

Revised List of Hawaiian Names of Plants Native and Introduced with Brief Descriptions and Notes as to Occurrence and Medicinal or Other Values

by Joseph F. Rock Consulting Botanist, Board of Agriculture and Forestry Honolulu, Hawai'i, 1920

Transcribed and annotated by Samuel M. 'Ohukani'ōhi'a Gon III

Introduction to the 1920 Manuscript

In 1913, the writer compiled a list of Hawaiian names of plants, which was published as Botanical Bulletin No. 2 of the Board of Agriculture and Forestry. The above mentioned list comprised simply the Hawaiian names and the corresponding scientific names of plants both native and introduced. Owing to the popularity of, and the demand for, the bulletin it was soon out of print, and the suggestion was made by the Superintendent of Forestry that the list be reprinted. Since 1913, the writer has added quite a number of new names to the old list and it was thought advisable to incorporate these in the present publication, which gives in addition a short popular description of the plants and such facts and notes as are of ethnological and historical interest. Many of the added names were secured from an old kahuna from Kaupō, Maui, who has since died. He collected plants personally and brought them to the writer giving the native names and such information as he could transmit through his interpreter, the writer not being familiar with the ancient Hawaiian speech. This information is here incorporated. Some of the scientific names have been changed in order to conform with the present day nomenclature. Others, only very few, however, needed to be corrected. Some represent new species which were described more or less by the writer.

The present publication is simply to fill a popular want and therefore the remarks under each plant are couched in popular language. Unfortunately the meaning of some of the Hawaiian names has been lost, and the writer has translated only those of which he was absolutely certain. Such delicate work which presupposes intimate

knowledge of the Hawaiian language the writer will leave for Hawaiian scholars, such as Mr. T.C. Thrum and Mr. Joseph Emerson, and it is hoped that in the compilation of the new Hawaiian Dictionary, provision for which was made by the Hawaiian Legislature, the Hawaiian names given in this publication will not only be used, but their original meaning explained in order to preserve the historic value connected with them. No name was inserted for which the writer did not have the actual corresponding plant before him. Some of the plants brought to him by kahunas were fragmentary and a specific diagnosis could not be made owing to the polymorphic character of many of the Hawaiian plants, especially such as belong to genera like *Cyrtandra* or *Peperomia*.

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Introduction to the Annotated Transcription

In the mid-1970s I accepted a faded mimeograph of a hand-typed manuscript from a colleague at the University of Hawai'i at Mānoa. I gave it a quick look: a 1920 manuscript of a revision of a checklist of Hawaiian names for plants, by Joseph Rock, the renowned botanist who wrote the classic: Indigenous Trees of the Hawaiian Islands. Some of it was barely readable, and the typographic errors scattered throughout made it clear that this was not a final product. After scanning through it once, I put it in a manila folder and stuck it between some botany books on the shelf. Some day I'd hunt down a copy of the final...

It was not until 1986, when working in the Bishop Museum library, that I took some time to hunt for the finished work, and found that Rock's reprint of his popular list of 1913 (Rock 1913a) had apparently never been realized. In fact, one of the librarians, on finding that I had a mimeograph of the draft, requested that I loan it to the museum library for photocopying. Now copies are housed at the Bishop Museum library and in its Botany Department. A nagging feeling in me grew that a fading mimeograph shouldn't be the only fate of an unpublished work by such an important early contributor to Hawaiian botany, so I decided to undertake an electronic transcription, and for myself and others, provide annotations to the transcription regarding nomenclature, Hawaiian spelling, biology, etc.

That Rock took the time to record for posterity the knowledge of native sources at the turn of the century was not unusual -- Rock appreciated the value of his Hawaiian informants, gathering such facts from them as the names of the plants and their uses. For all its value to us now, we still must bemoan the limitations of Rock's encounters: he could not speak Hawaiian, and needed interpreters to assist his compilations. So too, to the unnamed kahuna of Kaupō, Maui, who took the time to share some of his knowledge with an inquisitive **haole** botanist, we owe a debt of gratitude.

The reader who has an interest in the Hawaiian names of plants will be pleased to find names for some native taxa not to be found in other sources, and Rock's insistence on assigning names only to plants for which he had a clear sample lends credence to the new names listed here. In one example, the new name for a widespread native plant such as 'āhinahina kū pali for Artemisia australis goes beyond the generic 'āhinahina listed in most sources (and given to any silvery or grey-colored plants), and provides an intuitively pleasing qualifier, kū pali (standing on a cliff), that alludes to its typical habitat. Any modern worker could perhaps have come up with 'āhinahina kū pali, but the important point is that they didn't: a native speaker and kahuna from Kaupō at the turn of the century did so instead; and that is infinitely more satisfying!

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On the Annotations

I have tried to keep the structure of Rock's list as close as possible to the original. Annotations of nomenclature are placed in bracketed text so, for example, when Rock lists alani as the Hawaiian name for several species in the genus Pelea, it is immediately followed in brackets by the name currently in use for that genus, Melicope. Taxonomic annotations for flowering plants convert the taxonomy of Rock's time into that used in the Manual of Flowering Plants of Hawai'i by Wagner et al. (1999). Fern annotations use Hawai'i's Ferns and Fern Allies by Palmer (2003). One kind of taxonomic adjustment was made without brackets: in Rock's time, the common convention was to capitalize species epithets that were based on proper names, e.g., Rubus Macraei. Modern convention is to apply lower case to any species epithet, making it: Rubus macraei. I have applied this rule without notation throughout this transcription.

As to the spelling of Hawaiian words and the use of diacritical marks (lacking in Rock's manuscript), I have made use of the Hawaiian Dictionary (Pukui & Elbert 1986) and Place Names of Hawai'i (Elbert et al. 1986) to evaluate spellings and apply diacritical marks where appropriate. For example, where Rock lists the Hawaiian name for Styphelia tameiameiae as pukeawe. I have added the notation: [pūkiawe -- Pukui and Elbert (1986) do not include pukeawe as an accepted variant]. In another example, Rock consistently used the spelling "kukai" instead of "kūkae," for the Hawaiian word for fecal droppings, as in his rendering of the Hawaiian name for the grass Digitaria ciliaris: "kukai puaa" (pig droppings). The annotation corrects the name to "kūkae pua'a." Where it was not possible to deduce the appropriate Hawaiian spelling I have left the name unmodified. Any errors in assigning such markings are mine. Any qualified suggestions or additional insights on appropriate spelling or markings are very welcome.

There were also some obvious typographical errors in need of correction, such as the listing of the Hawaiian name for *Xylosma* as "Mana," whereas Rock elsewhere recognized and published the widely accepted "Maua" as the Hawaiian name. The placement of the erroneous "Mana" between Manono and Maunaloa is consistent with the error of transcribing "n" for "u," (perhaps on the part of an assistant working with Rock's written notes). There were numerous other examples, the majority of which are corrected without notation.

Despite Rock's wish that his list of names be incorporated in the Hawaiian Dictionary then being revised by the provisional government, it is interesting to note that not all of his listings are to be found in Pukui & Elbert 1986. Even so, some of the names that he listed as "new" (such as 'aka'akai = onion) are today well-known Hawaiian names for plants. These were apparently only new names for Rock personally. Where Rock noted such "new" names

with an asterisk I have used the symbol ‡. Where these names are indeed lacking in Pukui and Elbert (1986) there is an appropriate notation. These represent potential additions for future editions of the Hawaiian Dictionary.

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Glossary of Hawaiian Terms Used

Haole - Foreigner, typically Westerners.

Kahuna - Expert practitioner in either spiritual or practical arts.

Kai - Ocean, sea.

Lei - Wreath ornamentations, often of flowers, foliage or other natural material.

Mele - Song, chant.

Pali - Cliff.

Wai - Fresh water.

Hawaiian Names of Plants

Α

'A'aka — Dead trunks of the **naio** (*Myoporum sandwicense* A. Gray). [Pukui and Elbert (1986) define it as wood of the **naio**, rather than dead trunks, but the logical relationship is clear.] See **Naio**.

'A'ali'i kū makani — Dodonaea eriocarpa Smith [Rock recognized the glabrous, two-winged capsule variant as *D. eriocarpa*. Wagner et al. (1999) lump *D. eriocarpa* into *D. viscosa* Jacq.]. A very hard-wooded shrub [or] tree growing in the outskirts of the forests on the leeward side of all the islands. It is not peculiar to Hawai'i, but is found in tropical and subtropical countries. See Rock (1913b:278). [Pukui and Elbert (1986) list 'a'ali'i kū makani without distinguishing taxa.]

'A'ali'i kū ma kua — Dodonaea viscosa Jacq. [See note for 'A'ali'i kū makani, above.]. A shrub closely related to the foregoing species, but the capsules and undersurface of leaves are pubescent, the capsules are three to fourwinged instead of two-winged. It occurs in the lower forest zone or open scrub vegetation, especially on the lee-side of Kaua'i and on the lava flows of Hawai'i in both South and North Kona. [Pukui and Elbert (1986) list 'a'ali'i kū ma kua without distinguishing taxa.]

'A'ali'i mahu — Styphelia tameiameiae (Cham. & Schlechtend.) F. v. Muell. A shrub or small tree with white, pink, pink and white, or dark red dry berries and needle-like leaves. It occurs on all the islands; especially common at the volcano of Kīlauea on Hawai'i. See Rock (1913b:365). The more common name is Pūkeawe [Pūkiawe]. See Maiele and Kāwa'u.

'A'aw I ua kukui — Pittosporum hosmeri Rock. A small tree discovered by the writer in 1910 on Hawai'i. It has the largest fruit of the genus and is peculiar to the lava flows of Pu'uwa'awa'a, North Kona, Hawai'i. A variety longifolium occurs in South Kona. The 'Alalā (Corvus hawaiiensis) [C. tropicans] the Kona crow feeds on the sticky black seeds encased in the thick woody capsules. Named for Mr. R.S. Hosmer, once superintendent of forestry in Hawai'i. See Rock (1913b:161). [Pukui and Elbert (1986) list hō'awa and hā'awa as alternate names under listing for 'a'awa hua ku-kui.]

'Ae — *Polypodium pellucidum* Kaulf. A thick, leathery fern with transparent veins, and a creeping root-stock or rhizome. Common on all the islands in dry locations and also in swampy open exposed regions.

A'e — Xanthoxylum [Zanthoxylum] kauaense A. Gray. A tree belonging to the orange family or Rutaceae. The leaves when crushed have a soapy odor. The tree is easily distinguished by its lenticellate bark and compound (3-5)

leaves. It occurs on Kaua'i in the drier forests at 3,000 feet. Varieties occur on Hawai'i, with pubescent leaves. See Rock (1913b:199). [Pukui and Elbert (1986) list **a'e** to refer to all species of *Zanthoxylum*, as well as *Sapindus saponaria* L.]

Aelunui ['**Ae lau nui**?] — *Asplenium* sp? a fern. [Pukui and Elbert (1986) list '**Ae lau nui** as *Polypodium pellucidum* Kaulf. with large leaves. It is not clear whether Rock's **aelunui** is meant to be '**ae lau nui**, but it is tempting to suggest so.]

- **'Ae'ae** Lycium sandwicense A. Gray. A fleshy-leaved small bush growing near the sea-shores. It has small red berries, somewhat pear-shaped, and belongs to the Solanaceae or Tomato family. It is not very common. The berries are eaten but are not very palatable. It is common at Mo'omomi, at the west end of Moloka'i, below the cave. [Rock did not list the alternate names for *L. sandwicense* provided in Pukui and Elbert (1986) and Wagner et al. (1999): 'ōhelo kai, 'ākulikuli 'ae'ae, 'ākulikuli kai, 'ākulikuli 'ōhelo.]
- 'Ahakea Bobea elatior Gaudich., B. mannii A. Heller. The 'ahakea trees are peculiar to Hawai'i, the first named species is common on O'ahu and is easily distinguished by its very pale green foliage and deep purple berries which are borne in threes, the middle one being sessile. The other species occurs on Kaua'i and has smaller leaves and red venation which is pubescent beneath. The wood is yellow and was employed for canoe rims which are now usually made of koa and painted yellow. See Rock (1913b:439). [Pukui and Elbert (1986) list 'ahakea for unspecified species of Bobea, and in current times, yellow-painted koa on racing canoes is replaced by yellow fiberglass.]
- **'Ahakea lau li'i** *Bobea elatior* Gaudich. var. *brevipes* Boiss. A small leaved variety found back of Honolulu.
- **'Ahakea lau nui** *Bobea elatior* Gaudich. Named **lau nui** on account of the larger leaves, and to distinguish it from the var. *brevipes* Boiss. See Rock (1913b:439).
- 'Ahaniu Cladium meyenii (Kunth) Drake [Machaerina mariscoides J. Kern var. meyenii T. Koyama]. A sedge with flat, fleshy leaves found usually on open, exposed mountain slopes as on the crest and windward side of Oʻahu between Mt. Olympus and Konāhuanui. Common on all of the islands. [Pukui and Elbert (1986) list 'uki as an alternate name for all species of Machaerina.]
- ‡ 'Āhihi See 'Āhihi maile. [Pukui and Elbert (1986) list 'āhihi as any plant with long runners or creepers, and also as a kind of *Metrosideros*, lehua 'āhihi.]
- ‡ 'Āhihi maile See Maile. [No listing of such in Pukui and Elbert (1986).]

- **'Āhinahina** *Argyroxiphium sandwicense* DC. The famous silversword of the high mountains of Maui and Hawai'i. It belongs to the Sunflower Family (Compositae [Asteraceae]) and is peculiar to the islands.
- ‡ 'Āhinahina 'āhihi See Hinahina. [This name for the coastal *Heliotropium anomalum* Hook. & Arn. is not listed in Pukui and Elbert (1986) or any other source.]
- ‡ 'Āhinahina kū pali Artemisia australis Less. var. escholtziana (Besser) A. Gray. [Wagner et al. (1999) do not recognize var. escholtziana, lumping it within A. australis, but acknowledging the morphological variations, some of which may be worthy of formal recognition.]. A sage brush with deeply divided silvery leaves and yellow flower heads. It occurs on the windswept, open pali. [This Hawaiian name is not listed in Pukui and Elbert (1986) or any other source known to this transciber.]
- ‡ 'Ahu'awa See 'Ehu 'awa. [Although Rock lists this name as "new," Pukui and Elbert (1986), cite Neal (1965) as a source for this Hawaiian name of the sedge *Cyperus javanicus* Houtt., but note that this manuscript of Rock predates Neal, and may have been Neal's source for the name.]
- **A'ia'i** *Pseudomorus brunoniana* (Endl.) Bureau [*Streblus pendulinus* (Endl.) F. v. Muell. in Wagner *et al.* (1999).]. Sometimes a large tree with dark green shiny leaves recalling the mulberry to which it is closely related, the generic name [*Pseudomorus*] meaning false mulberry. It occurs in ravines of the lower forest zone, but is not common. It can be found on Maui near Makawoa [Makawao] (Waihou gulch), at Pu'uwa'awa'a, North Kona, Hawai'i and also near Pukapele [Pu'ukapele] on Kaua'i. See Rock (1913b:114).
- 'Aiea *Nothocestrum* spp. There are several species of this genus which is peculiar to Hawai'i. They are all of medium size with very pale, soft wood and brittle branches. Sometimes commonly called "Tomato tree" on Moloka'i, as it belongs to the Tomato family [Today it is not commonly known on Moloka'i, by any name, as it has dropped from general lay knowledge.]. The reddish or whitishgreen berries are eaten by the birds. The trees are peculiar to the dry regions. See Rock (1913b:417).
- 'Aiea *Ilex anomala* Hook. & Arn. f sandwicensis (Endl.) Loes. [Wagner et al. (1999) do not recognize the variety.]. The best known name of this tree is kāwa'u. The name 'aiea is used only on Kaua'i for this tree. [Pukui and Elbert (1986) listing concurs.]
- 'Aka'aka'awa Hillebrandia sandwicensis Oliv. The native begonia of Hawai'i. It occurs on all the islands with the possible exception of Lāna'i and Ni'ihau. Another name for this plant is **pua maka nui**, big-eyed-flower.

‡ 'Aka'akai — Onion. [In Pukui and Elbert (1986) this name is given to both the common onion, Allium cepa L., as well as the indigenous bulrush, Schoenoplectus lacustris (L.) Palla var. validus (Vahl) T. Koyama in Wagner et al. (1999), with the note that onion leaves resemble the bulrush. Rock may have been unfamiliar with both the bulrush and the transfer of the Hawaiian name to the introduced onion, since he marks it as a name new to him here.]

'Ākala — Rubus hawaiiensis A. Gray and Rubus macraei A Gray. Two large and variable species of raspberries inhabiting the mountains of Kaua'i, Maui, and Hawai'i. The



fruits of *R. hawaiiensis* are very large and edible but bitter. Both species are peculiar to Hawai'i. A spineless variety occurs on Kaua'i. [Development of spines is variable in most populations of 'ākala, and spineless or nearly spineless forms have been observed in many populations besides those of Kaua'i.]

Akea — See '**Ākia**. [Pukui and Elbert (1986) do not list any alternate spellings or pronunciations for '**ākia**.]

'Ākia — *Wikstroemia* spp. There are several species of *Wikstroemia* in Hawai'i, some growing near the sea, others in the dense rain forest. All have red drupes and a black very strong fibrous bark. It is one of the poisonous genera found in the islands. The natives used the plant as a fish poison. They range in size from shrubs to small trees. See Rock (1913b:316).

‡ 'Aki'aki — An unidentified grass. [Pukui and Elbert (1986) and other sources list 'aki'aki as one of the names for the indigenous coastal grass Sporobolus virginicus (L.) Kunth.]

'Akilolo — A variety of sugar cane (*Saccharum officinarum* L.) [Pukui and Elbert (1986) describe the variety's striped coloration, said to resemble a striped wrasse of the same name.].

