specimen:* GMP-2859, Tanna Island (Southwest)

*Use:* Used as part of kastom ceremony to harvest taro.

*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Didymoglossum tahitense*** (Nadeaud) Ebihara & K. Iwats.

*Vernacular name:* natiengateng [Neuai]

*Specimen:* GMP-2945, Tanna Island (Southwest)

*Use:* The leaves of this plant are used by school children to create island maps.

*Indigenous expert(s):* John Pasua, Samuel Herwaen, Joseph Kema, Benjamin Tom

***Hymenophyllum feejeense*** Brack.

*Vernacular name:* natnangamerua [Nafe]

*Specimen:* GMP-4668, Tanna Island (South)

*Indigenous expert(s):* Taya Ninneth, Naiwan Sam, Tan Danifer, Kayas Narko, Allan Rawi

***Hymenophyllum macgillivrayi*** (Baker) Copel.

*Vernacular name:* natengateng [Neuai]

*Specimen:* GMP-2857, Tanna Island (Southwest)

*Use:* Used as part of kastom ceremony to harvest taro.

*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Hymenophyllum polyanthos*** (Sw.) Sw.

*Vernacular name:* natganieura [Nafe]

*Specimen:* GMP-4615, Tanna Island (South)

*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko

***Hymenophyllum serrulatum*** (C. Presl) C. Chr.

*Vernacular name:* napanopotan [Anejoṃ]

*Specimen:* GMP-4098, Aneityum Island

*Notes:* The name means “ground cover”. It usually grows on the forest floor.

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* napan nohpothan [Anejoṃ]

*Specimen:* GMP-4098, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

***Vandenboschia maxima*** (Blume) Copel.

*Vernacular name:* noukmuura [Nafe]

*Specimen:* GMP-4693, Tanna Island (South)

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko

**LINDSAEACEAE**

***Lindsaea harveyi*** Carruth. ex Seem.

*Vernacular name:* natimi has [Anejoṃ]

*Specimen:* GMP-4095, Aneityum Island

*Use:* The name means “cruel or unhappy person”. If someone fastens this plant around his head as a decorative lei, it means that this person is not happy. He does not want to talk or communicate with anybody. The use is no longer common, and now many people do not know the significance.

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* natimi has [Anejoṃ]

*Specimen:* GMP-4095, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

***Lindsaea pacifica*** K.U. Kramer

*Vernacular name:* noukmuia [Nafe]

*Specimen:* GMP-4587, Tanna Island (South)

*Notes:* When a person is planting yams they must not touch this plant as it will make all of the yams that are planted rot.

*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko, Rawi Amos

***Tapeinidium denhamii*** (Hook.) C. Chr.

*Vernacular name:* nejoṃmuti [Anejoṃ]

*Specimen:* GMP-3716, Aneityum Island

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TABLE 1. Continued.

*Use:* The leaves of this plant, along with other leaves, are used to make an unspecified traditional medicine.

*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* nejoṃuti [Anejoṃ]

*Specimen:* GMP-3716, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

#### LYGODIACEAE

***Lygodium reticulatum*** Schkuhr (Figs. 5C, 6)

*Vernacular name:* nareth [Anejoṃ]

*Specimen:* GMP-4090, Aneityum Island

*Use:* The rachis of an old plant is braided as a rope to tie sugar cane, house posts, and fences. The rachis is used when green, and as it dries where it is tied it remains functional and lasts for a long time

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* nareuth [Anejoṃ]

*Specimen:* GMP-4090, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nared or nareth [Anejoṃ]

*Specimen:* MJB-4930, Aneityum Island

*Use:* Take a handful of the vine, twist it into rope with many stems of the vine, and use it to tie bundles of sugar cane. It can also be used to tie wild canes to the roof of the house.

*Indigenous expert(s):* Wopa Nasauman, Thomas Japanesai, Dick Matenekea

*Vernacular name:* nareusi [Futuna-Aniwa]

*Specimen:* MJB-5223, Futuna Island

*Use:* This plant is used to make a head decoration for kastom ceremony.

*Indigenous expert(s):* Naumeta Rose, Paul Fatapa

*Vernacular name:* numolis [Naka]

*Specimen:* KA-598, Tanna Island (North)

*Use:* Used as an ornamental crown to resemble Crown of Thorns. For cordage, the stripped rachis is used as a rope.

*Indigenous expert(s):* Numake Nakabue/ Chief Samson

*Vernacular name:* kwanwaras [Nafe]

*Specimen:* TAR-2618, Tanna Island (South)

*Use:* As a rope to tie sugar cane, houseposts, and other things. It does not need to be heated before use—strip off the leaves and tie it when fresh.

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* kwanuwaruas [Nafe]

*Specimen:* GMP-4580, Tanna Island (South)

*Use:* Use for tying the sugar cane in the garden when it is growing. When the cane is cut, this can be used as cordage to tie the bunches together. Use to tie house posts and every part of house, such as the cross bar, house thatch. This vine does not need to be heated up as do others; just cut long pieces 6–7 meters and tie it directly. Also used to tie a fence, like a pig fence and cow fence, and wrap around the post and cross bar of the fence.

*Indigenous expert(s):* Natao Numruken, Rawi Amos, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer,

*Vernacular name:* kwanuwaruas [Nafe]

*Specimen:* GMP-5188, Tanna Island (South)

*Use:* People use this as a local rope to tie house posts and rafters and for tying stems of sugar cane together.

