

**The vegetation and flora of Lakeba, Nayau and Aiwa Islands,
Central Lau Group, Fiji**

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Abstract— We describe terrestrial vegetation communities and compile an annotated checklist of vascular plant species found on the islands of Lakeba (56 km²), Aiwa (1.2 km²) and Nayau (22 km²) in the central Lau Group, Fiji, based on all previous published sources and our own observations and collections published here for the first time. Vegetation communities include coastal strand, mangrove, freshwater wetlands, grassland, fernland and scrub, lowland forest, and cultural vegetation. In 1999–2001, we collected plant specimens and made observations comprising 92, 76 and 279 new island records for Lakeba, Aiwa and Nayau, respectively (73, 21 and 102 of them collected). When combined with all other known vascular plants for these islands, the number of species documented to date is 337 for Lakeba, 85 for Aiwa and 295 for Nayau. A total of 449 species have now been recorded from these three islands of Central Lau. Many (161, 36%) of these are introduced. Among these, 16% are believed to be aboriginal introductions, while the majority (84%) are species introduced in historic times. About two-thirds of the species, 288 (64%) are indigenous to the Lau Group, but only 41 (14% of the indigenous species) are endemic to Fiji. Fourteen taxa, all of them endemic to Fiji or the western Polynesian or eastern Melanesian region, have been documented to occur in the Lau group by our recent surveys.

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Introduction

The unique plants and animals of the Pacific islands have inspired natural scientists from the time of Charles Darwin to the present era of biogeographical research stimulated by MacArthur and Wilson (1967), and constitute a biological and cultural legacy for its people (Thaman 1994). Fiji is considered a global biodiversity hotspot on the basis of high species endemism (Orme et al. 2005). The Lau Group in eastern Fiji is located between the larger Fijian islands 100 to 200 km to the west and the Tongan islands 320 km to the east. Both regions are also strongly linked in the cultural history of Lau (O'Day et al. 2004). Lau comprises 57 young (< 10 million years) islands, totaling 376 km² of land, spread across almost 4° of latitude (17° to 21° South), east of the Koro Sea (Figure 1). Thirty-five of them are less than 1 km² in size. Most of the islands, even those < 10 km from each other, are separated by deep water (> 100 m) and would have remained separate islands during Pleistocene low sea-level stands (Ash 1992, Nunn 1994). Although the biogeography (Raven & Axelrod 1972, Keast 1996), vascular flora (Smith 1979-1996, Heads 2006) and plant communities (summarized in Mueller-Dombois & Fosberg 1998) are well-studied for the larger islands of western Fiji, the floristics and ecology of terrestrial vegetation in the eastern Lau group are largely unknown. Garnock-Jones (1978) described the vegetation of two larger islands in Lau, Lakeba and Vanua Balavu, and Latham and Brookfield (1983) mapped land use, land forms and soils, and described vegetation types on Lakeba and several other small islands in Fiji, but comprehensive floristic studies of plant communities anywhere else in Lau are lacking.

Often biogeographical inferences are based on species lists for islands (Kohn & Walsh 1994, Whittaker 1998, Mayr & Diamond 2001) but complete, up to date and accurate plant distribution data are lacking for many regions including Lau. Further, species lists form the basis of contemporary conservation planning programs in which species are key elements of biodiversity (Margules & Pressey 2000). Both basic research and applied conservation are supported by accurate species distribution information (e.g., Paulay 2003, Lobban & Tsuda 2003). In this paper we focus on three islands in central Lau: Lakeba, Aiwa and Nayau. We present an annotated checklist of vascular plant species based on all published accounts and collections and our observations and collections from 1999-2001. This is prefaced by a brief description of the major terrestrial plant communities found on the three islands.

Study Area

The three islands studied are within sight of each other (Nayau is 28 km and Aiwa is 12 km from Lakeba), but differ in their size, extent and pattern of human impacts, and geomorphology. Lakeba (18° 14' S, 178° 48' W; 56 km²) is the provincial capital of Lau and has eight villages with a current human population of over 2000. The island has an andesitic volcanic center of Miocene age (Ladd

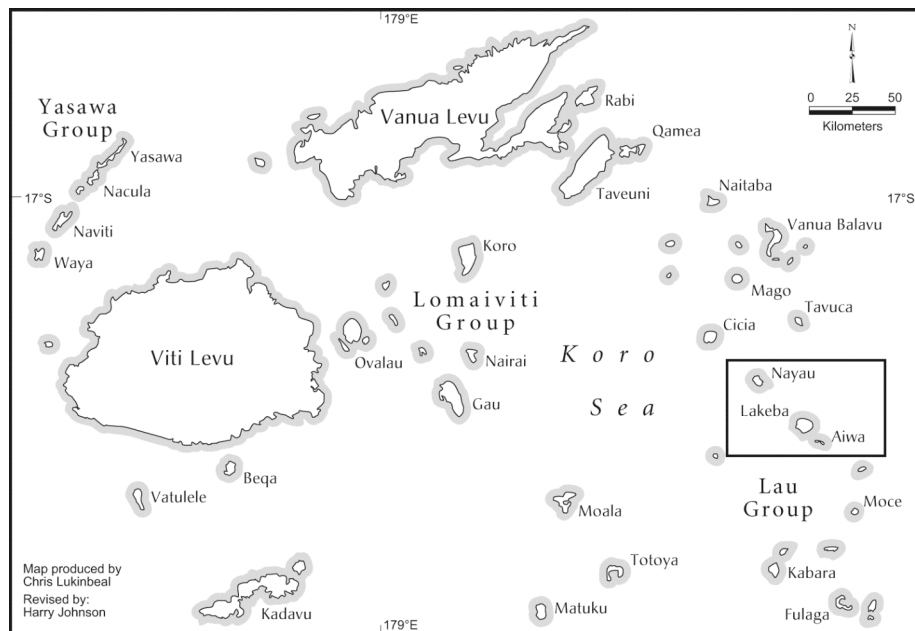


Figure 1. Map of study area showing location of Lakeba, Aiwa and Nayau in the Lau Island Group, Fiji.

& Hoffmeister 1945) that rises to over 200 m and is ringed by eroded outcrops of karstic Futuna limestone that covers about 4% of the island (Latham & Brookfield 1983). Nunn (1995, 1996, 1998) described the tectonic setting of Lakeba and the geology of the exposed carbonate rocks. The surficial geology (mapped by Mineral Resources Department, Best 1984), and corresponding soils (Latham & Brookfield 1983), are the primary factors controlling land use and therefore the current distribution of vegetation types on Lakeba. Deforestation for subsistence agriculture probably commenced soon after people first arrived in Lau over 2500 years ago (Best 1984). As a result very little forest remains as it has been replaced by “*talasiga*” (a fire-degraded herbaceous and shrubby community dominated by ferns and grasses, see below) on the volcanic uplands and, in recent decades, commercial pine plantation forestry (Garnock-Jones 1978, Latham & Brookfield 1983). We estimate from aerial photography that remnant rain forest covers less than 5 km² of Lakeba on limestone outcroppings near the coast and in small patches in ravines on the volcanic hillsides. This is similar to the estimate of 5.8 km² given by Latham and Brookfield (1983).

Aiwa and Aiwa Lailai (18° 19' S, 178° 42' W; total land area 1.2 km²) comprise a pair of low (51 and 40 m maximum elevation) raised limestone islets separated by a narrow strait (ca. 500 m). They have been uninhabited in historic times, and are 100% forested. While the forest understory is very disturbed by goats, which does not bode well for forest regeneration (Coblentz 1978), the

forest canopy appeared to be a low-stature but diverse late-successional coastal forest, relatively undisturbed by contemporary human activity.

As described in O'Day et al. (2004), Nayau (17° 58' S, 179° 03' W; 22 km² in area) is a composite of exposed volcanics and weathered limestone (Ladd & Hoffmeister 1945). Nayau has the “wedding cake” profile of many raised limestone islands, and its central plateau forms a shallow depression (about 100 m elevation) covered by degraded volcanic soils, which are cultivated. This plateau is surrounded by a discontinuous ring of elevated reefal limestone (maximum elevation ca. 160 m) and most late-successional forest on Nayau is found on this limestone escarpment. Coastal flats and reefal sands fringe the island. There are three villages on Nayau.

Terrestrial Natural and Seminal Vegetation Communities

Garnock-Jones (1978) provided a thorough and useful description of terrestrial plant communities of Lakeba, and, although qualitative, it still stands as one of the few published studies of vegetation on the smaller islands of Fiji (Ghazanfar et al. 2001). Subsequently, a comprehensive volume (Mueller-Dombois & Fosberg 1998) summarized vegetation studies throughout the tropical Pacific, although it did not propose a unified vegetation classification system for the region. We follow Mueller-Dombois & Fosberg's (1998) definition of principal vegetation types in Fiji, with modifications discussed by Garnock-Jones (1978) and Latham & Brookfield (1983) for smaller islands, in describing the plant communities and their distribution among the three islands. Further, we compare their composition to similar vegetation found in the southwestern Pacific.

COASTAL STRAND

Littoral Scrub. Referred to as “littoral strand” by Whistler (1992) in Tonga and Samoa, this herbaceous or shrubby vegetation is found between the littoral forest and the sea on all three islands. Herbaceous species include *Ipomoea* spp., *Vigna marina* and *Paspalum vaginatum*. Shrubs include *Scaevola taccada* and *Pandanus tectorius*.

Littoral Forest. As found throughout the Pacific islands, littoral forest forms a narrow zone on sandy or rocky shores and is dominated by tree species whose seeds are dispersed by seawater. In central Lau this vegetation is characterized by *Barringtonia asiatica*, *Hernandia nymphaeifolia*, *Calophyllum inophyllum*, *Hibiscus tiliaceus*, *Phaleria disperma* and *Terminalia catappa*.

MANGROVE VEGETATION

Mangrove forest is extensive on the eastern coast of Lakeba (7% of the island area according to Latham and Brookfield 1983), where it is dominated by *Bruguiera gymnorhiza* on the landward margin and *Rhizophora stylosa*, *R. mangle* and *R. x selala* on the seaward side.

FRESHWATER WETLAND VEGETATION

Latham & Brookfield (1983) noted that freshwater wetland vegetation occurs in very small areas on Lakeba, and we also observed it on Nayau. There is none on Aiwa. Almost everywhere this vegetation type has been replaced by taro cultivation, especially in the extensive freshwaters swamps in alluvial and colluvial plains and valleys on Lakeba. Where it persists in patches, it is frequently dominated by non-native species such as *Ludwigia octovalvis* and *Mikania micrantha*.

GRASSLAND, FERNLAND AND SCRUB

Latham & Brookfield (1983) estimate that this degraded plant community, referred to as 'talasiga' in Fiji, covers half of the land area of Lakeba. It also dominates the interior plateau of Nayau, but is absent from Aiwa. On Lakeba, several communities have been considered to constitute a successional sequence following disturbance, although native woody vegetation only seems to regenerate on less eroded sites. Garnock-Jones (1978) described this sequence as: a) fernland dominated by *Dicranopteris linearis* and *Pteridium esculentum* with some shrubs and small trees on shallow soils; b) grassland dominated by *Miscanthus floridulus* on deeper colluvium and in valleys; and, c) shrubs succeeding fernland on shallower soils, including *Dodonaea viscosa* and *Pandanus tectorius*. Latham & Brookfield (1983) described the following similar but more finely-divided categories: a) fern thicket; b) mixed fern thicket (*D. linearis* mixed with *M. floridulus*); c) dense fern thicket with some trees; d) mixed fern thicket with some shrubs; and, e) shrubs with *M. floridulus* on steep slopes with shallow soils. We observed forest regenerating under pine plantation in talasiga areas of Lakeba with a diversity of native species 1-6 m tall including *Geissois ternata*, *Leucosyke corymbulosa*, *Geniostoma rupestre*, *Myristica gillespieana*, *Maesa tabacifolia* and *Cyclophyllum barbatum*.

LOWLAND FOREST

Although Mueller-Dombois & Fosberg (1998) considered the forest types described for Lakeba by Garnock-Jones (1978) to be lowland rain forest, they qualified this by noting that they are mesic forest types, transitional between tropical rain forest and (seasonal) dry forest. The climate of the small islands of Lau is transitional between tropical wet and tropical wet seasonal (Richards 1996), with slightly more than 2000 mm annual average precipitation at Tubou on Lakeba. However, average monthly precipitation falls below 100 mm for the three winter months (94, 77 and 86 mm in June, July and August, respectively), and there are large interannual variations, based on records from 1966-1980 (Latham & Brookfield 1983). The forests, however, are dominated by evergreen, not deciduous species. Keppel et al. (2006) and Keppel & Tuiwawa (2007) discuss mesic versus dry tropical forest on the larger islands of Fiji.

Four subtypes of lowland forest can be distinguished:

Coastal forest. Characterized by *Xylosma simulans*, *Pouteria grayana*, *Syzygium richii*, *Diospyros elliptica*, *D. samoensis* and *Pisonia grandis* (Aiwa only), this variant of lowland forest has also been recognized in Tonga (Whistler 1992, Franklin et al. 2005) as transitional between littoral and lowland forest.

Swamp forest. Small areas of sub-coastal swamp forest are described on Lakeba by Latham & Brookfield (1983). None occurs on Aiwa or was observed on Nayau. It is characterized by *Inocarpus fagifer*, an aboriginal introduction (Whistler 2004), and has been called “*Inocarpus* swamp forest” in Tonga (Wiser et al. 2002).

Limestone forest. Closed forest on limestone is found on all three islands. Garnock-Jones (1978) described much of the forest on limestone as mature and undisturbed because the land is unsuitable for agriculture. While the most extensive closed canopy forest does occur on limestone on all islands, we observed variations in forest composition indicative of previous forest clearing or disturbance and we would characterize most of these forests as mid- to late-successional. This is plausible given that on both Nayau and Lakeba human settlements relocated to fortified hilltop locations in the 19th century (Best 1984, O'Day et al. 2004), which may have led to extensive forest clearing on both limestone and volcanic uplands (cf. Bayliss-Smith et al. 2003). Important canopy species include *Melicope cucullata*, *Alphitonia zizyphoides*, *Buchanania vitiensis* and *Dysoxylum tenuiflorum* in early- to mid-successional secondary forest, and *Dysoxylum richii*, *Maniltoa floribunda*, and *Pouteria grayana* in late-successional forest. On Aiwa coastal species are also common, as noted above, and on Nayau some other large species that are important traditional timber trees persist including *Intsia bijuga*, *Manilkara vitiensis* and *Burckella richii*.

Forest on volcanic soils. Remnant late-successional forest on volcanic substrate only persists in some ravines and ridges in upland Lakeba. Volcanic outcrops are covered by agricultural crops and villages on Nayau (no forest remains), and do not occur on Aiwa. Although they do share many species (for example *Barringtonia edulis*, *Grewia crenata*, *Vavaea amicorum*, *Dysoxylum richii*, *Micromelum minutum*, *Alyxia stellata*, *Ficus scabra*, *Alphitonia zizyphoides*, and *Pittosporum arborescens*), the composition of these remnant patches is somewhat different from the forest on limestone. *Geissois ternata* is an indicator species apparently restricted to volcanic substrate.

CULTURAL VEGETATION

Crops (wet and dry), coconut plantations, and, on Lakeba, commercial pine plantations established in the early 1970s, comprise significant land cover on Lakeba (40%) and Nayau, but do not occur on Aiwa.

Methods

In 1999-2001, we collected plant specimens and recorded species on Lakeba, Aiwa and Nayau. These data were used to produce a systematic list of

the known vascular flora for the three islands. Each species entry includes: a) scientific name and author, b) name(s) used on Nayau if known (information gathered by G. Keppel), c) species origin and distribution (“endemic” = endemic to Fiji), d) a brief species and habitat description taken from our field notes, or from the Smith flora (1979-1996), Whistler (1995, 2004), Brownlie (1977), Park & Whistler (2001), or Keppel & Ghazanfar (2006), and, e) the distribution of the species on Lakeba, Nayau and Aiwa. The observers or collectors name is followed by a collection number (if a specimen was collected), and non-vouchered observations for an island are only noted if no published specimen exists. “F & W” with no collection number refers to observations from Lakeba (18-28 Feb 2000) and Aiwa (22-24 Feb 2000) by JF and WAW. “F & K” with no collection number refers to observations from Nayau (October 2001) by JF and GK. Franklin (JF) collections from Lakeba and Aiwa were made with W. A. Whistler. Collections from Nayau were made by both JF and GK. All other information about collections from these islands with or without numbered specimens came from Smith (1979-1996), e.g., Bryan, DA (Department of Agriculture), Tothill, Summerhayes & Hubbard (grasses), Seemann, Harvey, and Garnock-Jones (also recorded in Garnock-Jones 1978). “Latham & Brookfield” refers to species listed for Lakeba by these authors in the 1983 UNESCO report that they edited, but no voucher specimens were reported.

