

Message plants of Southern Vanuatu

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Abstract

People in the southern Vanuatu islands of Aneityum and Tanna use plants as communication devices, a function which we call ‘message plants’. Certain species of plants are held, worn, or placed in specific locations with the intention of delivering messages with varied semantic content. In the cultural context of southern Vanuatu, message plants serve as an important parallel channel of communication, alongside spoken languages, and in some cases are considered more appropriate or effective means of conveying a message.

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1 Introduction

Vanuatu is home to a rich diversity of plant life along with extraordinary levels of language diversity (François, Franjeh, Lacrampe, and Schnell, 2015). Across the archipelago, the Indigenous people of this country (known as Ni-Vanuatu) maintain a variety of ingenious uses for their local plants. Over generations, they have come to use plants for everything from foodways (Labouisse, 2016), medicine (McCarter and Gavin, 2015), art (Bonnemaison, 1996), and architecture (Coiffier, 1988), to clothing (Huffman, 1996), transportation (Aufrey, 1996), music (Huffman, 1996), and weather magic rituals (Balick, Harrison, Kelso, Neriam, Noar, Plunkett, Ramik, and Wahe, 2022), to name just a few. One domain of plant use among Ni-Vanuatu that has received less attention is the use of plants as communication devices, which we call ‘message plants’ (Plunkett and Balick, 2017). We review prior literature from Vanuatu and elsewhere on the use of message plants as a form of symbolic communication and then identify 36 plant species (see Table 1 in Appendix 2) used to convey messages in communities from southern Vanuatu, along with their semantic content and social context. This ethnobotanical and linguistic study represents a multiyear collaboration with Ni-Vanuatu experts, three of whom (Dovo, Wahe, Neriam) are coauthors of this paper.

2 Background

The olive branch was adopted in ancient Greek and Mediterranean cultures as a symbol of peace that could be offered in physical form to a former enemy. The semantic content of the olive branch is now well enough established that no actual branch is needed to index the meaning, and it suffices to present an image of one or simply to use the phrase ‘olive branch’ in speech. Contemporary societies use plants or depictions of plants in a variety of symbolic ways. For example, the red poppy signals remembrance of war in the United Kingdom. Specific flowers used in exchanges and rituals have been understood – since antiquity and into the current era – to convey messages such as love, condolences, apologies, or congratulations (Doyle, Hanchek, and McGrew, 1994). In historical popular culture in the United Kingdom and the United States, the Victorian era (1837–1901) saw a surge of interest in ‘floriography’, and many books explicated the hidden meanings conveyed by flowers (e.g., Tyas, 1840; S., 1877; Greenaway, n.d.). Anthropological studies have documented similar uses and meanings in a wide range of non-European cultures. Some groups in Cameroon ritually plant certain species of grass at specific locations to mark

tribal land boundaries (Ngwa and Akara, 2019), and in St. Vincent, people plant *Cordyline fruticosa* (L.) A. Chev. to mark personal property boundaries and gravesites (Sheridan, 2016). On Woodlark Island in Papua New Guinea, the Muyuw people have an ‘extensive understanding and use of flora for depicting social/productive relationships’ (Damon, 1998: 67). For example, specific trees and the firewood gathered from those trees represent totemic groups in ritual exchanges. For the Muyuw, garden plants also model social relationships: for example, the intertwining of yam vines is understood metaphorically to represent marriage (Damon, 1998: 79).

Such uses of plants are a form of symbolic communication defined as: ‘the intentional communication, using learned, socially shared signal systems, of propositional information transmitted via symbols’ (Buck and VanLear, 2006: 522). Additionally, as Kull (2000: 328) points out: ‘the existence of plants as signs in human communicative systems’ also belongs to the emerging field of *ecosemiotics*, which explores the semiotics of landscapes.

Taking for a moment the perspective offered by ecosemiotics, we may distinguish three kinds of knowledge relating to message plants. The first kind, serving as the foundation for the other two, is everyday sensory interaction (olfactory, tactile, visual), which allows people to learn and identify plants by vernacular name and (folk) taxonomic classification. As Kull (1998: 354) notes: ‘The semiotic aspect of man-nature relationships may also include the distinguishing of species into useful and dangerous, into the familiar and the strange (or sometimes more classes) [...]’.¹ Plant nomenclature is particularly strong in Vanuatu: an average person encounters daily and can readily name hundreds of kinds of plants (including different varieties and forms of botanical species), while experts like coauthor Reuben Neriam know more than 1,000 plant names. Examples of this knowledge are represented in Appendix 2, Table 1, which lists 36 message plants by their local vernacular names (column 2), scientific names (column 3), and botanical collection numbers (column 4).

The second kind of knowledge – and the main focus of this paper – includes plants used as vehicles for symbolic meanings that are both intended by the sender and understood by the recipient. As Kull (1998: 351) notes: ‘Ecosemiotics [...] investigates human relationships to nature which have a semiosis (sign-mediated) basis [...]’. This kind of knowledge is represented throughout the paper and in the Appendix 2 (column 5). It extends beyond message plants to include other symbolic uses of plants, for example in weather magic (Balick, Harrison, Kelso, Neriam, Noar, Plunkett, Ramík, and Wahe, 2022), kava drinking rituals (Lindstrom, 1980), and decorative arts (Bonnemaison, 1996).