'Akiohala — *Hibiscus youngianus* Gaudich. ex Hook. & Arn. [*H. furcellatus* Desr. in Wagner *et al.* (1999); an indigenous species]. A small shrubby native *Hibiscus* with pink flowers which last for only one day. The plant is covered with fine stinging nettle-like hairs. The bark is very strong and fibrous. It is common back of Hilo along ditches and marshy places of the lowlands and in the valley bottoms of most of the islands [No longer so commonly



Figure 1. 'Āhinahina kū pali (Artemisia australis Less.) A. Habit/habitat. B. In flower. Photos by G.D. Carr.

encountered, due to numerous influxes of alien weeds in this zone.].

'Akoko — Euphorbia spp. [Chamaesyce spp.]. The genus Euphorbia [Some now recognized as Chamaesyce] has several species peculiar to Hawai'i which vary in size from creeping plants to small trees. A thick latex exudes from all of them when bruised, hence the name 'Akoko — blood [Pukui and Elbert (1986) do not make such a direct reference to blood, although the word 'ākoko is defined as "bloody".]. Euphorbia lorifolia (A. Gray ex H. Mann) Hillebr. var. gracilis Rock [Chamaesyce olowaluana (Sherff) Croizat & O. Deg. in Wagner et al. (1999)] found only on the island of Hawai'i, is usually meant by 'ākoko, although this name is employed for other species on the other islands. See Rock (1913b:259).

'Akole — *Dryopteris unidentata* C. Chr. The taro patch fern of the low marsh-lands.

'Ākōlea — Boehmeria stipularis Wedd. [B. grandis A. Heller in Wagner et al. (1999)]. An urticaceous shrub (nettle family) found in the lower forest zone. When not in flower it is often mistaken for mamaki [mamake in manuscript] (Pipturus), from which it differs in the spike-like drooping inflorescence. Found on all the islands usually near water courses. [Pukui and Elbert (1986) do not list Boehmeria under 'ākōlea, but Wagner et al. (1999) do.]

‡ 'Ākōlea — Phegopteris sp? A fern. Brought to the writer by a kahuna, but in a sterile condition so that it could not be identified. [Pukui and Elbert (1986) list 'ākōlea as the fern Athyrium microphyllum Alston, however Palmer (2003) indicates Ctenitis latifrons Verdc. (once referred to as Phegopteris sp.) is called 'ākōlea.]

'Akū — Cyanea tritomantha A. Gray. A lobeliaceous plant of the section palmaeformes. It occurs only on Hawai'i in the forests of Hilo and Ka'ū and is common near Glenwood, Hawai'i. [Pukui and Elbert (1986) claim that this plant, like the 'akū'akū below, was a food plant.]

‡ 'Akū'akū — Cyanea rollandioides Rock. A lobeliaceous plant with spiny stems and leaves and dark purple flowers. The crown of the leaves is eaten as a substitute for cabbage. It occurs only in the forests of Kalapana, Hawai'i. [This name is listed in Pukui and Elbert (1986).]

‡ Akukapihe — Seeds of the kā'e'e (Mucuna gigantea (Willd.) DC.) which are said to be used as a purgative. [Pukui and Elbert (1986) have no listing of akukapihe, listing pēka'a as the name for the seeds. The phrase kū ka pihe means lamentation (literally: "the wail arises"), but there seems no clear connection.]

'Ākulikuli — Sesuvium portulacastrum (L.) L. A fleshyleaved weed with pinkish flowers, growing in salt marshes near the sea. Very common in the Waikīkī duck ponds

[which are no more. In addition, the introduced bitterbush, *Batis maritima* L., has in these times displaced 'ākulikuli in most of the remaining salt marshes of Hawai'i; testimony to habitat changes within this century that have rendered even widespread native species uncommon or even rare.].

'Ākulikuli lau li'i — Portulaca oleracea L. The common introduced weed. Was eaten by the natives like spinach. See 'lhi.

'Akupa — Bobea mannii A. Heller. See Ahakea.

'Āla'a — Sideroxylon spp. [Pouteria in Wagner et al. (1999)]. Milky [-sapped] trees with thick leathery leaves, brownish beneath, fruits black (Sideroxylon sandwicense (A. Gray) Benth. & Hook. f. ex Drake) and yellow (Sideroxylon auahiense Rock and var. aurantium Rock) [in Wagner et al. (1999), all Sideroxylon spp. in Hawai'i are assigned to Pouteria sandwicense (A. Gray) Baehni & Degener, with a great deal of morphological variation acknowledged]. Found in dry regions mainly. The yellow-fruited species [form] is found on Maui and its variety in Kona, Hawai'i, the fruits are the size of a crab apple. See Rock (1913b:381). [Pukui and Elbert (1986) list āulu and 'ēla'a as alternate names.]

'Ala'ala — Tubers of *Dioscorea sativa* Thunb. [*D. bulbifera* L. in Wagner *et al.* (1999)], the aerial yam (or **Hoi**).

'Ala'ala hua — See **Mahoe** (*Alectryon macrococcus* Radlk.).

'Ala'ala pū loa — See Hi'aloa [Pukui and Elbert (1986): also 'uhaloa]. Waltheria americana L. [W. indica L. in Wagner et al. (1999)]. An American weed but also indigenous in Hawai'i. The thick, velvety leaves were pounded and used in the filling of the cracks in the canoes instead of pitch. The plant is very mucilaginous. It grows in dry waste lands.

'Ala'ala pehu — Peperomia reflexa (L. f.) A. Dietr. [P. tetraphylla (G. Forst.) Hook. & Arn. in Wagner et al. (1999)] usually epiphytic on trees, a very small leaved species. [Pukui and Elbert (1986) do not list 'ala'ala pehu, but include 'ala'ala wai nui pehu. Perhaps 'ala'ala pehu is an acceptable contraction.]

'Ala'ala wai nui — *Peperomia* spp. There are over 75 species in Hawai'i [Wagner *et al.* (1999) list 25 native species, considering many of the species accepted in Rock's day as synonyms], the majority of which are peculiar to Hawai'i, they are fleshy-leaved plants with minute flowers arranged in terminal or axillary spikes. The leaves have a peppery taste. They belong to the same family as the black pepper, *Piper nigrum* L. They are shade loving with few exceptions and inhabit the rain forests of all the islands [A few species occur in dry and mesic habitats.].

'Alae — Asplenium horridum Kaulf., a fern of the rain forest with blackish hairy stripes. [Pukui and Elbert (1986) list **'iwa** as another name for this fern.]

Alahe'e — See also walahe'e — Plectronia odorata F. Ritter [Canthium odoratum Seem. in Wagner et al. (1999), but reverting to P. odorata in an addendum]. A tree of the coffee family Rubiaceae with bright green very shiny leaves and white bark, flowers white and very fragrant. It occurs in the outskirts of the forests and on ancient lava flows of all the islands. The wood is hard and was used in the manufacture of adze handles by the ancient Hawaiians. See Rock (1913b:437).

Alani — Pelea spp. [Melicope in an addendum to Wagner et al. (1999)]. This large genus with the majority of species occurring in Hawai'i is known as alani. The leaves are very fragrant when crushed and remind of the orange to which family the genus belongs (Rutaceae). They can be found on all the islands, but the largest number of species occur on Kaua'i, where the species are known by different names. Some are trees, others scandent shrubs. All have four locular capsules. See Rock (1913b:211). [After contact, Hawaiians used the name 'alani (with the leading glottal stop) for the orange (Citrus sinensis (L.) Osbeck) and other Citrus species, with qualifiers.]

Alani wai — Pelea waialealae Wawra. A small tree very common on Wai'ale'ale, Kaua'i, also near Wahiawa bog, Kaua'i; leaves linear lanceolate, olive green. The crown is peculiarly truncate. See Rock (1913b:216). [Pukui and Elbert (1986) also list 'anonia as an alternate name, as does Rock, below.]

Alaweo — Chenopodium sandwicheum Moq. [Chenopodium oahuense (Meyen) Aellen in Wagner et al. (1999)]. A weed or small shrub with whitish creosodentate leaves, found in the dry regions. [Pukui and Elbert (1986) list 'āheahea, alaweo huna, and 'āweoweo as alternate names.]

Ale — Plantago princeps Cham. & Schltdl. A rare and most peculiar plant in one of two shrubby species. The second is peculiar to the Juan Fernandez Islands. [Wagner et al. (1999) acknowledge at least a superficial resemblance between P. princeps of Hawai'i and P. fernandezia Bert. ex Barn. of the Juan Fernandez Islands, but suggest that definitive evidence of a relationship are lacking.]

Alena — *Boerhavia diffusa* L. [*Boerhavia repens* L. in Wagner *et al.* (1999)]. A creeping plant with small leaves and small pinkish flowers belonging to the four o'clock family or Nyctaginaceae. Very common near the sea on rocky dry lands [**Anena** on Ni'ihau, according to Pukui and Elbert (1986).].

Ali'ipoe — Canna indica L. Cultivated plants commonly called Indian shot. [Naturalized in wet valley settings. Pukui and Elbert (1986) list **li'ipoe** as an alternate name.]

Ālula — *Brighamia insignis* A. Gray [Wagner *et al.* (1999) list ālula as the name for *Brighamia* spp. and recognize two species: *B. insignis* on Kaua'i and Ni'ihau, bearing yellow flowers, and *B. rockii* R.P. St. John, with white flowers, on Moloka'i and perhaps historically on Lāna'i and Maui. In Rock's time only *B. insignis* was recognized.]. A lobeliaceous plant with large cabbage-like fleshy leaves on a thick fleshy stem, flowers white long tubular, with the fragrance of violets. It grows near the sea on rock walls and cliff of the windward side of Moloka'i, Kaua'i, Ni'ihau, and in valleys near the sea. It is peculiar to Hawai'i. [Ni'ihau plants last seen in 1947.]

'Ama'u — Sadleria pallida Hook. & Arn. A fern. [Pukui and Elbert (1986) state that 'ama'u refers to all species of Sadleria.]

'Ama'uma'u — Sadleria cyatheoides Kaulf, the common fern around the Volcano Kīlauea, on Hawai'i. The young fronds are red. [Pukui and Elbert (1986) indicate 'ama'uma'u is a reduplication indicating "many 'ama'u," and make no reference to any specific species of Sadleria.]

'Ānapanapa — Colubrina asiatica (L.) Brongn. A scandent long rambling shrub, belonging to the Rhamnaceae. It occurs only near the sea, but is found throughout the Pacific Islands [Wagner *et al.* (1999) consider it indigenous].

'Ānaunau — Lepidium serra Mann. Peculiar to Kauaʻi, a shrub with long sharply serrate leaves. Dry regions 2,000-3,000 feet. [Pukui and Elbert (1986) also assign **'ānaunau** to Lepidium bidentatum Morton, but mention Rock's assignment of this name to *L. serra*. See **'ānounou**.]

Ānini — Eurya sandwicensis A. Gray. A shrub or small tree belonging to the Tea family. It occurs in the rainforests on nearly all the islands [Wagner et al. (1999): Kauaʻi, Oʻahu, Molokaʻi, Maui, Hawaiʻi, also **wānini**]. See Rock (1913b:308).

'Anonia — See Alani wai.

'Ānounou — Lepidium owaihiense Cham. & Schltdl. [L. bidentatum Morton in Wagner et al. (1999)]. A species related to the widespread L. piscidium Forst.f. [which Wagner et al. (1999) do not list as present in Hawai'i.]. It occurs in the lowlands and near the sea, a member of the mustard family. [Wagner et al. (1999) and Pukui and Elbert (1986) list alternate names: 'ānaunau, kanānā, and naunau.]

- **'Ānunu** *Sicyos* spp. Cucurbitaceous vines with subentire or deeply lobed leaves, several species peculiar to Hawai'i, occurring either in rainforests or dry regions.
- ‡ Apala ['Āpala?] See Pāpala kēpau. [Pukui and Elbert (1986) list 'āpala as a Hawaiianization of the English word "apple," and do not list the word as an alternate name for pāpala kēpau.]
- **'Ape** *Alocasia macrorrhiza* (L.) Schott. A taro-like plant with very large leaves and thick rhizome, eaten in times of scarcity.
- 'Ape'ape Gunnera petaloidea Gaudich. [in Wagner et al. (1999) and Pukui and Elbert (1986), the name applies to all Gunnera spp.]. A distinctly rainforest-type plant, occurring near waterfalls and in ravines near the highest ridges of the rain forests 4,000-4,500 ft. The leaves are circular in outline and measure often four feet in diameter, the inflorescence is a long pyramidal spike which is red in color [Wagner et al. (1999) describe color as greenish to occasionally rose magenta.].
- 'Āpi'i See 'Ape [Pukui and Elbert (1986) do not list this word as an alternate for 'ape (*Alocasia*) but as a variety of taro (*Colocasia esculenta* (L.) Schott) in the piko group, and as a ti (*Cordyline fruticosa* (L.) A. Chev.) variety with green, crinkly leaves.].
- 'Apu'u Sadleria squarrosa T. Moore. A much smaller fern than the 'ama'u, growing on damp walls along streambeds.
- **Au** Kadua acuminata Cham. & Schltdl. [Hedyotis acuminata Steud. in Wagner et al. (1999)]. A shrub with long scandent branches which are very brittle; the whole plant but especially the leaves when bruised emit a very unpleasant odor [Wagner et al. (1999) (and Pukui and Elbert (1986)) list **pilo** as an alternate name.]. See **Heau**.
- **'Auhola** *Tephrosia piscatoria* (Aiton) Pers. [*T. purpurea* (L.) Pers. in Wagner *et al.* (1999)]. A small leguminous bush with small flowers; it grows on the plains near the sea. A powerful narcotic and formerly much employed in stupefying fish. [Pukui and Elbert (1986) list **'auhuhu**, **'ahuhu**, and **hola** as alternate names.]
- **'Awa Kanaloa** Ranunculus mauiensis A. Meeuse. A native buttercup, occurs in the wet regions above 3,000 feet. [Pukui and Elbert (1986) list **'awa Kanaloa** as the name for all (native and introduced) buttercups; **makou** is listed as an alternate name.]
- 'Awapuhi Zingiber zerumbet (L.) Roscoe ex Sm. The Hawaiian mountain ginger of the lower forest zone; it dies down in the dry season. [Shampoo ginger is a current popular name.] [Pukui and Elbert (1986) list 'awapuhi kuahiwi and 'ōpuhi as alternate names.]

- **'Awapuhi a Kanaloa** *Liparis hawaiensis* W. Mann. "Kanaloa's ginger." It is one of the smaller of our three orchids, with inconspicuous greenish flowers; it is usually epiphytic on mossy trees in the rainforests of all islands.
- 'Āweoweo See Alaweo. [Chenopodium oahuensis (Meyen) Aellen. Pukui and Elbert (1986) list alaweo and 'āheahea as alternate names.]
- 'Āwikiwiki Canavalia galeata (Gaud.) Vogel. [Wagner et al. (1999) accept 'āwikiwiki or puakauhi as names for all native Canavalia species; Pukui and Elbert (1986) list puakauhi as a Kaua'i name.] A leguminous vine, peculiar to Hawai'i, a variety pubescens occurs in Kona, Hawai'i [Wagner et al. (1999) recognize Canavalia pubescens Hook. & Arn. as a distinct species, rather than a variety of C. galeata, but do not list Kona in the range of C. pubescens. Instead, the only species recognized for Kona would be Canavalia hawaiiensis Degener, I. Degener & J. Sauer, described after Rock's time.], the flowers are purple, the pods black and papery. At 1,000 feet to 2,000 feet.
- 'Awī'awī See Iliehe or Iliohe. [Pukui and Elbert (1986) list 'awī'awī and 'owī'owī as alternate names for 'uwī'uwī. There is no mention of iliehe or iliohe, but ilioha is listed as an alternate name for *Conyza* spp.]
- 'Āwiwi Kadua cookiana Cham. & Schltdl. [Hedyotis cookiana Steud. in Wagner et al. (1999)]. A small herbaceous plant belonging to the coffee family (Rubiaceae). Rare. [Pukui and Elbert (1986) do not mention this name in reference to Hedyotis, but instead to Centaurium sebaeoides (Griseb.) Druce. See below.]
- 'Āwiwi Erythraea sebaeoides (Griseb.) A. Gray [Centaurium sebaeoides (Griseb.) Druce in Wagner et al. (1999)]. An herb with pink flowers belonging to the Gentianaceae or Gentian family. It is common on the upland meadows of Hawai'i up to 8,000 feet elevation. [Wagner et al. (1999) list C. sebaeoides as a rare species of rocky coastal sites, while the naturalized alien species Centaurium erythraea Raf. is known from a range of elevations up to 2,140 m (7,020 ft). Perhaps Rock's high elevation range description is of C. erythraea. Pukui and Elbert (1986) list 'āwiwi as the name of the native C. sebaeoides.]

Ε

- **'Ehu'awa** *Cyperus pennatus* Houtt. [*Mariscus javanicus* (Houtt.) Merr. & Metcalfe in Wagner *et al.* (1999)]. A rush of the lowland marshes. [Pukui and Elbert (1986) list **'ehu'awa** as an alternate name for **'ahu'awa**.]
- **'Ēkaha** Asplenium nidus L. The birds' nest fern.
- **'Ēkaha 'ākōlea** *Polypodium lineare* Thunb. A small entire-leaved epiphytic fern. [Current name in Palmer (2003)



Figure 2. 'Ena'ena (*Pseudognaphalium luteoalbum* (L.) Hilliard & B.L. Burtt). Photo by G.D. Carr.

is *Lepisorus thunbergianus* (Kaulf.) Ching; Pukui and Elbert (1986) list **pākahakaha** as an alternate name.]

'Ēkaha'ula — Elaphoglossum micradenium Fée. A small creeping, entire-leaved fern with thin, papery, viscose leaves also known as hoe a Maui — Maui's paddle. A member of the extreme rain forests. [Current name in Palmer (2003) is Elaphoglossum pellucidum Gaudich.; Pukui and Elbert (1986) refers E. alatum Gaudich. to the names 'ēkaha'ula and hoe a Maui.]