Results and Discussion

After our observations and collections, the total number of species documented is 337 for Lakeba, 85 for Aiwa and 295 for Nayau. A total of 449 species have now been recorded from Central Lau (viz. Lakeba, Nayau, Aiwa and Aiwa Lailai). Many, 161 (36%), of these are introduced. Of these, 16% are believed to be aboriginal introductions, while the majority (84%) are species introduced in historic times. Introduced species listed here include approximately 50 cultivated ornamental or crop plants, some of which naturalize. As cultivated species are not the focus of our study, the list is undoubtedly incomplete. About two-thirds of the species, 288 (64%) are indigenous to the Lau Group, but only 41 (14% of the indigenous species) are endemic to Fiji.

Dicots are the biggest group, comprising 74% of the total (76% of the indigenous, 71% of the introduced) species. They are followed by monocots with 18% (13%, 29%) and ferns with 7% (11%, no introduced species). Gymnosperms consist only of *Pinus caribaea* (Pinaceae), an exotic plantation tree on Lakeba, *Cycas seemannii* (Cycadaceae), observed only in cultivation on Lakeba, and *Podocarpus neriifolius* (Podocarpaceae), moderately common in native forests on Nayau.

All endemic species are dicots, except for *Eragrostis scabrifolia* (Poaceae), the distribution of which is apparently restricted to the Lau and Lomaiviti Groups. Other narrowly distributed endemics found in Central Lau are *Polyalthia laddiana* (Annonaceae), which is only known from limestone

substrates in the Lau Group, southwest Viti Levu and Yanuca Islands (and in cultivation in Tonga), and *Psychotria edentata* (Rubiaceae) and *Homalium pallidum* (Flacourtiaceae), which are endemic to the Lau Group.

A number of other species, endemic to Fiji or the western Polynesian or eastern Melanesian region, have been documented to occur in the Lau group by our recent surveys published here including: *Polyalthia vitiense* (Annonaceae), *Hoya diptera* (Asclepiadaceae), *Diospyros phlebodes* (Ebenaceae), *Elaeocarpus chelonimorphus* (Elaeocarpaceae), *Homalium vitiense* (Flacourtiaceae), *Ficus greenwoodii* (Moraceae), *Syzygium seemannii* (Myrtaceae), *Piper insectifugum* (Piperaceae), *Melochia degeneriana* (Sterculiaceae), *Phaleria pubiflora* (Thymeliaceae), *Celtis harperi* (Ulmaceae), *Pipturus platyphyllus* (Urticaceae), *Faradaya ovalifolia* (Verbenaceae), and *Cayratia seemanniana* (Vitaceae).

Additionally, the following species endemic to Fiji, western Polynesia or eastern Melanesia, and previously only reported from the larger islands of Fiji, were recorded on Lakeba by Latham & Brookfield (1983), but unfortunately voucher specimens were not published: *Cyathocalyx insularis* (Annonaceae), *Canarium vanikoroense* (Burseraceae), *Elaeocarpus storckii* (Elaeocarpaceae), *Glochidion seemannii* (Euphorbiaceae), *Citronella vitiensis* (Icacinaceae), *Barringtonia seaturae* (Lecythidaceae), *Ficus fulvo-pilosa* (Moraceae), *Macropiper timothianum* (Piperaceae) and *Elatostema tenellum* (Urticaceae). Some of these species (e.g., *B. seaturae*) are probably incorrectly identified (their occurrence in Lau is unlikely) but without vouchers this is impossible to verify.

First records in Fiji include *Cerbera odollam* (Apocynaceae), a small coastal tree found in New Caledonia, Tonga and Samoa eastward to the Society Islands, and *Garuga floribunda* (Burseraceae), occurring from the Malay Peninsula to Samoa. In both cases the observations in Lau fill in a gap in their known distribution in the Pacific. Among the species recorded for central Lau, *Cycas seemannii* and *Aglaiia saltatorum* (Meliaceae) are IUCN Red List Vulnerable Species.

The vegetation communities found on the islands of the central Lau group are comparable to those found on similarly-sized islands, insofar as they have been documented, in western Polynesia and eastern Melanesia (Whitmore 1985, Whistler 1992, Franklin et al. 1999, Ghazanfar et al. 2001, Franklin et al. 2005, Webb et al. 2006). The depauperate flora is also typical of relatively small, forested isolated islands in having low endemism and being dominated by woody species. Such islands are vulnerable to invasive species, especially when habitats that were previously not present are created by human activities such as agriculture. Forest clearance and fire produce new habitats and many of these suit herbaceous species and weeds.

Table 1: Taxonomic summary of species status.

Taxon	Indigenous*	Endemic	Aboriginal Introduction	Historic Introduction	TOTAL
Pteridophyta (Ferns & fern allies)	31	-	-	-	31
Gymnosperms (conifers, cycads and related taxa)	2	-	-	1	3
Monocotyledons	36	1	10	36	82
Dicotyledons	219	40	15	99	333
TOTAL	272	33	21	136	449

* = includes endemic species.

Systematic List

Notes: **A** = Aiwa, **L** = Lakeba, **N** = Nayau. F & W refers to observations from Lakeba and Aiwa (2000) by JF and WAW. F & K refers to observations from Nayau (2001) by JF and GK. The numbers for observations by GK, e.g. “GK 86”, refer to collection numbers of specimens deposited at the South Pacific Regional Herbarium (SUVA) in Fiji, and for those by JF refer to collection numbers of specimens deposited in the San Diego State University Herbarium (SDSU). Only Nayau names are given, when they were learned (by GK), because they have not been previously published. Classification and author abbreviations of plant names generally follow the International Plant Names Index (IPNI; <http://www.ipni.org/index.html>).

PTERIDOPHYTA PSILOPSIDA PSILOTACEAE

Psilotum nudum (L.) P.Beauv.

Nayau Name: lumi ni veikau

Indigenous. Tropics and subtropics. Epiphytic or terrestrial fern. In sunny forest gaps or edges. **L**: Garnock-Jones 963; **N**: GK 86.

FILICOPSIDA ASPLENIACEAE

Asplenium australasicum Hook.

Indigenous. S Pacific. Epiphytic fern. Common bird’s nest fern in Fiji with sharply keeled underside of midrib. In forested areas. **L**: Garnock-Jones 958.

Asplenium laserpitiifolium Lam.

Indigenous. Mascarenes to Pacific. In Fiji, previously reported from Viti Levu, Vanua Levu, Taveuni, Kadavu and Ovalau. Epiphytic fern. Forested areas. **N**: GK 89.

Asplenium cf. *nidus* L.

Indigenous. Paleotropics. Epiphytic fern. Not common in Fiji but largely replaced by *A. australasicum* Hook., from which it differs by the underside of its midrib being rounded (Brownlie 1977). Forested areas. **L:** F & W; **N:** F & K.

Asplenium polyodon G.Forst.

Indigenous. Madagascar to New Zealand and Polynesia. Epiphytic fern. In forest. **L:** JF 42; **N:** GK 65; **A:** F & W.

BLECHNACEAE

Blechnum orientale L.

Indigenous. Tropical Asia to the Pacific. Fern with fronds to 1 m. Forest openings and clearings in lowland high-rainfall areas. **L:** Garnock-Jones 831.

DAVALLIACEAE

Davallia solida (G.Forst.) Sw.

Indigenous. Malaysia and E Australia to Polynesia. Fern with stout creeping rhizome. Exposed coastal and dry sites. **L:** Garnock-Jones 923.

Davallia solida var. *fejeensis* (Hook.) Noot.

Synonym: *Davallia fejeensis* Hook.

Indigenous (endemic variety). Fern with stout creeping rhizome. In forest. **L:** Garnock-Jones 962.

DICKSONIACEAE

Calochlaena straminea (Labill.) M.D.Turner & R.A.White

Synonym: *Culcita straminea* (Labill.) Maxon

Indigenous. Vanuatu and New Caledonia to central Polynesia. Fern to 4 m tall. Most abundant at low elevations on forest margins and in clearings. **L:** Garnock-Jones 932.

DRYOPTERIDACEAE

Pleocnemia cumingiana C.Presl

Synonym: *Tectaria irregularis* (C.Presl) Copel.

Indigenous. Philippines to Fiji. Terrestrial fern, up to 4 m tall. In forest. **N:** GK 81.

Tectaria crenata Cav.

Indigenous. Malaysia to Polynesia. Terrestrial fern. Lowland forest. **A:** JF 73.

Tectaria dissecta (G.Forst.) Lellinger

Indigenous. Vanuatu to Polynesia. Terrestrial fern. In forest. **L:** F & W.

Tectaria latifolia (G.Forst.) Copel.

Indigenous. Vanuatu to Polynesia. Terrestrial fern to 1.5 m tall. In open forest and on well-drained slopes. **L:** F & W; **N:** GK 68.

DENNSTAEDTIACEAE

Pteridium esculentum (G.Forst.) Cockayne

Indigenous. Malaysia and the Pacific. Terrestrial fern to 3 m tall. Common in dry talasiga lands in Fiji. **L:** Garnock-Jones 809.

GLEICHENIACEAE

Dicranopteris linearis (Burm.) J.Underwood

Synonym: *Gleichenia linearis* (Burm.) C.B.Clarke

Indigenous. Widely distributed in Old World tropics. Terrestrial fern. Common in uncultivated dry areas. **L:** Garnock-Jones 808; **N:** F & K.

LINDSAEACEAE

Lindsaea ensifolia Sw.

Indigenous. Africa to S Pacific. Fern with pinnate to bipinnate fronds. Widespread in dry areas. **L:** Garnock-Jones 832.

MARATTIACEAE

Angiopteris evecta (G.Forst.) Hoffm.

Indigenous. Malaysia to Polynesia. Very large terrestrial fern. Widespread in forested areas. **L:** F & W.

OLEANDRACEAE

Nephrolepis biserrata (Sw.) Schott

Nayau Name: saqato

Indigenous. Pantropical. Epiphytic on tree trunks in shade and terrestrial in open weedy areas. Common in lowland areas. **L:** F & W; **N:** F & K.

Nephrolepis hirsutula (G.Forst.) C.Presl.

Nayau Name: saqato

Indigenous. Trop. Asia to the Pacific islands. Fern with long, narrow pinnate fronds. Common in open disturbed areas in full sunlight. **L:** Garnock-Jones 787, 849 (*N. aff. hirsutula*; may comprise more than one taxon); **N:** F & K.

POLYPODIACEAE

Drynaria rigidula (Sw.) Bedd.

Synonym: *Drynaria linnaei* (Bory) Carr.

Indigenous. Malaysia and Sumatra to Australia and Polynesia. Large epiphytic fern. Common on forest trees. **N:** F & K.

Microsorium grossum (Langsd. & Fisch.) S.B.Andrews

Synonyms: *Phymatosorus grossus* (Langsd. & Fisch.) Brownlie; *Polypodium grossum* Langsd. & Fisch.

Misapplied names: Widely mistaken for the small epiphytic *Phymatosorus scolopendria* (Burm.f.) Pichi-Serm.

Indigenous. New Caledonia eastwards to the S Pacific. Terrestrial fern, usually creeping on the ground in sunny places. Common in coastal areas. **L:** Garnock-Jones 765; **N:** F & K.

Pyrrosia lanceolata (L.) Farw.

Synonym: *Pyrrosia adnascens* (Sw.) Ching

Indigenous. SE Asia to Polynesia. Epiphytic fern. Widespread in open forest. **L:** F & W; **A:** F & W.

PTERIDACEAE

Acrostichum aureum L.

Indigenous. Pantropical. Terrestrial fern, up to 3 m tall. Mangrove swamps, coastal areas. **L:** Garnock-Jones 799.

Pteris pacifica Hieron.

Indigenous. Solomon Islands to Pacific. Terrestrial fern. In well-drained sunny sites. **N:** GK 80.

SCHIZAEACEAE

Lygodium reticulatum Schkuhr

Indigenous. Vanuatu and E Australia through Polynesia. Terrestrial fern with creeping rhizome. Scrambling over trees in forested areas. **L:** Garnock-Jones 855.

Schizaea dichotoma (L.) Sm.

Indigenous. Madagascar to Polynesia. Terrestrial fern with dichotomously branched fronds. Occurs throughout Fiji in many plant communities. **L:** Garnock-Jones 930.

THELYPTERIDACEAE

Pneumatopteris sp.

This specimen may be *P. parksii* (Ballard) Holtt. (endemic), which would be the first record outside Viti Levu, Vanua Levu and Taveuni. **N:** GK 71.

Sphaerostephanos invisus (G.Forst.) Holttum

Indigenous. Malaysia to the Marquesas. Terrestrial fern. Abundant throughout Fiji especially in sunny disturbed areas. **L:** JF 25; Garnock-Jones 768, 854; **N:** F & K.

Sphaerostephanos unitus (L.) Holttum

Indigenous. Sri Lanka to the Marquesas. Terrestrial fern. Common throughout Fiji, especially in disturbed areas of high rainfall regions. **N:** F & K.

VITTARIACEAE

Antrophyum plantagineum (Cav.) Kaulf.

Indigenous. Malaysia to Polynesia. Epiphyte fern with short, fleshy rhizome. Lowland rain forest margins. **L:** JF 48.

GYMNOSPERMAE
CYCADALES
CYCADACEAE

Cycas seemannii A.Braun

Synonyms: *C. rumphii* f. *seemannii* (A.Braun) Kanahira; *C. rumphii* var. *seemannii* J.W.Parham

Indigenous. Vanuatu, New Caledonia, Fiji and Tonga. Mostly unbranched tree 1-12 m high. In forest, usually in dry places. L: F & W.

CONIFERALES
PINACEAE

Pinus caribaea Morelet

Introduced. W Indies and Central America. Large timber tree. Cultivated in lowland and upland dry areas. L: Garnock-Jones 971.

PODOCARPACEAE

Podocarpus neriifolius D. Don

Indigenous. India, China and Japan through SE Asia to the Solomon Islands and Fiji. Tree 4-15 m tall with slender trunk and branching crown. Important timber tree. N: JF 166.

ANGIOSPERMAE
MONOCOTYLEDONAE
AGAVACEAE

Agave sisalana Perrine ex Engelm.

Recent introduction. Central America and Mexico. Large succulent plant with basal rosette of large leaves, flower stalk up to 10 m height. Formerly cultivated and now naturalized in disturbed open places. L: Latham & Brookfield; N: F & K.

Cordyline fruticosa (L.) A.Chev.

Synonyms: *C. terminalis* (L.) Kunth; *Taetsia fruticosa* (L.) Merr.

Aboriginal introduction or indigenous. Himalayas, SE Asia, Malesia, and N Australia. Shrub or small tree. Planted in villages and occasionally naturalized in fallow areas and open forest. L: F & W; Garnock-Jones 816; N: F & K; A: F & W.

Dracaena cf. *angustifolia* Roxb.

Synonym: *Pleomele angustifolia* (Roxb.) N.E.Br.

Recent introduction. Shrub or small tree. Trop. Africa. Ornamental. N: F & K.

Furcraea foetida (L.) Haw.

Recent introduction. Trop. S America. Densely crowded fibrous leaves with spiny margins. Cultivated and sparingly naturalized in Fiji near sea level. L: Garnock-Jones 945.

Sansevieria trifasciata Prain var. "Laurentii"

Synonym: *Sansevieria guineensis* (Jacq.) Willd.

Recent introduction. Trop. Africa. Stemless erect herb. Widely cultivated and sometimes naturalized. N: F & K.