The third kind of knowledge includes narratives that people in Vanuatu tell, either among themselves or to visitors, scientists, and others, about human relations to the plant world. Topics of these plant-centered narratives range from highly practical (e.g., architecture, foodways), to symbolic (e.g., magic rituals, messages), to mythological (e.g., origin stories). Through their performance, these oral narratives transmit cultural models that express the ni-Vanuatu philosophy of living in harmony with nature. As Noth (1998: 334) notes: '[M]ythological models of human ecology have been culturally transmitted in the form of narratives which instruct humans about their place in nature, telling them what they can, should, and must do with their natural environment'.

Knowledge of all three kinds (sensory, symbolic, and narrative) appears throughout this paper, and in Appendix 2. This knowledge was provided by the many experts named in column 6 of that Appendix (and by the three Ni-Vanuatu coauthors of this paper).

In Vanuatu, plants may convey specific semantic content (or 'propositional information') not by being mentioned by name or portrayed but by being carried, worn, and physically exchanged among persons, or strategically placed or planted by a person at a location. Some symbolic uses of plants in Vanuatu have been documented. Thaman (1992) describes cycads as markers of status, having many important ceremonial uses and associations, such as showing a person's rank, and displayed on Vanuatu's national flag. Thaman also suggests that cycads are used to convey messages and information but does not explain what those messages may be or how they are transmitted. Mescam (1989: 24) provides a detailed account of message plants from Pentecost Island, in northern Vanuatu. She notes that 'among the thousand and one uses to which they are put, there is one very special use, plants can mean something to the point of constituting a real language'. To provide a contrast with our own findings from the southern islands of Tanna and Aneityum, we summarize Mescam's key findings here:

(1) When someone cannot be present at a feast but was meant to offer boar tusks or a gift pig, he can instead provide the type of leaf that represents the length of the tusk that would have been given (and will be given). For example, *Inocarpus fagifer* (Parkinson) Fosberg equals a full circle tusk; while *Imperata cylindrica* (L.) P. Beauv. indicates the giver will later give a pig.

(2) *Maesa*; cf. *ambrymensis* Guillaumin, *Pseuderanthemum laxiflorum* (A. Gray) F. T. Hubb. ex L. H. Bailey, and *P. aubertii* Benoist leaves are signs of peace when carried in a belt.

(3) *Erythrina variegata* L. flowers represent blood: they serve as a declaration of war against the village where they are left.

(4) *Codiaeum variegatum* (L.) A. Juss. indicates that its bearer intends to kill. Leaves may also be left at a murder site (author does not specify by whom).

(5) ‘The leaves of a species of pepper shrub’ (exact species not identified by author) is planted to mark the place where the current chief’s ancestors lived and died.

(6) *Pterocarpus indicus* Willd. is left (location not indicated) to indicate that a person has borrowed kava or yams from someone else’s garden.

(7) *Cycas circinalis* L. [=C. *seemannii* A. Braun] leaves are placed to forbid entry to a house, or forbid access to a footpath or fruit tree.

(8) A type of moss locally called *lumtika* is placed at a potential garden site to remind someone trying to clear land for a garden that he has no right to, perhaps because he is from a different place.

Mescam (1989:25) concludes that this knowledge is vanishing: ‘The lore of these leaves and the information to be read from them is gradually dying out [...] the written language learnt by the young has taken its place’.

3 Methods

We are scientists affiliated with the New York Botanical Garden, and local culture experts in Vanuatu. Together, we are studying plants in this island country, along with their uses by the Indigenous peoples and their names in local languages. Vanuatu is a Y-shaped archipelago of 83 mostly volcanic islands, situated in the South Pacific between Fiji, New Caledonia, and the Solomon Islands. The population of 334,000 (United Nations Department of Economic and Social Affairs, 2022) speaks over 130 Indigenous languages (François, Franjeh, Lacrampe, and Schnell, 2015).

During our first two visits (in 2013), we met with community members on Tanna and Aneityum Islands in the far south of the country to gauge their interest in participating in the documentation of plants and plant uses (see Appendix 1, Figures 1 to 10). In many areas, we saw signs of a rapid erosion of such knowledge, where grandparents knew the traditional information, but their adult children, and even more so their grandchildren, had experienced a growing alienation from the natural world, especially as they became more dependent on modern approaches to life. In village after village, the elders expressed to us how they had been hoping and ‘waiting their whole lives’ for someone to help them preserve their plant knowledge in the face of aggressive pressures from modernization and globalization. In this paper, we share some of the results of our work with local people in Vanuatu, supporting their efforts at preservation and transmission.