'Emoloa — *Eragrostis variabilis* (Gaud.) Steud. A very common grass, growing in clumps on exposed slopes as on the Pali, on all islands. [Pukui and Elbert (1986) list **kāwelu** and **kalamālō** as alternate names.]

'Ena'ena — Gnaphalium luteoalbum L. [Pseudognaphalium luteoalbum (L.) Hilliard & B.L. Burtt in Wagner et al. (1999)] [Pukui and Elbert (1986) lists **'ena'ena** as referring to G. sandwicensium Gaudich., G. hawaiiense Degener & Sherff, and other species of Gnaphalium; called pūheu on Ni'ihau.]. A composite with whitish wooly leaves

and yellowish flowers, close to the plants known as "everlasting."

Enuhe — See **Uluhe** (staghorn fern) [*Dicranopteris linearis* (Burm. f.) Underw., sometimes called false staghorn fern]. [Pukui and Elbert (1986) list **'enuhe** as a caterpillar, as of sphinx moths, but list **unuhe** as an alternate name for **uluhe**.]

Н

Haʻā— Antidesma platyphyllum Mann. An euphorbiaceous tree of the rain forests with glossy leathery leaves of a bluish hue, lenticillate branchlets, and flat, juicy, purplish drupes. Occurs on all the islands. See Rock (1913b:247). [Pukui and Elbert (1986) lists haʻā as the same as hame.]

Hāhā — Cyanea and Clermontia spp. Members of the Lobeliaceae are usually known as hāhā or 'ōhā or 'ōhāwai. [Pukui and Elbert (1986) also list ālula, 'ōhā kēpau, and 'ōhā wai nui.]

Hāhā 'ai a ka manu — Clermontia gaudichaudii Hillebr. A lobeliaceous branching shrub, peculiar to Kaua'i, the berries are of the size of a crab apple, yellow, and are sought by the native birds, hence the name "hāhā, eaten by the birds". [Pukui and Elbert (1986) attribute the name to the "sap ... used for catching birds," which seems less reasonable than Rock's explanation.]

Hāhālua — *Cyanea leptostegia* A. Gray. The tallest of our lobeliaceous plants, simple-stemmed or branching after injury. It grows in the outskirts of the forest of the lee-side of Kaua'i only.

Hame — Antidesma pulvinatum Hillebr. The second species of that genus in Hawai'i, it occurs in the dry leeward regions of Moloka'i, Maui and Hawai'i, the fruits are smaller and the leaves darker with little pulvini is the axils of the veins beneath. The bark is longitudinally furrowed and fibrous, the wood is very hard dark brown. See Rock (1913b:349). [Rock seems to distinguish hame as the primary name for A. pulvinatum and ha'ā for A. platyphyllum Mann, but Pukui and Elbert (1986) attribute the name hame to both species, and list additional names: ha'āmaile, hamehame, and mehame.]

Hamehame or Mehame — Neowawraea phyllanthoides Rock [Flueggea neowawraea W.J. Hayden in Wagner et al. (1999), who report the Hawaiian name as mēhamehame, as do Pukui and Elbert (1986).]. A monotypic genus discovered by the writer [Wagner et al. (1999) consider it a member of a pantropical but primarily Old World genus of 14 species, with closest relative the Philippine to Melanesian Flueggea flexuosa Müll. Arg., and consider erroneous the assignment by Sherff of the species to the genus Drypetes.]. It resembles greatly the hame, but the

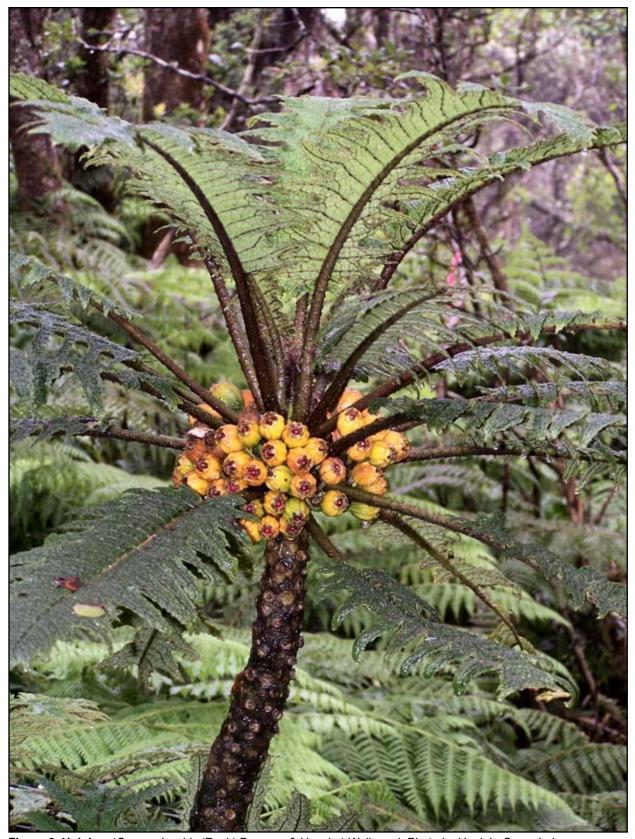


Figure 3. Holokea (Cyanea horrida (Rock) Degener & Hosaka) Waikamoi. Photo by Hank L. Oppenheimer.

leaves are very pale beneath and the bark is flaky yellowish to drab color. It has so far only been found in Kapu'a, South Kona, Hawai'i, three trees observed. [Since Rock's time, the tree has also been reported from Kaua'i, O'ahu, Moloka'i (perhaps extinct there), and Maui.] The wood is very hard. See Rock (1913b:245).

Hao [Haa in manuscript] — *Rauvolfia sandwicensis* A. DC. A milky tree reaching a large size on Kaua'i, elsewhere usually a small tree; wood yellowish, it was never used for the manufacture of charcoal as the smoke is said to be poisonous. It belongs to the Apocynaceae or oleander family. It is restricted to the dry regions of all the islands but is not common. See Rock (1913b:409).

Hāpu'u [**Hapu** in manuscript: a common misspelling] — *Cibotium chamissoi* Kaulf. The most common tree fern of Hawai'i. They were ruthlessly cut down in former years for the large amount of "**pulu**" or soft golden brown scales at the apex of the trunk.

Hāpu'u [Hapu in manuscript, see note above] 'l'i'i [Pu-kui and Elbert (1986) list hāpu'u 'i'i, but not hāpu'u 'i'i. However listing of 'i'i'i alone is described as synonymous with hāpu'u 'i'i.] — Cibotium menziesii Hook. See He i'i.

Hau — *Hibiscus tiliaceus* L. The common yellow flowered **hau** of the natives used for arbors, etc. The wood is now used for outriggers instead of that of the **Wiliwili**. The bark furnishes a fiber.

Hau hele wai — See Akiohala [Pukui and Elbert (1986) are vague, listing hau hele wai as "a kind of hau hele shrub," whereas Rock equates hau hele wai with akiohala. Hibiscus youngianus Gaudich. ex Hook. & Arn.].

Ha'uoi — Stachytarpheta dichotoma (Ruiz & Pav.) Vahl. A verbenaceous introduced weed, sometimes shrubby at higher elevations; flowers on spikes, blue. [Pukui and Elbert (1986) recognize **ha'uoi** as a variant spelling of **ha'uōwī** itself an alternate for **ōwī**.]

Hau hele 'ula — Kokia rockii Lewton var. kauaiensis Rock [Wagner et al. (1999) list it as Kokia kauaiensis (Rock) Degener & Duvel]. This tree was known to exist on Kaua'i, but had never been previously described and was discovered by Mr. Augustus Knudsen of Kaua'i (see Rock 1919). Only one tree is in existence. It is closely related to Kokia rockii of Kona, Hawai'i. It occurs in Koaloha, canyon lee side of Kaua'i [currently known also from a number of mesic gulches of Western Kaua'i, 350-660 m elevation.].

Hāwane — *Pritchardia* spp. The native fan palms commonly called **loulu**. The seeds are also called **hāwane** or **wāhane**. [Pukui and Elbert (1986) primarily attribute **hāwane** to the nut of the **loulu**, but later cite "**lau wāhane**" as **loulu** leaves.]

Hea'e — See A'e (Xanthoxylum) [Zanthoxylum].

Heau — *Exocarpos sandwicensis* Baill. A curious but rather rare tree with two kinds of leaves, belonging to the Santalaceae or sandalwood family. It occurs in dry regions only. It is also known as **hulumoa**, but mainly on Kaua'i. [Pukui and Elbert (1986) cite **au** as an alternate name. See grammatical note for **he i'i**, below.]

Hē'ī — *Carica papaya* L. The common papaya. [Pukui and Elbert (1986) list **mīkana** as an alternate name.]

He i'i — Cibotium menziesii Hook. One of the tree ferns, the stipes or leaf-stalks are covered with dark reddish brown stiff bristles or scales. [Pukui and Elbert (1986) do not list he i'i, but recognize i'i as short for hāpu'u 'i'i. In Hawaiian, the phrase "he i'i" can mean: "an i'i," as in response to someone (Rock?) asking: "What is this plant?" Similar pattern can be seen in the names heau and hea'e, above.]

Hi'aloa — See **Pualoa** or **'Ala 'ala pūloa**, *Waltheria americana* L. [*Waltheria indica* L. in Wagner *et al.* (1999), Pukui and Elbert (1986) also list **'uhaloa** as an alternate name, but there is no listing of **pualoa**.]

Hinahina — See '**Āhinahina** '**āhihi**, *Heliotropium anomalum* Hook. & Arn. A small creeping silvery heliotrope with white fragrant flowers, found on the sands near the sea.

Hō'awa — Pittosporum spp. A genus of several species with resinous wood, bi- to trivalvular capsules either smooth or deeply wrinkled, they exude a milky thick viscous sap, and contain closely-packed brown to black seeds. They inhabit the dry regions, also the rain forests. See Rock (1913b:153). [Pukui and Elbert (1986) also list 'a'awa hua kukui and hā'awa as alternate names.]

Hō'awa lau nui — *Pittosporum kauaiense* Hillebr. A medium sized tree found in the outskirts of the lee-forests of Kaua'i. See Rock (1913b:171). [Pukui and Elbert (1986) listing concurs.]

Hoe a Māui — Elaphoglossum micradenium (Fée) Moore. A small fern epiphytic on trees in moss at high elevations. The name means "Māui's (god) paddle" on account of the paddle-shaped frond. [Pukui and Elbert (1986) list hoe a Māui as the same as 'ēkaha 'ula (E. alatum Gaudich.) or E. pellucidum Gaudich. Palmer (2003) indicates current name is E. pellucidum.]

Hoene — A variety of taro *Colocasia esculenta* (L.) Schott. [Pukui and Elbert (1986) do not list **hoene** as a taro variety name.]

Hoi — *Dioscorea bulbifera* L. The wild yam, a vine with grey potato-like serial tubers. Common in the lower forest zone.

Hoi — *Verbena bonariensis* L. An introduced verbenaceous weed. [Pukui and Elbert (1986) list **oī** as a weedy verbena.]

Hōʻiʻo — *Diplazium arnottii* Brack. [Palmer (2003) indicates **hoʻiʻo** as Hawaiian name for *D. arnottii* and *D. sanwichianum* (C. Presl) Diels]. A common fern of the lower forest, eaten as salad.

Hola — See Auhuhu.

Hōlei — Ochrosia sandwicensis A. DC. A milky tree with dark green foliage, and very fragrant cream-colored flowers. The fruit is a double fruit, and yellowish when mature. It is a very rare tree and on the verge of extinction. [Wagner et al. (1999) indicate O. sandwicensis has been split into several species. These are found on the islands of Kaua'i (O. kauaiensis St. John), O'ahu (O. compta K. Schum.), Moloka'i (O. compta), Maui (O. haleakalae St. John) and Hawai'i (O. kilaueaensis St. John and O. haleakalae St. John). All are called hōlei.] The wood is dark yellow. See Rock (1913b:413).

Hōlio — *Cryptocarya mannii* Hillebr. A lauraceous tree of fine dimensions. It occurs only on Kaua'i on the leeward forests near Waimea Canyon, but also in the Wai'anae Mountains of O'ahu.

‡ Holokea — Cyanea ferrox Hillebr. var. horrida Rock [Cyanea horrida (Rock) Degener & Hosaka in Wagner et al. (1999).]. A very spiny lobeliaceous plant found above Olinda, Haleakalā Maui, near Puuikakai [Pu'u o Kakae in Elbert et al. (1986).] [Pukui and Elbert (1986) do not list holokea, but hala kea is described as a kind of pineapple with thorny leaves.].

Hona — *Urera sandwicensis* Wedd. var. *kauaiensis* Rock. An urticaceous small tree or shrub with reddish petioles and inflorescence. It occurs on Kaua'i only, especially along stream beds on the lee side (Kaholuamano). See Rock (1913b:149). [Pukui and Elbert (1986) indicate **hona** as alternate name for 'opuhe.]

Honohino — Cleome sandwicensis A. Gray [Cleome spinosa L. in Wagner et al. (1999)]. Now a rather rare capparidaceous plant. [Now considered extinct, Wagner et al. (1999) suggest the Hawaiian populations are an endemic Hawaiian subspecies.]

Honohono — *Haplostachys grayana* Hillebr. A very rare labiate peculiar to Hawai'i. It grows in open meadow lands on Moloka'i and Hawai'i also south Haleakalā. Maui.

Honohono — See Honohono wai.

‡ Honohono kupukupu — Capsella bursa-pastoris Moench. The common shepherd's purse, a cruciferaceous weed of late introduction; the above native name was

given to this weed by a Maui **kahuna**. [Pukui and Elbert (1986) do not list **honohono kupukupu**.]

Honohono wai — *Commelina nudiflora* Burm. f. [*C. diffusa* Burm. f. in Wagner *et al.* (1999)]. A monocotelydonous creeping herbaceous plant with blue flowers, known as "Wandering Jew."

Honuaulu — A variety of sugar cane *Saccharum* officinarum L. [Pukui and Elbert (1986) list **honua 'ula** as a dark brown-red mutant of **manulele** sugar cane, one of the best for eating raw. Rock's "**honuaulu**" may be a variant or misspelling.]

Hōwaiaulu — Lagenophora maviensis C. Forbes [Lagenifera maviensis H. Mann in Wagner et al. (1999)]. A small composite found on the high mountain swamps as on Kaua'i and west Maui.

Huahekili — *Scaevola frutescens* (Mill.) Krause [*Scaevola sericea* Vahl in Wagner *et al.* (1999).]. A common shrub in the sand near the sea, flowers white and drupes white, hence the name "Hailstone fruit". [Pukui and Elbert (1986) list "hail" as the first definition of **huahekili**, literally "thunder fruit," echoing Rock's "hailstone fruit".]

Hu'ahu'akō — *Rumex albescens* Hillebr. An herbaceous plant with large, terminal panicles of whitish green flowers and small capsular fruit. Common on Kaua'i.

Huehue — *Cocculus ferrandianus* Gaudich. [*Cocculus trilobus* (Thunb.) DC. in Wagner *et al.* (1999)]. A strong menispermaceous twiner or runner with very variable leaves and bluish glaucous fruits the size of a small pea. Common in dry rocky regions, lowland.

Hue'ie — See Huehue.

Hue wai — Lagenaria vulgaris Ser. The common bottle gourd. [Pukui and Elbert (1986) list **ipu** as the name for Lagenaria, with **hue wai** listed as a gourd water bottle. Today Hawaiian Lagenaria are no longer common, as they are highly susceptible to attack by introduced insects.]

Huluhulu — *Gossypium tomentosum* Nutt. ex Seem. The native brown cotton common on dry leeward regions of all islands. The leaves are greyish-green, the [bolls] brown.

Huluhulu a 'iole — Lycopodium cernuum L. [Lycopodiella cernua (L.) Pic. Serm. in Palmer (2003)].

Hulumoa — See Heau.

Hulumoa — *Viscum articulatum* Burm. f. The Hawaiian mistletoe. Not uncommon in the forests, usually found on **kalia** and **lama** trees, but also on a number of others. It is represented by a number of varieties.

Hunakai — *Ipomoea acetosaefolia* (Vahl) Reom. & Schult. A morning-glory found near the sea.

I

'le - See 'le'ie.

'le'ie — Freycinetia arborea Gaudich., a strong pandanaceous climber forming dense thickets.

'le'ie luau — A taro *Colocasia esculenta* (L.) Schott with red leaves.

'Ihi — Portulaca oleracea L., the common pigweed.

'lhi — Desmodium triflorum (L.) DC., a small leguminceous plant found in meadows.

'Ihi — Oxalis corniculata L., the common sheep sorrel.

'Ihi 'ai — See 'Ihi, Portulaca oleracea L.



Figure 4. 'Iliau — *Wilkesia gymnoxiphium* A. Gray. Photo by G.D. Carr.

'Ihi makole — *Portulaca sclerocarpa* A. Gray, a fleshy weed.

‡ 'l'iwa lauli'i ['lwa'iwa lau li'i in Pukui and Elbert (1986). Listing may indicate a contraction of 'iwa'iwa into 'i'iwa.] — Asplenium erectum Bory ex Willd. [Palmer (2003) indicates current name is A. macraei Hook. & Grev.], a small fern

Iliahi — Santalum freycinetianum F. Phil., and all other species of Sandalwood are termed **Iliahi**, with the exception of the following:

Iliahi alo'e — Santalum littorale (Hillebr.) Rock [S. ellipticum Gaud. in Wagner et al. (1999).], a small shrub, sandalwood, found near the sea, as around Diamond Head [today not common at all around Diamond Head.], the greenish flowers are very fragrant; the leaves small, elliptical and glaucous.

'Iliau — *Wilkesia gymnoxiphium* A. Gray, a very interesting ancient composite found only on Kaua'i. It flowers, like the Silversword to which it is related, only once in its life. It is exceedingly viscous when in flower.

'llie'e — See 'llieo.