AMARYLLIDACEAE

Crinum asiaticum L.

Recent introduction. Trop. Asia. Coarse herb to 2 m tall. Widely cultivated ornamental and naturalized, on sandy beaches and in coastal areas. N: F & K.

ARACEAE

Amorphophallus paeoniifolius (Dennst.) Nicolson

Indigenous or perhaps an aboriginal introduction. Trop. Asia to the Pacific. Tuberos herb. Flowers with a putrid smell. Found in forests and pastures. N: F & K.

Colocasia esculenta (L.) Schott

Aboriginal introduction. Trop. Asia. Tuberos perennial herb with large leaves. Important crop that is commonly planted in food gardens. L: Latham & Brookfield; N: F & K.

Cyrtosperma chamissonis (Schott) Merr.

Aboriginal introduction. Large acaulescent herb from tuber. Crop plant. L: Latham & Brookfield.

Epipremnum pinnatum (L.) Engl.

Synonyms: *Epipremnum aureum* (Linden ex André) Bunting; *Rhaphidophora aurea* (Linden ex André) Birdsey; *R. pinnata* (L.) Schott; *Scindapsus aureus* (Linden ex André) Engl.; *Pothos aureus* Linden ex André

Nayau Name: yalu

Indigenous. SE Asia to Polynesia. High-climbing liana. A common root climber of shady places. L: Garnock-Jones 866; N: F & K; A: F & W.

Xanthosoma sagittifolium (L.) Schott

Recent introduction. W Indies. Large acaulescent herb from tuber. Occasional in village food gardens. Staple food crop. L: Latham & Brookfield; N: F & K.

ARECACEAE

Cocos nucifera L.

Nayau Name: niu

Indigenous. Old World Tropics, Pacific islands and Indian Ocean Islands. Solitary, erect monoecious palm up to 30 m tall, leaves to 6 m or more. Abundant in coastal strand vegetation, in village gardens and plantations. L: Leslie & Delai; N: F & K; A: F & W.

CANNACEAE

Canna indica L.

Likely a recent introduction. Trop. America. Coarse herb to 2.5 m tall. Horticultural plant, also naturalized. L: Garnock-Jones 886.

COMMELINACEAE

Commelina diffusa Burm.f.

Likely a recent introduction but could be an aboriginal introduction or indigenous. Trop. Asia. Weak-stemmed herb. Locally common in wet disturbed places. N: F & K.

CYPERACEAE

Cyperus stoloniferus Retz.

Indigenous. Locally common. Perennial sedge with stout, fragrant tubers. In white sand in the outpost zone on beaches. N: F & K.

Eleocharis dulcis (Burm.f.) Trin. ex Henschel

Indigenous. W Africa to Tonga. Tufted perennial sedge. In swamps and lake edges. L: Latham & Brookfield.

Fimbristylis dichotoma (L.) Vahl

Indigenous. Worldwide distribution. Annual sedge. In open places, marshes, and weed in cultivated areas. L: Latham & Brookfield.

Fimbristylis miliacea (L.) Vahl

Recent introduction. Pantropical. Annual to biennial sedge. Naturalized adventive in swampy areas including cultivated areas, rice fields and wet pastures. L: JF 33.

Gahnia aspera (R.Br.) Spreng.

Indigenous. Malesia to Bonin Islands, Australia and the Pacific. Leafy perennial sedge. Infrequent in forests, thickets and open areas. L: Bryan 533.

Kyllinga nemoralis (J.R.Forst. & G.Forst.) Dandy ex. Hutch. & Dalziel

Recent introduction. Pantropical. Creeping sedge. In disturbed places. L: Garnock-Jones 878.

Mariscus cyperinus (Retz.) J.Vahl

Recent introduction. India to Australia and Japan. Perennial sedge with culms to 70 cm. Naturalized on seashores and open places near sea level. N: GK 87.

Mariscus javanicus (Houtt.) Merr. & F.P.Metcalf

Indigenous. Trop. Africa through SE Asia into the Pacific. Tall perennial sedge. Near sea level on rocky and sandy shores, behind mangroves, and in disturbed areas. L: Garnock-Jones 949.

Pycneus polystachyos (Rottb.) P.Beauv.

Synonym: *Cyperus polystachyos* Rottb.

Recent introduction. Uncertain origin, now pantropical and subtropical. Tufted sedge. Occasional in relatively moist disturbed places. N: F & K.

Rhynchospora corymbosa (L.) Britton

Indigenous. Pantropical. Tall perennial sedge. Locally common in swamps, beside creeks, in pastures, rice fields, and roadsides. **L:** JF 34.

Scleria lithosperma (L.) Sw.

Indigenous. Pantropical. Slender perennial sedge. In forest. **L:** JF 49; **N:** F & K.

Scleria polycarpa Boeckeler

Indigenous. From NE Australia through Melanesia, the Marianas, and the Carolines to Samoa and Tonga. Perennial, erect leafy sedge to 1 m tall with woody rhizome. Open and forested areas. **L:** Garnock-Jones 848; **N:** F & K.

DIOSCOREACEAE

Dioscorea alata L.

Aboriginal introduction. Possibly native to SE Asia. Sprawling or high-climbing vine with winged stems twining to the right. Common in village food gardens. Minor staple food plant. **L:** Latham & Brookfield; **N:** F & K.

Dioscorea bulbifera L.

Aboriginal introduction. Trop. Asia to Africa. Herbaceous vine, stems twisting clockwise. Occasional in moist disturbed places and secondary forest. Famine food plant. **L:** Garnock-Jones 890; **N:** F & K.

Dioscorea esculenta (Lour.) Burkill

Aboriginal introduction. SE Asia. Herbaceous vine with prickly stems twining to left. Minor staple food plant, common in village food gardens. **L:** Garnock-Jones 840; **N:** F & K.

Dioscorea pentaphylla L.

Probably an aboriginal introduction. Trop. Asia. Herbaceous vine with aerial tuber. Cultivated and now sparingly naturalized. **L:** F & W; **N:** F & K.

FLAGELLARIACEAE

Flagellaria gigantea Hook.f.

Indigenous. Fiji, Samoa and Niue. High-climbing liana. In forest or edges of mangrove. **L:** JF 36; **N:** F & K.

LILIACEAE

Dianella intermedia Endl.

Indigenous. From New Zealand into the Pacific. Coarse branching herb in terrestrial clumps to 2 m high. Many habitats throughout Fiji. **L:** Bryan 534.

MUSACEAE

Musa (AAA Group) Simmonds

Synonyms: *M. sapientum* L.; *M. paradisiaca* L. var. *sapientum* (L.) Kuntze; *M. acuminata* Colla

Recent introduction. S. E. Asia. Arborescent monocot. Planted food crop. **L:** Latham & Brookfield; **N:** F & K.

ORCHIDACEAE

Calanthe ventilabrum Rchb.f.

Indigenous. From New Guinea to Samoa. Erect terrestrial orchid to 60 cm, flowers bright yellow. In dense forest. **N:** GK 82.

Chiloschista godefroyana (Rchb.f.) Schltr.

Endemic. Small epiphytic orchid, flowers white to yellow. On limestone in coastal areas. **A:** JF 70.

Corymborkis veratrifolia (Reinw.) Blume

Indigenous. India to Samoa. Terrestrial orchid, paniculate, with many white flowers. In forested areas. **L:** JF 28.

Didymoplexis micradenia (Rchb.f.) Hemsl.

Indigenous. New Caledonia, Vanuatu, Fiji, Samoa and Niue. Saprophytic orchid of metallic blue-green colour. In forested areas. **N:** GK 83.

Hetaeria oblongifolia Blume

Indigenous. Malesia, Micronesia, Tonga, Samoa and Niue. Terrestrial orchid with succulent stems rooted at nodes, small white to cream flowers. In forest. **N:** GK 70.

Spathoglottis pacifica Rchb.f.

Indigenous. India to Samoa. Erect terrestrial orchid to 1 m tall with deep pink, many flowered inflorescences. Locally abundant in forest opening and edges. **L:** Garnock-Jones 824.

Taeniophyllum fasciola (Sw.) Seem.

Indigenous. Widely distributed throughout the insular Pacific. Small epiphytic orchid. In dry forest along rocky coasts. **N:** F & K.

PANDANACEAE

Pandanus tectorius Parkinson

Synonym: *P. pyriformis* Gaud.

Indigenous and probably an aboriginal introduction in the case of some cultivars. SE Asia, N Australia and throughout the Pacific Islands. Branched small tree with prop roots and prickly trunk. Near sea level in beach vegetation, on sea cliffs or edges of mangroves. **L:** Garnock-Jones 794; **N:** F & K; **A:** F & W.

POACEAE

Bambusa vulgaris Schrad. ex J.C.Wendl.

Recent introduction. Africa. Bamboo, culms with many slender branches, 3-5 m long. Widespread in Fiji along riverbanks and on hillsides. **N:** F & K.

Bothriochloa bladhii (Retz.) S.T.Blake

Recent introduction. Trop. Africa, SE Asia and Australia. Perennial grass. Naturalized, found near sea level in dry zones, in disturbed areas. **L:** JF 24.

Brachiaria humidicola (Rendle) Schweick.

Recent introduction. Africa. Perennial creeping pasture grass introduced to Fiji in 1958. Naturalized in pastures. **L:** Latham & Brookfield.

Brachiaria subquadrifida (Trin.) Hitchc.

Recent introduction. Old World Tropics. Low creeping grass. Common in waste places, lawns, cultivated areas. **L:** JF 50.

Cenchrus echinatus L.

Recent introduction. Trop. America. Grass with spike-like racemes of sharp-spined burs. Uncommon in disturbed and cultivated areas. **L:** Garnock-Jones 881; **N:** F & K.

Centosteca lappacea (L.) Desv.

Indigenous or aboriginal introduction. SE Asia, China, Pacific islands and trop. Africa. Perennial grass. Common in shady, moist sites. **N:** F & K.

Chloris barbata (L.) Sw.

Synonym: *Chloris inflata* Link.

Recent introduction. Trop. America. Grass. In disturbed places. **N:** F & K.

Chrysopogon aciculatus (Retz.) Trin.

Recent introduction. SE Asia and Pacific islands. Mat-forming grass. Occasional weed of disturbed places. **N:** F & K.

Coix lacryma-jobi L.

Recent introduction. Cultivated throughout the tropics. Glabrous annual grass. Naturalized in moist waste places. **L:** Latham & Brookfield.

Cymbopogon refractus (R.Br.) A.Camus

Recent introduction. Australia. Now extending into the Pacific as far as the Tuamotus and Hawaii. Perennial grass. Common in open, upland grasslands on all islands. **N:** F & K.

Cyrtococcum trigonum (Retz.) A.Camus

Recent introduction. SE Asia. Slender annual grass. Common in many habitats, usually shady places. **L:** JF 146.

Dactyloctenium aegyptium (L.) Willd.

Recent introduction. Old World Tropics. Mat-forming grass. Occasional in disturbed places. **N:** F & K.

Digitaria setigera Roth ex Roem. & Schult.

Indigenous or aboriginal introduction. SE Asia to Polynesia. Grass. Occasional in open and ruderal habitats. **N:** F & K.

Echinochloa colona (L.) Link

Recent introduction. Old World Tropics. Grass. In disturbed wet areas. **N:** F & K.

Eleusine indica (L.) Gaertn.

Aboriginal/ancient introduction. Old World tropics. Grass with terminal digitate branches. Locally common, dense in gardens and ruderal habitats. **L:** Garnock-Jones 877, 905; **N:** F & K.

Eragrostis tenella (L.) P.Beauv. ex Roem. & Schult.

Recent introduction. Old World Tropics. Grass with open panicle of short delicate branches. In sunny disturbed places. **N:** F & K.

Eragrostis scabriflora Swallen

Endemic. Known only from the Lau and Lomaiviti Groups. Perennial grass. On dry hillsides and limestone ridges. **L:** Summerhayes & Hubbard.

Eriochloa procera (Retz.) C.E.Hubbard

Recent introduction. SE Asia and trop. Africa. Grass. Disturbed places. **L:** JF 29.

Imperata conferta (J.Presl) Ohwi

Recent introduction. SE Asia and Malesia. Perennial tufted grass to 90 cm tall. Widespread in disturbed areas in Fiji and difficult to eradicate. **L:** Summerhayes & Hubbard.

Lepturus repens (G.Forst.) R.Br.

Indigenous. Mascarene Islands in the Indian Ocean to Polynesia. Perennial low creeping grass. Common in coastal, sandy habitats. **N:** F & K; **A:** F & W.

Miscanthus floridulus (Labill.) Warb. ex K.Schum. & Lauterb.

Indigenous. Indian Ocean through Malesia to the Society Islands. Large perennial grass, 2-4 m tall. Common on open slopes, often forming dense thickets. **L:** Garnock-Jones 755; **N:** F & K.

Oplismenus compositus (L.) P.Beauv.

Indigenous or aboriginal introduction. Pantropical. Broad leaved grass. In disturbed shady places. **L:** F & W; Summerhayes & Hubbard; **N:** F & K.

Oplismenus hirtellus (L.) P.Beauv.

Indigenous or aboriginal introduction. Pantropical. Grass. Usually in damp, shady places, on edges of forest. **N:** F & K; **A:** F & W.

Paspalum conjugatum P.J.Bergius

Recent introduction. Trop. America. Creeping grass with flattened stems. In disturbed sites. **L:** Garnock-Jones 779; **N:** F & K.

Paspalum orbiculare G.Forst.

Recent introduction. Trop. Asia. Erect perennial grass. Common in disturbed, open areas. **L:** Garnock-Jones 833; 834.

Paspalum vaginatum Sw.

Synonyms: *P. distichum* L.; *P. littorale* R.Br.

Recent introduction (possibly indigenous). Pantropical. Perennial creeping grass, often forming dense mats. Beaches and bordering mangrove areas. **N:** F & K; **L:** Garnock-Jones 941.

Pennisetum polystachion (L.) Schult.

Recent introduction. Old world tropics. Perennial tufted grass. Naturalized on open hillsides. **L:** Latham & Brookfield.

Sporobolus jacquemontii Kunth

Recent introduction. Americas. Tufted perennial grass. Open hillsides, along roads. **N:** F & K.

Sporobolus virginicus Kunth

Indigenous. Pantropical. Creeping perennial beach grass. **N:** F & K.

Stenotaphrum micranthum (Desv.) C.E.Hubbard

Indigenous. Indian Ocean and Pacific Ocean. Creeping, stoloniferous grass. Sandy, coastal areas. **L:** Summerhayes & Hubbard; **N:** F & K.

Themeda quadrivalvis (L.) Kuntze

Recent introduction. India. Annual grass, inflorescence a fan-shaped cluster. In disturbed places. **L:** JF 32.

Thuarea involuta (G.Forst.) Roem. & Scult.

Indigenous. Malaysia to E Polynesia and Micronesia. A prostrate grass with creeping stems. Found in strand vegetation on sandy sites, sometimes extending inland. **L:** Tothill; **N:** GK 76.

Tripsacum laxum Nash.

Recent introduction. Mexico. Perennial grass. Cultivated for fodder, may persist or naturalize. **L:** Latham & Brookfield.

SMILACEAE

Smilax vitiensis (Seem.) A.DC.

Nayau Name: kadrangi

Indigenous. Vanuatu, Fiji and Tonga. Climbing shrub or liana. In forests. **N:** JF 200.

TACCACEAE

Tacca leontopetaloides (L.) Kuntze

Possibly indigenous, but probably an aboriginal introduction. India and Sri Lanka through Malesia to Melanesia. Glabrous perennial herb with tubers. Old garden sites, understory of coastal and inland forests and disturbed sites. **L:** Garnock-Jones 771; **N:** F & K.

Tacca maculata Seem.

Indigenous. Fiji and Samoa. Coarse herb up to 1 m in height. Occurs away from beaches but in coastal areas. **L:** JF 80; **N:** F & K.

ZINGIBERACEAE

Alpinia zerumbet (Pers.) B.L.Burt & R.M.Sm.

Ancient (but not aboriginal) introduction. New Guinea or nearby Malesia. Coarse herb 2-4 m tall with nodding inflorescence. Cultivated. **N:** F & K.

Curcuma longa L.