*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak

*Vernacular name:* kwanuwaras [Nafe]

*Specimen:* GMP-3116, Tanna Island (Southeast)

*Use:* The stem of this plant is used for rope. Heat the stem over a fire, hang it outside to dry, this is said to last longer than metal wire. It is also used to tie sugar cane.

*Indigenous expert(s):* Sam Nakua, Jean-Paolo Nawarao, Samuel Kehma, Tom Rafei, Jean Pascal Wahe

*Vernacular name:* kuanuares [Nafe]

*Specimen:* GMP-3034, Tanna Island (Southeast)

*Indigenous expert(s):* Jony Konapo, Nufunu Sakama, George Turiak, Jack Nakweren, Sam Nauka, Alick Rayris, Tom Kahi, Johnson Kamkari, Kasumartin, Moses Kahu

TABLE 1. Continued.

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*Vernacular name:* kwanwares [Nafe]  
*Specimen:* GMP-3034, Tanna Island (Southeast)  
*Use:* The stem of this plant is used for rope. Heat the stem over a fire, hang it outside to dry, this is said to last longer than metal wire. It is also used to tie sugar cane.  
*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

**MARATTIACEAE**

***Angiopteris evecta*** (G. Forst.) Hoffm. (Fig. 4H)  
*Vernacular name:* nekeaitimi [Anejoṃ]  
*Specimen:* AAM-28, Aneityum Island  
*Use:* To cure when the anus falls out (rectal prolapse) - Pound together 1 branch's worth of inpalcapnesgin (*Hibiscus cooperi* Hort.) leaves and of inloptiri (*Codiaeum variegatum* Blume), also take the inner bark of nekeaitimi. Put this into your hand, or another leaf and give it to the person to use it. This should be applied to the anus whenever the anus comes out. Used to use a clam shell to extract the bark but not anymore.  
*Indigenous expert(s):* Nijae Natahenpok and Rosita

*Vernacular name:* nekei atimi [Anejoṃ]  
*Specimen:* AAM-28, Aneityum Island  
*Use:* To make a head decoration, take 2 long pinnate leaves [i.e., pinnae] and tie the bases and tip as a lei for wearing around the neck. This is used to welcome visitors and for decoration. The aroma is pleasant. This can also be used to ornament the hair. The plant grows in the forest, so people use this when they are walking in the forest and also collect it for use.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nekei atimi [Anejoṃ]  
*Specimen:* GMP-3654, Aneityum Island  
*Use:* The leaf is wrapped around the head as an adornment by both men and women. If a person gets burned by a fire, scrape the petiole of this plant and squeeze juice on the wound to cool and heal it. Use as long as needed. The ancestors are said to have cooked the stump of this plant in an earth oven (Fig. 3A), over 2-3 nights, and then ate it. It is said to have no taste but was more of a famine food during periods of drought.  
*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* nekeiatiumi [Anejoṃ]  
*Specimen:* GMP-3654, Aneityum Island  
*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

***Ptisana smithii*** (Mett. ex Kuhn) Murdock (Fig. 5G)  
*Vernacular name:* nakhe [Anejoṃ]  
*Specimen:* AAM-29, Aneityum Island  
*Use:* To cure when the anus falls out - Pound together 1 branch's worth of inpalcapnesgin (*Hibiscus cooperi*) leaves and of both inloptiri (*Codiaeum variegatum*), also take the inner bark of nekeaitimi (*Angiopteris evecta*) and nakhe. Put this into your hand, or another leaf and give it to the person to use it. This should be applied to the anus whenever the anus comes out. Used to use a clam shell to extract the bark but not anymore.  
*Indigenous expert(s):* Niyagae, Rosita

*Vernacular name:* nakhe [Anejoṃ]  
*Specimen:* GMP-3712, Aneityum Island  
*Use:* The very young leaves of this plant are edible.  
*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* nauke [Anejoṃ]  
*Specimen:* GMP-3712, Aneityum Island  
*Use:* The young leaves are edible when boiled until they are soft. They are also used to wrap fish, and then the fish is wrapped with any other cooking leaf and put on the fire or stone oven (Fig. 3A) to roast the fish. Then the burned outer leaves are peeled off and the fern leaf is eaten with the fish.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* nekuia [Anejoṃ]  
*Specimen:* TAR-2487, Aneityum Island  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* nakuoi [Futuna-Aniwa]  
*Specimen:* GMP-5110, Futuna Island  
*Use:* The leaves of this plant are mixed with other leaves of various types and taken to the reef, placed under a rock to attract mangrove fish to the reef so that people can catch them. This leaf in combination with others can also be used to attract ocean fish such as tuna, barracuda, yellowfish, and wahoo but not bottom-dwelling fish such as trout, cod, poulet, and snapper.  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru

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TABLE 1. Continued.

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*Vernacular name:* manakil [Naka]  
*Specimen:* TAR-2231, Tanna Island (North)  
*Indigenous expert(s):* Kating Kew, Willie Nalin

*Vernacular name:* nakir [Kwamera]  
*Specimen:* TAR-2612, Tanna Island (South)  
*Use:* Edible leaves; collect the young leaves, boil them in a saucepan like island cabbage, add meat, coconut milk, or any other food and eat as a soup cooked in a pan.  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* nakir [Nafe]  
*Specimen:* GMP-3027, Tanna Island (Southeast)  
*Use:* Food: Young leaves are eaten cooked.  
*Indigenous expert(s):* Jony Konapo, Nufunu Sakama, George Turiak, Jack Nakweren, Sam Nauka, Alick Rayris, Tom Kahi, Johnson Kamkari, Kasumartin, Moses Kahu