'Ilieo — *Plumbago zeylanica* L., a subherbaceous scandent bush with viscous inflorescenses and white flowers common in the lowlands' dry regions.

'Ilihia — *Cyrtandra wawrae* C.B. Clarke, a large leaved gesneriaceous plant with begonia-like leaves and white flowers. It occurs on Kaua'i only.

'Ilima — *Sida* spp. All Hawaiian *Sida* are called **'ilima** of the yellow flowers of which the famous **'ilima** lei or wreaths were made and worn only by chiefs.

'Ilioha — Erigeron canadense L. [Conyza canadensis (L.) Cronq. in Wagner et al. (1999)], an introduced composite, the Canada fleabane.

'Iliohe — See Ilioha.

'Ili'ohu — See **Honohino**. [Pukui and Elbert (1986) also list **honohinu** and **honohina**.]

'Inalua — See **Haleakaia** [that name is not listed, but Pukui and Elbert (1986) indicate **hale-a-ka-i'a** as an alternate name for **'inalua**, *Cardiospermum halicacabum* L., a vine used medicinally to treat dizziness.].

'Inia — *Melia azederach* L., a tree with lilac flowers; the "Pride of India."

'Inika — Basella rubra L., an introduced weed, family Cruciferae.

Inikoa — *Indigofera suffruticosa* Mill., an indigo producing plant, of early introduction.

'lo nui ['l'o nui in Pukui and Elbert (1986)] — *Dryopteris filix mas* (L.) Schott [Palmer (2003) indicates current name is *Dryopteris wallichiana* (Spreng.) Hyl.], a common terrestrial fern known as the male fern. [The species epithet filix-mas literally means "male fern."]

Ipu — The fruit of *Lagenaria vulgaris* Ser.

Ipu nui — The fruit of Cucurbita maxima Duchesne ex Lam.

'Iwa — Pteris excelsa Gaudich., a fern with black stipes which were used in the making of hats. [Pukui and Elbert (1986).]

'lwa'iwa — Asplenium adiantum-nigrum L., a fern occuring in high altitudes, open country 7000-8000 feet elevation.

'Iwa'iwa lau nui — Aspidium cicutarium (L.) Sw. var. gaudichaudii Mett. [Palmer (2003) indicates current name is Tectaria gaudichaudii (Mett.) Maxon], a fern.

'Iwa'iwa o Kāne — Asplenium bipinnatifidum [There seems to be no such name in the literature, the closest name being A. bipinnatum C. Chr., now considered A. kaulfussii Schultdl. f. bipinnatum (Hillebr.) D.D. Palmer, but this taxon is attributed to the Hawaiian name kūau. Palmer (2003) attributes A. aethiopicum (Burm. f.) Bech. to 'iwa'iwa a Kāne, which is not listed in Pukui and Elbert (1986).], a fern.

'Iwa pua kea ['Iwa puakea in Pukui and Elbert (1986), and noted as a Maui name for *P. irregularis* in Palmer (2003)] — *Pteris irregularis* Kaulf., a fern.

K

Ka'a — Cyperus sp?, a rush.

Ka'ape'ape — See Apeape.

Ka'ape'ape — *Polystichum falcatum* L. f. var., a fern.

Ka'awau — *Ilex anomala* Hook. & Arn. *f. sandwicensis* (Endl.) Loes., called **Aiea** on Kaua'i. See **Kāwa'u**.

Kae kolea — Medicinal name for **Akolea**, a species of *Phegopteris*, a fern.

Ka'e'e'e — *Mucuna gigantea* (Willd.) DC., a leguminous vine with large, flat, round seeds which are called **Akukapihe**.

‡ Kahihi kolo — a name used in native medicine for *Acacia koa* A. Gray, a leguminous tree. See **Koa.** [Pukui and Elbert (1986) list **hihikolo** as a legendary **koa** tree of Kaua'i that was said to have no trunk.].

Ka'iwi - See Nukuiwi.

Kakalaioa — Caesalpinia crista L. and Caesalpinea jayabo M. Gómez, two spiny vines of large dimensions. Seeds are greyish of the size of a marble and employed for **lei**.

Kākonakona — *Panicum torridum* Gaudich., an annual grass of the lowlands.

Kākonakona — *Panicum nephelophilum* Gaudich. var. *xerophilum* Hillebr., an annual grass of the lowlands.

Kalaipahoa [note phonetic similarity to Ka lei o Pahoa, below] — A kahuna tree, extinct and never identified, said to have grown on the west end of Moloka'i on Mauna loa. The sap is said to have [been] red. Perhaps only mythical.

Kakaiwi — See Nukuiwi.

Kalamalo — Eragrostis variabilis (Gaudich.) Steud. See 'Emoloa.

Kalamoho lau li'i — *Pellaea ternifolia* (Cav.) Link a xerophytic fern found in dry regions and on lava flows.

Kalamona — Cassia laevigata Willd. and Cassia bicapsularis L., two leguminous shrubs with yellow flowers and terete pods; both are introduced species; the first mentioned may be found in the forests of Kaua'i.

‡ Ka lei o Hi'iaka — Pelea gayana Rock, a newly described species of Pelea, long known to the natives as the "lei of Hi'iaka," the sister of Pele. It grows in the dense forests near Wai'ale'ale on Kaua'i. [In Wagner et al. (1999) the name leiohi'iaka and kaleiohi'iaka are attributed to Melicope elliptica A. Gray, while Melicope feddei (H. Lév.) T. Hartley & B. Stone (which included P. gayana) was not attributed with a Hawaiian name. Pukui and Elbert (1986) list lei-o-Hi'iaka as "Pelea elliptica (A. Gray) Hillebr. and related species", suggesting the epithet may apply to several similar species.]

Ka lei o Pahoa — The wood of the Kauila and Nioi trees was called Kaleipahoa when cut with a stone edge (Pahoa). [Did Rock mishear the term "kālai pahoa" (to carve with pahoa) as kaleipahoa or Ka lei o Pahoa? Neither kaleiopahoa nor leiopahoa are listed in Pukui and Elbert (1986).]

Kalia — *Elaeocarpus bifidus* Hook. & Arn., a tree found only on Kaua'i and O'ahu. See Rock (1913b).



Figure 5. Kue nui (Cyanea grimesiana Gaudich. var obatae St. John) Central Ekahanui Gulch. Photo courtesy of The Nature Conservancy of Hawai'i.

Kalili — *Viola kauaiensis* Gagnep., a violet with a creeping rootstock and large blue flowers, peculiar to the swamps of Kaua'i. See **Powe hiwa**.

Kaliko — *Euphorbia geniculata* Ortega, an introduced milky weed.

Kaluaha — Astelia menziesiana Sm., a liliaceous, epiphytic, herbaceous plant with long, narrow leaves silvery beneath, also known as Wewehiwa and Pāhiwa. A mele was sung about this plant on Kaua'i which reads: Me he wewehiwa la Kaula lauoho loloa o Hanalei - The wewehiwa is like the hair of the prophet of Hanalei.

Kaheha — *Cyperus strigosus* L. var. *insularis*, a rush occurring in the mountains of Hawai'i.

Kāmanamana — *Adenostemma viscosum* J.R. Forst. & G. Forst., an herbaceous composite found in the lowlands of all islands, always in damp valleys and very wet places in shade.

Kamani or **Kamanu** — *Calophyllum inophyllum* L., a large tree with globose, hard fruits; the flowers are white and fragrant. It can only be found near native dwellings and near the sea. The wood is employed for calabashes.

A large grove of this species exists in the valley of Hālawa on Moloka'i; it must be exceedingly old as it was mentioned by Captain Cook in his voyage. [Kamani reproduces very readily by seed, so this grove may have persisted since Cook's time, but perhaps not the specific individual trees within it.]

Kamani — *Terminalia catappa* L., the umbrella tree. An introduced species and commonly called the false **Kamani**, also almond tree on account of its almond-like, edible fruits.

Kāmanomano — *Cenchrus caliculatus* Cav., a grass with bur-like fruits, found in the dry regions on Maui, Hawai'i and probably elsewhere.

Kāmakahala — *Labordia* spp., there are two types of *Labordia*, one with yellow (orange) flowers usually shrubs, and the other with greenish flowers, usually trees. The orange colored flowers, especially of the Kaua'i species, were used in the making of **lei** which were worn by chiefs only. They belong to the strychnine family.

Kamakahala lauli'i — *Labordia waialealae* Schltr., a small leaved species, a shrub with very small yellow flowers; oc-

curs only on the high plateau of Waimea, near Wai'ale'ale on Kaua'i.

Kamanu — See Kamani.

Kamole — See Pukamole.

Kamole — *Polygonum glabrum* Willd., a duck weed found only in stream beds and swampy places on all the islands at elevation of 2000-3000 feet.

Kanawau [**Kanawao** in Pukui and Elbert (1986), also **Pu'ahanui**] — *Broussaisia arguta* Gaudich. and *Broussaisia pellucida* Gaudich., two species belonging to the *Hydrangea* family, both are shrubs or small trees with dark red berries. The first species has opposite leaves, the second ternate (in threes) leaves [only *B. arguta* is recognized in Wagner *et al.* (1999)]. Found on all the islands at elevation of 2000-4500 feet.

‡ Kanawao ke'oke'o — *Cyrtandra* sp.? [listed in Pukui and Elbert (1986)].

Kanehoa — See Pukeawe.

‡ Kane milo hai — The name of the medicine prepared from the Milo tree (*Thespesia populnea* (L.) Sol. ex Corrêa). [The name kane milo hai is not listed in Pukui and Elbert (1986), but Kānemiloha'i is the name of one of the brothers of Pele, associated with the NW Hawaiian Islands (French Frigate Shoals).]

Kapana — *Phyllostegia grandiflora* A. Nelson, a labiate, scandent shrub or vine, with large, white flowered racemes, peculiar to Hawai'i, it belongs to the rain forest. There are a number of species, but only a few have native names.

Kauila — *Alphitonia excelsa* (Fenzl) Reissek ex Endl., a tall tree with fine, hard and close grained, reddish heartwood. It is restricted to the dry regions of Kaua'i, Maui, and Hawai'i, perhaps also Lana'i and Moloka'i. Spears and tapa beaters were made from the wood of this species. It occurs also in Samoa and Australia and elsewhere in the Pacific.

Kauila — Colubrina oppositifolia Brongn. ex Mann, a rhamnaceous tree peculiar to Hawai'i. The wood is harder than that of the foregoing species and was used mainly in the making of spears, also tapa beaters. It is now restricted to North Kona, Hawai'i where fine specimens may still be found. See Rock (1913b:283).

Kauila mohu — *Cheirodendron gaudichaudii* (DC.) Seem. See 'Ōlapa.

Kaulu — *Pteralyxia macrocarpa* K. Schum., a rare, milky tree belonging to the oleander family with large, bright red, double fruits. It occurs only in the Wai'anae Mountains of O'ahu. See Rock (1913b:407).

Kaulu — Sapindus oahuensis Focke. See **Lonomea**, only known as **Kaulu** on Oʻahu, where it grows in Wailupe and Niu Valley, also at Kahuku and in the Waiʻanae Mountains.

Kaulu — *Rockia sandwicensis* (Hillebr.) Heimerl. See **Aulu**. Known as **Kaulu** on Kaua'i.

Kaulu — *Sideroxylon sandwicense* (A. Gray) Benth. & Hook. f. ex Drake [*Pouteria sandwicensis* (A. Gray) Baehni & O. Deg. in Wagner *et al.* (1999)], a milky tree with black fruits. The yellow fruited species is known [as] **Ala** 'a.

Kaumahana — *Viscum articulatum* Burm. f. [*Korthalsella remyana* Tiegh. in Wagner *et al.* (1999)]. See **Hulumoa**.

Kauno'a — Cassytha filiformis L., a leafless parasite belonging to the laurel family, composed of masses of yellow stems which cover sometimes entire tree tops, especially common in Ka'ū and Kona. It is often mistaken for dodder — Cuscuta sandwichiana Choisy, a much smaller plant usually found on *Ipomoea pes-caprae* (L.) R. Br. — The **Pōhuehue**.

Kauna'oa — See Kauno'a.

Kaupo'o — See Pa'ū o Hi'iaka.

Ka'upu — *Polystichum aculeatum* (L.) Roth ex Mert. [The name **ka'upu** is attributed to *Polystichum hillebrandii* Carruth. in Palmer (2003).], a fern.

Kāwa'u — *Ilex anomala* Hook. & Arn. f. *sandwicensis* (Endl.) Loes., a common forest tree with whitish wood, dark green, glossy leaves with fairly impressed venation. The flowers are white and the berries black. Found on the [main] islands.

Kāwa'u — *Styphelia tameiameiae* F. Muell., known so on Lāna'i only. See '**A'ali'i mahu**.

Kāwa'u kua kuku kapa — Zanthoxylum dipetalum Mann var. hillebrandii St. John, a large tree with thick, leathery leaves compound of 3 leaflets and two additional stipelli form leaflets. The wood is yellow and a log had a ring when struck with a tapa beater, hence it was said: Me he kāwa'u la ka ale i ka moana [Like the kāwa'u the (sound of the) waves on the beach]. This tree is peculiar to Kaua'i, although the species occurs on O'ahu, and two other varieties on Hawai'i

Kawelu — *Schiedea stellarioides* H. Mann, a subherbaceous plant peculiar to Kaua'i, found in the outskirts of the forest, not common. Also called **Mā'oli'oli**. [Pukui and Elbert (1986) do not list **kawelu** as a name for any species of *Schiedea*, but for the native grass *Eragrostis variabilis* (Gaudich.) Steud. and a seaweed, said to resemble the flowering head of *Eragrostis*.]

Kea — *Mezoneuron kauaiense* Hillebr., the more common name is **Uhiuhi**.

Keahi — *Chrysophyllum polynesicum* Hillebr. [*Nesoluma polynesicum* (Hillebr.) Baill. in Wagner *et al.* (1999)], a sapotaceous tree, rather rare, milky throughout with thick, obtuse, leathery leaves, and olive-like black fruits borne dose to the branchlets. It is restricted to the dry regions of most islands.

Keakea — Cyanea asplenifolia Hillebr., a lobeliaceous plant simple stemmed with deeply fern-like divided leaves; it occurs on Maui, in the valley of Waihe'e and neighboring valleys. [There is no plant listed among the meanings of either **keakea** or **ke'ake'a** in Pukui and Elbert (1986). Considered extinct in Wagner *et al.* (1999).]

Kenikeni — See $\mathbf{K}\bar{\mathbf{o}}$, sugar cane, *Saccharum officinarum* L.

Kēpau ulu [**Kapau ulu** in manuscript] — Latex of **Ulu** or breadfruit.

Ki — *Cordyline fruticosa* (L.) A. Chev., the **Ki** or **Ti** of the natives, the leaves are used in baking fish the latter being wrapped in them; from the root a liquor is distilled known as **Okolehao**.

Kiawe — Prosopis juliflora (Sw.) DC. [Prosopis pallida (Humb. & Bonpl. ex Willd.) Kunth in Wagner et al. (1999)], the Algaroba, a valuable, introduced tree, spread over the lee sides of all the islands.

Kihe — Polypodium serrulatum (Sw.) Mett. [Current name Lellingeria saffordii (Maxon) A.R. Sm. & R.C. Moran in Palmer (2003)], a very small, epiphytic fern of the [forest].

Kikenia — *Xanthium strumarium* L., an introduced burcomposite.

Kikania pilipili — *Desmodium uncinatum* (Jacq.) DC., a leguminous plant called the "Spanish Clover".

Kikawaeo [**Kikawaiō** in Pukui and Elbert (1986)] — *Dryopteris cyatheoides* (Kaulf.) Kuntze [*Christella cyatheoides* Holttum in Palmer (2003)], a fern.

Kīlau — *Dryopteris glabra* Kuntze, a fern.

Kīlau — *Trichomanes davallioides* Gaudich. [*Vandenboschia davalloides* Copel. in Palmer (2003)], a fine, filmy fern, climbing on tree trunks in the rain forests in dense shade.

Kīlau a pueo [Listed as **kīlau pueo** in Pukui and Elbert (1986)] — *Pteridium aquilinum* (L.) Kuhn, the common bracken fern; also eagle fern.

Kilika — Morus nigra L., the common Mulberry tree.

Kili'o'opu — *Cyperus auriculatus* Nees & Meyen ex Kunth, a rush.

Kio 'ele — Kadua menziesiana Cham. & Schltdl. [Hedyotis coriacea Sm. in Wagner et al. (1999)], a subherbaceous, rubiaceous (coffee family) plant; rather rare, and peculiar to Hawai'i.

Kiponapona — *Phyllostegia racemosa* Benth., a labiate with whitish pink flowers, a scandent bush with rambling branches, peculiar to Hawai'i.

Klu or **Kolu** — *Acacia farnesiana* (L.) Willd., a thorny, leguminous shrub or tree, widely spread over the lee sides of all the islands. Introduced from tropical America.

[Koa] — [Despite the cross-reference below, Rock had no listing for **koa**, the tree *Acacia koa* A. Gray.]

Koa lauli'i — See **Koa**, the regular O'ahu **koa** is meant by that name while:

Koa Hawai'i — represents *Acacia koa* A. Gray var. *hawaiiensis* Rock [Variety not recognized in Wagner *et al.* (1999)], the broad phyllode form found in the uplands of Hawai'i.

Koaha — The bark of **Wauke** - *Broussonetia papyrifera* (L.) L'Hér. ex Vent.

Koa haole — Leucaena glauca Benth. [Leucaena leucocephala (Lam.) de Wit in Wagner et al. (1999)], an introduced leguminous shrub the pods of which remind of the **Koa**, the flowerheads are globose as in the **Koa** but white.

Koai'e — *Acacia koaia* Hillebr., a rare tree resembling very much *A. koa*, the wood is harder, the tree is smaller, the phyllodes smaller, and the pod very narrow. It still occurs in the lower dry slopes of the Kohala mountains back of Waimea towards Kawaihae.

Koai'a — See Koai'e.

Koaka — See Koa.