Realizing that Vanuatu previously had no national checklist of its many plant species (see Plunkett, Ranker, Sam, and Balick, 2022; Plunkett, Ranker, Sam, Balick, and Ramík, 2022), we helped to initiate a project to document the kinds and uses of the plants found here. Building on a relationship we had forged with members of the Vanuatu National Herbarium (including curator Chanel Sam and the late assistant curator Philemon Ala) and the Vanuatu Department of Forests (coauthor Presley Dovo), we decided to start the project in the southern province of Tafea, where plant diversity is known to be especially great. We also discussed the project with the late Chief Jacob Kapere of the Vanuatu Cultural Centre, who put us in touch with the Centre's local branch in Tanna, the Tafea Kaljoral Senta (TKS), where we teamed up with field worker (and coauthor) Jean-Pascal Wahe. Since 2013, the Herbarium, Forestry Department, TKS, and the New York Botanical Garden, along with other groups, have been partners in a project we call (in Bislama, the country's national creole language) *Plants mo Pipol blong Vanuatu (Plants and People of Vanuatu)*. We collected physical plant specimens to document the species at each site and for each use (Ranker, Balick, Plunkett, Harrison, Wahe, and Wahe, 2022). These specimens are pressed, dried, and mounted (along with labels providing information regarding habit, habitat, location, date, and names of collectors, inter alia), then deposited in herbaria to serve as permanent records of the raw data (part of a process known as specimen-based research). Besides collecting specimens, we elicit, record, transcribe, and analyze local names and cultural narratives shared with us by local experts about plants, their meanings and uses.

4 Findings

Mobile phones and social media are increasingly important for conveying information in the modern world, but in the traditional life of the people of Aneityum and Tanna Islands, before mobile phones became commonplace, plants played a critical role in daily communication. Coauthor Reuben Neriam, a local leader dedicated to preserving Aneityum *kastom* (traditional beliefs and practices), explained that in the times before the settlers and missionaries, people did not exchange greetings such as 'good morning' or 'hello'. Instead, if two men were to cross paths, one would step to the side and look down, so as not to disturb the other, who might be deep in thought about his garden or other important matters.

Likewise, it was considered disrespectful to deliver news of an important event, such as a birth or death, by telling another person directly what had happened. Instead, the bearer of good or bad news would find a stick from a particular plant species, cut it into small pieces (about 30 cm long), place these at the

entrance of the other person's house, and then leave. Upon finding the sticks, the other person would immediately know that a message was to be delivered, and he would go in search of the messenger and invite him into his home. Only after a polite conversation about other matters would the recipient finally ask if the messenger had some news to deliver. As Reuben Neriam explained, each region of Aneityum has a certain species that represents that tribe when delivering a message to someone from another tribe. The plant that signifies his area, the village of Anelcauhat, is a common coastal tree, *Hibiscus tiliaceus* L. (see Table 1 for details of all herbarium voucher collections). This plant is known as *buraō* in Bislama and *intop̄ hau* in Anejoñ (the language of Aneityum) (Harrison, 2015).

Several other Aneityumese villagers from the area near Anelcauhat explained how some plant species may convey more particular messages. Local experts Wopa Nasauman, Yaiyaho Keith, Dick Matenekea and two brothers, Japanesai Lalep and Titiya Lalep, explained that several species of the small, fern-like genus *Selaginella*, known as *ngemas* or *necemas* in Anejoñ (and as spikemoss in English), send a message that somebody has died. The messenger walks past someone with this plant in his hand or on his head, or sometimes hands it to the other person directly, prompting that person to ask the messenger the name of the person who has passed away. Reuben and Yaiyaho also explained that a small yellow daisy, *Wollastonia biflora* (L.) DC., known as *intop̄ asiej* or *intop̄ asyejora* in the Anejoñ language, was placed on the doorstep of another person to indicate that he wished to break an agreement. Wopa Nasauman and Japanesai Lalep described how a particular species of grass, *Isachne comata* Munro ex Hack., known as *nautahs* in Anejoñ, was used to send a message to a songwriter. When a musician received this plant, he recognized this as a request to compose a new song.

Sometimes the messages conveyed are connected to other uses of the plant. As Titiya Lalep explained, the small but beautiful fern *Schizaea dichotoma* (L.) Sm., known as *nirid u numu* on Aneityum, is often rubbed on a fishing line to help attract fish, instead of bait. Therefore, by extension, when the fisherman returns from a successful day in his canoe, he places this same plant in his hat as a signal that he caught some fish. He also described the several meanings that ground orchids of the genus *Spathoglottis* can have. Their beautiful flowers convey a sense of romance, as orchids do in many societies, and when a young man puts these flowers behind his ear or places them on a table, and then stares at a woman, he sends a subtle invitation that the woman should follow him. If he stares at another man instead, it is an invitation for the two men to meet in the *nakamal* (men's ceremonial area) to share some kava or to go for a swim together.

Titiya Lalep explained that another vine, a parasitic plant known as *inwou-ityuwun* (*Cassytha filiformis* L.), may be carried by a stranger from another village to convey the message that he is visiting in peace. The same message is conveyed by holding a branch of *Euodia hortensis* J. R. Forst. and G. Forst., a small tree or shrub with a strong, almost pungent fragrance, known as *masing* in Bislama and *inpa* in Anejoñ.