*Vernacular name:* nakir [Nafe]  
*Specimen:* GMP-3027, Tanna Island (Southeast)  
*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

*Vernacular name:* manaker [Neuai]  
*Specimen:* GMP-2922, Tanna Island (Southwest)  
*Use:* Young, top leaves are eaten. Cooked with coconut milk in a saucepan. See GMP-2921 & GMP-2923.  
*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

**NEPHROLEPIDACEAE**

***Nephrolepis biserrata*** (Sw.) Schott  
*Vernacular name:* natcei [Anejom̃]  
*Specimen:* GMP-4096, Aneityum Island  
*Notes:* The name means the border between two lands, or a landmark.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesei

*Vernacular name:* natcei [Anejom̃]  
*Specimen:* GMP-4096, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* puku fakatuu [Futuna-Aniwa]  
*Specimen:* TAR-2521, Futuna Island  
*Indigenous expert(s):* Takaronga Kuaautonga

*Vernacular name:* nowetang [Naka]  
*Specimen:* TAR-2308, Tanna Island (North)  
*Indigenous expert(s):* Jimmy Nakapue Asim, Yesua Nakapue, Tom Johnson, Chessie Church, Samson Jimmy Nakapue, Greg Matai

*Vernacular name:* kakurei awiuaha [Nafe]  
*Specimen:* GMP-4577, Tanna Island (South)  
*Use:* To make a baby learn to walk sooner and faster, take the leaf of this plant, warm it in a fire, and wrap the ankle of the baby and secure the leaf with string.  
*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko

*Vernacular name:* neper [Nafe]  
*Specimen:* MJB-5127, Tanna Island (Southeast)  
*Indigenous expert(s):* Johnson Noar, Peter Nisian

*Vernacular name:* nepuer [Nafe]  
*Specimen:* MJB-5127, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Nephrolepis cordifolia*** (L.) C. Presl  
*Vernacular name:* kaiao kaiao [Nafe]  
*Specimen:* GMP-4608, Tanna Island (South)  
*Use:* Used as a decoration for kastom ceremonies. Put the fern frond in a person's hair, like a local feather, to decorate the hair. This was the original decoration for hair before people began to use feathers. This is only used for kastom ceremony dancing, and was used by men. Sometimes men use it today for this purpose.  
*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko

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TABLE 1. Continued.

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***Nephrolepis hirsutula*** (G. Forst.) C. Presl  
*Vernacular name:* puku fakatuu [Futuna-Aniwa]  
*Specimen:* TAR-2522, Futuna Island  
*Indigenous expert(s):* Takaronga Kuautonga

**OLEANDRACEAE**

***Oleandra neriiiformis*** Cav.  
*Vernacular name:* lanugo [Futuna-Aniwa]  
*Specimen:* GMP-5116, Futuna Island  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru  
*Vernacular name:* nitei neteiu piran [Nafe]  
*Specimen:* GMP-4652, Tanna Island (South)  
*Indigenous expert(s):* Taya Ninneth, Naiwan Sam, Tan Danifer, Kayas Narko, Allan Rawi  
*Vernacular name:* kuanow kuanow [Neuai]  
*Specimen:* GMP-2867, Tanna Island (Southwest)  
*Notes:* When leaves are dry/brown, be careful to avoid stepping on it; it will prick you. Kuanow means “spear”.  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

**OPHIGLOSSACEAE**

***Ophioderma pendulum*** (L.) C. Presl  
*Vernacular name:* nahed u paralelecei [Anejoṃ]  
*Specimen:* GMP-3657, Aneityum Island  
*Notes:* It is taboo for women to wear this plant in their hair. If they do so, the male spirit will follow them and bother them. Paralelecei is the word for the male spirit. Nahed means his rasta.  
*Indigenous expert(s):* Titiya Lalep, Wina Nasauman, Ruben Neriam  
*Vernacular name:* nahed u parualelecei [Anejoṃ]  
*Specimen:* GMP-3657, Aneityum Island  
*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith  
*Vernacular name:* hgavava pakasi [Futuna-Aniwa]  
*Specimen:* GMP-5115, Futuna Island  
*Notes:* The name of this plant means “gut of a pig”; hgavava means “intestines”, and pakasi means “pig”.  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru  
*Vernacular name:* nisenau pika [Neuai]  
*Specimen:* GMP-2868, Tanna Island (Southwest)  
*Indigenous expert(s):* Kataua Kati

**POLYPODIACEAE**

***Ctenopterella* sp. nov. “*pacifica*”** Parris ined. [B. A. Parris, pers. comm.]  
*Vernacular name:* narijo [Anejoṃ]  
*Specimen:* GMP-4088, Aneityum Island  
*Notes:* Considered the same as narijo (*Prosaptia contigua* GMP-4087). However, the two species have different forms as recognized by local people, depending on where it grows and what type of soil it is growing in. When it grows in good soil (as in for gardening) it takes the form of *Prosaptia contigua*. In cold and rocky soil it has the form of this species. (GMP-4088).  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai  
*Vernacular name:* nariujo [Anejoṃ]  
*Specimen:* GMP-4088, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

***Drynaria rigidula*** (Sw.) Bedd. (Fig. 4C)  
*Vernacular name:* napudve [Anejoṃ]  
*Specimen:* GMP-3494, Aneityum Island  
*Use:* When a dog is poisoned by ciguatera from eating a fish, the root of this species is collected, cleaned and a handful is boiled in 1-2 cups of water and given to the dog to drink. This treatment should be done 3x daily, in the morning, around noon and during the evening meal for as long as the dog is sick.  
*Indigenous expert(s):* Titiya Lalep  
*Vernacular name:* napudve [Anejoṃ]  
*Specimen:* GMP-3494, Aneityum Island  
*Use:* When a dog is poisoned by Ciguatera from eating a fish, the root of this species is collected, cleaned and a handful is boiled in 1-2 cups of water and given to the dog to drink. This treatment should be done 3x daily, in the morning, around noon and during the evening meal for as long as the dog is sick. This can also be used in the same way for people when they are poisoned by Ciguatera.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

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TABLE 1. Continued.