Koali 'ai — *Ipomoea tuberculata* (Desr.) Roem. & Schult [*Ipomoea cairica* (L.) Sweet in Wagner *et al.* (1999).], a morning glory.

Koali 'awahia — *Ipomoea insularis* (Choisy) Steud. [*Ipomoea indica* (Burm.) Merr. in Wagner *et al.* (1999)], a morning glory with purple flowers, the root of this vine was used for bruises and sprains, it was pounded up with salt and then applied, removing inflammation rather quickly.

Koali mahu — *Ipomoea dissecta* (Jacq.) Pers., a morning glory.

‡ Koali pehu — *Ipomoea bona nox* L. [*Ipomoea alba* L. in Wagner *et al.* (1999)], the evening morning glory, or moon flower. [Listed in Pukui and Elbert (1986).]

Koa'oha — See Koai'e.

Kohekohe — *Eleocharis obtusa* (Willd.) Schult., a cyperaceous plant found in muddy, marshy places.

Koholāpehu — *Railliardia latifolia* A. Gray [*Dubautia latifolia* (A. Gray) D. Keck in Wagner *et al.* (1999).], a rare shrub with long, rambling, sometimes climbing branches. It belongs to the Compositae [Asteraceae] or sunflower family and is the only species of that genus which climbs over trees. All others are either stiff shrubs or trees. It is peculiar to leeward Kaua'i.

Kōī — Coprosma stephanocarpa Hillebr. var. kauaiensis (A. Gray) Hillebr. [Coprosma kauensis (A. Gray) A. Heller in Wagner et al. (1999)], a small tree belonging to the coffee family, fruit a red, globose berry. It grows in the drier forests about Kaholuamanō, Kaua'i.

Kōkea — See Kō.

Koki'o — *Kokia rockii* Lewton and *K. drynarioides* Lewton, two very rare trees, the former occurs still on Hawai'i, the latter is extinct as a wild plant. They belong to the cotton family and are very handsome trees with large, red flowers resembling the *Hibiscus*. Restricted to dry regions. See Rock (1913b).

Kokiʻo keʻokeʻo — Hibiscus arnottianus A. Gray, the white native Hibiscus occurring in the mountains back of Honolulu and on Oʻahu generally. Another species with the same Hawaiian name occurs on Kauaʻi; it is scientifically known as Hibiscus waimeae A. Heller and differs mainly in the smaller leaves which are velvety beneath. It is a tree in dry canyons. See Rock (1913b). [One other white-flower native Hibiscus from Molokaʻi has been recognized as H. arnottianus subsp. immaculatus M. Roe since Rock's time.]

Koki'o 'ula — *Hibiscus kokio* Hillebr., the red native *Hibiscus*, a rather rare plant.

Koko — Euphorbia spp. [Chamaesyce spp. in Wagner et al. (1999)]. See 'Akoko.

Koko kahiko — Euphorbia hirta L. [Chamaesyce hirta (L.) Millsp. in Wagner et al. (1999)], an introduced milky weed now very common.

Kolea — *Suttonia* spp. [*Myrsine* spp. in Wagner *et al.* (1999)]. All the large leaved species of the genus *Suttonia* [*Myrsine*] are called **Kolea**. They occur on all the islands, have thick, leathery leaves which are purplish red when young. The flowers are small and are borne [in] masses closely all along the branches, the fruit is small, purplish black and the size of a pea.

Kolea lauli'i — *Suttonia sandwicensis* (A. DC.) Mez [*Myrsine sandwicensis* A. DC. in Wagner *et al.* (1999)], a shrub or small tree with very small leaves. See **Kolea**.

Koli — *Ricinus communis* L., the castor oil plant.

Koli'i — *Trematolobelia macrostachys* (Hook. & Arnott) A. Zahlbr. var. *kauaiensis* Rock [*Trematolobelia kauaiensis* (Rock) Skottsb. in Wagner *et al.* (1999)], a lobeliaceous plant, with horizontally spreading floral spikes and purplish red flowers. It occurs only on the high plateau of Kaua'i and on Wai'ale'ale, proper.

Kolokolo — See Mahinalua.

Kolokolo kahakai — *Vitex trifolia* L. var. *unifoliata* Schauer [*Vitex rotundifolia* L. f. in Wagner *et al.* (1999)], a verbenaceous creeper with blue flowers, common on seabeaches in the sand.

Kolokolo kuahiwi — *Lysimachia daphnoides* (A. Gray) Hillebr., primulaceous plant with purplish, bell-shaped flowers, found on Kaua'i.

Kolokolo lehua [Kolikoli lehua in manuscript] — See Kolokolo Kuahiwi [Kolikoli Kauhiwi in manuscript].

Kolokolo mokihana — Pelea sp?

Kolu — Indigo [*Indigofera suffruticosa* Mill.]. See **Inikoa**.

Konakona — *Panicum nephelophilum* Gaudich., an annual grass.

Koʻokolau [Pukui and Elbert (1986) lists **kōkoʻolau**, but not **koʻokolau**] — *Careopsis* (*Campylotheca*) spp. [*Bidens* spp. in Wagner *et al.* (1999)]. All of the Hawaiian species of *Careopsis*, most of them shrubs, are known as **Koʻokolau** [see note above]; the leaves and flowers are employed as tea.

Koʻokolau [See note above] **puaki** [Pukui and Elbert (1986) does not list this variant name.] — *Bidens pilosa* L., the Spanish needle, an introduced weed.

Koʻokoʻolau — See Koʻokolau.

Kopa — *Kadua glaucifolia* A. Gray [*Hedyotis schlechten-dahliana* Steud. in Wagner *et al.* (1999)], a rubiaceous shrub with long, scandent branches and bluish (glaucous) foliage, found on Kaua'i only.

Kopiko kea — *Straussia kaduana* (Cham. & Schlechtend.) A. Gray [*Psychotria kaduana* (Cham. & Schlechtend.) Fosb. in Wagner *et al.* (1999)], coffee-like berries, and small white flowers; the wood of this species is white.

Kopiko 'ula — Straussia hawaiiensis A. Gray [Psychotria hawaiiensis (A. Gray) Fosb. in Wagner et al. (1999)], more commonly called 'Ōpiko 'ula. The wood of this species is red: it is common on Hawai'i forests of Puna and Hilo.

Kou — *Cordia subcordata* Lam., now a rare tree cultivated only. The wood was highly prized for calabashes.

Kuahulu — *Ipomoea pentaphylla* (L.) Jacq. [*Merremia aegyptia* (L.) Urb. in Wagner *et al.* (1999)], a morning glory with long, yellowish hair and white flowers. very common in waste lands.

Kūau — Asplenium kaulfussii Schltdl., a fern.

Kuawa — *Psidium guajava* L., the common guava, also called **kukailio**. [If Rock meant "horse droppings" then **kūkaelio** is the spelling, but Pukui and Elbert (1986) do not list this word as a Hawaiian name for guava.]

Kua wawae nohu — *Schiedea lychnoides* Hillebr., a rare vine-like plant belonging to the pink family. It occurs only in the moss forests of the high plateau of Kaua'i.

Kue nui — *Cyanea grimesiana* Gaudich., a lobelioid with pinnate leaves, common on Oʻahu. [Not in Pukui and Elbert (1986). It may represent an undocumented name for this rare plant.]

Kuhi'aikamo'owahie — *Lobelia hypoleuca* Hillebr., a tree lobelia with a candelabra-like branching, inflorescence and beautiful long, blue flowers, the handsome leaves are silvery white beneath. Common in the mountains of O'ahu. [Common no longer, considered a rare plant.]

Kūkae lio [**Kukai lio** in manuscript] — The common guava [*Psidium guajava* L.] (translation of name, horse-droppings.) [See annotation under **Kuawa** above.].

Kūkae moa [Kukai moa in manuscript] — *Pelea microcarpa* A. Heller [*Pelea clusiifolia* A. Gray in Wagner *et al.* (1999).], a species of Pelea found on Kaua'i, the capsules of this species resemble **Mokihana** and when collected by an ignorant person for that species, was ridiculed and the seeds were called **Kūkae moa [Kukai moa** in manuscript.]. — Chicken droppings.

Kūkae nene [**Kukai nene** in manuscript] — *Coprosma ernodeoides* A. Gray, a rubiaceous, creeping plant of the highlands of Maui and Hawai'i it has black, shining berries hence the name, goose-droppings. It is common about Kīlauea Volcano.

Kūkae pua'a [**Kukai pua'a** in manuscript] — *Panicum pruriens* Fisch. ex Trin. [*Digitaria setigera* Roth in Wagner *et al.* (1999)], a hairy grass.

Kukui — *Aleurites moluccanus* (L.) Willd., the candle-nut tree. See Rock (1913b).

Kukuihi — *Jatropha curcas* L., an euphorbiaceous plant, cultivated only. The yellow fruits serve as a purgative. A small tree or shrub.

Kukuku — Colubrina asiatica (L.) Brongn. See 'Ānapanapa.

Kuluʻi [Kuluʻī in Pukui and Elbert (1986)] — *Nototrichium sandwicense* Hillebr., a shrub or small tree peculiar to the dry regions of Maui and especially common in Kaʻū and Kona. It also occurs on Kauaʻi. It is easily recognized by its yellowish to gray, silky foliage and catkin-like drooping inflorescense. [Its current known range includes Kauaʻi, Oʻahu, Molokaʻi, Lānaʻi, Maui and Hawaiʻi.]

Kumuniu — *Doryopteris decipiens* J. Sm., a handsome little fern with palmately divided fronds peculiar to the dry regions of the lee and lowlands. See **'lwa'iwa** and **Manawahua**.

Kuolohia — Rhynchospora laxa R.Br. [Rhynchospora rugosa (Vahl) Galein Wagner et al. (1999)], a sedge. See **Pu'ukoa**.

Kupala [**Kūpala** in Pukui and Elbert (1986)] — *Sicyos pachycarpus* Hook. & Arn., a cucurbitaceous vine, peculiar to Hawai'i, with large, triangular leaves.

Kupali'i — *Peperomia* sp? perhaps an undescribed species.

Kupaoa [**Kupaua** in manuscript] [**Kupaoa** in Pukui and Elbert (1986)] — *Raillardia scabra* DC. [*Dubautia scabra* (DC.) D. Keck in Wagner *et al.* (1999)], a composite of the uplands and dry regions at 4000 to 8000 feet elevation. The flowers are whitish with purplish involucres, while

those of the other species of *Raillardia* are yellow. Common about the Volcano of Kīlauea and the high mountains of Hawai'i and Maui.

L

Lā'au ala — The wood of *Santalum freycinetianum* F. Phil., and other species of sandalwood.

Lākana — *Lantana camara* L., a verbenaceous shrub commonly called lantana, of early introduction but now widely spread. [The Hawaiian name is an obvious Hawaiianization of the common name.]

Lākī — Name of the leaves of the **Ti** — *Cordyline terminalis* (L.) Kunth. [*Cordyline fruticosa* (L.) A. Chev. in Wagner *et al.* (1999) Pukui and Elbert (1986) notes further contraction into the form **Iā**'ī for **ti** leaves.]

Lama — Maba sandwicensis AS. DC. [Diospyros sandwicensis (A. DC.) Fosb. in Wagner et al. (1999)], a common tree of the dry regions of all islands. It belongs to the persimmon family and has an olive shaped orange, yellow, edible fruit. The Goddess of Hula was always represented by a block of lama wood on the altar sacred to her.

Lanakia wahine — See Laukahi launiu.

Laniwela — See Ilioha.

Lapalapa — Cheirodendron platyphyllum (Hook. & Arn.) Seem., an araliaceous tree of the moss forest of Oʻahu and Kauaʻi where it grows near the tops of the highest mountains. Leaflets 3 to 5, broader than long, while in the second species (See 'Ōlapa), they are longer than broad; the fruits and leaves when crushed have a carroty odor. [Since Rock's time, other species of Cheirodendron than C. platyphyllum with leaflets broader than long are recognized as distinct species, e.g., the Kauaʻi species C. domini Krajina.]

Laua'e — *Polypodium spectrum* Kaulf. [*Microsorum spectrum* (Kaulf.) Copel. in Palmer (2003).], the Hawaiian ivy fern of the lower forest zone, a creeping fern. [Rock's manuscript provides critical evidence that the name **Laua'e** was initially attributable to *Microsorium spectrum*, then transferred to the alien *P. scolopendrium* Burm. f. after its introduction in the early 1900s.]

Lauala — See Lauhala or Puhala.

Lauhala — *Pandanus tectorius* S. Parkinson ex Z., and its varieties *douglasii* (Gaud.) Martelli, *chamissonii* (Gaud.) Martelli, *menziesii* Gaud., and *sinensis* Warb. in Engl. [These varieties are not recognized in Wagner *et al.* (1999)]. It occurs on all the islands. In the Nāpali region of

Kaua'i all the above mentioned varieties form dense forests, pure stands. [**Hala**-dominated forest stands still exist along the Nāpali coast.]

Laukahi — *Dryopteris truncata* (Poir.) Kuntze [*Pneumatopteris hudsoniana* Holttum in Palmer (2003).], a fern.

Laukahi — *Dryopteris filix-mas* (L.) C. Chr. [*Dryopteris wallichiana* (Spreng.) Alston & Bonner in Palmer (2003)], the male fern. See **'lo nui**.

Laukahi — *Lindsaea repens* (Bory) Thwaites [*Lindsaea repens* (Bory) Thwaites var *macraeana* (Hook. & Arn.) C. Chr. in Palmer (2003)], a fern of the lower forests.

Laukahi — *Elaphoglossum wawrae* C. Chr., an entire leaved, epiphytic fern of the moss forests.

Laukahi — Ophioglossum pendulum L. [Ophioderma pendulum (L.) Presl in Palmer (2003)], a fern ally known as adder's tongue [today considered a true fern]. Epiphytic on tree trunks.

Laukahi — *Ophioglossum vulgatum* Franch. & Sav. [*Ophioglossum petiolatum* Hook in Palmer (2003).], a fern ally, [today considered a true fern] a small plant consisting of a single, entire frond, with fruiting spike; grows in damp meadows and near the beach.

Laukahi — Pellaea ternifolia (Cav.) Fée, a xerophytic fern.

Laukahi lau li'ili'i [**Lauiliilii** in manuscript] — *Vittaria elongata* Sw. [*Haplopteris elongata* (Sw.) E.H. Crane in Palmer (2003)], a fern with simple, grasslike fronds, with the spore-cases on both margins of the frond.

Laukahi lau nui [Laukalhi launui in manuscript] — *Elaphoglossum reticulatum* (Kaulk.) Gaud. [*Elaphoglossum crassifolium* L.E. Anderson & Crosby in Palmer (2003)], an entire leaved, epiphytic fern with a creeping rhizome.

Laukea — *Claoxylon tomentosum* (Hillebr.) A. Heller [*Claoxylon sandwicense* Müll. Arg. in Wagner *et al.* (1999)], an euphorbiaceous shrub or small tree found only on Kaua'i. The leaves are pale and tomentose beneath.

Laukona — A variety of sugar cane *Saccharum officinarum* L. — Ribbon cane.

Lehua 'āhihi — *Metrosideros tremuloides* P. Knuth, a very handsome, glabrous '**Ōhi'a lehua** tree with narrow, glossy foliage, bright red flowers and drooping branches; found mainly on O'ahu in the mountains behind Honolulu.

Lehua kamakua — *Metrosideros collina* (J.R. Forster & G. Forster) A. Gray *forma polymorpha* (Gaud.) Rock var. *typica* [*Metrosideros polymorpha* Gaud. in Wagner *et al.* (1999)], this is the typical 'Ōhi'a lehua of Hawai'i, found near the Volcano.

Lehua lauli'i — *Metrosideros collina* (J.R. Forster & G. Forster) A. Gray forma *polymorpha* (Gaud.) Rock var. — [Apparently Rock had not decided on a varietal epithet at the time this draft was prepared]. [*Metrosideros polymor-*

pha Gaud. in Wagner et al. (1999)] A small leaved variety.

Lehua maka noe — *Metrosideros collina* (J.R. Forster & G. Forster) A. Gray *forma polymorpha* (Gaud.) Rock var. *pumila* (A. Heller) Rock [*Metrosideros polymorpha* Gaud. in Wagner *et al.* (1999)], this is the stunted variety occurring in the bogs of Kaua'i [and also in other bogs of the main islands.].



Figure 7. Laua'e (Microsorum spectrum (Kaulf.) Copel.). Photo courtesy of The Nature Conservancy.

Lehua mamo — *Metrosideros collina* (J.R. Forster & G. Forster) A. Gray *forma polymorpha* (Gaud.) Rock [*Metrosideros polymorpha* Gaud. in Wagner *et al.* (1999)], a yellow flowered form, probably *Metrosideros lutea* A.Gray.

Lehua papa — *Metrosideros rugosa* A. Gray, a small tree with deeply rugose leaves wooly beneath; it is peculiar to the mountain crests of Oʻahu.

Lehua pua kea — *Metrosideros collina* (J.R. Forster & G. Forster) A. Gray *forma polymorpha* (Gaud.) Rock [*Metrosideros polymorpha* Gaud. in Wagner *et al.* (1999).], a very pale greenish flowered **Lehua**.

Lemi — *Citrus limon* (L.) Burm. f., the lemon.

Lemiwai — *Passiflora laurifolia* L., the so-called water-lemon, a yellow fruited passion vine.

Lepelepe a moa — *Selaginella arbuscula* Spring., a fern ally, terrestrial in damp woods.

Lililehua — *Salvia coccinea* Buc'hoz ex Etl., an escaped cultivated plant, said to produce abortion in cows.

Liliwai — *Acaena exigua* A. Gray, a rosaceous herb of the high mountain bogs, related to Antarctic species. Common on Pu'u Kukui, West Maui, 6000 feet elevation [Today considered extremely rare and possibly extinct, not having been seen for decades in the Hawaiian islands, then one individual found in 2000? in West Maui.]. See also **Nani Wai'ale'ale**.