The beach-bean (*Canavalia rosea* (Sw.) DC.), called *nahajcǵi* in Anejoñ, is a low-growing vine with purple flowers that grows along the beach. Titiya Lalep explained that this plant is used to convey the message that a person would like to build a new house or establish a new garden at a particular spot. By wrapping this vine around a stick and placing it in the ground, that person signals that the area is *tabu*, or forbidden, and that other people should stay away. A similar *tabu* message is conveyed by placing cuttings of several *nawa* plants, *Polyscias guilfoylei* (W. Bull) L. H. Bailey, at different spots along a reef. This tells people that the reef in that area is 'blocked' – in other words, under a period of conservation or replenishment during which no one is allowed to fish.

In the Anejoñ language, the word *netupu* refers to all plant 'signs'. This includes calendar plants that tell you something about seasonal time by their flowering/fruiting, etc. The same term covers message plants; plants that a person takes from somewhere else and either plants or places to convey a message.

On Tanna Island, message plants have uses similar to those from Aneityum. *Neure* (*Alocasia cucullata* (Lour.) G. Don) is used to mark the boundaries of one's land, and the leaves of *nakaimuap* (*Piper latifolium* L.f.) can be placed on or near a tree to enforce a *tabu* on harvesting its fruits. There is also a longstanding tradition on Tanna of creating head adornments out of wild plants to indicate a person's interactions with the forest. For example, a stem of *korwisiwhëru* (*Dendrobium mohlianum* Rchb. f.) with a flower woven into it indicates that its wearer has returned from the high-elevation forest.

Some messages may be conveyed by placement of plants but do not require any specific species to be used. For example, leaves may be placed on the trunk of a tree to signal that no one should pick fruits from this tree. If a gardener does not want people to walk through his garden, he can place two sticks in the ground, forming a large X, to indicate that the road is closed. The same is done to warn women not to enter or walk through a *nakamal* where boys are living after they have been circumcised. Plants used for this purpose may be wild cane stems (*Miscanthus floridulus* (Labill.) Warb. ex K. Schum. and Lauterb.), leaves of coconut or *Cycas seemanii* A. Braun, or any stick. If two people have

planned to walk together to a place but depart at different times, the person who departs earlier may place these leaves or any sticks along the side of the road to indicate to the second person which direction s/he is walking in.

5 Conclusion

The people of Vanuatu have a rich cultural history and an intense desire to maintain these cultural practices as living traditions, collectively referred to in Bislama as *kastom*. We adopt Lindstrom's (2020: 5) definition of *kastom* as the Ni-Vanuatu 'label [...] [for] festivals, along with any traditional or local practice, style, or belief'. But maintaining tradition in a rapidly changing and globalizing world can prove to be a great challenge. Message plants are an important part of Vanuatu *kastom* and are accompanied by a rich repertoire of orally transmitted knowledge.

The use of message plants in Vanuatu demonstrates the interplay between plants, people, and languages, with the added element of extralinguistic symbolic communication. Plants are vital to life in Vanuatu, and plant biodiversity is reflected in the local languages' rich vernacular nomenclature and taxonomies. Botanical knowledge is learned, remembered, and transmitted by local experts, many of whom do not even consider their ability to name hundreds of plants a remarkable feat. The persistence of plant knowledge is due in part to the extraordinary powers of memory possessed by people who live in oral societies, which is reinforced by their daily, practical use of the knowledge. In terms of communication, we all benefit from modern advances such as smartphones, text messaging, and social media, and these technologies are also used with increasing frequency in Vanuatu. But the immediacy of these modern methods is so often intrusive, even aggressive, especially when compared to the subtlety of traditional communication in Vanuatu, which highlights a gentler, more sophisticated, and more refined means of conveying messages with greater respect and dignity. We could all learn a few lessons from these great gifts of the ancestors.

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Notes

1. The latter part of this section reads: '[N]ational taxonomies provide many examples here (thus, a large part of ethnobiology happens to propose questions for ecosemiotics)' (Kull, 1998: 354).
2. Collection number (which includes collector's initials) is the system used by botanists for identifying herbarium voucher specimens: (MJB: Michael J. Balick; AAM: Ashley A. McGuigan; GMP: Gregory M. Plunkett). Links from the collection number to the C. V. Starr Virtual Herbarium are provided if available.
3. In the Aneityumese Dictionary (Inglis, 1882:101) *nieg* is defined as "a reed".
4. From *Dictionnaire du Netwar* (Ramík, 2015): '*nuig n* (terme générique) roseau, de ses tiges on fait les "kamo sit", "kamé piagen", cloisons et flèches "nowanparam". Dans ses feuilles on enveloppe les nouvelles ignames pendant "kamaru nuw". Parfois au soir on noue les feuilles des roseaux autour de la route pour "attraper" et arrêter le soleil, qui est en train de se coucher, quand on est en retard'. [Translation: '*nuig n* (generic term) reed, the kamo sit, kamé piagen, partitions and arrows *nowanparam* are made from its stem. The new yams are wrapped in its leaves during *kamaru nuw*. Sometimes in the evening, the leaves of these reeds are tied along the road to "catch" and stop the sun, which is setting, when we are late']. http://dominicweb.eu/en/lenakel/?lang=eng_tnl&type=info. Accessed July 2023.

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Appendix 1: Figures



Figure 1. Jean-Pascal Wahe, of Tanna Island, wearing a head adornment of various plants, including *Flagellaria indica* L., *Geitonoplesium cymosum* (R.Br.) A.Cunn. ex R.Br, and several fern species. (Photo by Presley Dovo).