Aboriginal introduction. Widely cultivated in Indo-Malesia, origin unknown. Herbs forming dense clumps. Naturalized in forest. **N:** F & K.

Zingiber zerumbet (L.) Sm.

Nayau Name: cagolaya

Aboriginal introduction. Trop. Asia. Herb with leafy stems, to 2 m tall. Naturalized in forests and clearings. **L:** F & W; **N:** F & K.

DICOTYLEDONAE

ACANTHACEAE

Blechnum pyramidatum (Lam.) Urb.

Recent introduction. Trop. America. Prostrate to erect herb with small, white funnel-shaped flowers. Weed found in disturbed places. **L:** Garnock-Jones; **N:** F & K.

Graptophyllum insularum (A.Gray) A.C.Sm.

Indigenous. Fiji and Tonga. Shrub or slender tree, corolla rich pink to purplish-red. In dense, dry or open forest, often locally frequent. **L:** F & W; **N:** JF 182; **A:** JF 58.

Thunbergia fragrans Roxb.

Recent introduction. SE Asia and Malesia, Herbaceous vine, corolla white. Garden ornamental, naturalized along roadsides near sea level. **L:** Garnock-Jones 973.

ALANGIACEAE

Alangium vitiense (A.Gray) Baill. ex Harms

Nayau Name: drauvula

Endemic and collected from several islands. Slender or spreading tree. Common component of limestone forest. **L:** JF 39; **N:** F & K.

AMARANTHACEAE

Achyranthes aspera L.

Indigenous or aboriginal introduction. SE Asia to Polynesia. Pubescent subshrub. Occasional in coastal areas. **L:** JF 47; **N:** F & K.

Alternanthera sessilis (L.) DC.

Recent introduction. Pantropical. Prostrate to ascending herb. Occasional weed. **L:** Latham & Brookfield; **N:** F & K.

Amaranthus viridis L.

Synonym: *Amaranthus gracilis* Desf. ex Poiret

Aboriginal introduction. Old World Tropics. Erect herb. In disturbed sites. **L:** JF 23; **N:** F & K.

Amaranthus cf. *tricolor* L.

Recent introduction. Trop. Asia, now pantropical. Coarse unarmed erect or ascending herb. Planted and now adventive. **N:** F & K.

Deeringia amaranthoides (Lam.) Merr.

Indigenous. SE Asia to Fiji. Scandent shrub or liana with long, pendulous branches. In dense or open forest, often in rocky places. **N:** DA 7169.

ANACARDIACEAE

Buchanania vitiensis Engl.

Endemic. Several islands. Medium sized tree. Near sea level in coastal forest. **L:** JF 7, 158; Bryan 492B; **N:** F & K; **A:** JF 72.

Dracontomelon vitiense Engl.

Nayau Name: tarawau

Indigenous. Vanuatu, Fiji, Tonga and Samoa. In Fiji, recorded from Viti Levu, Vanua Levu, Gau, Koro and Beqa. Fruit tree, can be large. Often found cultivated in villages. **L:** F & W; **N:** F & K.

Mangifera indica L.

Nayau Name: maqo

Recent introduction. Indo-Burma. Common planted fruit tree. **L:** Garnock-Jones 859; **N:** F & K.

Pleiogynium timoriense (DC.) Leenh.

Nayau Name: manawi

Indigenous. Malesia to Fiji and Tonga. Deciduous tree, sometimes large. In coastal and limestone forest. **N:** F & K; **A:** F & W.

Semecarpus vitiensis (A.Gray) Engl.

Indigenous. Fiji and Tonga. Tree with irritating latex. In open or dense forest. **L:** JF 37.

ANNONACEAE

Annona muricata L.

Recent introduction. Trop. America. Small tree with dark green fruits. Planted fruit tree. **L:** F & W; **N:** F & K.

Cananga odorata (Lam.) Hook.f. & Thomson

Aboriginal introduction. Indomalaysia. Tree with open and spreading crown, fragrant flowers. Cultivated and naturalized in secondary forest. **L:** Garnock-Jones 845; **N:** F & K.

Cyathocalyx insularis A.C.Sm.

Endemic. Previously only known from Viti Levu and Kandavu. Slender tree. Forest. **L:** Latham & Brookfield. Collection required to confirm existence in Lau Group.

Polyalthia laddiana A.C.Sm.

Endemic. Known previously from Oneata, Kabara and Yanuca Is., Nadroga; introduced to the Yasawas. Small slender understory tree. In forest on limestone. **L:** F & W; **N:** F & K; **A:** JF 66.

Polyalthia vitiensis Seem.

Endemic. Previously known only from Viti Levu, Ovalau, Vanua Levu and Taveuni. Slender tree. In dense or open forest. **N:** JF 234.

APIACEAE

Centella asiatica (L.) Urb.

Indigenous or an aboriginal introduction from Asia, now pantropical and subtropical. Low herb with creeping stems rooting at the nodes. In open places and cultivated areas. **L:** Garnock-Jones 926; **N:** F & K.

APOCYNACEAE

Alyxia bracteolosa Rich ex A.Gray

Indigenous. Fiji, Tonga, Samoa and Wallis and Futuna. Liana with copious white latex. In forest or thickets. **N:** F & K.

Alyxia stellata (J.R.Forst. & G.Forst.) Roem. & Schult.

Indigenous. Widely distributed in S Pacific. Shrub with milky sap. Common in forests. **L:** JF 59; **A:** JF 66.

Catharanthus roseus (L.) G.Don

Recent introduction. Madagascar. Herb or low shrub, flowers usually pink with crimson throat. Planted ornamental. **N:** F & K.

Cerbera manghas L.

Nayau Name: rewa, vasa

Indigenous. Trop. Asia to the Pacific. Shrub or tree usually with a clear trunk and a freely-branched crown, copious white sap and fragrant white flowers, sometimes with pinkish center. Beach thickets, open forest and in shrub- and grasslands. **L:** Garnock-Jones 807, 835; JF 162; **N:** F & K.

Cerbera odollam Gaertn.

Indigenous. First record for the species within the Fiji Group. Trop. Asia to eastern Polynesia. Medium-sized tree with milky sap, a showy white corolla with a yellow throat. Forest or open habitats near the coast. **L:** F & W; **N:** F & K.

Melodinus vitiensis Rolfe

Indigenous. Fiji and Tonga. Liana with milky latex and large, green to brown globose fruit. In forest. **A:** JF 77.

Neisosperma oppositifolium (Lam.) Fosberg & Sachet

Synonym: *Ochrosia oppositifolia* (Lam.) K.Schum.

Indigenous. Philippines to SE Polynesia and Micronesia. Medium-sized tree with milky sap and a large fibrous fruit. Occasional in littoral forest. **L:** F & W; **N:** F & K; **A:** F & W.

Nerium oleander L.

Recent introduction. Asia. Poisonous shrub to 5 m high with milky latex and pink flowers. Planted ornamental. **N:** F & K.

Plumeria rubra L.

Synonyms: *P. acuminata* Ait.f.; *P. acutifolia* Poir.

Recent introduction. Trop. America. Small tree with white latex and fragrant rose-colored flowers. Planted ornamental. **N:** F & K.

Plumeria rubra f. *lutea* (Ruíz & Pav.) Woodson

Synonyms: *P. acuminata* Ait.f.; *P. acutifolia* Poir.

Recent introduction. Trop. America. Small tree with white latex, swollen stems and fragrant flowers. Planted ornamental. **N:** F & K.

Tabernaemontana pandacaqui Lam.

Synonym: *Ervatamia obtusiuscula* Markgr.

Nayau Name: sua ni bu

Indigenous. Vanuatu, Fiji, Tonga and Samoa, and probably eastward to the Society and western Tuamotu Islands. Shrub or small understory tree with white latex. In forest. **L:** F & W; **N:** JF 187, 199; **A:** JF 79.

Thevetia peruviana K.Schum.

Synonyms: *Cascabela thevetia* (L.) Lippold; *Thevetia neriifolia* Juss. ex A.DC.

Recent introduction. Trop. America, including the W Indies. Shrub or small tree with bright yellow flowers. Cultivated and naturalized. N: F & K.

ARALIACEAE

Polyscias multijuga (A.Gray) Harms

Synonym: *Nothopanax multijugum* Seem.

Indigenous. Fiji, Tonga, Niue and Wallis and Futuna. Small understory tree, large pinnate leaves with a sheathing petiole base. Occasional in coastal and lowland forest. L: Garnock-Jones 871; N: F & K; A: Bryan 525.

ASCLEPIADACEAE

Asclepias curassavica L.

Recent introduction. Trop. America. Scarcely branching shrub with opposite leaves. Uncommon as a weed of disturbed places. L: Garnock-Jones 891; N: F & K.

Hoya australis R.Br. ex J.Traill

Indigenous. NE Australia to Tonga and Samoa. Vine with milky sap and opposite, fleshy leaves. Occasional in coastal and limestone forests. N: F & K.

Hoya diptera Seem.

Endemic to Fiji. Previously recorded from Viti Levu and Vanua Levu. Vine with opposite leaves, milky sap, yellow flowers. In forest. N: F & K.

ASTERACEAE

Acmella uliginosa (Sw.) Cass.

Synonym: *Spilanthes paniculata* sensu J.W. Parham

Recent introduction. Trop. America. Coarse herb. Naturalized in waste places. L: Latham & Brookfield.

Ageratum conyzoides L.

Recent introduction. Mexico and W Indies to S America. Erect herb with fragrant foliage. Common weed of disturbed places. L: Garnock-Jones 889.

Bidens pilosa L.

Recent introduction. Trop. America. Herb. Occasional as a weed of disturbed places. N: F & K.

Conyza sumatrensis (Retz.) E.Walker

Synonyms: *C. bonariensis* (L.) Cronquist; *Erigeron bonariense* L., *E. sumatrensis* Retz.

Recent introduction. S America, but now pantropical. Erect, scarcely branching herb with hairy foliage. Common in disturbed places. L: Garnock-Jones 927; N: F & K.

Cosmos caudatus H.B. & K.

Recent introduction. W Indies and Central America. Coarse herb to 2 m high, ray flowers pink or reddish. Naturalized in disturbed areas. **L:** Garnock-Jones 907.

Crassocephalum crepidoides (Benth.) S.Moore

Recent introduction. Trop. Africa. Coarse or succulent herb to 1 m high. Naturalized along streams, rivers, roadsides. **L:** Latham & Brookfield.

Elephantopus mollis H.B. & K.

Recent introduction. Trop. America, now widespread as adventive throughout tropical areas. Tall, erect herb. Weed, occasional to common in dry disturbed habitats. **N:** F & K.

Eleutheranthera ruderalis (Sw.) Sch.-Bip.

Recent introduction. Trop. America. Annual, erect herb with opposite small heads of yellow flowers. Widespread weed of disturbed sites. **L:** F & W; **N:** F & K.

Emilia sonchifolia (L.) DC.

Recent introduction. Africa. Erect herb with clasping leaf bases, a panicle of several heads of lavender disc florets. Occasional in disturbed places. **L:** Latham & Brookfield. **N:** F & K.

Erechtites valerianaefolia (Wolf.) DC.

Recent introduction. Central and South America. Coarse, succulent herb. Weed of waste places. **L:** Latham & Brookfield.

Mikania micrantha H.B. & K.

Introduced in early 1900's. Trop. America. Herbaceous vine with corymbs of small white disk-shaped heads. Occasional to common in disturbed sites. **L:** Garnock-Jones 856, 893; **N:** F & K.

Sigesbeckia orientalis L.

Probably a recent, perhaps aboriginal, introduction. Old World warm regions. Erect herb with yellow heads in paniculate clusters. In dry areas, clearings and waste places. **L:** Seemann 263.

Sonchus oleraceus L.

Recent introduction. Eurasia and N Africa. Erect herb with clasping leaves and yellow heads of disc florets. Occasional in disturbed places. **L:** Garnock-Jones 902.

Synedrella nodiflora (L.) Gaertn.

Recent introduction. Trop. America. Coarse herb with opposite leaves and heads of yellow disc florets. Weed of waste places, roadsides and ruderal sites. **L:** Garnock-Jones 922; **N:** F & K.

Tridax procumbens L.

Recent introduction. Trop. America. Low-growing herb with opposite hairy leaves. Weed of disturbed dry sites. **L:** Garnock-Jones 906; **N:** F & K.

Vernonia cinerea (L.) Less.

Recent introduction. Trop. Asia. Herb with alternate leaves and heads of purple disc florets. Weed of disturbed sites. **L:** Garnock-Jones 897; **N:** F & K.

Melanthera biflora (L.) Wild.

Synonyms: *Wedelia biflora* (L.) DC.; *Wollastonia biflora* (L.) DC.

Indigenous. E Coast of Africa to the Pacific islands. Subshrub with yellow heads of yellow ray and disc florets. Found in beach thickets and sometimes slightly inland. **L:** Garnock-Jones 928; **N:** F & K.

BALANOPHORACEAE

Balanophora fungosa J.R.Forst & G.Forst.

Indigenous. SE Asia to Fiji. Root parasite. In forest. **L:** Garnock-Jones 938.

BORAGINACEAE

Cordia subcordata Lam.

Indigenous. Indian Ocean to Hawaii. Small tree with cymose inflorescences of orange flowers. In coastal vegetation. **L:** Garnock-Jones 761, 935; **N:** F & K.

Tournefortia argentea L.f.

Indigenous. Small to medium-sized shrub or tree with large scorpioid cymes of small white flowers. Beach thickets. **L:** F & W; **A:** F & W.

BRASSICACEAE

Rorippa sarmentosa (Soland. ex G.Forst.) J.F.Macbr.

Synonym: *Nasturtium sarmentosum* (DC.) Schinz & Guillaumin

Aboriginal or recent introduction. Solomon Islands and New Caledonia throughout the S Pacific to the Tuamotus and also in Hawaii. Indigenous somewhere west of Fiji. Small herb. Found occasionally in wet places. **N:** F & K.

BURSERACEAE

Canarium harveyi Seem.

Indigenous. Solomon Islands to Tonga, Samoa and Niue. Large tree with clear sap and ellipsoid fruits to 2 cm long. In dense or open forest. **N:** F & K.

Canarium vanikoroense Leenh.

Indigenous. Santa Cruz Islands and Fiji. Medium to large tree. In dense or secondary forest. **L:** Latham & Brookfield. Existence in the Lau Group needs to be confirmed.

Garuga floribunda Decne.

Indigenous. Philippines and Java to Samoa and Tonga. First record and collection in the Fiji Group. Large deciduous tree to 20+ m tall with pinnately-compound leaves. In forest near coastal areas. **L:** F & W; **N:** JF 190; **A:** F & W.

CACATACEAE

Opuntia cochinellifera (L.) Mill.

Recent introduction. Trop. and subtrop. America. Cactus with succulent stems. Planted ornamental. **N:** F & K.

CAESALPINIACEAE

Caesalpinia bonduc (L.) Roxb.

Indigenous. Pantropical. Scrambling to climbing shrub with hooked spines. Found in littoral vegetation in sandy sites. **N:** F & K.

Delonix regia (Bojer) Raf.

Recent introduction. Madagascar. Planted ornamental shade tree with attractive red-orange flowers. **L:** F & W; **N:** F & K.

Intsia bijuga (Colebr.) Kuntze

Indigenous. Madagascar to Polynesia. Large tree with small buttresses. Found in coastal forest or somewhat inland. **N:** F & K.

Maniltoa floribunda A.C.Sm.

Endemic to Fiji. Found on several islands. Large tree, leaflets predominantly in three pairs. Occasional in forest. **L:** Garnock-Jones 875; **A:** F & W.

Maniltoa grandiflora (A.Gray) Scheff.

Nayau Name: cibicibi

Indigenous. Fiji and Tonga. Large tree. Leaflets predominantly in two pairs. Occasional in limestone forest. **N:** F & K.

Senna occidentalis (L.) Roxb.

Recent introduction. Trop. America. Coarse, foetid herb or shrub. Locally abundant as weed of disturbed areas. **L:** Garnock-Jones 758, 894; **N:** F & K.

Senna tora (L.) Link

Recent introduction. Trop. America. Coarse herb or shrub to 1 m height. Abundantly naturalized in disturbed areas. **L:** Garnock-Jones 896.