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*Vernacular name:* matanugi [Futuna-Aniwa]  
*Specimen:* TAR-2526, Futuna Island  
*Indigenous expert(s):* Takaronga Kuautonga

*Vernacular name:* neuka [Nafe]  
*Specimen:* GMP-5166, Tanna Island (South)  
*Use:* When a person gets a sore from which a lizard emerges, this rhizome is used to treat the sore. Grate the rhizome into a *Macaranga* sp. leaf, wrap it up and heat it over a fire, then squeeze the juice of the rhizome on the sore, 2x daily morning and evening, for two days. This treatment will kill the lizard and heal the sore. The rhizome grows underneath the stem of the leaf, just like the lizard. When a person has a toothache, the rhizome is heated and placed, hot, in the mouth to heal the toothache. The person spits it out when it becomes cold.  
*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak

***Goniophlebium persicifolium*** (Desv.) Bedd.  
*Vernacular name:* nukuk [Neuai]  
*Specimen:* GMP-2847, Tanna Island (Southwest)  
*Notes:* There are two types of nukuk. See GMP-2869 (*Davallia pentaphylla*) for the one that has a use. This nukuk does not have a use.  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Lepisorus spicatus*** (L. f.) Li Wang  
*Vernacular name:* nukuk-arman [Nafe]  
*Specimen:* GMP-3128, Tanna Island (Southeast)  
*Use:* Unspecified secret medicine  
*Indigenous expert(s):* Sam Nakua, Jean-Paolo Nawarao, Samuel Kehma, Tom Rafei, Jean Pascal Wahe

*Vernacular name:* nukuk [Nafe]  
*Specimen:* GMP-3128, Tanna Island (Southeast)  
*Indigenous expert(s):* Necky Malto, Kakurai Pita, Kapiri Joseph, Dan Dannifer

***Microsorium papuanum*** (Baker) Parris  
*Vernacular name:* nukuku [Whitesands]  
*Specimen:* TAR-2255, Tanna Island (Central)  
*Indigenous expert(s):* Kapyul Ben Nambo

*Vernacular name:* tarour [Nafe]  
*Specimen:* GMP-3048, Tanna Island (Southeast)  
*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko

*Vernacular name:* tarur [Neuai]  
*Specimen:* GMP-2893, Tanna Island (Southwest)  
*Notes:* When this plant is seen growing on a tree, that tree is considered going strong.  
*Indigenous expert(s):* David Kapwia, Joseph Dabua, Tupun Alexis

***Microsorium scolopendria*** (Burm. f.) Copel.  
*Vernacular name:* nititidei [Anejoṃ]  
*Specimen:* GMP-3658, Aneityum Island  
*Use:* This plant has a secret, unspecified use.  
*Indigenous expert(s):* Titiya Lalep, Wina Nasauman, Ruben Neriam

*Vernacular name:* nithithidae [Anejoṃ]  
*Specimen:* GMP-3658, Aneityum Island  
*Use:* To help make babies stand up and walk faster, take 5–6 inrolled leaves and boil this in water. Mix the boiled water with cold water and use this to bathe the babies. Give a bath in the evening once a day for 5 days. It can also be used in the morning.  
*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith

*Vernacular name:* maiure [Futuna-Aniwa]  
*Specimen:* TAR-2524, Futuna Island  
*Indigenous expert(s):* Takaronga Kuautonga

*Vernacular name:* nasar [Nafe]  
*Specimen:* MJB-5126, Tanna Island (Southeast)  
*Indigenous expert(s):* Johnson Noar, Peter Nisian

*Vernacular name:* nasuar [Nafe]  
*Specimen:* MJB-5126, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* nasar [Nafe]  
*Specimen:* MJB-5111, Tanna Island (Southeast)  
*Indigenous expert(s):* Johnson Noar, Peter Nisian

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TABLE 1. Continued.

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*Vernacular name:* tarour [Nafe]  
*Specimen:* MJB-5111, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Prosaptia contigua*** (G. Forst.) C. Presl.  
*Vernacular name:* narijo [Anejoṃ]  
*Specimen:* GMP-4087, Aneityum Island  
*Notes:* The name refers to a crustacean and also to the spines of bamboo.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai  
*Vernacular name:* nariujo [Anejoṃ]  
*Specimen:* GMP-4087, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* kaiao kaiuao [Nafe]  
*Specimen:* TAR-2619, Tanna Island (South)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* kaiao kaiuao [Nafe]  
*Specimen:* GMP-4689, Tanna Island (South)  
*Use:* People use this fern to put in their hair during kastom ceremonies and dances. It was more used before people had chicken feathers. Men and women who live in kastom villages still use this in their hair.  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko

*Vernacular name:* khirkwangeri nui [Nafe]  
*Specimen:* GMP-3061, Tanna Island (Southeast)  
*Indigenous expert(s):* Taya Ninneth