Figure 2. Nasau Nalep, of Tanna Island, wearing ceremonial face paint and an armband of *Euodia hortensis*. (Photo by Michael J. Balick).



Figure 3. Chris Nevehev of Aneityum Island plaiting coconut (*Cocos nucifera* L.) leaves. (Photo by K. David Harrison).



Figure 4. Anselon Seru, in his outrigger canoe on the beach of Futuna Island, surrounded by beach-bean vines (*Canavalia rosea*). Every wooden canoe on Futuna Island has a specially carved shape on its upper stern that mimics the shape of a prominent rock at the canoe's home harbor. Upon seeing this shape carved on a canoe, local people understand where it belongs. (Photo by K. David Harrison).



Figure 5. Chris Nevehev (left) of Aneityum Island, prepared a *salusalu* (neck lei, of *Hornstedtia scottiana* (F.Muell.) K.Schum) and chaplet (*Kuanari*, of *H. scottiana*, *Euodia hortensis*, and several other species) to welcome linguist David Harrison (right). (Photo by Orien Namu).



Figure 6. Looped *nuig* (Netwar for wild cane, *Miscanthus floridulus*) leaf, tied in a knot and loop as pictured, as a sign to lead people to an umbilical cord burying ceremony. (Photo by Martial Wahe).



Figure 7. *Dendrobium mohlianum* (in Nafe language, *kwarwisiwir*, *GMP-4614*) a species of orchid used as a message plant indicating the wearer has traveled to a high forest. (Photo by Martial Wahe).



Figure 8. Left: *Cordyline fruticosa* (*MJB-4819*) used to mark boundaries on Tanna Island, Vanuatu (Image courtesy of C. V. Starr Virtual Herbarium); right: living specimen of the same species. (Photo by Gregory M. Plunkett).



Figure 9. Reuben Neriam, of Aneityum Island, placing a stick of *Hibiscus tiliaceus* L. on a doorstep as a message. (Photo by Michael J. Balick).



Figure 10. The species *Polyscias samoensis* (A.Gray) Harms, called *nauraua* in the Anejoñ language, is stuck in the ground or in rocks at intervals along the coast, conveying that the whole length of reef it covers is blocked from any marine harvest. (Photo by Neal Kelso).

Appendix 2

Table 1. Message plants of southern Vanuatu

| Language | Local name | Latin name | Collection number ² | Use | Local experts |
|----------|--|----------------------------|--------------------------------|--|---|
| Anejom̃ | <i>intop̃ hau</i> , <i>inhauamai</i> , <i>inhau</i> (green leaf), <i>inhau cap̃</i> (red leaf) | <i>Hibiscus tiliaceus</i> | GMP-3202 | This species is an important message plant. If someone is not home and someone else comes to visit from the eastern part of the Island (from Anawonjei district) the second person can leave a 12-inch stick in front of the door so that the inhabitant knows that an eastern visitor has come by. The reason that person has come to visit is to pass on an important message – good or bad ‘luck’. The bad luck message might be a death and cannot be conveyed directly. The recipient of the message will ask ‘Who?’ after seeing the message plant and can then be told the name of the deceased. The good luck message might be a birth or that a conflict has been resolved. These messages are communicated using sticks – each district has a different species of plant. Reuben Neriam’s is the <i>Hibiscus tiliaceus</i> , as he is from Anelcauhat. (See Figure 9). | Wina Nasauman, Tony Keith, Marie Michelle |
| Anejom̃ | <i>intop̃ asiej</i> , <i>intopasiej</i> | <i>Wollastonia biflora</i> | GMP-3221, GMP-3446 | If a person wishes to break an agreement, then the person puts the top leaves of this plant on another individual’s doorstep to indicate that the agreement is broken. | Reuben Neriam |

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|---------|----------------------------------|--|-----------------------|--|--|
| Anejom̃ | <i>nekei atimi, nekeatimi</i> | <i>Angiopteris evecta</i> (G. Forst.) Hoffm. | AAM 28, GMP-3654 | To make a head decoration for welcoming visitors, one is to take two long pinnate leaves (second order pinnae) and tie the bases and tip as a lei for wearing around the neck. This is used to welcome visitors and for decoration. (See Figure 5). | Wina Nasauman, Tony Keith |
| Anejom̃ | <i>nahojcei</i> | <i>Canavalia rosea</i> | GMP-3544, GMP-3224 | If a person wants to build a house or garden in a specific place, he puts a piece of this vine on a stick near the area to tell others that they should not build a garden or house near this area – this is a message about a <i>tabu</i> . There are a few other unspecified leaves added to the stick, not only this one. | Titiya Lalep, Wina Nasauman |
| Anejom̃ | <i>inwowa-iyuwun, inwounetun</i> | <i>Cassytha filiformis</i> | GMP-3545 | (1) If a person is walking through a village that is not his own, people know that he comes in peace if he wears this plant. (2) If a group is discussing something and one person goes out and makes a head lei of this vine, it means that there can't be any agreement. (3) If someone is angry at someone else, he drops the vine at their door, and the second person needs to leave. | Titiya Lalep |
| Anejom̃ | <i>namrad</i> | <i>Croton insularis</i> Baill. | GMP-4752, MJB-4876 | (1) When men, women, or children are walking on a path, they take the top of the leaves and put it in their hair or behind their ear, or in their basket, to make the journey shorter. (2) When people see a person with this leaf in their hair or behind their ear, they know that this person comes from the western side of the island. | Wopa Nasauman, Wina Nasauman, Tony Keith, Reuben Nertiam, Marie Michelle, Natu Kenneth |