CAPRIFOLIACEAE

Sambucus mexicana C.Presl ex DC.

Introduced ornamental. Southwestern N America. Shrub. Planted in villages. **N:** F & K.

CAPPARACEAE

Capparis cordifolia Lam.

Indigenous. Palau and Mariana Islands eastward to Henderson Island. Prostrate woody vine or scrambling shrub with nocturnal flowers. Rocky shores and limestone cliffs. **A:** F & W.

CARICACEAE

Carica papaya L.

Nayau Name: weleti

Recent introduction. Trop. America. Small unbranched tree. Commonly planted fruit tree in villages and agricultural lands. Adventive in disturbed places. **L:** F & W; **N:** F & K.

CASUARINACEAE

Casuarina equisetifolia L.

Synonym: *C. litorea* Oken

Indigenous. Indian Ocean to Polynesia and Micronesia. Tall tree with leafless, pine needle-like stems. Littoral and coastal forests, dry degraded areas, grassland, open forests. **L:** Garnock-Jones 815; **N:** F & K.

CELASTRACEAE

Maytenus vitiensis (A.Gray) Ding Hou

Indigenous. Fiji to E Polynesia. Scandent shrub or small tree. Coastal and lowland forest. **L:** F & W; **A:** JF 69.

CLUSIACEAE

Calophyllum inophyllum L.

Indigenous. Trop. Africa to E Polynesia and Micronesia. Large tree with axillary racemes of showy flowers. Occasional in coastal forest. **L:** Garnock-Jones 763; JF 20; **N:** F & K.

Calophyllum neo-ebudicum Guillaumin

Nayau Name: damanu

Indigenous. New Britain to Samoa, Tonga and Niue. Large tree with racemose axillary clusters of flowers. In rain forest. **N:** JF 170.

Garcinia pseudoguttifera Seem.

Indigenous. Vanuatu, Fiji and Tonga (Vava'u only). Small to tall dioecious tree, branches at right angle from the trunk, with yellow latex. Dense or open forest, and in beach thickets. **L:** F & W.

Garcinia sessilis (G.Forst.) Seem.

Indigenous. Santa Cruz Islands and Fiji. Large tree with yellow latex. Occasional to common in limestone forest. **N:** JF 200, 174, 217.

Mammea odorata (Raf.) Kosterm.

Indigenous. Malesia, from Java and Philippines to Micronesia, Fiji and Tonga. Tree of littoral thickets. **N:** F & K.

COMBRETACEAE

Terminalia catappa L.

Indigenous. Trop. Asia and Australia to W Polynesia and Micronesia. Medium to large semi-deciduous tree with red fruits. Common in littoral forest. **L:** Garnock-Jones 762; **N:** F & K.

Terminalia littoralis Pancher ex Guillaumin

Synonyms: *T. samoensis* Rech.; *T. saffordii* Merr.

Indigenous. Fiji and Tonga. Small to medium-sized tree with red, compress-oid fruits. Found in littoral forest. **L:** JF 5; **N:** F & K; **A:** F & W.

CONNARACEAE

Connarus pickeringii A.Gray

Endemic to Fiji. Reported from several islands. Liana or scandent shrub with odd-pinnate glandular-punctate leaves. In forest. **L:** JF 27; **N:** F & K; **A:** F & W.

CONVOLVULACEAE

Ipomoea aquatica Forssk.

Indigenous. Old World tropics. Sprawling or floating vine. Wet, open places and cultivated area. **L:** Latham & Brookfield.

Ipomoea batatas (L.) Lam

Nayau Name: kumala

Recent introduction. Originally from trop. America, circumtropical in cultivation. Sprawling vine with edible tubers. Cultivated. Sometimes naturalized near cultivated areas and roadsides. **L:** Garnock-Jones 882.

Ipomoea fistulosa Choisy

Recent introduction. Originally from trop. America, circumtropical in cultivation. Ornamental shrub 1-5 m high, rich pink corolla. Cultivated and occasionally naturalized in disturbed areas. **L:** Garnock-Jones 960.

Ipomoea indica (Burm.) Merr.

Indigenous. Pantropical. Sprawling or creeping vine with a purple-blue to pink flowers. Usually coastal, but in Fiji extending into margins of coastal forest and sometimes climbing in open grasslands. **L:** Garnock-Jones 885; **N:** F & K.

Ipomoea littoralis Blume

Indigenous. Malesia to Hawaii. Prostrate to climbing vine with light pink to pale blue corolla. On sand dunes, in open forests, and disturbed areas near sea level. **L:** Garnock-Jones 883; **N:** F & K.

Ipomoea macrantha Roem. & Schult.

Indigenous. Pantropical. Vine with showy white corolla. Common climbing in trees in littoral and coastal forest. **L:** Garnock-Jones 924; **N:** F & K; **A:** F & W.

Ipomoea pes-caprae (L.) R.Br.

Synonym: *I. brasiliensis* (L.) Sweet

Indigenous. Pantropical. Perennial prostrate vine with red stems and a magenta corolla. Creeping vine found on sandy beaches. **L:** Garnock-Jones 795; **N:** F & K.

Ipomoea quamoclit L.

Recent introduction. Originally from trop. America, now widely cultivated. Annual vine, corolla bright red. Ornamental. Frequently abundant in disturbed areas. **L:** Bryan 536.

Merremia peltata (L.) Merr.

Indigenous. Indian Ocean islands to the Society Islands in Polynesia and to Pohnpei and Kosrae in Micronesia. Climber. In disturbed vegetation and on forest edges. **L:** F & W; **N:** F & K.

CRASSULACEAE

Kalanchoe blossfeldiana Poelln.

Synonym: *Bryophyllum blossfeldiana* Poelln.(Harvey) Hamet

Recent introduction. Madagascar. Succulent perennial herb. Weed of waste places. **N:** F & K.

CUNONIACEAE

Geissois ternata A. Gray

Endemic. Medium-sized tree with trifoliate leaves, bright red calyx and yellow anthers. In dense or open forest. **L:** Garnock-Jones 931; **JF** 160.

CUSCUTACEAE

Cuscuta campestris Yunck.

Possibly indigenous. Pantropical. Twining parasitic vine with yellow-orange stems. In plantations and disturbed areas. **N:** F & K.

DICHAPETALACEAE

Dichapetalum vitiense (Seem.) Engl.

Indigenous. Fiji, Tonga and Samoa. Dioecious high-climbing liana, petioles with pale-brown indument. In dense forest. **L:** **JF** 41; **N:** F & K; **A:** F & W.

EBENACEAE

Diospyros elliptica (J.R.Forst & G.Forst.) P.S.Green

Indigenous. SE Asia to Tonga and Samoa. Medium-sized tree with white, urn-shaped, 3-lobed flowers, and a red to yellow, ellipsoid fruit. Common in coastal forest. **L:** **JF** 57; **A:** F & W.

Diospyros major (G.Forst.) Bakh.

Nayau Name: kauloa

Indigenous. Fiji, Tonga and Wallis and Futuna. Small to medium-sized slender dioecious tree, white flowers, globose, fragrant, yellow fruit. Dense, open or dry forest. **N:** **JF** 204.

Diospyros phlebodes (A.C.Sm.) A.C.Sm.

Endemic. Recorded from many islands throughout the Fiji Group. Medium-sized tree with a globose fruit with persistent, reflexed calyx lobes. In coastal, dry or rain forest. **N:** **JF** 194.

Diospyros samoensis A.Gray

Indigenous. Fiji, Tonga, Niue, Wallis and Futuna, and Samoa. Medium-sized tree with a globose fruit with persistent, reflexed calyx lobes. Found in forest usually on limestone. **L:** F & W; **A:** F & W.

Diospyros vitiensis var. *longisepala* (Gillespie) A.C.Sm.

Synonym: *Diospyros globosa* (A.C.Sm.) Fosberg

Nayau Name: kauloa

Endemic. Known from several large islands and Lau. Small to medium tree, fruits yellow to brown. In limestone forest. **L:** Latham & Brookfield; **N:** JF 177, 198.

ELAEOCARPACEAE

Elaeocarpus cf. *chelonimorphus* Gillespie

Nayau Name: kasa

Endemic. Previously recorded from Viti Levu, Vanua Levu, Taveuni and Kadavu. Medium to large tree. In limestone forest. **N:** JF 229.

Elaeocarpus cf. *graeffei* Seem.

Indigenous. Tonga and Fiji. In Fiji recorded from Viti Levu and Kabara. Medium to large forest tree in limestone forest. **N:** JF 226.

Elaeocarpus storckii Seem.

Endemic. Previously known only from larger islands. Slender tree. In dry or open forest. **L:** Latham & Brookfield. Existence in the Lau Group needs to be confirmed.

EUPHORBIACEAE

Acalypha grandis Benth.

Indigenous. Malesia to Samoa and Wallis and Futuna. Shrub or small tree with alternate, spirally-arranged broad leaves. In coastal or lowland thickets. **L:** Tothill 704; Garnock-Jones 975; JF 16; **N:** JF 206.

Acalypha insulana Müll.Arg.

Nayau Name: doko

Indigenous. New Guinea to Tonga and Samoa. Shrub or small tree with alternate, spirally-arranged leaves. Common in open forest. **N:** GK 73, JF 227.

Aleurites moluccana (L.) Willd.

Aboriginal introduction, naturalized in Fiji. Indigenous in Malesia, abundant in many tropical areas. Large tree with a greenish globose fruit containing a hard-shelled seed. Uncommon in forests. **L:** Garnock-Jones 950; **N:** F & K.

Bischofia javanica Blume

Nayau Name: tea

Indigenous. India and central China throughout Malesia and eastward into the Pacific. Medium to large tree with clear sap turning red after exposure and trifoliolate leaves. In forests and open areas. **L:** Garnock-Jones 861; **N:** F & K.

Chamaesyce chamissonis (Boiss.) F.C.Ho

Synonym: *Chamaesyce atoto* sensu auct. non (G.Forst.) Croizat

Indigenous. Sri Lanka to Tuamotu Islands. Low herb with tiny white flowers in cyathia. Occasional on coastal rocks. **L:** Garnock-Jones 821; **N:** GK 88.

Chamaesyce hirta (L.) Millsp.

Synonyms: *Euphorbia hirta* L.

Recent introduction. Probably native to trop. America but now pantropical. Small succulent herb. Weed in disturbed areas. **L:** Garnock-Jones 904; **N:** F & K.

Claoxylon fallax Müll.Arg.

Indigenous. Fiji and Tonga. In Fiji recorded from Viti Levu, Vanua Levu, Taveuni, Kadavu, Ovalau, Gau and Koro. Slender and spreading tree or shrub with alternate leaves and milky latex. In dense forest. **N:** JF 209.

Cleidion leptostachyum (Müll.Arg.) Pax & K.Hoffm.

Endemic. Reported from several islands. Small dioecious tree or shrub with alternate, spirally-arranged leaves. In coastal or lowland forest. **N:** JF 180.

Codiaeum variegatum (L.) A.Juss.

Recent introduction. Malaysia to Melanesia. Planted ornamental with variegated leaves. **L:** Seeman 411; **N:** Tothill 724.

Euphorbia cyathophora Murray

Synonym: *Euphorbia heterophylla* var. *cyathophora* (Murray) Boiss.

Recent introduction. W Indies. Annual herb to 1.5 m high. Weed of disturbed places and occasionally naturalized in coastal vegetation. **L:** Garnock-Jones 901; **N:** F & K.

Euphorbia heterophylla L.

Recent introduction. Trop. and subtropical America. Annual herb. Occurring in disturbed vegetation. **N:** F & K.

Excoecaria agallocha L.

Indigenous. Trop. Africa and Asia through Malesia to Tonga and Niue in Polynesia, and the Caroline Islands in Micronesia. Medium-sized tree with toxic, milky sap. Common in coastal vegetation. **L:** Garnock-Jones 792; **N:** F & K; **A:** F & W.

Glochidion concolor Müll.Arg.

Indigenous. Fiji and Tonga. Small tree with alternate, ovate to elliptic leaves. Found in open forest, thickets, grassland, and open slopes. **L:** Garnock-Jones 841; **N:** JF 181.

Glochidion seemanii Müll.Arg.

Endemic. Shrub or small tree with alternate, short-petioled leaves. Open or dense forest. **L:** Latham & Brookfield.

Jatropha integerrima Jacq.

Recent introduction. W Indies. Ornamental with attractive pink to scarlet flowers. Planted in gardens. **N:** F & K.

Macaranga harveyana (Müll.Arg.) Müll.Arg.

Nayau Name: gadoa ni lekutu

Indigenous. Fiji eastward in the S Pacific to the Society Islands. Small to medium-sized tree with peltate leaves and soft-spiny fruits. Pioneer tree in early successional forest. **L:** Garnock-Jones 887; JF 19.

Macaranga seemanii (Müll.Arg.) Müll.Arg.

Nayau Name: gadoa ni lekutu

Indigenous. Fiji, Tonga and Niue. Small to medium-sized tree with alternate, ovate, peltate leaves. In forest. **N:** GK 93.

Manihot esculenta Crantz

Nayau Name: tavioka

Recent introduction. Trop. America. Herbaceous perennial with edible tuber. Abundantly grown in food gardens as a major staple crop. **L:** Garnock-Jones 972; **N:** F & K.

Phyllanthus amarus Schumach. & Thonn.

Recent introduction. Trop. America. Erect herb. Uncommon weed of disturbed places. **L:** Garnock-Jones 909.

Phyllanthus debilis Klein ex Willd.

Recent introduction. Old World, now pantropical. Erect herb. Weed of disturbed sites. **N:** F & K.

Phyllanthus virgatus G.Forst.

Recent introduction. A large herb branching from the base. Weed of disturbed places. **L:** JF 11.

FABACEAE

Abrus precatorius L.

Indigenous. Trop. Africa to the Marquesas. Liana with pinnately compound leaves, pink flowers, and pods containing red and black seeds. Usually found in coastal vegetation. **L:** F & W; **N:** F & K; **A:** F & W.

Alysicarpus vaginalis (L.) DC.

Recent introduction. Prostrate herb with terminal racemes of red to purple pea-flowers. Occasional to common in sunny, disturbed lowland places. **L:** Garnock-Jones 979.

Calopogonium mucunoides Desv.

Recently introduced as a cover crop. Sprawling or twining perennial herb. Cultivated. **L:** Latham & Brookfield.

Canavalia rosea (Sw.) DC.

Synonym: *C. maritima* Thouars

Indigenous. Pantropical. Prostrate vine with trifoliolate leaves and magenta flowers. Sandy beaches and littoral thickets; occasionally slightly inland in disturbed sites. **N:** F & K.

Canavalia sericea A.Gray

Indigenous. SW Pacific. Trailing vine with trifoliolate silvery leaves and magenta flowers. Occasional in sunny littoral habitats. **N:** F & K; **A:** F & W.

Centrosema pubescens Benth.

Recent introduction. Trop. America. Climbing herb forming tangled mats with blue to purple flowers. Naturalized in disturbed habitats. **L:** Garnock-Jones 979; **N:** F & K.

Crotalaria pallida Aiton

Synonym: *C. mucronata* Desv.

Recent introduction. Trop. Africa. Subshrub with long racemes of yellow flowers. Weed of disturbed places. **L:** Garnock-Jones 915; **N:** F & K.

Dendrolobium umbellatum (L.) Benth.

Indigenous. Shrub with white flowers. Uncommon in sunny littoral areas. **L:** F & W.

Derris malaccensis (Benth.) Prain

Nayau Name: duva ni Niukini

Recent introduction. S Burma and Malesia, possibly into New Guinea, but a later introduction into the Pacific islands. Liana or scrambling shrub. Cultivated and sometimes established. **L:** Garnock-Jones 769; **N:** F & K.

Derris trifoliata Lour.

Synonym: *Derris uliginosa* Willd.

Nayau Name: duva (ni Viti)

Indigenous. From E Africa to trop. Asia eastward through Malesia to Tonga and Samoa in Polynesia, and to Nauru and the Caroline Islands in Micronesia. Woody vine. Common in coastal habitats. **L:** Garnock-Jones 766; JF 157; **N:** F & K; **A:** F & W.