***Pyrrrosia confluens*** (R. Br.) Ching  
*Vernacular name:* naparap [Anejoṃ]  
*Specimen:* GMP-3504, Aneityum Island  
*Use:* This is a medicine to stop bleeding in fresh cuts. Take the leaf of this species, macerate it, and add 1 tablespoon of water and wrap in a *Macaranga* leaf, and then heat it on a fire. After heating, puncture the side of the *Macaranga* leaf and drop the hot juice on the fresh cut. This is said to be good before going to see the dispensary or if you do not have access to a health care professional.  
*Indigenous expert(s):* Titiya Lalep  
*Vernacular name:* naparap [Anejoṃ]  
*Specimen:* GMP-3504, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

***Pyrrrosia longifolia*** (Burm. f.) C.V.Morton (Fig. 5A)  
*Vernacular name:* nuckuuk [Nafe]  
*Specimen:* MJB-5176, Tanna Island (Southeast)  
*Use:* To treat a burn on a person's body, take 5-6 tips of the youngest leaves, chew them and spit on the burn. This is said to help to ensure that the burn will not erupt through the skin and help it heal. Then take more leaves in this way, chew and apply this to the burn, wrapping a cloth around the area to secure it. Change each day and do this treatment for a week.  
*Indigenous expert(s):* Johnson Noar, Peter Nisian  
*Vernacular name:* noukouuk [Nafe]  
*Specimen:* GMP-5197, Tanna Island (South)  
*Use:* When a person has a burn, the leaves are chewed along with the root and stem and spit on the burn and skin once daily until the burn heals.  
*Indigenous expert(s):* Thomas Kamisak, Johnny Rawi, Robert Rawi, Komi Kamisak, Bob Nako, Daniel Kamisak  
*Vernacular name:* nukuk [Nafe]  
*Specimen:* GMP-3073, Tanna Island (Southeast)  
*Use:* People use this to treat skin sores, by boiling a handful of leaves in a small amount of water and washing the sores with this. Wash 2-3x daily until the sore is better. It may take 3-4 weeks to heal the sore.  
*Indigenous expert(s):* Sam Nakua  
*Vernacular name:* nukuk [Nafe]  
*Specimen:* GMP-3073, Tanna Island (Southeast)  
*Indigenous expert(s):* Taya Ninneth, Johnny Karpa, Tan Danifer, Kayas Narko  
*Vernacular name:* nukuk [Nafe]  
*Specimen:* MJB-5064, Tanna Island (Southeast)  
*Indigenous expert(s):* Johnson Noar, Peter Nisian

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TABLE 1. Continued.

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*Vernacular name:* noukouk [Nafe]  
*Specimen:* MJB-5064, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Selliguea feeioides*** Copel.  
*Vernacular name:* nepjenepjenu [Anejoṃ]  
*Specimen:* GMP-4850, Aneityum Island  
*Indigenous expert(s):* Wopa Nasauman, Martial Wahe

*Vernacular name:* tuaruarua [Nafe]  
*Specimen:* GMP-4660, Tanna Island (South)  
*Indigenous expert(s):* Taya Ninneth, Naiwan Sam, Tan Danifer, Kayas Narko, Allan Rawi

***Selliguea plantaginea*** Brack. (Fig. 5D)  
*Vernacular name:* nepjenepjen [Anejoṃ]  
*Specimen:* GMP-4091, Aneityum Island  
*Use:* When a child is between 1 month and 1 year, if the father persists too soon in resuming sexual relations with the mother, the child can become sick. When the child gets sick, green leaves are collected. When the sickness occurs, the leaves are burned and the baby is washed with the ash and it is rubbed all over the body. People prefer to pick the dry leaves from plants growing on the ground, not climbing on the tree. If the plants are collected from the trees, the children will always like to climb trees, even when it is dangerous and they could be hurt. After visitors leave one's house, one must not hurry to return to their gardens. One waits a few days, then swims with the rachis of this fern tied about their waist. If this practice is not followed, it is believed that the plants in one's gardens will grow weak.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japaneseai

*Vernacular name:* nepjenepjenu [Anejoṃ]  
*Specimen:* GMP-4091, Aneityum Island  
*Use:* If a baby is weak and not developing bones properly, then take the ash of the burned leaves and rub this powder all over the baby; this will make the baby grow stronger. Apply in the morning after the child has a bath and then wash the ash off in the evening. Use this treatment once a day for three days, maximum. People prefer to pick the dry leaves from plants growing on the ground, not climbing on the tree. If the plants are collected from the trees, the children will always like to climb trees, even when it is dangerous and they could be hurt.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* turaruarua  
*Specimen:* TAR-2623, Tanna Island (South)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

**PSILOTACEAE**

***Psilotum complanatum*** Sw.  
*Vernacular name:* inrokdania [Anejoṃ]  
*Specimen:* GMP-4093, Aneityum Island  
*Use:* Sickness from menstruation. When a man has intercourse with a woman during her menstrual cycle, he can become sick. The leaves are squeezed, along with other unspecified leaves, to produce an extract. The dose and duration varies according to the degree of the symptoms. Further information about the preparation withheld.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japaneseai

*Vernacular name:* inrokdania [Anejoṃ]  
*Specimen:* GMP-4093, Aneityum Island  
*Notes:* The symptoms of this *sickness blo namya* can vary from person to person and can include nausea, stomach ache, and backache. The name of the plant, inrokdania means Lion fish.  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* toataufu [Futuna-Aniwa]  
*Specimen:* GMP-5128, Futuna Island  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa

***Psilotum nudum*** (L.) P. Beauv.  
*Vernacular name:* malmalgairoro [Hano]  
*Specimen:* GMP-5435, Penama Province. Pentecost Island (North)  
*Indigenous expert(s):* Selwyne Dovo

*Vernacular name:* malmalgairouro  
*Specimen:* GMP-5435, Penama Province. Pentecost Island (North)  
*Indigenous expert(s):* Selwyne Dovo

***Tmesipteris vanuatuensis*** A.F. Braithw. (Fig. 4G)  
*Vernacular name:* metak metak [Neuai]  
*Specimen:* GMP-2861, Tanna Island (Southwest)

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TABLE 1. Continued.