Liliko'i — *Passiflora edulis* Sims, the purple fruited passion vine, now naturalized on O'ahu and Kaua'i [And since Rock's time naturalized in mesic areas on all main islands.].

Liua — See Kuhi'aikamo'owahie.

Lola — *Asplenium acuminatum* Hook. & Arn., a fern.

Lonomea — Sapindus oahuensis Hillebr. ex Radlk. See **Kaulu**, a soap berry tree, remarkable for its simple leaves, it occurs in dry canyons on the lee side of Kaua'i [Also on O'ahu.]. The seeds are employed as a purgative.

Loulu — *Pritchardia* spp. There are now twenty-one species of *Pritchardia* known from Hawai'i which are all called Loulu. They do however distinguish two species, one with reddish fruits, *Pritchardia officus* [Apparently not a valid species.], which is called Loulu lelo, and one with large, globose, black fruits, *Pritchardia gaudichaudii* H. Wendl. [cf. *Pritchardia martii* (Gaud.) H.A. Wendl. in Wagner *et al.* (1999).], found on Moloka'i, the Loulu hiwa.

Loulu hiwa — See Loulu.

Loulu lelo — See Loulu.

Lumaha'i — The seeds of *Argemone mexicana* L. [*Argemone glauca* Pope in Wagner *et al.* (1999).], the **Puakala**, which are used as a purgative, a teaspoonful is chewed with coconut [In Pukui and Elbert (1986) the listing for **lumaha'i** indicates only "a medicine," perhaps making Rock's more specific description ethnobotanically useful.].

Lu'u — The seeds of *Jussiaea villosa* Lam., a yellow flowered water weed [No such botanical reference in Pukui and Elbert (1986).].

M

Mahinalua — Polypodium pseudogrammitis Gaudich. [Grammitis tenella Kaulf. in Palmer (2003).]. One of the smaller simple leaved ferns growing in masses on mossy tree trunks in the rain forests on all islands.

Mahoe — *Alectryon macrococcus* Radlk., a very rare tree of the Sapindaceae or soapberry family. The fruits are the size of an Irish potato, with a crustaceous shell, carunine edible fruit flesh and a compressed bony stone, the upper surface of which is smooth ad dark brown and protrudes from the fruit flesh. The lower surface is very rough and uneven and imbedded in the fruit flesh. It is still to be found in fairly good numbers (in 1910) on the southern slope of Mt. Haleakalā, Maui, at Auahi [A few **mahoe** trees still occur there today.]. It occurred on Moloka'i, Kaua'i, and is still to be found in the Wai'anae Mountains of O'ahu. Leaves large compound, branches horizontal.

Mahu — See 'Ōlapa (*Cheirodendron gaudichaudii* (DC) Seem.) [*C. trigynum* (Gaudich.) A. Heller in Wagner *et al.* (1999).].

Mai'a — *Musa sapiantum* L. [*Musa x paradisiaca* L. in Wagner *et al.* (1999).]. The banana and its numerous varieties.

Maiapilo — Capparis sandwichiana DC., the Hawaiian Caper, with white flowers, found always near the seashore.

Maiele — See **Pukeawe** (*Styphelia tameiameia* F. Muell.).

Maile — *Alyxia oliviformis* Gaudich., the famous **Maile**, an apocynaceous milky vine with black olive shaped fruits. The vine is much employed for **lei** or wreaths.

Maile kaluhea — An unidentified species of *Coprosma*, the name is used on Maui only.

Mairi — See Maile.

‡ Makolia — Ricinus communis L. The castor oil plant.

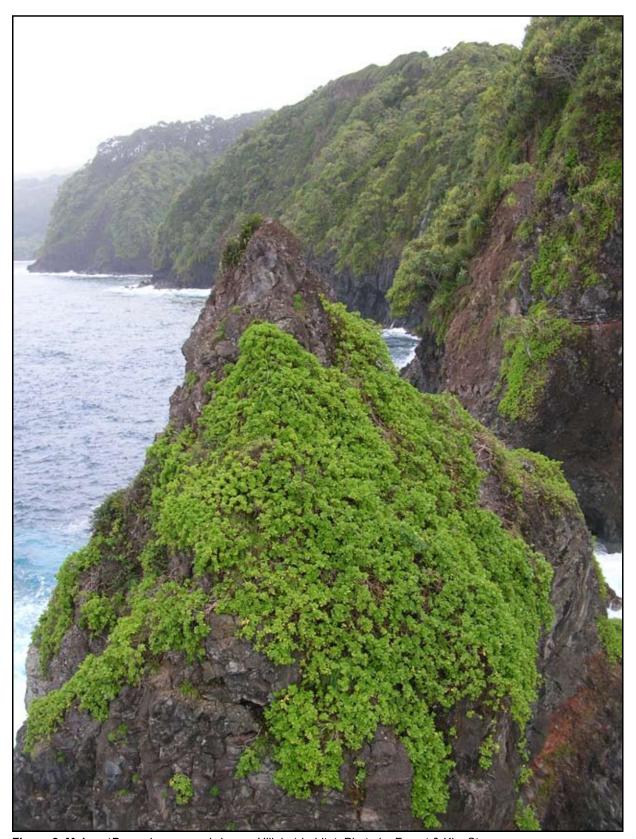


Figure 8. Makou (Peucedanum sandwicense Hillebr.) habitat. Photo by Forest & Kim Starr.

Makole — *Nertera depressa* Banks & Sol. ex Gaertn. [*Nertera granadensis* (Mutis ex L.f.) Druce in Wagner *et al.* (1999)]. A fleshy creeping, small, pale leaved rubiaceous plant with pale red berries, found only in the very wet moss forests.

† Makolokolo — See **Honohono wai** — *Commelina nudiflora sensu* Hillebr. [*Commelina diffusa* N.L. Burm. in Wagner *et al.* (1999).].

Makou — Ranunculus mauiensis A. Gray, A bush of the rainforest in open places near streams. The Hawaiian buttercup with yellow flowers.

Makou — *Peucedanum sandwicense* Hillebr., an herbaceous umbelliferous plant (carrot family) found on the windward side especially on Moloka'i, on the Kalaupapa Valley and in Wailau.

Makau [Makua] — Botrychium subbifoliatum Brack. An entire leaved fern with fronds covered with brown scales, epiphytic and drooping from the tree trunks in rainforests of all islands.

Māku'e lauli'i — *Polypodium hookeri* Cordem. [*Grammitis hookeri Copel.* in Palmer (2003)]. A small entire leaved fern of the high mountains and dense rainforests, the small linear fronds are covered with red hair.

† Malalei — Poetic name of **'Ōhi'a lehua**, occurs in prayers only. [Botanical reference not in Pukui and Elbert (1986), described as a stroke in **lua** fighting.]

Māmake or **Māmaki** — *Pipturus* spp. There are several species of *Pipturus* known as **Mamake**, the bark of which made finest tapa cloth.

Māmani [**Māmane**]— *Sophora chrysophylla* Seem. A leguminous tree of the high mountains of Maui and Hawai'i. Two varieties are also known. The species occurs also on Kaua'i and O'ahu.

Mānā — *Pteris irregularis* Kaulf. A fern.

Manawahua — Doryopteris decipiens J. Sm. See Kumuniu.

Manele — Sapindus saponaria L. The soap berry tree of America found wild in the group, only on Hawai'i, near the Volcano of Kīlauea and at Pu'uwa'awa'a in North Kona.

Manena — *Pelea cinerea* Hillebr. [*Melicope cinerea* A. Gray in Wagner *et al.* (1999)]. A rutaceous tree of the dry regions. See **Alani** — **Pelea**.

Manene — Plantago pachyphylla A. Gray var. kavaiensis A. Gray [Plantago pachyphylla A. Gray in Wagner et al. (1999).]. A high mountain Plantain, found on Kaua'i in the bog of Wai'ale'ale.

Mānienie [**Mamenie** in manuscript] — *Cynodon dactylon* (L.) Pers. The **Mānienie** grass.

Mānienie 'aki'aki [Mamenie in manuscript] — *Stenotaphrum americanum* Schrank. [*Stenotaphrum secundatum* (Walter) Kuntze in Wagner *et al.* (1999)], a coarse creeping grass found near the sea.

Manono — *Gouldia* spp. [*Hedyotis* spp. in Wagner *et al.* (1999)]. Shrubs or small trees on the mountains, it is very difficult to identify the various species owing to their polymorphism. The fruits are purplish berries arranged in drooping panicles.

[Page 44 of the original Rock manuscript was missing!]

peculiar to Kaua'i. Flowers white but hidden in tracts along the stem beneath the simple crown of leaves.

Maua [Mana in manuscript] — *Xylosma hawaiiense* Seem., *X. hillebrandii* Wawra [Together recognized as *X. hawaiiense* in Wagner *et al.* (1999)]. Two trees belonging to the Bixaceae [now Flacourtiaceae]. The first is common on Kaua'i in the rainforests and outskirts of the same, but occurs also on other islands. The second is confined to the dry regions of Maui, Hawai'i, Moloka'i, and Lāna'i. The species are easily mistaken for *Antidesma* when not in fruit. The venation of the first species is reddish also on the leafstalks. The leaves are bright green and glossy.

Mauna loa — *Dioclea altissima* (Vell.) Rock. [*Dioclea wilsonii* Standl. in Wagner *et al.* (1999)]. A leguminous vine found on Hawai'i near Hilo. Flowers small dark purple.

Milikani — See Mikana.

Mīkana — *Carica papaya* L. The common papaya [Rock's manuscript spelled it "**Papia**"]. See also **Hē**'ī.

Miki nalo — *Drosera longifolia* L. [*Drosera anglica* Huds. in Wagner *et al.* (1999)]. The sundew of America and Europe. It is however a native of Hawai'i, and occurs only in the bogs of Kaua'i. The name **Mikinalo** denotes "Flycatcher."

Milo — Thespesia populnea (L.) Sol. ex Corrêa. The well-known **Milo**, a malvaceous tree related to the **Hau**.

Moa — See Moa nāhelehele.

‡ Moa nāhelehele [Listed as *moa nahele* in Pukui and Elbert (1986)] — *Psilotum triquetrum* L. [*Psilotum nudum* (L.) P. Beauv. in Palmer (2003)]. A fern ally, and used as an emetic.

‡ Moamoa — Eleusine indica (L.) Gaertn. An introduced grass.

Mohihi — *Stenogyne scrophularioides* Benth. A labiate climber.

Mokihana — *Pelea anisata* Mann [*Melicope anisata* (Mann) T.G. Hartley & B.C. Stone in Wagner *et al.* (1999)]. The famous **Mokihana** tree peculiar to Kaua'i. The fragrant capsules emitting an odor like anise are strung into **lei** or wreaths.

Mulo — See Milo.

Ν

Na'ena'e — Species of the arborescent endemic genera *Dubautia* and *Railliardia*. [The species of the genus *Railliardia* are considered *Dubautia* species in Wagner *et al.* (1999).]

Na'ena'e pua kea — *Dubautia paleata* A. Gray. A composite shrub with white flowers found in the high plateau of Kaua'i, on the borders of swamps.

Na'ena'e pua melemele — *Dubautia laxa* Hook. & Arn. A composite shrub with yellow flowers, found near the summit ridges of O'ahu.

Na'ena'e 'ula — *Dubautia railliardioides* Hillebr. A composite shrub peculiar to the boggy regions of Kaua'i, the stems and leaf bases are purplish-red hence the name "**ula**" - red.

Naieo — See Naio.

Naio — *Myoporum sandwicense* A. Gray. A medium sized tree with rough bark found from sea level and 3000 to 9000 feet elevation. The yellow wood is exceedingly fragrant and was used as a substitute for sandalwood. See **A'aka**. It reaches its best development at 3500 feet.

Nahelehele — *Ageratum conyzoides* L. An introduced composite weed.

Nanea — *Vigna marina* (Burm.) Merr. A leguminous vine with yellow flowers and trifoliate leaves, found at the seashore only. See **Pūlihilihi**.

Nani Wai'ale'ale — Acaena exigua A. Gray. See Liliwai.

Nānū — *Gardenia remyi* Mann. An endemic gardenia tree 20 feet high, not uncommon in the rainforests of all islands [It is much less common presently.]

Nā'ū — *Gardenia brighamii* Mann. A now rather rare and beautiful gardenia tree, with very fragrant white flowers, peculiar to the dry regions of Moloka'i, Lāna'i, and Hawai'i. Very rare on the latter islands. Worthy of cultivation.

Naupaka kahakai — Scaevola frutescens (Mill.) Krause [Scaevola sericea Vahl in Wagner et al. (1999).]. See Huahekili.

Naupaka kuahiwi — *Scaevola* spp. Goodeniaceous shrubs of Australian origin, found on all the islands of the group. Flowers either white, yellow, or purple. Fruits small, black, berry-like.

Nehe — *Lipochaeta* spp. Composite shrubs or subherbaceous creepers usually found in the dry regions. Flowers like a coreopsis, yellow leaf surfaces always rough.

Neke — *Dryopteris gongylodes* (Schkuhr) Kuntze [*Cyclosorus interruptus* (Willd.) H. Itō in Palmer (2003)]. A fern

Neleau or **neneleau** — *Rhus semialata* J.A. Murray var. *sandwicensis* Engl. [*Rhus sandwicensis* A. Gray in Wagner *et al.* (1999)]. The Hawaiian sumac occurs in the lowlands only. The species is found in the Himalayas, the variety is peculiar to Hawai'i. [Species currently recognized as endemic to Hawai'i.]

† Nena — Boerhavia diffusa [sensu Hawaiian botanists, Boerhavia repens L. in Wagner et al. (1999)]. A creeper found near the sea. Flowers pinkish.

Ni'ani'au — *Nephrolepis exaltata* (L.) Schott. A common fern of which the fish tail fern is a part.

Ninika — *Lythrum maritimum* Kunth. A bush found in the lowlands and on the windward side of Kaua'i and Moloka'i at the sea. Flowers pink.

Nioi — Eugenia rariflora Benth. [Eugenia reinwardtiana (Blume) DC. in Wagner et al. (1999)]. Now a very rare plant in Hawai'i peculiar to the dry regions. A plant used in Hawaiian courtship, the following chant was said (in one breath) with the **nioi** flowers hidden near one's bosom and while walking up and down before the house wherein the maiden dweller whose love was to be awakened, and captured.

"la oe malu ai uka, malu ai kai, malu ai nahale, a kaua a malu. la oe hono a lele, e lele oe a iaia, iaia oe e kuko ai, e lia ai, e makahalia ai, e moe ole ai kou po, he hia ke aloha o kaua i keika i ka houpu ma ke kua, ma ke alo, paa ke aloha o(a?) kaua aole pau, amama, ua noa, ua lele wale."

It is suggested that Mr. Joseph Emerson append a translation of this interesting prayer [Although Emerson never translated this chant, elements of this chant are to be found in the **ho'ao** (wedding) ceremony, consistent with the courtship function mentioned above by Rock. Gon adjusted the Hawaiian wording and here offers this translation:

lā 'oe malu ai uka,	To you, cherished in the uplands	e moe 'ole ai kou pō he hia ke aloha a kāua ikaika i ka houpu ma ke kua	Sleepless are your nights Delightful love of us two
malu ai kai	Protected seaward		So strong in the heart
malu ai nahele a kāua a malu	Shaded forest hiding us two		At the back
iā 'oe Honoalele	To you, Honoalele [a god	ma ke alo	At the front
	of love]	pa'a ke aloha a kāua, a'ole pau	Firm is our love, not ended
e lele 'oe a iā ia	You fly to her	'Āmama, ua noa, ua lele wale	
iā ia 'oe e kuko ai	In her you create desire		has flown].
e li'a ai, e maka hali'a ai	Yearning, recalling fondly		



Figure 9. Nioi (Eugenia reinwardtiana (Blume) DC.). Photos by G.D. Carr.

Niu — Cocos nucifera L. The coconut.

Nohu — *Tribulus cistoides* L. A creeping plant with yellow flowers and spiny fruits or burs found in sandy places near the sea.

Nohuanu [**Noho anu**] — *Geranium humile* Hillebr. var. *kauaiensis* Rock [*Geranium kauaiense* (Rock) St. John in Wagner *et al.* (1999)]. A little creeping *Geranium* with pinkish flowers and silvery leaves found only at the summit of Kaua'i, Mt. Wai'ale'ale.

Noni — *Morinda citrifolia* L. A rubiaceous plant cultivated by the natives, the fruits are the size of a lemon and very ill odored when ripe. Employed in medicine and as hair oil.

Nukuiwi [**Nuku'i'iwi**] — A leguminous climber of great beauty with large red flowered racemes, the flowers resemble the bill (**nuku**) of the red bird (**'i'iwi**) hence **nukuiwi**. Found in the rainforests of the lower zone.

Nu'umela — *Asclepias curassavica* L. The orange flowered milkweed of early introduction.

O

- 'Oāli'i [Aalii in manuscript] makali'i Schizaea robusta Baker. A rare fern of the high mountains.
- ‡ 'Ōhāhāwai nui Clermontia arborescens (H. Mann Hillebr. A large lobeliaceous shrub.
- **'Ōhā wai** The various species of *Clermontia*. Lobeliaceous shrubs of the rainforests.
- **'Ōhai** Sesbania tomentosa Hook. & Arn. A creeping leguminous plant with red flowers found on sea beaches, rather rare; common at Mo'omomi-Moloka'i [and still to be found there, though the species is endangered.]. An erect shrubby variant occurs inland in the dry regions.
- **'Ōhai** Samanea saman (Jacq.) Merr. The cultivated large monkey pod tree.
- 'Ōhai [Ohia in manuscript] ke'oke'o Sesbania grandiflora (L.) Pers. A shrub or small tree, cultivated in Hawai'i. Flowers large, white, also red.
- **'Ohe** *Joinvillea ascendens* Gaudich. ex Brongn. & Gris. A very rare liliaceous plant, the leaves resembling young (seedling) palm leaves, rainforests only.
- '**Ohe** *Isachne distichophylla* Munro ex Hillebr. A grass of the uplands, common near Kīlauea Volcano, Hawai'i.
- **'Ohe** Bambusa vulgaris Wendl. ex Nees. [Schizostacyum glaucifolium (Rupr.) Munro in Wagner et al. (1999)].