Desmodium adscendens (Sw.) DC.

Recent introduction. Presumably from the Americas. Coarse herb or low shrub with pink to purple flowers. Locally common and naturalized in disturbed areas. **L:** Garnock-Jones 899.

Desmodium heterophyllum (Willd.) DC.

Recent introduction. SE Asia to Malesia. Prostrate sprawling herb. In waste places. **L:** Latham & Brookfield.

Desmodium incanum DC.

Synonym: *Desmodium canum* (J.F.Gmel.) Schinz & Thell.

Recent introduction. Trop. America. Herb with racemes of mauve flowers. Weed of disturbed places. **N:** F & K.

Desmodium triflorum (L.) DC.

Recent introduction. Pantropical. Prostrate herb with axillary, purple flowers. Occasional in disturbed places. **L:** Garnock-Jones 900.

Erythrina fusca Lour.

Indigenous. Pantropical. Small to medium sized tree, alternate trifoliate leaves, flowers red to orange with white splotches. Uncommon in coastal forest. **L:** Garnock-Jones 916.

Erythrina variegata L.

Indigenous. From Zanzibar to the Marquesas and the Marshall Islands in the Pacific. Spreading tree to 20 m, trunk coarsely spiny. Uncommon in coastal forest. **L:** Garnock-Jones 796; **N:** F & K.

Indigofera suffruticosa Mill.

Recent introduction. Trop. America. Spreading shrub. Locally common as a weed of disturbed places. **L:** Garnock-Jones 903; Tothill 102; **N:** F & K.

Inocarpus fagifer (Parkinson) Fosberg

Synonym: *Inocarpus edulis* J.R.Forst. & G.Forst.

Aboriginal introduction, or possibly indigenous. Malesia to Micronesia and French Polynesia. Large tree with strongly fluted trunk buttresses, fruit a compressed ovoid drupe up to 10 cm with one seed. Coastal forests and swamps. **L:** Garnock-Jones 802; Harvey s. n.; **N:** F & K.

Millettia pinnata (L.) Panigrahi

Synonym: *Pongamia pinnata* (L.) Pierre

Indigenous. Indian Ocean to Fiji and Samoa and into the large islands of Micronesia. Medium to large tree with pink flowers. In beach thickets and forest, and occasional along the margins of mangroves. **L:** JF 150; **N:** F & K; **A:** F & W.

Mucuna gigantea (Willd.) DC.

Indigenous. Africa through India and China to the Societies and Hawaii in Polynesia. Liana. Coastal and lowland forest. **N:** F & K.

Pueraria lobata (Willd.) Ohwi

Nayau Name: qari yaka

Aboriginal introduction. SE Asia. Coarse, hairy vine. Common weed of disturbed places. **L:** Garnock-Jones 823; **N:** F & K.

Sesbania coccinea (L.f.) Poir.

Indigenous. Only known from Fiji (Lau only), Tonga, and outlying islands of New Caledonia. Shrub or small tree, brown fruits up to 20 cm. Along sandy beaches and limestone-derived soils. **N:** Tothill 103.

Sophora tomentosa L.

Indigenous. Indian Ocean to E Polynesia and Micronesia. Shrub with pods to 15 cm greatly restricted between subglobose seeds. Uncommon in beach vegetation. **N:** F & K.

Vigna marina (Burm.) Merr.

Indigenous. Pantropical. Trailing vine. Abundant in sandy coastal vegetation. **L:** Garnock-Jones 790; **N:** F & K.

FLACOURTIACEAE

Erythrospermum acuminatissimum (A.Gray) A.C.Sm.

Indigenous. Fiji and Samoa. Large shrub or tree. In dense or secondary lowland forest. **N:** JF 175.

Flacourtia subintegra A.C.Sm.

Endemic and known from several islands. Small to medium tree. In lowland forest. **N:** JF, 218, 231.

Homalium pallidum A.C.Sm.

Endemic, known only from Lau. Medium tree. In forest, especially on limestone. **L:** Garnock-Jones 874.

Homalium vitiense Benth.

Endemic and known from several islands. Slender tree. In primary or secondary forest. **N:** JF 203

Xylosma orbiculatum (J.R.Forst. & G.Forst.) G.Forst.

Indigenous. Fiji, Tonga and Niue. Smith (1981) reports only a single Fijian collection from Ongea Driki island (Lau Group). Scrambling shrub. On rocky islets and coastal cliffs. **N:** GK 77.

Xylosma simulans A.C.Sm.

Indigenous. Fiji and Tonga. Medium tree. In coastal forest and thickets. **L:** F & W; **N:** F & K; **A:** F & W.

GOODENIACEAE

Scaevola taccada (Gaertn.) Roxb.

Synonyms: *S. frutescens* Krause; *S. koenigii* Vahl; *S. sericea* (G.Forst.) Vahl.

Indigenous. Trop. Asia to Hawaii. Subshrub with a white corolla with all the petals arranged on one side. Common in strand vegetation on sandy beaches. **L:** Garnock-Jones 760; **N:** F & K.

HERNANDIACEAE

Gyrocarpus americanus Jacq.

Indigenous. Pantropical. Medium tree up to 20 m in height. In forest. **L:** JF 43; **N:** JF 184.

Hernandia nymphaeifolia (C.Presl) Kubitzki

Synonyms: *H. sonora* L.; *H. peltata* Meisn.

Nayau Name: evuevu

Indigenous. Trop. Asia to Pacific islands. Large tree with large, ovate, peltate leaves and a lantern-like fruit. Occasional in coastal forest. **L:** Garnock-Jones 770; JF 154; **N:** F & K.

ICACINACEAE

Citronella vitiensis R.A.Howard

Endemic and previously known only from Viti Levu, Vanua Levu and Ovalau. Tree with alternate, entire leaves with anastomosing nerves. Fruit a large, woody drupe. In secondary or dense forest. **L:** Latham & Brookfield. Existence in the Lau Group needs to be confirmed.

LAMIACEAE

Hyptis pectinata (L.) Poit.

Recent introduction. Trop. America. Tall herb with square stems. Locally abundant in disturbed places. Considered a noxious weed in Fiji. **L:** Garnock-Jones 836; **N:** F & K.

Ocimum basilicum L.

Recent introduction. Paleotropical. Aromatic annual herb. Cultivated, and naturalized weed of waste places. **L:** Seemann 358.

Ocimum tenuiflorum L.

Synonym: *Ocimum sanctum* L.

Recent introduction. Trop. Asia. Erect much-branched herb with pungent odor, to 1 m tall. Weed of waste places. **N:** F & K.

LAURACEAE

Cassytha filiformis L.

Indigenous. Pantropical. Parasitic twiner that is found on other plants in coastal strand vegetation, often most abundant on the shrub layer exposed to the sea. **L:** Garnock-Jones 76; **N:** F & K.

Cinnamomum cf. *verum* J.Presl

Recent introduction. Tree to 15 m, leaves 3-nerved from the base. Cultivated. **L:** F & W.

Cryptocarya hornei Gillespie

Indigenous. Several islands in Fiji and 'Eua, Tonga. Medium sized tree with alternate leaves 3-nerved from base, and fragrant wood. In dense forest, often on limestone. **L:** Garnock-Jones 867; **N:** JF 233; **A:** Bryan 523.

LECYTHIDACEAE

Barringtonia asiatica (L.) Kurz

Indigenous. Madagascar to SE Polynesia and Micronesia. Very large, spreading tree with a large top-shaped fruit. Occasional in coastal (especially sandy) locations. **L:** Garnock-Jones 788; **N:** F & K; **A:** F & W.

Barringtonia edulis Seem.

Indigenous. Solomon Islands, Vanuatu and Fiji. Large tree with an edible seed. In forest near coast. **L:** Garnock-Jones 843; **N:** F & K.

Barringtonia racemosa (L.) Spreng.

Indigenous. S and E Africa to Fiji in the Pacific. Large tree with long, pendulous racemes. In dense or open forest. **L:** Garnock-Jones 801; JF 35.

Barringtonia seaturae H.B.Guppy

Synonym: *Barringtonia petiolata* A.C.Sm.

Endemic. Previously only observed on the large islands of Fiji. Large tree. In forest. **L:** Latham & Brookfield. Probably incorrectly identified (occurrence in Lau is unlikely).

LOGANIACEAE

Geniostoma insulare A.C.Sm. & Stone

Indigenous. Fiji and Tonga. Shrub or small tree with opposite leaves and axillary fascicles of small flowers. In forest and on limestone near coast. **N:** GK 79.

Geniostoma rupestre J.R.Forst. & G.Forst.

Indigenous. Medium-sized tree with opposite leaves and axillary fascicles of tiny white flowers. Common in forest. **L:** F & W.

Geniostoma uninervum A.C.Sm. & Stone

Endemic. Viti Levu, Vanua Levu, Taveuni and Ovalau. Slender tree with axillary fascicles of 3-20 flowers. Dense or secondary forest. **L:** Latham & Brookfield. **N:** F & K.

Geniostoma vitiense Gilg & Benedict

Indigenous. Fiji, Tonga and Niue. Medium-sized tree with axillary fascicles of tiny white flowers. Found in coastal and inland forests and thickets. **N:** GK 84.

LYTHRACEAE

Cuphea carthagenensis (Jacq.) J.F. Macbr.

Recent introduction. Trop. America. Herb with sticky reddish stems and opposite leaves. Occasional to common in disturbed places. **L:** Garnock-Jones 821.

Pemphis acidula J.R. Forst. & G. Forst.

Indigenous. Shrub with solitary, axillary flowers with six white petals. Locally common on littoral rocks. **N:** DA 3166.

MALPHIGIACEAE

Hiptage myrtifolia A. Gray

Endemic, known from several islands (including collections from the Lau Group). Scandent shrub, small tree or high-climbing liana with opposite leaves. In coastal or lowland forest. **N:** F & K.

MALVACEAE

Abelmoschus manihot (L.) Medik.

Synonym: *Hibiscus manihot* L.

Aboriginal introduction. Trop. Asia. Subshrub with alternate, palmately lobed leaves. Perennial shrub planted in food gardens. **N:** F & K.

Gossypium sp.

Recent introduction. Trop. America. Small perennial shrubs or herbs, punctate with black oil glands. Cultivated and sometimes sparsely naturalized. **N:** F & K.

Hibiscus diversifolius Jacq.

Probably an aboriginal introduction. Old World tropics. An annual herb with thorny stems. Flowers yellow. **L:** Garnock-Jones 920; Tothill 27; DA 2525.

Hibiscus rosa-sinensis L.

Recent introduction. Trop. E Africa. A number of red, pink, cream-coloured and white cultivars exist. Cultivated ornamental. **N:** Bryan s.n.; F & K.

Hibiscus tiliaceus L.

Nayau Name: vau

Indigenous. Pantropical. Medium-sized, spreading tree with pubescent, heart-shaped to round leaves and showy yellow flowers, purple at the base. Found in coastal vegetation and occasionally in upland sites. **L:** Seemann 25; Garnock-Jones 759; **N:** F & K; **A:** F & W.

Malvastrum coromandelianum (L.) Garcke

Recent introduction. Trop. America. Low woody herb with pale orange, flowers. Uncommon as a weed of disturbed places. **L:** Latham & Brookfield; **N:** F & K.

Sida acuta Burm.f.

Recent introduction. Trop. America. Low shrub with strong taproot, pale yellow flowers. Naturalized in waste places. **N:** F & K.

Sida rhombifolia L.

Recent introduction. Pantropical. Subshrub with pale orange, axillary, flowers on long stalks. Weed of disturbed, open sites. **L:** Garnock-Jones 774; **N:** F & K.

Thespesia populnea (L.) Sol. ex Correa

Nayau Name: mulomulo

Indigenous. Paleotropics and the Pacific islands. Medium-sized shrubby tree with ovate to heart-shaped leaves and showy yellow flowers. Common in coastal forest. **L:** Garnock-Jones 798; **N:** F & K.

Urena lobata L.

Aboriginal introduction. Subshrub with red stems and a bur-like fruit. Uncommon in disturbed places. **L:** Garnock-Jones 888.

MELASTOMATACEAE

Clidemia hirta (L.) D.Don

Recent introduction. Trop. America. Shrub with hairy stem and foliage, leaves with pleated surface and black bristle-covered berries. Found in almost all vegetation types, except the ultimate coastal strip and sunny sites. A noxious weed of shady sites and forest margins. **L:** Garnock-Jones 837; **N:** F & K.

Melastoma denticulatum Labill.

Indigenous. Solomon Islands eastward to the Society Islands. Shrub with opposite, ovate to lanceolate leaves, palmate venation. Common in sunny, disturbed places and fernlands. **L:** Harvey s.n.; Garnock-Jones 811.

Memecylon vitiense A.Gray

Indigenous. Vanuatu, Fiji and Tonga. Small tree, opposite leaves, axillary small flowers. Occasional in forest. **L:** F & W.

MELIACEAE

Aglaia saltatorum A.C.Sm.

Indigenous. Fiji, Tonga and Niue. Small tree, alternate, pinnate, leaves with indument of stellate hairs on young parts. Occasional in forest understory, usually on limestone. **L:** DA 1137; Garnock-Jones 873; JF 21; **N:** F & K; **A:** F & W.

Dysoxylum richii (A.Gray) C.DC.

Nayau Name: makota

Indigenous. Fiji, Tonga and Niue. Tall tree to 25+ m, alternate compound leaves to 80 cm, wood garlic (onion) smelling. Locally abundant in forest. **L:** Garnock-Jones 842; **N:** JF 205; **A:** F & W.

Dysoxylum tenuiflorum A.C.Sm.

Endemic. Previously reported from Vanua Levu, Kadavu, Taveuni and Lakeba. Tall tree, alternate compound leaves to 50 cm. In forest, often on limestone. **L:** Bryan 530; JF 90; **N:** F & K; **A:** F & W.

Swietenia mahagoni (L.) Jacq.

Recent introduction. S Florida to W Indies. Large plantation forestry tree. **L:** F & W.

Vavaea amicorum Benth.

Nayau Name: cevua

Indigenous. Fiji and Tonga. Small tree with leaves clustered at the ends of the stems. Common in forest understory and coastal forest. **L:** Tothill 61; **N:** F & K; **A:** JF 65.

Xylocarpus granatum K.D.Koenig

Indigenous. Medium-sized tree, fruit a hanging globose capsule to 25 cm diameter. Occasional in littoral forest. **L:** Garnock-Jones 800.

MENISPERMACEAE

Pachygone vitiensis Diels

Indigenous. Fiji and Tonga. Liana with ovate leaves, 3-nerved from the base. Found in forest near the coast. **L:** F & W; **A:** F & W.

MIMOSACEAE

Acacia simplex (Sparman) Pedley

Synonym: *Acacia simplicifolia* (L.f.) Druce

Indigenous. New Caledonia and Vanuatu eastward to Tonga and Samoa. Small tree with simple, alternate, elliptic leaves (phyllodes). Occasional in coastal forests and thickets, usually on sandy beaches. **L:** Garnock-Jones 783; **N:** Tothill 132c.

Adenanthera pavonina L.

Recent introduction. Malaysia. Medium to large tree with brown, smooth bark, bipinnately compound leaves and fruit a curved pod to 25 cm twisting open to expose shiny red seeds. In secondary forest. **L:** Garnock-Jones 805, 978; **N:** F & K.

Albizia lebbek (L.) Benth.

Recent introduction. Large spreading tree with bipinnately compound leaves, pods to 30 cm long. Cultivated or naturalized along roadsides or in forest. **L:** Garnock-Jones 892.

Entada phaseoloides (L.) Merr.

Indigenous. Trop. Asia, through Malesia east to the Cook Islands. High-climbing liana with thick stem. Occasional in forest. **L:** Harvey s. n.; Garnock-Jones 951; **N:** F & K.

Leucaena leucocephala (Lam.) de Wit

Synonym: *L. glauca* (L.) Benth.

Recent introduction. Trop. America. Small tree with clusters of strap-shaped pods on woody stalk. Naturalized and common in disturbed sites. **L:** Garnock-Jones 942; **N:** F & K.

Mimosa invisa Mart. ex Colla

Recent introduction. Trop. America. Spreading or sprawling shrub. Aggressive weed in fields and pastures. **L:** Latham & Brookfield.