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*Notes:* Same name for small/young prawn. Same name used for *Asplenium caudatum*.  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

**PTERIDACEAE**

***Acrostichum speciosum* Willd.**  
*Vernacular name:* seura [Futuna-Aniwa]  
*Specimen:* GMP-5083, Futuna Island  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru

***Adiantum diaphanum* Blume**  
*Vernacular name:* nelkemaning or nolkimaning [Naka]  
*Specimen:* KA-601, Tanna Island (North)  
*Use:* For muscle pain or abdominal pain. Take leaf and squeeze with a bit of water into a chicken's mouth. Then place leaf on corresponding part of chicken's body. When the chicken scratches the dirt, the action is thought to remove the pain. The leaf itself resembles a chicken foot.  
*Indigenous expert(s):* Chief Samson Numake Nakabue  
*Vernacular name:* nusumanu [Nafe]  
*Specimen:* MJB-5142, Tanna Island (Southeast)  
*Use:* Children collect young leaves to decorate their exercise books in school. If a person does not want to get too drunk on kava, they will chew 3 leaves before drinking, and spit out remains while swallowing the juice. This plant has the power to reduce effects of kava.  
*Indigenous expert(s):* Johnson Noar  
*Vernacular name:* nusumaunu [Nafe]  
*Specimen:* MJB-5142, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa  
*Vernacular name:* natengateng [Neuai]  
*Specimen:* GMP-2870, Tanna Island (Southwest)  
*Use:* Used as part of kastom ceremony to harvest taro.  
*Indigenous expert(s):* Tupun Alexis, Nasuar Madeline Tacknik, Iarapat Jerome Neru

***Adiantum hispidulum* Sw.**  
*Vernacular name:* natimihuas [Anejoñ]  
*Specimen:* GMP-4780, Aneityum Island  
*Notes:* The name means a person who is very bad.  
*Indigenous expert(s):* Wopa Nasauman, Wina Nasauman, Tony Keith, Ruben Neriam, Marie Michelle  
*Vernacular name:* karareng feimanu [Nafe]  
*Specimen:* MJB-5073, Tanna Island (Southeast)  
*Indigenous expert(s):* Johnson Noar, Peter Nisian  
*Vernacular name:* kringfeimanu [Nafe]  
*Specimen:* MJB-5073, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa  
*Vernacular name:* iélken apen [Netwar]  
*Specimen:* GMP-2787, Tanna Island (West)  
*Indigenous expert(s):* Jean-Pascal Wahe, Joshua Andrew

***Antrophyum plantagineum* (Cav.) Kaulf.**  
*Vernacular name:* takiula [Futuna-Aniwa]  
*Specimen:* GMP-5023, Futuna Island  
*Indigenous expert(s):* Naumeta Rose, Paul Fatapa, Samuel Seru

***Haplopteris elongata* (Sw.) E.H. Crane**  
*Vernacular name:* nukuk  
*Specimen:* TAR-2219, Tanna Island (North)  
*Notes:* Thought of as a young Nukukap. [Naka name for a *Phreatia* sp. – Orchidaceae]  
*Indigenous expert(s):* Johnny Nakabue, Marie Kating Kew, Willie Nalin Nadikas, Kating Kew Enauta, Numake Tom Kapalu, Kuwau Tom Keuai, Nausan Kamsak  
*Vernacular name:* nukuk-apran [Nafe]  
*Specimen:* GMP-3120, Tanna Island (Southeast)  
*Indigenous expert(s):* Sam Nakua, Jean-Paolo Nawarao, Samuel Kehma, Tom Rafei, Jean Pascal Wahe  
*Vernacular name:* nukuk apran [Nafe]  
*Specimen:* GMP-3120, Tanna Island (Southeast)  
*Indigenous expert(s):* Necky Malto, Kakurai Pita, Kapiri Joseph, Dan Dannifer

***Pteris comans* G. Forst. (Fig. 5E)**  
*Vernacular name:* nesal or nasal [Naka]  
*Specimen:* KA-578, Tanna Island (North)

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TABLE 1. Continued.

*Use:* Young leaves are edible. Known generally as “Island Cabbage”. Methods of preparation include boiling and frying.

*Indigenous expert(s):* Chief Samson Numake Nakabue

*Vernacular name:* manasar [Neuai]

*Specimen:* GMP-2892, Tanna Island (Southwest)

*Use:* In case chewed kava is desired to be transported to another nakamal, this leaf must be used as an exterior wrapper. This exterior wrapping guards against the female spirit present in the villages. This spirit/energy would otherwise decrease the potency of the kava.

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

#### SCHIZAEACEAE

##### *Schizaea dichotoma* (L.) J. Sm.

*Vernacular name:* neret unoumuu [Anejoṃ]

*Specimen:* GMP-4799, Aneityum Island

*Indigenous expert(s):* Wopa Nasauman, Martial Wahe

*Vernacular name:* niridunumu [Anejoṃ]

*Specimen:* GMP-4121, Aneityum Island

*Use:* The name means “fish gill”. When one acquires a culture-bound illness, caused by possession of the sea devil, this plant is used to prepare a remedy. Further information about the illness and remedy is secret.