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|---------|------------------------------------|--|--|---|--|
| Anejōm̃ | <i>nala</i> | <i>Dendrolobium umbellatum</i> (L.) Benth. | GMP-3217, GMP-3533, GMP-3572, MJB-4860, MJB-4961 | <p>(1) When traveling past a community one can place these leaves in a basket or walk with it in his or her hand. In this way, people in the community know that this person is traveling in peace and will not harm the people in that village.</p> <p>(2) If a person travels from one district to another on Aneityum, and the tree can be seen planted in that other district, the traveler knows they are free to come into this area.</p> <p>(3) If a person goes to visit a relative, and they are not at their home, then he is to leave a branch of this tree on their doorstep or somewhere they can see it and then the person knows that some relatives have come and tried to visit them.</p> | <p>(1) Reuben Neriam, Keith Yaiyaho; (2) Reuben Neriam, Wopa Nasauman, Charlie Nafarniyng; (3) Wina Nasauman, Tony Keith, Marie Michelle</p> |
| Anejōm̃ | <i>inpa,</i> <i>inpaumatmas</i> | <i>Euodia hortensis</i> | AAM-26, GMP-3525 | <p>The name of this plant means 'peace'. (1) During a peace ceremony, when someone places food in an offering, he gives a branch of this plant to the other party to symbolize that the conflict is over.</p> <p>(2) It conveys that a person comes in peace. The individual in question puts small tips of the leaves in one's hair, makes a hat out of it, or carries it in one's hand and people will know that this person comes in peace when walking to a village that is not one's own. When giving a gift, for example a basket, one will put this leaf on the gift. When displayed on a basket or wearing the leaves, people are happy and peaceful. This is symbolic of Aneityumese people, so even when people leave their island, they grow this plant.</p> | <p>(1) Titiya Lalep; (2) Titiya Lalep, Wina Nasauman, Tony Keith, Reuben Neriam, Marie Michelle</p> |

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|---------|--|---------------------------------------|-------------------------------------|---|---|
| Anejom̃ | <i>nelmaha</i> | <i>Ficus septica</i> Burm. f. | <i>AAM 6,</i> <i>AAM 21</i> | <i>Nelmalha</i> means 'Go away!' in the Anejom̃ language. If a person puts this stem or leaf in someone else's garden whom they are angry with, it conveys the message 'Go away!' | Wina Nasauman, Tony Keith, Reuben Neriam, Marie Michelle |
| Anejom̃ | <i>nikam</i> | <i>Finschia chloroxantha</i> Diels | <i>GMP-3481,</i> <i>GMP-4076</i> | (1) If a person goes to another village with a leaf of this species in their hand, then people know that someone else is coming. (2) When a branch of this plant is left at the house of a person, it indicates that someone had visited them and they were not home. They can then ask neighbors as to who it was that called. | Titiya Lalep, Wina Nasauman, Tony Keith, Reuben Neriam, Wopa Nasauman, Thomas Japanesai |
| Anejom̃ | <i>iñpa! apo- gen, inpal- caponecin</i> | <i>Hibiscus coo- peri</i> Meehan | <i>AAM-31,</i> <i>GMP-4751</i> | Used as personal protective adornment by people from the western side of Aneityum island, but not people from the eastern side. It is forbidden to be used by people on the eastern side because it is believed that, if used as a personal adornment for these people, the spirits of the eastern side will not be happy and can harm or even kill the offending people. | Wopa Nasauman, Wina Nasauman, Tony Keith, Reuben Neriam, Marie Michelle |
| Anejom̃ | nautahos | <i>Isachne comata</i> | <i>GMP-3280</i> | If one goes to a person who composes songs and give this to them, they will know they are to compose a song. The name means 'flowers on the ground'. | Wopa Nasauman, Titiya Lalep, Thomas Japanesai |

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|---------|--|--|---|---|---|
| Anejom̃ | <i>nawa</i> | <i>Polyscias guilfoylei</i> | AAM-7 | Used to convey a message when it is time to protect a reef – to conserve it and attract more fish. Cut the stem of the whole plant and put it in the reef in several places – people will know that this area is under protection and respect it by not fishing or gathering there. This conservation practice of temporary reef closure is sometimes referred to as ‘saltwater blocking’ or ‘reef tabu’ (Hickey, 2006). | Wina Nasauman, Tony Keith, Marie Michelle |
| Anejom̃ | <i>nieg³</i> | <i>Saccharum maximum</i> (Brongn.) Trin. | AAM-12 | (1) One takes a cane, ties the leaves together, and then ties this to a tree to indicate that it is <i>tabu</i> . For example, it is attached to a citrus tree that will ripen soon, and people will know that they cannot pick the fruit. (2) This message plant means ‘Don’t stop!’ and refers to the transport of kava. One is to tie the leaves into a knot and put the stem on a kava stem that has been harvested. This means ‘this kava goes express’ so the carrier of the kava goes to the border of a village and passes it on to another person who knows that it cannot stop in their village. Rather, it must be carried to the next village and passed along in this way until it gets to its destination. | Wina Nasauman, Tony Keith, Marie Michelle |
| Anejom̃ | <i>niri⁴ u numu, niri⁴ unumu</i> | <i>Schizaea dichotoma</i> | GMP-3482, GMP-3614, GMP-3284, GMP-4121 | The local name means ‘fish gill’. It is put in a person’s hat when they come back from fishing, letting people know that they caught fish. | Titiya Lalep, Wina Nasauman, Tony Keith, Ruben Neriam |