Mimosa pudica L.

Recent introduction. Pantropical. Prostrate subshrub or coarse herb with pale pink filaments. Common weed in disturbed places. **L:** Garnock-Jones 775; **N:** F & K.

Samanea saman (Jacq.) Merr.

Synonym: *Albizia saman* (Jacq.) F.Muell.

Recent introduction. Mexico to Brazil. Large tree up to 25 m, spreading crown. Planted ornamental, sometimes naturalized. **N:** F & K.

Serianthes melanesica Fosberg

Nayau Name: vaivai

Indigenous. Vanuatu and the Loyalty Islands eastward to Tonga and Samoa. Large tree, to 20 m, large bipinnate leaves, corolla cream, stamens exerted, pods velvety brown. In forest. **N:** GK 64.

MORACEAE

Artocarpus altilis (Parkinson) Fosberg

Synonyms: *A. incisus* (Thunb.) L.f.; *A. communis* J.R.Forst. & G.Forst.

Nayau Name: uto

Aboriginal introduction. Malayo-Pacific. Small to medium tree. Abundant staple food tree planted in villages and food gardens. **L:** F & W; **N:** F & K.

Broussonetia papyrifera (L.) Vent.

Nayau Name: masi

Aboriginal introduction. China, Japan and probably Burma and Thailand. Slender, erect shrub or small tree. Cultivated. **N:** F & K.

Ficus fulvo-pilosa Summerh.

Endemic and found on several islands. Slender tree with white latex with yellow to red figs. Open forest. **L:** Latham & Brookfield.

Ficus greenwoodii Summerh.

Endemic and found on several islands. Slender tree, yellow or white latex, bracts below figs tinged with deep red, figs usually axillary. In forest. **N:** JF 189.

Ficus masonii Horne ex Baker

Endemic. Slender tree, white latex, figs in clusters on trunk and branchlets. In forest. **L:** Garnock-Jones 838.

Ficus obliqua G.Forst.

Nayau Name: baka

Indigenous. Sulawesi to Australia, Fiji, Tonga, Niue, and Samoa. Often spreading tree, at first an epiphytic strangler, becoming a banyan with numerous prop roots descending from the branches, with orange to red fruit. In coastal and lowland forest, occasionally cultivated in villages. **L:** F & W; **N:** JF 183, 202, 240; **A:** JF 61.

Ficus prolixa G.Forst.

Indigenous. Pacific. Large banyan with green to dark purple, berry-like fruits. Occasional in lowland forest. **L:** Garnock-Jones 947; JF 153; **N:** F & K; **A:** F & W.

Ficus scabra G.Forst.

Indigenous. Vanuatu, New Caledonia, Fiji, Tonga, Niue, and Samoa. Small to medium-sized tree with scabrous leaves and a yellow to purple fig. Occasional in littoral and inland forests. **L:** JF 8; **N:** JF 225; **A:** F & W.

Ficus tinctoria G.Forst.

Indigenous. SE Asia to Polynesia and Micronesia. Small tree with asymmetric leaves and a red to purple fig. Uncommon in forests. **L:** Garnock-Jones 936; JF 91; **N:** JF 185; **A:** F & W.

Malaisia scandens (Lour.) Planch.

Indigenous. Liana with milky sap, alternate leaves, small stipules and fruit an orange drupe. In forest near coast. **L:** JF 149; **A:** F & W.

MYRISTICACEAE

Myristica gillespieana A.C.Sm.

Nayau Name: male

Endemic. Widespread in Fiji. Medium-sized tree with a large, brown ovoid fruit with a red aril around its single seed. Occasional in dense forest. **L:** JF 153; **N:** F & K.

MYRSINACEAE

Maesa tabacifolia Mez

Indigenous. Fiji, Samoa, and Wallis and Futuna. Shrub or small weak-stemmed tree with flesh-colored fruits. Occasional in forest. **L:** DA 1381; JF 15.

MYRTACEAE

Decaspermum fruticosum J.R.Forst. & G.Forst.

Indigenous. From India to the Society Islands. Shrub with opposite leaves. Uncommon in sunny places such as fernlands. **L:** Garnock-Jones 825.

Eugenia reinwardtiana (Blume) DC.

Indigenous. Borneo to Hawaii. Small tree, simple opposite leaves, white corolla and many white exerted stamens. In coastal and lowland forest. **L:** JF 159; **N:** JF 26; **A:** JF 64.

Metrosideros collina (J.R.Forst. & G.Forst.) A.Gray

Indigenous. Vanuatu eastward to the Tuamotus. Shrub or small tree, with showy flowers, pink or yellow stamens, borne in bunches towards the tips of branches. Dense forest, thickets of crests and ridges. **L:** Garnock-Jones 828, 876.

Psidium guajava L.

Nayau Name: quava

Recent introduction. Trop. America. Small tree with globose fleshy edible fruits. Common in disturbed areas, an invasive noxious weed. **L:** Garnock-Jones 817; **N:** F & K.

Syzygium corynocarpa (A.Gray) C.Muell.

Indigenous. Fiji, Tonga, Niue, Samoa and Wallis and Futuna. Tree with branched inflorescences, hypanthium and petals pink and fruit dark red. In dense forest. **L:** F & W.

Syzygium aff. *gracilipes*

Identified as undescribed species by W. A. Whistler. Medium tree, fruits bright red. In dense forest on limestone. **L:** JF 93, 152.

Syzygium jambos (L.) Alston

Recent introduction. Probable origin SE Asia. Small tree, hypanthium white to reddish, petals, filaments and mature fruits white to yellowish. Uncommon in cultivation, occasionally naturalized in disturbed areas or forest. **L:** Garnock-Jones 917.

Syzygium malaccense (L.) Merr. & L.M.Perry

Aboriginal introduction. Origin in Indo-Malesian area uncertain. Medium to large tree, flowers bright pink to deep red, fragrant fruit turns from cream yellow to red. Occasional in cultivation and naturalized in forest. **L:** Garnock-Jones 948.

Syzygium quadrangulatum (A.Gray) Merr. & L.M.Perry

Indigenous. Fiji and Tonga. Medium tree, opposite leaves, white to yellowish flowers. In dense or open forest. **N:** JF 178, 236, 201.

Syzygium richii (A.Gray) Merr. & L.M.Perry

Nayau Name: qoriqori wai

Indigenous. Fiji and Tonga. Spreading shrub or tree, opposite leaves, inflorescence a globular mass. Coastal and littoral thickets and forest. **L:** JF 145; **N:** JF 167; **A:** F & W

Syzygium seemanii (A.Gray) Biffin & Craven

Synonyms: *Cleistocalyx seemanii* (A.Gray) Merr. & L.M.Perry, *Cleistocalyx ellipticus* (A.C.Sm.) Merr. & L.M.Perry, *Cleistocalyx kasiensis* A.C.Sm., *Cleistocalyx longiflorus* (A.C.Sm.) Merr. & L.M.Perry

Endemic. Viti Levu, Kadavu, Ovalau and Moala. Shrub or small tree, flowers white or pink-tinged, and purple to black hypanthium. In forest, often along streams. **N:** JF 219.

Syzygium sp. nova

Identified as undescribed species by W. A. Whistler. Small to medium tree. In forest on limestone. **L:** JF 147.

NYCTAGINACEAE

Boerhavia acutifolia (Choisy) J.W.Moore

Synonym: *Boerhavia repens* sensu auct. non R.Br.

Recent introduction. Indo-Pacific and Africa. Prostrate to ascending perennial herb. Common in disturbed places. **A:** F & W.

Pisonia grandis R.Br.

Indigenous. Madagascar to the Tuamotus. Large tree with leaves clustered at the ends of the branches and sticky, cylindrical spiney fruits. Uncommon in littoral forest. **A:** F & W.

Pisonia umbellifera (J.R.Forst. & G.Forst.) Seem.

Indigenous. Madagascar to E Polynesia. Small tree with narrowly spindle-shaped fruit with sticky ribs. Uncommon in coastal forest. **A:** Bryan 527.

OLACACEAE

Ximения americana L.

Indigenous. Subtropical America, Africa, India, Sri Lanka and in the Pacific to the Tuomotus. Shrub with fruit an ovoid drupe 2-3 cm long. On rocky shores near the beach. **L:** Garnock-Jones 793.

OLEACEAE

Jasminum didymum G.Forst.

Indigenous. Malesia and the Pacific. Climbing vine or scandent shrub with opposite trifoliolate leaves. Found in forest and at edges. **L:** JF 46; **N:** F & K; **A:** F & W.

Jasminum simplicifolium G.Forst.

Indigenous. Malesia and the Pacific. Liana with thin stems and opposite, simple leaves. Common in primary and secondary forests. **L:** Garnock-Jones 956; **N:** JF 62; **A:** Bryan 524.

ONAGRACEAE

Ludwigia octovalvis (Jacq.) P.H.Raven

Recent introduction. Trop. America. Herb with yellow flowers and linear pods. Common to abundant in wet areas. **L:** Garnock-Jones 925; **N:** F & K.

OXALIDACEAE

Oxalis corniculata L.

Recent introduction. Small herb with trifoliolate leaves and yellow flowers. Occasional weed of disturbed sites. **L:** Garnock-Jones 898; **N:** F & K; **A:** F & W.

PASSIFLORACEAE

Passiflora foetida L.

Recent introduction. Trop. America. Hairy herbaceous vine with palmately 3-lobed leaves and showy flowers. Occasional weed of disturbed places. **L:** Garnock-Jones 820; **N:** F & K; **A:** F & W.

Passiflora maliformis L.

Recent introduction. Trop. America. Climbing vine with showy white and purple flowers. Uncommon in cultivation and disturbed places. **L:** JF 53.

PIPERACEAE

Macropiper puberulum Benth.

Indigenous. Fiji, Tonga, Samoa, Niue, Wallis and Futuna and Rapa. Shrub with palmately veined leaves, flowers in axillary spikes. Common in forests. **L:** Garnock-Jones 767.

Macropiper timothianum (A.C.Sm.) A.C.Sm.

Synonym: *Piper timothianum* A.C.Sm.

Indigenous. Fiji and Samoa. Shrub or small slender tree. In forest or thickets. **L:** Latham & Brookfield.

Piper insectifugum C.DC. ex Seem.

Endemic and reported from several islands but this is the first record for the Lau Group. High-climbing liana. In open or dry forest and on forest edges. **N:** JF 238.

Piper methysticum G.Forst.

Nayau Name: yaqona

Aboriginal introduction. Indigenous to E Melanesia. Shrub with white spikes. Cultivated. **L:** Garnock-Jones 863; **N:** F & K.

PITTOSPORACEAE

Pittosporum arborescens Rich ex A.Gray

Indigenous. Fiji, Wallis and Futuna, Tonga and the Cook Islands. Small to medium-sized tree, fruit a subglobose capsule that splits along two seams to expose the orange seeds. Occasional in open areas and forests. **L:** Garnock-Jones 946; JF 17; **N:** JF 193, 239; GK 92.

Pittosporum rhytidocarpum A.Gray

Endemic. Widespread in Fiji. Shrub or slender tree, with large leaves, abundant white latex, and black, sticky seeds. In dense or open forest. **N:** JF 208.

POLYGALACEAE

Polygala paniculata L.

Recent introduction. Trop. America. Slender, erect, profusely-branching annual herb. Occasional to common weed of disturbed areas. **L:** Garnock-Jones 880; **N:** F & K

PORTULACACEAE

Portulaca oleracea L.

Recent introduction. Cosmopolitan. Prostrate to ascending glabrous, often succulent, herb. Common in disturbed places. **A:** F & W.

RHAMNACEAE

Alphitonia zizyphoides (Spreng.) A.Gray

Indigenous. Vanuatu to Society Islands. Large tree, fruit a globose black drupe. Common early-successional tree in forests. **L:** Garnock-Jones 974; **N:** F & K; **A:** F & W.

Colubrina asiatica (L.) Brongn.

Indigenous. Paleotropical. Shrub or sprawling liana, fruit a globose brown capsule. Locally common in coastal thickets. **L:** Garnock-Jones 789; **N:** F & K.

Rhamnella vitiensis (Benth.) A.C.Sm.

Indigenous. New Guinea to Tonga. Scandent shrub or liana, yellow flowers, purple fruit. In open forest, disturbed areas or rocky coasts. **A:** JF 76.

Ventilago vitiensis A.Gray

Indigenous. Fiji, Tonga and the Cook Islands. High-climbing liana. In open areas or along beaches. **L:** JF 44; **N:** F & K.

RHIZOPHORACEAE

Bruguiera gymnorhiza (L.) Sav.

Indigenous. Trop. S and E Africa to Tonga. Low to medium sized tree with a dense rounded crown and aerial roots (pneumatophores). Usually on landward side of mangrove swamps. **L:** Garnock-Jones 939.

Rhizophora mangle L.

Indigenous. Trop. America and Africa to Samoa and Tonga. Small tree with stilt roots. On seaward side of mangrove swamps. **L:** JF 30.

Rhizophora stylosa Griff.

Indigenous. E Asia to Micronesia and W Polynesia. Tree with stilt roots and leathery mucronate leaves. On seaward side of mangrove swamps. **L:** JF 31; **N:** F & K.

Rhizophora x selala (Salvoza) P.B.Tomlinson

Indigenous. Vanuatu and Fiji. Tree with stilt roots. Sterile hybrid between *R. mangle* and *R. stylosa*. Mangrove swamps. **L:** Garnock-Jones 804.

RUBIACEAE

Antirhea inconspicua (Seem.) Christoph.

Nayau Name: siti ni lekutu

Indigenous. Fiji, Tonga, Samoa and Wallis and Futuna. Small tree with densely pubescent young stems and awl-shaped pubescent interpetiolar stipules up to 1 cm long. Uncommon in forest. **L:** JF 161; **N:** JF 232.

Badusa corymbifera (G.Forst.) A.Gray

Indigenous. Solomon Islands, Vanuatu, Fiji and Tonga. Shrub or small tree with deltoid, connate sheathing stipules. Occasional in forest understory, often on limestone. **L:** JF 6; **A:** JF 62.

Cyclophyllum barbatum (G.Forst.) A.C.Sm. & S.P.Darwin

Indigenous. Solomon Islands to the Tuamotus. Small tree or shrub with interpetiolar stipules and a red, obcordate fruit. Occasional in sunny places and open forest. **L:** JF 82; **N:** JF 228.

Gardenia taitensis DC.

Indigenous. Vanuatu, Fiji, Wallis and Futuna, Tonga and Niue. Shrub or small tree with fragrant flowers. Found near the coast usually on limestone. **L:** JF 40; **A:** JF 60.

Geophila repens (L.) I.M.Johnston

Indigenous. Pantropical. A creeping perennial herb, rooting at nodes, with interpetiolar stipules. Found in shady wet places on forest floor. **L:** JF 155.

Guettarda speciosa L.

Indigenous. Trop. Asia to the Pacific islands. Medium-sized tree with interpetiolar stipules, white flowers, fruit an ovoid drupe. Common in coastal forest. **L:** F & W; **N:** F & K; **A:** F & W.

Gynochthodes epiphytica (Rech.) A.C.Sm. & S.P.Darwin

Synonym: *Gynochthodes ovalifolia* var. *smithii* Fosberg

Indigenous. Fiji, Tonga, Niue and Samoa. Liana with interpetiolar stipules, and a black, subglobose fruit. Occasional in forests. **L:** JF 38; **N:** F & K.

Oldenlandia biflora L.

Synonym: *Hedyotis biflora* (L.) Lam.

Indigenous. Trop. Asia eastward in Pacific to Tonga, Niue and Samoa. Small herb. Uncommon in littoral areas. **L:** F & W; **A:** F & W.

Ixora calcicola A.C.Sm.

Indigenous. Fiji, Tonga, Niue and Wallis and Futuna. Shrub or small tree; inflorescence of three flowers subtended by bract-like leaves. Found on limestone near the coast. **L:** JF 54.

Ixora coccinea L.

Synonym: *Ixora lutea* Hutchinson; *I. coccinea* var. *lutea* (Hutchinson) Fosberg & H.H.Sachet

Recent introduction. SE Asia. Shrub with opposite leaves, interpetiolar stipules, and red to orange flowers. Planted ornamental. **N:** F & K.