*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai

*Vernacular name:* nhiritunumu [Anejoṃ]

*Specimen:* GMP-4121, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* niridunumu [Anejoṃ]

*Specimen:* GMP-3482, Aneityum Island

*Use:* People who go fishing take this plant along with other unspecified leaves, crush them and rub them on the fishing line that the person is using. This is said to attract more fish to the bait. It is also a “message plant” to be put in a person’s hat when they come back from fishing and then people know that they caught fish. Local name means “fish gill.”

*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* niridunumu [Anejoṃ]

*Specimen:* GMP-3482, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

*Vernacular name:* nirthunumu [Anejoṃ]

*Specimen:* GMP-3614, Aneityum Island

*Indigenous expert(s):* Titiya Lalep

*Vernacular name:* niridunumu [Anejoṃ]

*Specimen:* GMP-3614, Aneityum Island

*Use:* People who go fishing take this plant along with other unspecified leaves, crush them and rub them on the fishing line that the person is using. This is said to attract more fish to the bait. It is also a “message plant” to be put in a person’s hat when they come back from fishing and then people know that they caught fish. Local name means “fish gill.”

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

*Vernacular name:* niritunumu [Anejoṃ]

*Specimen:* GMP-3284, Aneityum Island

*Use:* If a poacher goes into a protected area and takes any fish inside this area, the spirits will cause an accident that will result in a person having a wound. To treat, mix this plant with leaves of GMP-3272 [*Tapeinosperma kajewskii* Guillaumin, Primulaceae] and squeeze the juice into the wound.

Doing this will let others know that you have been poaching in a protected area.

*Indigenous expert(s):* Wopa Nasauman, Lalep Thomas Japanesei.

*Vernacular name:* niridunumu [Anejoṃ]

*Specimen:* GMP-3284, Aneityum Island

*Indigenous expert(s):* Wina Nasauman, Tony Keith, Marie Michelle

*Vernacular name:* nusu tikituak [Nafe]

*Specimen:* GMP-4601, Tanna Island (South)

*Use:* When a baby is crying and will not stop, chew the stem of this fern and spit it on the baby’s head and they will stop crying.

*Indigenous expert(s):* Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko, Rawi Amos

#### TECTARIACEAE

##### *Tectaria crenata* Cav.

*Vernacular name:* necṇapaiṇ [Anejoṃ]

*Specimen:* GMP-4094, Aneityum Island

TABLE 1. Continued.

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*Notes:* The name describes a sea bird, whose long legs are similar in shape to the stipe of this fern.  
*Indigenous expert(s):* Titiya Lalep, Wopa Nasauman, Thomas Japanesai  
*Vernacular name:* necñapaiñ [Anejoñ]  
*Specimen:* GMP-4094, Aneityum Island  
*Indigenous expert(s):* Wina Nasauman, Tony Keith

***Tectaria latifolia*** Copel.  
*Vernacular name:* nakeaben [Nafe]  
*Specimen:* GMP-3162, Tanna Island (Southeast)  
*Use:* When a person is hunting for land crabs and catches them, wrap the leaves of this species around the crab to prevent them from getting away. Use “local rope” to tie up the crab in the leaf.  
*Indigenous expert(s):* Sam Natou, Sam Nauka, Philip Wahe  
*Vernacular name:* nakeaben [Nafe]  
*Specimen:* GMP-3162, Tanna Island (Southeast)  
*Indigenous expert(s):* Necky Malto, Kakurai Pita, Kapiri Joseph, Dan Dannifer

***Tectaria melanocaulos*** (Blume) Copel.  
*Vernacular name:* nasar [Nafe]  
*Specimen:* MJB-5074, Tanna Island (Southeast)  
*Use:* Boil the leaves for 15–20 min, fry them, or put them in the earth oven (Fig. 3A) to eat. They taste very good.  
*Indigenous expert(s):* Johnson Noar, Peter Nisian  
*Vernacular name:* nasar [Nafe]  
*Specimen:* MJB-5074, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

**THELYPTERIDACEAE**

***Christella dentata*** (Forssk.) Brownsey & Jermy  
*Vernacular name:* nititan cei [Anejoñ]  
*Specimen:* GMP-3631, Aneityum Island  
*Indigenous expert(s):* Titiya Lalep  
*Vernacular name:* nititan cei [Anejoñ]  
*Specimen:* GMP-3631, Aneityum Island  
*Use:* When cooking the seeds of *Inocarpus fagifer* in an earth oven, use the leaves of this plant to cover the fruits in the oven (Fig. 3A).  
*Indigenous expert(s):* Wina Nasauman, Tony Keith, Ruben Neriam