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|---------|---|--|---|---|--|
| Anejom̃ | <i>naerumuan</i> , <i>naeruman</i> | <i>Schleimizia insularum</i> (Guill.) Burkart | GMP-3576 | Unspecified use as a message plant. | Titiya Lalep |
| Anejom̃ | <i>necemas</i> | (a) <i>Selaginella distans</i> Warb., (b) <i>S. durvillei</i> A. Br. | (a) <i>MJB-4919</i> ; <i>GMP-3509</i> | Signifies that there has been a death. The person holds one dried leaf or puts it on their head, goes to someone else's house and hands it to the person they wish to convey the message to without saying anything. It can also be handed to that person. The person receiving the message then asks 'Who?' and is told the deceased person's name. | Natu Kenneth, Wopa Nasauman, Thomas Japanesai, Dick Mateneke |
| Anejom̃ | <i>nemandanlap</i> , <i>nemtanla</i> | <i>Sida cordifolia</i> L. | <i>MJB-4892</i> | If a person is coming to a 'new' village, e.g., not their own village, and holding a branch in his or her hand, it means that he or she is coming in peace and not trying to harm anyone in the new village. Or, if this person is asking for something that might be found in the new village, he or she holds the branch of this plant and passes it to someone from that village to gain acceptance. | Wopa Nasauman, Rene Theimu |
| Anejom̃ | <i>intaleja</i> , <i>inteleja</i> | (a) <i>Spathoglottis pacifica</i> Rchb. f. (b) <i>S. petri</i> Rchb. f. | (a) <i>GMP-3523</i> ; (b) <i>GMP-3480</i> | If a person puts this terrestrial orchid flower behind his or her ear and then stares at someone else or tosses the flower at that person, it is an invitation to follow the first person, to drink kava, for example, or go swimming. Or a man invites a woman to go somewhere with him. Alternatively, the flower can be left on a table, and this is also a message to go with that person. | Titiya Lalep |

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|---------|------------------|--|----------|--|--|
| Anejom̃ | <i>niveg</i> | <i>Miscanthus floridulus</i> | MJB-4885 | <p>(1) When a man wants to obtain kava stumps from another man (because he has none of his own), he places a stem of wild cane in front of the door of the other man's house. On the top of the cane, he fixes a leaf that represents his tribe, orienting it in the direction in which he will walk away and then leaves. When the other man emerges from his house, he sees the message and goes to look for the first man. No payment is given at this time, but when the kava owner needs to have a <i>kastom</i> ceremony, he knows he can count on the borrower to supply him with mats, pigs, etc., in return for the kava.</p> <p>(2) Used to mark a route. If two people have planned to walk together but depart at different times, the person who departs earlier may place these plants along the side of the road to indicate to the second person which direction s/he is walking in.</p> <p>(3) To indicate that something is <i>tabu</i> (sacred, forbidden), one ties the leaf and puts it on an object, such as ripe bananas. People will understand it is <i>tabu</i> and will not take it away.</p> | Bernard Daniel, Raymond Seimea, Wopa Nasauman, Rene Theimu |
| Futuna | <i>wowofuine</i> | <i>Alyxia stellata</i> (J.R. Forst. and G. Forst.) Roem. and Schult. | MJB-5244 | Ancient people were said to use this vine to decorate their heads during the <i>kastom</i> dance. If people decorate their heads with this vine today, they say that the vine is from the God of Majikjiki, Futuna, and if one wears it, people will know that the person is from Futuna – a sign of identity. | Naumeta Rose, Paul Fatapa |