The native bamboo [Rock spelled it: bambu.], found at the head of valleys.

'Ohe Hawai'i — See 'ohe Bambusa vulgaris Wendl. ex Nees. [Schizostacyum glaucifolium (Rupr.) Munro in Wagner et al. (1999)].

'Ohe kīko'olā — *Tetraplasandra waimeae* Wawra. An araliaceous tree peculiar to the lee-side of Kaua'i.

'Ohe kukuluae'o — Reynoldsia sandwicensis A. Gray. A large araliaceous tree of the dry regions of all islands. The wood was used for stilts in a game called **Kukuluae'o**. The native swipe [an endangered waterbird: the Hawaiian stilt] is also known as **Kukuluae'o** the name referring to its long legs.

'Ohe makai — See Ohe kukuluae'o. Makai means seaward, referring to the lowland situation of the trees.

'Ohelo — Vaccinium spp. 'Ohelo occur on all the islands, the species meant by 'ohelo is usually Vaccinium reticulatum Sm. found near the volcano. 'Ohelo berries were sacred to Pele.

'Ohelo kai — Lycium sandwicense A. Gray. See Aeae.

'Ohelo papa — *Fragaria chiloensis* (L.) Duchesne. The Hawaiian strawberry of the high mountains of Maui and Hawaii.

'Ohe naupaka — *Scaevola glabra* Hook. & Arn. A goodeniaceous shrub of the moss or rainforests. Flowers long tubular orange yellow, drooping.

'Ohe'ohe — Pterotropia kavaiense (H. Mann) Sherff and P. dipyrena (H. Mann) Hillebr. [both are recognized as Tetraplasandra kavaiensis (H. Mann Sherff in Wagner et al. (1999)]. Tall araliaceous trees with large compound leaves, and long drooping inflorescences; usually found in the dry regions; the former on Kaua'i [and O'ahu], the latter on Maui.

'Ohe wai — Water containers made from bamboo [Rock spelled it: bambu]. See **Huewai**.

‡ 'Ohe'ohe lau mo'o — Cladium angustifolium (Gaud.) Drake [Machaerina angustifolia (Gaud.) T. Koyama in Wagner et al. (1999)]. A rush found on open exposed palis near the summits of the ridges and in forests proper. [Not listed in Pukui and Elbert (1986).]

'Ōhi'a — See 'Ōhi'a 'ai.

'Ōhi'a 'ai — *Jambosa malaccensis* (L.) DC. [*Syzygium malaccensis* (L.) Merr. & L.M. Perry in Wagner *et al.* (1999).]. The mountain apple of the lowlands.

‡ 'Ōhi'a 'apapane — [Not listed as such in Pukui and Elbert (1986), which however lists 'ōhi'a 'āpane, and notes that 'āpane is a short form of 'apapane, referring the plant name to a dark red form of 'ōhi'a lehua, perhaps in reference to the red coloration of the 'apapane.] See 'Ōhi'a hāloa.

'Ōhi'a hā — *Syzygium sandwicensis* (A. Gray) Nied. A myrtaceous tree, with red edible berries not uncommon in the rainforests of all islands; called **Pā'ihi** on Maui.

‡ 'Ōhi'a hāloa and 'Ōhi'a mākālei — Metrosideros collina (J.R. Forster & G. Forster) A. Gray forma polymorpha (Gaud.) Rock var. glaberima (H. Lév.) Rock [Metrosideros polymorpha var. glaberrina (H. Lév.) St. John in Wagner et al. (1999)]. These two native names are applied to the perfectly glabrous forms of the Lehua or 'Ōhi'a lehua trees. [Neither is listed among the many variants of 'ōhiā in Pukui and Elbert (1986) and may represent rediscovered Hawaiian nomenclature].

'Ōhi'a lehua — *Metrosideros collina* (J.R. Forster & G. Forster) A. Gray *forma polymorpha* (Gaud.) Rock [*Metrosideros polymorpha* Gaud. in Wagner *et al.* (1999)]. See **Lehua** etc.

'Ōhi'a kū — *Hymenophyllum recurvum* Gaudich. [Mecodium recurvum (Gaudich.) Copel. in Palmer (2003)]. A filmy fern of the rainforests.

'Ōhi'a kūmakua [Not listed in Pukui and Elbert (1986)] — See 'Ōhi'a hā.

‡ 'Ōhi'a mākālei — See 'Ōhi'a hāloa.

'Ōī — Verbena bonariensis L. [Verbena litoralis Kunth in Wagner et al. (1999)]. A verbenaceous weed. See **Hoi**.

'Okole o Makili — *Vigna marina* L. See **Nanea** and **Pulihilihi**. [Pukui and Elbert (1986) list the grammatical variant **'okole makili** as a name for *V. marina*.]



Figure 10. Olonā (Touchardia latifolia Gaudich.). Photos A. by John Obata, B. fruit and C. male flowers by G.D. Carr.

'Ōkupukupu — *Doodia media* R. Br. [*Doodia kunthiana* Gaudich in Palmer (2003)]. A fern.

'Ōlapa — Cheirodendron gaudichaudii (DC.) Seem. [Cheirodendron trigynum (Gaud.) A. Heller in Wagner et al. (1999)]. An araliaceous tree of the forest of all islands. See **Lapalapa**.

'Ōlena — *Curcuma longa* L. Turmeric. The yellow rhizome used in dyeing tapa cloth. A plant of the lowlands; windward side.

'Ōlena — Coprosma waimeae Wawra. A rubiaceous tree, peculiar to Kaua'i, called 'ōlena on account of its yellow wood.

'Oliana [Also 'oleana in Pukui and Elbert (1986)] — See Kō

‡ 'Oliwa — Bryophyllum calycinum Salisb. [Kalanchoe pinnata (Lam.) Pers. in Wagner et al. (1999)]. The well known air plant, introduced herb, spreads easily from leaves which throw out rootlets in leaf notches. [The name 'oliwa in Pukui and Elbert (1986) is attributed to the European olive and to oleander, but not to air plant.]

'Ōloa — Neraudia melastomifolia Gaudich. See Ma'oloa.

'Olohua — Solanum nodiflorum Jacq. [Solanum americanum Mill. in Wagner et al. (1999)]. Solanaceous wood with black berries (nightshade).

Olomea — Perrottetia sandwicensis A. Gray. A common tree with red berries borne in drooping clusters along the branches. The leaf-stalks are red, the leaves bright green, glossy. The wood was used in producing fire by friction with the Hau wood, Hibiscus tiliaceus L. These two rubbing sticks were called 'aunaki.

Olonā — *Touchardia latifolia* Gaudich. An urticaceous shrub, the bark of which furnished an exceedingly strong fiber which was used in fish lines and formed the basic material of the famous feather cloaks. Each feather was tied on with **olonā** fibre. The plant is dioecious and grows in very wet regions only.

[Olopua] — [Although Rock listed olopua as an alternate name for the native tree *Nestegis sandwicensis* (A. Gray) O. Deg. & L.A.S. Johnson, his list did not include an entry for Olopua. See Pua.]

Olopu — *Viola chamissonis* var. *pubescens* [No such species has been published. This is likely to be *Viola chamissoniana* Ging. in Wagner *et al.* (1999).]. A shrubby pubescent leaved violet of the dry districts of Kaua'i; flowers white.

Olua — *Dryopteris punctata* (Thunb.) C. Chr. [*Hypolepis hawaiiensis* Brownsey in Palmer (2003)]. A fern.

Oni — Name of the rhizome of *Zingiber zerumbet* (L.) Roscoe ex Sm. The common ginger — **Awapuhi**. [Pukui and Elbert (1986) do not list **oni** as associated with *Zingiber* in any way.]

'Opeha — *Elaphoglossum gorgoneum* (Kaulf.) Brack. [*Elaphoglossum aemulum* (Kaulf.) Brack. in Palmer (2003).]. A fern with entire fertile and sterile fronds; epiphytic.

'Opiuma — *Pithecellobium dulce* (Roxb.) Benth. An introduced leguminous tree. Native of the West Indies.

Ōpuhe — *Urera sandwicensis* Wedd. [*Urera glabra* (Hook. & Arnott) Wedd. in Wagner *et al.* (1999)]. An urticaceous tree with large leaves and yellow berries borne in large clusters. The bark is very fibrous and was used for rope.

'Ōpuhi — Zingiber zerumbet L. See Awapuhi.

'Owāli'i ['Oāli'i in Pukui and Elbert (1986)] — Asplenium trichomanes L. A fern.

'Owāli'i [**'Ōali** in Pukui and Elbert (1986)] — *Pteris cretica* L. A dry district fern.

F

Pa'i — Polypodium hymenophylloides Kaulf. [Adenophorus hymenophylloides (Kaulf.) Hook. & Grev. in Palmer (2003)]. The smallest epiphytic fern in Hawai'i.

Pa'i — *Pteridium aquilinum* (L.) Kuhn. The common brake or eagle fern.

Paihi — See 'Ōhi'a hā, Syzygium sandwicensis (A. Gray) Nied.

Pa'iniu — *Astelia veratroides* Gaudich. [*A. menziesii* Sm. in Wagner *et al.* (1999)]. A liliaceous plant with silvery sword-like leaves, and spikes with yellow fruits found on all the islands usually between 3000-4500 feet elevation.

Paka — *Nicotiana tabacum* L. The tobacco, and *N. glauca* Graham. Another introduced species with long tubular flowers.

Pakaha — Sphacele hastata A. Gray [Lepechinia hastata (A. Gray) Epling in Wagner et al. (1999)]. A labiate subherbaceous plant with magenta red flowers arranged in spikes. The plant has a strong mouth-like odor. It forms a belt around Mt. Haleakalā on Maui at 3000-5000 feet on Haleakalā Ranch.



Figure 11. Pua maka nui (Hillebrandia sandwicensis Oliv.). Photo by G.D. Carr

Pākahakaha — *Polypodium lineare* Thunb. [*Lepisorus thunbergianus* (Kaulf.) Ching in Palmer (2003)]. A common epiphytic fern.

‡ Pakai — Chenopodium urbicum L. [Amaranthus dubius Mart. ex Thell. in Wagner et al. (1999); Chenopodium urbicum not reported from Hawaii.]. A common weed.

‡ Pakapakai — Euxolus viridis (L.) Moq. [Amaranthus viridis L. in Wagner et al. (1999)]. A common weed.

Pala — *Marattia douglasii* Baker. The mule hoof-fern. The fleshy auricles are edible, they are baked in hot ashes.

Pala'ā — *Odontosoria chinensis* (L.) J. Sm. [*Sphenomeris chinensis* (L.) Maxon in Palmer (2003)]. A lowland fern.

Pala'e [Pukui and Elbert (1986) lists pala'e as a short form of pa'ū o Pala'e, an alternate name for pala'ā.] — See Uini.

Palai hihi — *Trichomanes davallioides* Gaudich. [*Vandenboschia davallioides* (Gaudich.) Copel. in Palmer (2003)]. A filmy fern.

Palai hinahina — *Hymenophylum lanceolatum* Hook. & Arn. [*Sphaerocionium lanceolatum* (Hook. & Arn.) Copel. in Palmer (2003)]. A filmy fern.

Palai lā'au — *Polypodium adenophorus* [non Hook. & Arn. *Adenophorus periens* I.E. Bishop in Palmer (2003)]. An epiphytic fern with sinuous fronds.

Palai lau li'i — *Hymenophyllum obtusum* Hook. & Arn. [*Sphaerocionium obtusum* (Hook & Arn.) Copel. in Palmer (2003)]. A small epiphytic filmy fern.

‡ Palama — Eugenia jambolana Lam. [Syzygium cumini (L.) Skeels in Wagner et al. (1999)]. The Javanese plum. [Listed in Pukui and Elbert (1986) as a Hawaiianization of "plum".]

Palani — See Kō.

Palapalai — *Microlepia strigosa* (Thunb.) C. Presl. A common fern of the lower forest zone, used in **lei** and decorations.

Palapalai 'aumakua — Dryopteris crinalis C. Chr. A fern.

Palapalai lau li'i — *Diellia pumilla* Brack. [*Diellia erecta* Brack. *forma pumila* (Brack.) W.H. Wagner in Palmer (2003)]. A very rare fern of the lower forest zone, used in **lei** and decorations.

Palapalai o Kamapua'a [Palapalai a Kamapua'a in Pukui and Elbert (1986)] — *Dryopteris globulifera* Kuntze [*Amauropelta globulifera* (Kuntze) Holttum in Palmer (2003)] A fern, the **Palapalai** of Kamapua'a, a god, half pig, half man.

‡ Pālau uhi [In Pukui and Elbert (1986), **pālau** is a Maui term for yam, but the term **pālau uhi** is not listed.] — *Dioscorea bulbifera* L. See **Hoi**.

Pāmakani mahu — *Phyllanthus sandwicensis* Müll. Arg. A dry district euphorbiaceous shrub with distichous leaves. **Pāmakani** — See **Pāmakani** mahu.

Pāmakani — Senecio sandvicensis Less. A now extinct composite, only collected by Chamisso.

Pāmakani — *Viola robusta* Hillebr. [*Viola lanaiensis* W. Becker and *V. wailenalenae* (Rock) Skottsb. in Wagner *et al.* (1999)] and *Viola chamissoniana* Ging. The shrubby endemic violets called **Pāmakani** on Moloka'i.

‡ **Pāmakani** — An introduced composite. *Eupatorium macrophyllum* Spreng. [*Ageratina adenophora* (Spreng.) R.M. King & H. Rob. in Wagner *et al.* (1999)]. A pest, the leaves of which resemble those of the shrubby violets called **Pāmakani**.

Pāmoho — *Asplenium resectum* Sw. [*Asplenium excisum* C. Presl in Palmer (2003)]. A fern.

Pāmoho — Nephrolepis exaltata (L.) Schott. See Ni'ani'au.

Pāmoho — See 'Ōkupukupu.

Pānaunau — Lobelia yuccoides Hillebr., a true lobelia with long flowering spikes and blue flowers, found in the dry districts of Kaua'i and in the Wai'anae Mountains, of O'ahu; the leaves are linear, and whitish beneath.

Panini — *Opuntia megacantha* Salm-Dyck. [*Opuntia ficus-indica* (L.) Mill. in Wagner *et al.* (1999)]. The common cactus.

Panunu kuahiwi — *Sicyos cucumerinus* A. Gray. A cucurbitaceous vine.

Papa'a — See Kō.

Papa hekili — *Pittosporum acuminatum* H. Mann. A tree peculiar to Kaua'i, the flowers are white and fragrant and are borne on long peduncles.

Pāpala — Charpentiera obovata Gaudich., an amaranthaceous tree with soft, light wood, which was used in fireworks at night; the dry logs were lighted and thrown over the Pali at Hā'ena, Kaua'i, the wind carrying it out to sea. It is common on all the islands.

Pāpala — Calpidia excelsa (Blume) Heimerl [Pisonia umbellifera (G. Forster) Seem. in Wagner et al. (1999)], a very soft wooded tree of the lower forests, leaves dark green dull, the fruits are cylindrical and very viscous.

Pāpala kēpau — Calpidia brunonina (Endl.) Heimerl [*Pisonia brunoniana* Endl. in Wagner *et al.* (1999)], a small tree, with large panicles and very sticky cylindrical fruits which were used as bird lime in the catching of birds for their feathers. It occurs on all the islands but is less common than the foregoing.

Papa'oi — Polystichum lobatum (Huds.) C. Presl [Polystichum hillebrandii Carruth. in Palmer (2003)], a fern.

Pāpapa — *Dolichos lablab* L. [*Lablab purpureus* (L.) Sweet in Wagner *et al.* (1999)], a leguminous vine with white and purple flowers, cultivated for its beans.

Papipi — See Panini.

Pa'ū o Hi'iaka — *Jacquemontia sandwicensis* A. Gray, a small blue-flowered morning glory found on sandy beaches. The name **Pa'ū** (riding skirt) of Hi'iaka — sister of the fire goddess Pele.

Pau o palae — Vigna marina (Burm.) Merr. See Nanea.

Pauuoa [Pauoa in Pukui and Elbert (1986)]— *Dryopteris squamigera* (Hook. & Arn. Kuntze [*Ctenitis squamigera* (Hook. & Arn.) Copel. in Palmer (2003)], a fern.

Pāwale — *Rumex giganteus* Aiton, a subherbaceous plant with long, scandent or climbing stems and large, paniculate, bright red inflorescences, found up to 10,000 feet elevation on Hawai'i.

Peahi — *Polypodium spectrum* Kaulf. [*Microsorum spectrum* (Kaulf.) Copel. in Palmer (2003)]. See **Laua'e**.

Pia — *Tacca pinnatifida* J.R. Forst. & G. Forst. [*Tacca leontopetaloides* (L.) Kuntze in Wagner *et al.* (1999)], a plant cultivated for its starchy, tuberous roots.

Pi'ia [This word is not attributed to any plant in Pukui and Elbert (1986).] — *Dioscorea pentaphylla* L., a yam with digitally divided leaves and underground tubers. Grows in the lower forest zone.

Pi'ipi'i — Chrysopogon aciculatus (Retz.) Trin., a grass.

Pi'ipi'i lau manamana — Asplenium pseudofalcatum Hillebr. [Asplenium lobulatum Mett. in Palmer (2003)], a pinnate-leaved fern.

Pili — Andropogon contortus L. [Heteropogon contortus (L.) P. Beauv. ex Roem. & Schult. in Wagner et al. (1999)], the **Pili** grass which was employed in the construction of grass houses; it covers the dry leeward slopes of the islands to near the sea.