***Christella harveyi*** (Mett. ex Kuhn) Holtt.  
*Vernacular name:* niseni maruu [Futuna-Aniwa]  
*Specimen:* TAR-2523, Futuna Island  
*Indigenous expert(s):* Takaronga Kuautonga via David Harrison  
*Vernacular name:* nemreken [Nafe]  
*Specimen:* MJB-5018, Tanna Island (Southeast)  
*Indigenous expert(s):* Johnson Noar, Peter Nisian  
*Vernacular name:* nemreken [Nafe]  
*Specimen:* MJB-5018, Tanna Island (Southeast)  
*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Menisciopsis rubrinervis*** (Mett.) S.E. Fawc. & A.R. Sm. (Fig. 4D)  
*Vernacular name:* aupiñiña or naupinyiga [Anejoñ]  
*Specimen:* GMP-3656, Aneityum Island  
*Use:* Put several leaves of this species together to wrap food, especially the fresh water eel, and to carry plants of taro, kava, holding the leaves over one’s shoulder to carry these crops.  
*Indigenous expert(s):* Titiya Lalep, Wina Nasauman, Ruben Neriam  
*Vernacular name:* naupiñiñuña [Anejoñ]  
*Specimen:* GMP-3656, Aneityum Island  
*Indigenous expert(s):* Ruben Neriam, Wina Nasauman, Tony Keith  
*Vernacular name:* namnu [Naka]  
*Specimen:* TAR-2228, Tanna Island (North)  
*Use:* Leaves are used as a secondary wrapper for cooking laplap.  
*Indigenous expert(s):* Johnny Nakabue, Marie Kating Kew, Willie Nalin Nadikas, Kating Kew Enauta, Numake Tom Kapalu, Kuwau Tom Keuai, Nausan Kamsak  
*Vernacular name:* manaper-abum [Neuai]  
*Specimen:* TAR-2330, Tanna Island (Southwest)

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TABLE 1. Continued.

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*Use:* A frond of this plant is used as a wrapping when cooking laplap. Before the laplap is placed in a ground oven (Fig. 3A) to cook, it is first wrapped in another leaf. This leaf is then placed over the first wrapping as the external wrapper.

*Indigenous expert(s):* John Pasua, Alexis Tupun, Alick Nauka, Samuel Herwaen, Albert Andre

***Plesioneuron attenuatum*** (Brack.) Holtt.

*Vernacular name:* nurekin [Kwamara]  
*Specimen:* TAR-2613, Tanna Island (South)

*Use:* For fiber, pound the stem, pull out the fibrous portion and place in the sun to dry, roll together and use as thread to sew clothes or for other similar uses.

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Pneumatopteris costata*** (Brack.) Holtt.

*Vernacular name:* nititan or nitituan [Anejoñ]  
*Specimen:* MJB-4972, Aneityum Island

*Use:* The fronds of this fern are used to wrap stingray and shark meat, which have a great deal of moisture in them, for cooking in the earth oven (Fig. 3A). Wrap the fronds around the meat and tie with a *Pandanus* string. Because they are not thick, broad, entire leaves, but rather have many places in them where water can drain out during the cooking process, it is said that these leaves are much better for preparing these two types of fish, as well as any other meat that contains a great deal of moisture. For cooking in the earth oven (Fig. 3A), put these wrapped foods on top of any other leaves so that they do not touch the hot stones directly, and then cover with other leaves as well. Then place the hot stones on top of these wrapped meats.

*Indigenous expert(s):* Tony Keith, Wopa Nasauman, Wina Nasauman  
*Specimen:* MJB-4972, Aneityum Island

*Use:* This plant can be used in place of toilet paper. To cook the nuts of *Inocarpus fagifer*, clear out the stone over but keep the charcoal in the hole. Line the oven (Fig. 3A) with these leaves and put a layer of *Inocarpus* on top of them. Then put a layer of hot stones on top of the nuts, cover them with the leaves and cook for 2 hours and then they are ready to eat.

*Indigenous expert(s):* Wina Nasauman, Tony Keith

*Vernacular name:* niseuni [Futuna-Aniwa]  
*Specimen:* MJB-5208, Futuna Island

*Indigenous expert(s):* Naumeta Rose, Paul Fatapa

*Vernacular name:* kuarun apen [Neuai]  
*Specimen:* GMP-2879, Tanna Island (Southwest)

*Use:* Used as an exterior leaf for wrapping laplap.

*Notes:* Kuarun means “teeth”. Apen means “black”. See GMP-2863 [*Asplenium laserpitifolium*] & GMP-2864 [*Asplenium bipinnatifidum*].

*Indigenous expert(s):* David Kapwia, Joseph Dabuah, Tupun Alexis

***Pneumatopteris glandulifera*** (Brack.) Holtt.

*Vernacular name:* naprapamus [Naka]  
*Specimen:* TAR-2229, Tanna Island (North)

*Notes:* Noted as similar to Namnu, TR-2228 [*Menisciopsis rubrinervis*]. However, larger leaves of TR-2228 are preferred.

*Indigenous expert(s):* Johnny Nakabue, Marie Kating Kew, Willie Nalin Nadikas, Kating Kew Enauta, Numake Tom Kapalu, Kuwau Tom Keuai, Nausan Kamsak

*Vernacular name:* Napramus [Nafe]  
*Specimen:* TAR-2229, Tanna Island (North)

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

*Vernacular name:* naprapamus [Kwamara]  
*Specimen:* TAR-2611, Tanna Island (South)

*Indigenous expert(s):* Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa

***Strophocaulon invisum*** (G. Forst.) S.E. Fawc. & A.R. Sm.)

*Vernacular name:* niseuni [Futuna-Aniwa]  
*Specimen:* TAR-2520, Futuna Island

*Indigenous expert(s):* Takaronga Kuautonga

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decoration. No uses were described for the widespread *Dicranopteris linearis* in the Tafea Province, but in Pohnpei it is used as a head garland (*i.e.*, a chaplet; Balick *et al.*, 2009) and on Palau it is used for both medicine and basket making (Balick and Hillmann Kitalong, 2020). No uses are listed for *Asplenium laserpitiifolium* in either Pohnpei or Palau, but in Vanuatu the leaves are used in cooking. Other examples of divergent uses across countries could be given, but the fact that the uses of even shared species across island groups are usually quite different, suggests to us that each location has independently developed ethnobotanical uses of their own species.

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