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|------|---|--|--|--|--|
| Nafe | <i>neure</i> | <i>Alocasia cucullata</i> | <i>MJB-5200</i> | Ornamental, planted to indicate boundaries of a person's property, garden, or house. | Johnson Noar, Peter Nisian |
| Nafe | <i>nare, nare sanhet (H. coronarium)</i> | (a) <i>Alpinia novae-pomeraniae</i> , (b) <i>Hedychium coronarium</i> | (a) <i>MJB-4724</i> ; (b) <i>MJB-4722</i> | Used to welcome visitors by weaving the leaves and flowers into a head lei, locally known as a <i>kuanari</i> . If there are no flowers, people weave the leaves to welcome visitors. The visitor will wear this ornament for at least several hours, indicating their honored guest status. This species is becoming invasive in the area. (See Figure 5). | Sam Natou, Jean-Pascal Wahe |
| Nafe | <i>nakaimuap, nakaimap, nekemuap, nekemap</i> | <i>Piper latifolium</i> | <i>MJB-5170</i> | The leaves of this plant are placed on a fruiting tree to indicate that it is tabu and not to be touched. Alternatively, the leaves are put near the tree to let people know to keep away from the tree. | Johnson Noar, Peter Nisian |
| Nafe | <i>kor-wisihëru, kwarwisiwir</i> | <i>Dendrobium molitianum</i> | <i>GMP-4614</i> | If a man adorns himself with a stem of this orchid with a flower in it, it signifies that he has been in the high elevation forest. | Natao Numruken, Taya Ninneth, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko |
| Nafe | <i>nisei, nisai, nisai arman, niset anantom</i> | <i>Euodia hortensis</i> | <i>MJB-4728</i> | (1) Men use these leaves to decorate an arm band. These leaves are also used to tie a kava root for a ceremony in the <i>nakamal</i> . For a <i>kastom</i> ceremony, one is to take coconut endosperm, chew it this leaf and cover one's body. It makes the body smell very nice. (2) For <i>kastom</i> ceremonies, use this plant to decorate the roots of kava that is given to a chief; also used in women's grass skirts for <i>kastom</i> dance. | (1) Teresa Wahe, Samuel Kehma, Jean Paolo Niawarau, Philip Wahe; (2) Natao Numruken, Naiwan Sam, Tan Danifer, Kayas Narko, Taya Ninneth, Johnny Karpa |

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|--------|----------------------------|--|-------------------------------|--|---|
| Nafe | <i>kaitao kaituao</i> | (a) <i>Prosopita contigua</i> (G. Forst.) C. Presl, (b) <i>Nephrolepis cordifolia</i> (L.) C. Presl | (a) GMP-4689; (b) GMP-4608 | People use this fern to adorn their hair during <i>kastom</i> ceremonies and dances. It was used more widely before people had chicken feathers. Men and women who live in <i>kastom</i> villages still use this in their hair. | Natao Numruken, Taya Ninneih, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko |
| Nafe | <i>naturauna, naturena</i> | <i>Phlegmariurus phlegmaria</i> (L.) Holub | GMP-4603 | The vine is dried in the sun and wrapped around a person's head and on their arms as an adornment during <i>kastom</i> ceremonies. | Natao Numruken, Taya Ninneih, Naiwan Sam, Johnny Karpa, Tan Danifer, Kayas Narko, Rawi Amos |
| Naka | <i>napuās</i> | <i>Fagraea berteriana</i> A. Gray ex Benth. | MJB-4744, MJB-4848 | Flowers are strung on a string to make a necklace used to welcome visitors. By wearing this adornment, the visitor signals his or her status as a guest who has been properly welcomed. | Kating Ken Matai, Marie Ken Matai, Ken Bob Matai, Naloma Ken Matai |
| Neuai | <i>naewan naewan</i> | <i>Melicytus fasciger</i> Gillespie | GMP-2878 | Symbol for the people from the villages from Enmira to Iuihaker, along the east coast of Tanna Island. | David Kapwia, Joseph Dabuah, Tupun Alexis |
| Netwar | <i>narwiiu</i> | <i>Cordyline fruticosa</i> | MJB-4819 | (1) Cultivars with green leaves are planted on graves to mark them. Because the plant grows for a very long time, it is a symbol of eternal life. (2) Often planted to mark the boundaries of one's land. The shrub may be planted near a stone marker that reflects the origin of a person's tribe. It is always to be left where it has been planted. (See Figure 8). | Lui Noamel, Joe Natuma, David Tao, Jack Iawaiah, Natua Harry |

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|---------------|--------------------------------|-------------------------------------|-------------------------------|---|---|
| <p>Netwar</p> | <p><i>nuig</i>⁴</p> | <p><i>Miscanthus floridulus</i></p> | <p>GMP-3104, MJB-5088</p> | <p>(1) If someone does not bring their own kava to the <i>nakamal</i>, they can bring a short stem of <i>nuig</i> with a few leaves on it to make others aware they need to prepare their kava. (2) After a newborn's umbilical cord falls off, a trail of <i>nuig</i> leaves tied into a knot with a loop is made to lead people to the umbilical cord burying ceremony.</p> | <p>(1) Clément Kapalu, Iahwot, Joe Nasak, Joe Natuman, Moïs Nako, Nadine Ramik, Pierrot Nako Yeru, Sam Posen, Tao Metiwai, (2) Katmatem, Sam Iahipe</p> |
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SPECIAL ISSUE

Ethnobotany: Plants, people and languages

Guest Editors: *Robbie E. Hart (William L. Brown Center, Missouri Botanical Garden, United States), and K. David Harrison (Center for Environmental Intelligence, VinUniversity, Vietnam; Center for Plants, People and Culture, New York Botanical Garden, United States)*

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Ethnobotany: Plants, people and languages

Guest Editors

Robbie E. Hart (William L. Brown Center, Missouri Botanical Garden, United States), and K. David Harrison (Center for Environmental Intelligence, VinUniversity, Vietnam; Center for Plants, People and Culture, New York Botanical Garden, United States)