Pili kai — *Argyreia tiliaefolia* [sensu Hillebr., non Wight *Stictocardia tiliifolia* (Desr.) Hallier f. in Wagner et al. (1999)], a morning glory found inland, the flowers pinkish red, common on the lee side of Moloka'i, especially at Mapolehu [Mapulehu].

Pilo — Coprosma spp. Rubiaceous trees of the middle and upper forest zones, up to an elevation of 8000 feet. Berries orange to brick-red; seeds always two.

Pilo — Kadua cf. *laxiflora* H. Mann [Hedyotis mannii Fosberg in Wagner et al. (1999)]. A rubiaceous, scandent shrub.

Pilo kea — Platydesma campanulata H. Mann [Both P. remyi (Sherff) Degener, I Degener, Sherff & B. Stone and

P. spathulata (A Gray) B. Stone in Wagner *et al.* (1999)], a rutaceous shrub or small tree found on all the islands. The name **Pilo kea** is used on Kaua'i only.

Pilo 'ula — *Pelea kavaiensis* H. Mann, a robust, small, rutaceous tree peculiar to the high plateaus of Kaua'i. See **Alani**.

Pipi — *Psilotum triquetrum* Sw. [*Psilotum nudum* (I.) P. Beauv. in Palmer (2003)], a fern ally, growing terrestrially or epiphytically on branching tree trunks. See **Moa nahelehele**.

Pipi wai — See Kohekohe.

‡ Piohia [Pi'o hi'a in Pukui and Elbert (1986)] — See Kanawao ke'oke'o.

Poe — *Portulaca sclerocarpa* A. Gray, a fleshy plant of the dry regions.

Pohā — *Physalis peruviana* L., the introduced "Cape Gooseberry" found wild in the uplands of Hawai'i in **Naio** and **Koa** forests.

‡ Pohapoha — See Kanawao keʻokeʻo. [In Pukui and Elbert (1986) pohāpohā is not attributed to *Cyrtandra*.]

Pohe hiwa — *Viola kauaiensis* A. Gray, a creeping violet with blue flowers, peculiar to the bogs of Kaua'i.

Pohepohe — *Hydrocotyl verticillata* Thunb., a common water weed with peltate leaves.

Pohepohe wai — See Pohepohe.

Pohinahina — *Heliotropium anomalum* Hook. & Arn. See **Hinahina**.

Pohole — *Diplazium arnottii* Brack. [Common name also applied to *Diplazium sandwichianum* (C. Presl) Diels in Palmer (2003)]. A fern eaten as salad with shrimp; grows in the lower forest zone. [Pukui and Elbert (1986) indicates pohole is a Maui name for **hōʻiʻo**.]

Pōhuehue — *Ipomoea pes-caprae* (L.) R. Br., the common goat foot morning glory, a runner with purplish flowers found on the sandy beaches and extending to the edge of the water.

Polinalina — Vitex trifolia L. var. unifoliata Schauer [Vitex rotundifolia L.f. in Wagner et al. (1999)]. See Kolokolo kahakai.

Pololei — *Ophioglossum concinnum* Brack., a fern ally found in wet grass, but rare [Not fern ally, but true fern. Habitat often very dry.].

Pōlolo — Cuscuta sandwichiana Choisy, the Hawaiian dodder, resembling **Kauna'oa**, but much smaller in size, found usually near the sea, parasitic on **Pōhuehue**.

Po'olā — Claoxylon sandwicense Müll. Arg., a euphorbiaceous small tree, not uncommon on Maui and Hawai'i. In Hawai'i specimens the leaves turn steel blue on drying [Claoxylon is also found on Kaua'i and O'ahu].

Po'olā nui — *Coreopsis cosmoides* A. Gray [*Bidens cosmoides* (A. Gray) Sherff in Wagner *et al.* (1999)], a very large flowered shrub, with drooping branches, peculiar to the middle forest zone of Kaua'i.

Poniu — See Inalua.

Pōpolo — *Phytolacca brachystachys* Moq., the American poke-weed, found in the mountains of all the islands; native.

Pōpolo — Solanum aculeatissimum Jacq. [Solanum capsicoides All. in Wagner et al. (1999)], a spiny shrub with large scarlet (dry) fruits used as **lei**; common in the lower forest zone.

Pōpolo — Solanum nodiflorum Jacq. [Solanum americanum Mill. in Wagner et al. (1999)]. See **Olohua**.

Pōpolo — Cyanea solanacea Hillebr., a lobeliaceous plant peculiar to Moloka'i (3000 feet), called **Pōpolo** on account of the spiny stems and *Solanum*-like leaves.

Pōpolo 'ai a ke akua — *Solanum kauaiense* Hillebr., a shrub, with large, tomentose leaves, and potato-like flowers; peculiar to the forests of Kaua'i. "The **Pōpolo** eaten by the gods."

Pōpolo ku ma'i — *Solanum incompletum* Britton & Rose var. *mauiense* Hillebr. [*Solanum incomplettum* Dunal in Wagner *et al.* (1999)], a shrub with rambling branches, found on the southern slopes of Mt. Haleakalā, Maui.

Pōpolo ku ma'i — Phytolacca brachystachys Moq. See Pōpolo.

Pua — Osmanthus sandwicensis (A. Gray) Knobl. [Nestegis sandwicensis (A. Gray) Degener, I. Degener & L. Jonshon in Wagner et al. (1999)], the Hawaiian **Pua** or **Olopua**, the native olive. Large trees may be found on Hawai'i. It is common on all the islands, but is restricted to the drier regions. The wood is hard and beautifully marked.

Pua'ainaka — *Stenogyne rotundifolia* A. Gray, a climbing labiate with small, purple flowers and orbicular crenate leaves; it is found on the highlands of Hawai'i.

Pua'akuhinia — *Astelia menziesiana* Sm. [Pukui and Elbert (1986) list **pua'akuhinia** as another name of the **pākahakaha** fern]. See **Pahiwa** or **Wewehiwa**.

Pua ala — Brighamia insignis A. Gray. See Alula.

Pū'ahanui — Broussaisia arguta Gaudich. See Kanawau.

Pua hekili — *Lysimachia hillebrandii* Hook.f., a primulaceous shrub with purplish, drooping flowers, found especially common on Moloka'i.

Pua kala — Argemone mexicana L. [Argemone glauca Pope in Wagner et al. (1999)], the Mexican poppy [now considered a Hawaiian endemic species] common on the dry lowlands of the lee sides of all the islands. The yellow juice is a remedy for toothache.

Puakauhi — *Canavalia galeata* (Gaudich.) Vogel, a leguminous vine with purple flowers, found in the lower forest zone usually on the lee side of most of the islands.

‡ Puakawau — [No such entry in Pukui and Elbert (1986), though it is tempting to link the words pua (flower) with kāwa'u, a Maui name for *Styphelia*.] See Pukeawe.

Puakeawe — [No such entry in Pukui and Elbert (1986)] Styphelia tameiameiae F. Muell. See **Pukeawe**.

Pualele — Sonchus oleraceus L., a composite known as the milkweed.

Pua aloalo — Hibiscus kokio Hillebr. ex Wawra. See Koki'o 'ula.

Pua maka nui — *Hillebrandia sandwicensis* Oliv., the Hawaiian mountain begonia [See 'Aka'aka'awa].

Pua mana — Erigeron canadense L. [Conyza canadensis (L.) Cronq. in Wagner et al. (1999)]. See **Ilioha**.

Pua nānā honua — *Solanum verbascifolium* L. [cf. Solanum mauritianum Scop. in Wagner et al. (1999)], an apparently introduced tree found in the mountains of Waiahole-Waikāne, described erroneously as *Solanum carterianum* Rock.

Pua nānā honua — *Datura suaveolens* Humb. & Bonpl. ex Willd. [*Brugmansia suaveolens* (Humb. & Bonpl. ex Willd.) Bercht. & J. Presl]. The so-called angel's trumpet; cultivated only, but apparently wild along the Glenwood Volcano road, Hawai'i.

Pua'ole — A flowerless sugar cane *Saccharum officinarum* L.

Pua pilipili — *Desmodium uncinatum* [non (Jacq.) DC. *Desmodium sandwicense* E. Mey. in Wagner *et al.* (1999)], the Spanish clover. See **Kikania pilipili**.

Pua pilo — Capparis sandwichiana DC. See Maiapilo.

Puapua moa — Ophioglossum pendulum L. [Ophioderma pendulum (L.) C. Presl in Palmer (2003)], a fern ally, known as adder's tongue, found epiphytically in rain forest. [Although Rock refers to the plant as a fern ally, the Ophioglossaceae is considered a true fern family.]

Pu'e — Lobelia kauaensis (A. Gray) A. Heller, a handsome Lobelia with terminal spikes of purplish to cream colored flowers. Found on the summit of Wai'ale'ale, Kaua'i, and the bogs of the high plateau of that island.

Pūhala — Pandanus tectorius S. Parkinson ex Z., the **Hala** or Pandanus common near the coasts, four varieties are known. See **Hala**. [In Pukui and Elbert (1986) the term **pūhala** refers specifically to a **hala** tree, with its clustered structure (**pū**).]

Pukamole — Jussiaea villosa Lam. [Ludwigia octovalvis (Jacq.) Raven in Wagner et al. (1999)], a water weed with yellow flowers, found in lowlands and lower forest zone clearings near streams.

Pukeawe — [**Pūkiawe**, Pukui and Elbert (1986) do not include **pukeawe** as an accepted variant.] *Styphelia tameiameiae* F. Muell. See 'A'ali'i mahu.

Pūlihilihi — Vigna marina (Burm.) Merr. See Nanea.

Pu'ukoa — *Rhynchospora laxa* R. Br. [*Rhynchospora rugosa* (Vahl) Gale in Wagner *et al.* (1999)], a rush.

Т

Taro — Colocasia antiquorum Schott [Colocasia esculenta (L.) Schott in Wagner et al. (1999)], **Kalo**.

Ti — Cordyline terminalis (L.) Kunth [Cordyline fruticosa (L.) A. Chev. in Wagner et al. (1999)], a liliaceous plant with large, oblong leaves used in wrapping fish and in cooking. The root furnishes an alcohol called **Okolehao**.

Tō — See Kō.

Tou — See Kou.

Tutui — See Kukui.

U

Uahi a Pele [Uaheapele in manuscript] — *Pelea barbig-era* (A. Gray) Hillebr., a rutaceous, small tree with grayish,

convex leaves, called the "smoke (**uahi**) of Pele" on account of the grayish appearance of this tree in the forest of the lee side of Kaua'i, to which island it is peculiar.

Uala — *Ipomoea batatas* (L.) Lam., the sweet potato.

Uala — A variety of sugar cane *Saccharum officinarum*

Uhaloa — See **Hi'aloa**, *Waltheria americana* L. [*Waltheria indica L.* in Wagner *et al.* (1999)].

Uhauhako [**Uhaohako** in manuscript] — *Rumex giganteus* Aiton, only known on Moloka'i by that name. See **Pāwale**.

Uhi — Smilax sandwicensis Kunth [Smilax melastomifolia Sm. in Wagner et al. (1999)], a vine with yellowish white, edible, but insipid fruits, common on all the islands. See **Ulehihi**.

Uhiuhi — *Mezoneuron kauaiense* Hillebr. [*Caesalpinea kavaiensis* H. Mann in Wagner *et al.* (1999)], a leguminous tree with reddish flowers and broad, pinkish, papery pods winged at the upper suture; the wood is black and very hard. It was mainly employed as tapa beaters and for [an] instrument called **Lā'au melo melo**, which was employed in fishing. See Rock (1913b). It is very rare and can now only be found in North Kona, Hawai'i, between Huehue and Pu'u Wa'awa'a. [Populations of *C. kavaiensis* occur on Kaua'i, O'ahu, Maui, and in locations on Hawai'i other than North Kona.]

Uhiuhi — Cassia gaudichaudii Hook. & Arn., a small, leguminous shrub with greenish flowers; common in the dry districts of Moloka'i, Lāna'i, Maui, Hawai'i, and probably O'ahu and Kaua'i.

Uiui or Palai [Palae in manuscript] — See Neke.

Uiwi — See Awiwi.

Uki — *Dianella odorata* Blume [*Dianella sandwicensis* Hook & Arn. in Wagner *et al.* (1999)], a liliaceous shrub with purplish blue berries; common on all the islands.

Ulahihi — See Kuahulu.

Ulehihi — See Uhi.

'Ulei — Osteomeles anthyllidifolia (Sm.) Lindl., a prostrate, rosaceous shrub, or with thick, ascending, flexible branches; flowers white like those of a small wild rose, very fragrant, berries sweet but dry, whitish, glaucous, and edible. It is found in the dry regions of all the islands. It becomes an erect shrub in Kona, Hawai'i [achieving same form in Pōhakuloa Saddle region.].



Figure 12. Uhiuhi (Caesalpinea kavaiensis H. Mann). Photo by G.D. Carr.

Uleule hala — The aerial roots of *Pandanus tectorius* S. Parkinson ex Z., the **Hala** or **Puhala**.

Ulihi — *Phyllostegia* sp? An unidentified labiate found on the high plateau of Kaua'i.

Ulu and **Ulukaka** — *Artocarpus communis* J.R. Forst. & G. Forst. [*Artocarpus altilis* (Parkinson) Fosberg], the common breadfruit.

Uluhe — *Gleichenia linearis* (Burm. f.) C.B. Clarke [*Dicranopteris linearis* (Burm. f.) Underw. in Palmer (2003)], the staghorn fern, a fern covering clearings in the forest and difficult to penetrate.

Uluhe lau nui — *Gleichenia longissima* Blume [*Diplopterygium pinnatum* (Kunze) Nakai in Palmer (2003)], a fern related to the foregoing, but with larger fronds.

Uluhi — See **Uluhe** [**Uluhi** not listed in Pukui and Elbert (1986)].

Ulu nahele — *Cyrtandra knudsenii* Rock, a gesneriaceous shrub peculiar to Kauaʻi.

Ulupua — *Osmanthus sandwicensis* (A. Gray) Knobl. [*Nestegis sandwicensis* (A. Gray) Degener, I. Degener & L. Johnson in Wagner *et al.* (1999)]. See **Olopua**.

Umealu — *Cenchrus echinatus* L., the common burrgrass of the lowlands, an excellent fodder.

Umeke pohue — *Curcurbita maxima* Duchesne ex Lam.

Umeke — After the gourd of *Curcurbita maxima* Duchesne ex Lam. is cleaned.

Unuhi — See **Uluhe** [**Unuhi** not associated with any plant in Pukui and Elbert (1986)].

'U'ulei - See 'Ulei.

Uwiuwi — *Erigeron canadense* L. [*Conyza canadensis* (L.) Cronq. in Wagner *et al.* (1999)]. See '**Ilioha**.

W

Wāhane — Seeds of the various species of *Pritchardia*. See **Hāwane**.

Wahine noho mauna — *Polypodium tamariscinus* Kaulf. [Adenophorus tamariscinus (Kaulf.) Hook. & Grev. in Palmer (2003)], a small, epiphytic, graceful fern called "mistress of the mountain."

Waiawī — *Psidium pomiferum* L. [*Psidium cattleianum* Sabine in Wagner *et al.* (1999)], the apple-guava, cultivated and wild as an escape from cultivation.

Wai maka nui [Waineakamui in manuscript] — Dryopteris keraudreniana (Gaudich.) C. Chr. [Pseudophegopteris keraudreniana (Gaudich.) Holttum in Palmer (2003)], a fern.

Waimea — Perrottetia sandwicensis A. Gray, Waimea is a Maui name. See Olomea.

Waimea — Boehmeria stipularis Wedd. [Boehmeria grandis (Hook & Arn.) A. Heller in Wagner et al. (1999)], an urticaceous shrub of the lower forest zone. See Akolea.

Waimea — Pipturus sp. an undescribed species of Pipturus, with thick, rugose leaves and red venation, peculiar to Kaua'i.

Walahe'e — Plectronia odorata (G. Forster) Benth. & J.D. Hook. ex Hillebr. [Canthium odoratum (G. Forster) Seem. in Wagner et al. (1999)]. See Alahe'e.

Wanini — Eurya sandwicensis A. Gray. See Anini.

Wauke — Broussonetia papyrifera (L.) L'Hér. ex Vent.,



Figure 13. Wiliwili (Erythrina sandwicensis Degener). A. Kaho`olawe. B. Kanaio, Maui. Photos by Forest & Kim Starr.

Wāwae 'iole — Lycopodium cernuum L. [Lycopodiella cernua (L.) Pic. Serm. in Palmer (2003).]. See **Huhulu** a 'iole.

Wāwae 'iole — *Lycopodium pachystachyon* Spring [*Huperzia phyl*lantha (Hook. & Arn.) Holub in Palmer (2003)], a fern ally growing epiphytically on trees in the rain forest. The strobus reminds of rat's feet, hence the name.

Weleweka — [cf. Celosia argentea L. var cristata (L.) Kuntze] Cockscomb, an introduced amaranthaceous plant. [Pukui and Elbert (1986) list lepe a moa as the Hawaiian name for cockscomb. The name weleweka is a Hawaiianization of the English word "velvet," and according to Pukui and Elbert (1986) refers to a species of Coleus.]

Wiliwili — *Erythrina monosperma* Gaud. [*E. sandwicensis* Degener in Wagner *et al.* (1999)], formerly a common tree

belonging to the Leguminosae [Fabaceae], but now found in numbers only in Kona and Kaʻū Hawaiʻi, also Molokaʻi, Maui and Lānaʻi [Wagner *et al.* (1999) list Kauaʻi, Oʻahu, and Kahoʻolawe also]. The red seeds were strung into **lei**. There are red and yellowish-white flowering varieties. The very soft and light wood furnished the outriggers for the native canoes.

Wiwili — Adenanthera pavonina L., a leguminous tree, introduced from India, the false **Wiliwili**, so called on account of the red seeds which resemble those of *Erythrina monosperma* Gaud. [*E. sandwicensis* Degener in Wagner *et al.* (1999)].

Wi — Spondias dulcis Parkinson, or **Wi** apple, an introduced anacardiaceous tree.