Ixora finlaysonianana Wall.

Recent introduction. SE Asia. Shrub or small tree with opposite leaves, interpetiolar stipules, and cream-white flowers. Planted ornamental, occasionally escapes to waste places. **L:** Garnock-Jones 954.

Ixora prolixa A.C.Sm.

Endemic and known only from the Lomaiviti and Lau Groups. Shrub with inflorescences to 30 cm long, calyx pink, corolla white to pink. Often on limestone. **N:** Tothill 284; JF 50.

Morinda citrifolia L.

Probably an aboriginal introduction. Trop. Indo-Malesia. Shrub or small tree with a large, fleshy, lumpy fruit. Common in coastal forest and disturbed places. **L:** Garnock-Jones 813; **N:** F & K.

Morinda myrtifolia A.Gray

Indigenous. Widespread in the Pacific from New Caledonia to the Austral Islands. Liana with a purple fruit. Occasional in forests. **N:** JF 186; **A:** JF 74.

Mussaenda raiateensis J.W.Moore

Indigenous. Vanuatu to Society Islands. Shrub or small tree, flowers subtended by a single, showy white, leaf-like sepal. In forest and clearings. **L:** Garnock-Jones 819; **N:** F & K.

Neonauclea forsteri (Seem. ex Havil.) Merr.

Nayau Name: vacea

Indigenous. Solomon Islands (Bougainville) and Vanuatu eastward to the Society Islands. In Fiji recorded from Viti Levu, Vanua Levu and Ovalau. Large to very large tree with conspicuous 1-2 cm long ovoid, flat, appressed stipules and thick brown bark. Occasional in forest. **N:** JF 207.

Psychotria brackenridgei Schum.

Endemic. Shrub or small tree with stipules divided into two lobes. Found in forest. **N:** GK 90.

Psychotria edentata A.C.Sm.

Nayau Name: kilito

Endemic. Only known from the Lau Group. Slender shrub; 6-8 white corolla lobes. In forest on limestone. **N:** JF 168.

Psychotria cf. *pickeringii* A.Gray

Endemic. Shrub or small tree with pink-tinged white flowers and orange to red fruits. In forest. **L:** JF 56.

Psydrax odorata (G.Forst.) A.C.Sm. & S.P.Darwin

Synonym: *Canthium odoratum* (G.Forst.) Seem.

Indigenous. Mariana Islands to New Caledonia, eastward to the Tuamotus and Hawaii. Shrub or small tree with 20-40-flowered inflorescences. Found in coastal forest and sometimes further inland. **L:** JF 63; **N:** F & K; **A:** F & W.

Spermacoce remota Lam.

Synonyms: *Borreria laevis* sensu Christophersen; *Spermacoce assurgens* Ruiz & Pav.

Recent introduction. Trop. America. Small herb with dense axillary clusters of tiny white flowers. Common weed of disturbed sites. **L:** Garnock-Jones 908; **N:** F & K.

Tarenna sambucina (G.Forst.) T.Durand ex Drake

Indigenous. Mariana Islands, Solomon Islands and New Caledonia to SE Polynesia and Micronesia. Small tree or shrub with flowers in widely branching cymose clusters. In lowland forest understory, **L:** Garnock-Jones 810; **J:** 18; **N:** JF 221.

RUTACEAE

- Citrus × aurantifolia* (Christm.) Swingle
Recent introduction. Malesia. Cultivated tree. **N**: F & K.
- Citrus × limon* (L.) Burm.f.
Synonyms: *Citrus medica* L. var. *limon* L.; *Citrus hystrix* DC.
Nayau Name: moli karo
Recent introduction. Trop. Asia. Cultivated tree. **N**: F & K.
- Citrus medica* L.
Synonyms: *Citrus medica* L. var. *limon* L.; *Citrus hystrix* DC.
Recent introduction. Origin unknown. Cultivated tree, sparingly naturalized.
L: Garnock-Jones 895.
- Euodia hortensis* J.R.Forst. & G.Forst.
Aboriginal introduction. New Guinea and W Melanesia. Shrub or small slender tree with strong pungent fragrance. Cultivated ornamental and sometimes persisting in forest at former village and garden sites. **N**: F & K.
- Melicope cucullata* (Gillespie) A.C.Sm.
Endemic to Fiji, known from several islands. Shrub or small tree with opposite, trifoliolate leaves. Uncommon in forest gaps and secondary forest.
L: JF 148; **N**: JF 192; **A**: F & W.
- Micromelum minutum* (G.Forst.) Wight & Arn.
Indigenous. Malesia, NE Australia, Tonga, Niue, and Samoa. Shrub or small slender tree with fragrant flowers and copiously glandular fruits. Occasional in forest understory. **L**: F & W; **N**: F & K.

SANTALACEAE

- Santalum yasi* Seem.
Indigenous. Vanuatu, Fiji and Tonga. Small hemiparasitic tree. Occasional in forest and cultivated. **L**: Garnock-Jones 911.

SAPINDACEAE

- Allophylus timorensis* (DC.) Blume
Indigenous. Malesia and the Pacific. Shrub or small tree with trifoliolate leaves. In dense forest, often on limestone. **N**: JF 172.
- Arytera brackenridgei* (A.Gray) Radlk.
Indigenous. Vanuatu to Tonga and Samoa. Medium sized tree with even-pinnate leaves, inflorescence an axillary panicle, fruit a three-valved capsule, pilose within, seeds with an aril. In coastal and lowland forest. **L**: F & W; **A**: JF 67.
- Dodonaea viscosa* Jacq.
Indigenous. Pantropical. Shrub with alternate, oblanceolate leaflets, panicles of small white, unisexual flowers, and a reddish, papery 2-4-winged capsule forming on the female plants. Common in fernlands. **L**: Garnock-Jones 806.
- Elattostachys falcata* (A.Gray) Radlk.
Nayau Name: masa

Indigenous. Vanuatu to Tonga, Niue and Samoa. Large tree with alternate, even-pinnately compound leaves, axillary racemes or panicles of racemes, tiny flowers with conspicuous red stamens, and an obovoid, shallowly 3-lobed capsule. Common in primary and secondary forest. **L:** Garnock-Jones 784; **N:** F & K; **A:** F & W.

Guioa rhoifolia (A.Gray) Radlk.

Indigenous. Fiji and Samoa. Medium-sized tree with alternate, even-pinnately compound leaves. Occasional in forests. **L:** F & W.

Harpullia arborea (Blanco) Radlk.

Indigenous. S India and Sri Lanka to Samoa and Tonga. Tree with even pinnately-compound leaves, the rachis terate, axillary inflorescence, fruit a red capsule with inflated lobes, seeds shiny and dark. In forest on limestone near the coast. **L:** JF 51; **N:** JF 176; **A:** JF 51.

Pometia pinnata J.R.Forst. & G.Forst.

Nayau Name: dawa

Indigenous or perhaps an aboriginal introduction. Philippines and Sulawesi eastward to Tonga, Niue, and Samoa. Large tree with a buttressed trunk, large, pinnately compound leaves, toothed leaf margins, dense panicles of tiny apetalous flowers, and a large subglobose fruit. Uncommon in forests, perhaps escaped from cultivation. **L:** Garnock-Jones 959; **N:** F & K.

SAPOTACEAE

Burckella richii (A.Gray) H.J.Lam

Indigenous. Tonga and Fiji. In Fiji only known in the Lau Group with certainty. Large buttressed tree with stout branchlets, white latex, large, simple, entire, spirally-arranged leaves, and white flowers, crowded at ends of branchlets. Rare. In forest on limestone. **L:** F & W; **A:** JF 75.

Manilkara vitiensis (H.J.Lam & v.Olden) Meeuse

Endemic. Only known from the Mamanuca and Lau groups. Small tree with alternate, entire leaves crowded at ends of branchlets, white flowers. In coastal forest, on limestone. **N:** JF 220.

Pouteria grayana (H.St.John) Fosberg

Synonyms: *Planchonella grayana* H.St.John

Nayau Name: qalaka, kalaka

Indigenous. From Vanuatu to the Austral and Tuamotu Islands in French Polynesia. Large tree with alternate leaves, milky sap, fascicled white flowers, and a large, green subglobose fruit with 2 or more large, shiny ellipsoid seeds. Coastal and limestone forest. **L:** Garnock-Jones 868; **N:** JF 237; JF 191; **A:** JF 71.

SOLANACEAE

Capsicum frutescens L

Recent introduction. Trop. America. Subshrub with nodding, cream-colored flowers with bright yellow stamens, and a red, ellipsoid fruit. Occasional in disturbed places, also cultivated. **L:** Garnock-Jones 934; **N:** F & K.

Nicotiana tabacum L.

Recent introduction. W Indies, C and S America. Shrub with large, alternate glandular-pubescent leaves, fruit an ovoid capsule with many small black seeds. Cultivated. **L:** S. Best; **N:** F & K.

Physalis angulata L.

Probably an early, non-aboriginal introduction, but could also be indigenous (Whistler 1995). Trop. America. Erect, glabrous herb. Occasional as a weed of disturbed places. **N:** F & K.

Physalis peruviana L.

Recent introduction. S America. Coarse herb or small shrub. In disturbed, open areas. **L:** Latham & Brookfield.

STERCULIACEAE

Commersonia bartramia (L.) Merr.

Indigenous. Widespread from SE Asia eastwards to the Society Islands and Marquesas. Shrub or small tree with smooth brown bark, alternate, simple leaves, small white to cream flowers in axillary clusters and capsular fruit with dense soft hairs. Dry and secondary forests as well as patches of forests and thickets in grasslands. **L:** JF 83.

Heritiera littoralis Aiton

Indigenous. E Africa to Tonga. Medium-sized tree with thin buttresses, large alternate leaves with silvery scales on lower surface, fruit ellipsoid with a dorsal ridge. Littoral and coastal forest. **L:** Garnock-Jones 957.

Heritiera ornithocephala Kosterm.

Indigenous. Fiji, Tonga and Niue. Large tree with alternate, oblong to ovate-elliptic leaves, a silvery-scaled lower leaf surface, and fruit with an obscure longitudinal ridge, beaked at the apex. Occasional in forests. **N:** JF 223; **A:** JF 68.

Melochia degeneriana A.C.Sm.

Endemic. Reported from Viti Levu, Vanua Levu, Ovalau, Nairai, the Yasawas and the Mamanuca Group. Sometimes slender tree 2–15 m high, young branchlets and petioles sparsely stellate-pilose or puberulent. Dense or open forest. **N:** GK 66.

Melochia vitiensis A.Gray

Endemic. Widespread throughout Fiji. Shrub or small tree with indument of stellate hairs, serrate leaves, lanceolate or deltoid stipules. Mostly yellow flowers with pinkish calyx, brown capsules. In secondary or open forest and grasslands. **L:** Garnock-Jones 862; JF13; **N:** GK 85.

THYMELAEACEAE

Phaleria disperma (G.Forst.) Baill.

Indigenous. Fiji, Samoa and Tonga. Shrub or small tree with opposite leaves, fragrant white or yellow flowers and red fruits. Littoral forest and beach thickets. **L:** Garnock-Jones 781; JF 3; **N:** F & K.

Phaleria pubiflora (A.Gray) Gilg

Endemic. Previously known from Viti Levu, Kadavu and Vanua Balavu. Shrub or tree with opposite leaves, cauliflorous. On limestone in forest near coast. **L:** JF 2, 151; **N:** F & K.

Wikstroemia foetida (L.f.) A.Gray

Indigenous. Fiji, Samoa and Tonga. Shrub with opposite, elliptic to ovate, dull-green leaves, a yellow 4-lobed calyx, and a red ovoid drupe. Occasional in open places. **L:** Garnock-Jones 829; JF 4; **A:** F & W.

TILIACEAE

Grewia crenata (J.R.Forst.) Schinz & Guillaumin

Indigenous. Vanuatu and New Caledonia east to Mariana and Society Islands. Small tree with alternate leaves with toothed margins, axillary umbellate clusters flowers with numerous yellow stamens, and a black drupe. Occasional in forest gaps, disturbed places and coastal areas. **L:** Garnock-Jones 860; JF 14; **N:** JF 241; **A:** F & W.

Triumfetta procumbens G.Forst.

Indigenous. Micronesia and eastern Malesia to the Tuamotu Islands. Low shrub with prostrate trailing stems, alternate leaves, stellate indument, flowers yellow, fruits soft-spiny with bristles. On beaches and in coastal forest on sandy soils. **L:** Garnock-Jones 785; **N:** F & K.

Triumfetta rhomboidea Jacq.

Synonym: *Triumfetta bartramia* L.

Recent introduction. Pantropical weed, presumed indigenous to Old World tropics. Shrub with dense, stellate hairs, small yellow flowers and pubescent burrs with hooked bristles. In disturbed places such as roadsides and pastures. **L:** Garnock-Jones 918; **N:** GK 72.

TURNERACEAE

Turnera ulmifolia L.

Recent introduction. Trop. America. Coarse herb with yellow petals. Introduced ornamental, naturalized and locally abundant especially in coconut plantations. **L:** Garnock-Jones 961; **N:** F & K.

ULMACEAE

Celtis harperi Horne ex Baker

Indigenous. Fiji (previously known only from the two largest islands), Tonga, Niue, Wallis and Futuna. Small to medium-sized tree with leaves 3-veined from the base, short axillary panicles of tiny, greenish, unisexual flowers, and a black ovoid drupe. Uncommon in forests. **A:** JF 79.

Trema cannabina Lour.

Synonym: *Tremma orientalis* (L.) Blume

Indigenous. India to China, throughout Malesia to Micronesia, to NE Australia and to Samoa and Niue. Small tree with tiny greenish flowers in short cymose clusters, and a small red-brown to black, ovoid drupe. Uncommon in disturbed places. L: Seemann 563; Garnock-Jones 826; N: GK 67.

URTICACEAE

Dendrocnide harveyi (Seem.) Chew

Nayau Name: salato

Indigenous. Fiji, Tonga, Niue and Samoa. Medium to large tree with grey, smooth outer bark, large, simple, alternate, cordate leaves with finely serrate margins and stinging hairs that cause severe pain on touch. Flowers unisexual, tree dioecious. Dense forest, forest margins, thickets and along creeks. L: Garnock-Jones 865; N: F & K; A: F & W.

Elatostema tenellum A.C.Sm.

Synonym: *Elatostema eximium* A.C.Sm.

Endemic. Known only from larger islands. Succulent herb with reddish stems. In dense forest, often in wet places, or sometimes on limestone cliffs. L: Latham & Brookfield.

Leucosyke corymbulosa (Wedd.) Wedd.

Indigenous. Exact range not known but reported from Vanuatu, Fiji, Wallis and Futuna, Samoa and the Cook Islands. Shrub or small tree with alternate, crenate to serrate leaves, three-nerved and white-tomentose below. In open or secondary forest. L: Garnock-Jones 851; JF 81; N: JF 196.

Pipturus platyphyllus Wedd.

Endemic and previously only reported from Viti Levu, Vanua Levu and Ovalau. Much-branched shrub or small tree, alternate leaves with dense hairs on the lower side and globose, fleshy fruits. In open or secondary forest, usually on limestone. N: JF 216.

Procris pedunculata (J.R.Forst & G.Forst) Wedd.

Indigenous. Malesia to Polynesia. Herb with succulent stems, opposite leaves with one leaf in each pair greatly reduced and cauducous. On rocky limestone coasts. L: F & W; N: GK 74.

VERBENACEAE

Clerodendrum buchananii (Roxb.) W.G.Walpers

Recent introduction. India to Malesia. Subshrub or shrub, opposite, cordate leaves, terminal paniculate inflorescence, corolla red, fruit bright red. Cultivated, occsionally naturalized. L: Garnock-Jones 933.

Clerodendrum inerme (L.) Gaertn.

Indigenous. Indomalaysia, Australia and the Pacific islands. Scandent shrub with opposite leaves, showy white flowers with red, protruding stamens.

Occasional in coastal vegetation. **L:** Garnock-Jones 937; **N:** F & K; **A:** F & W.

Faradaya ovalifolia (A. Gray) Seem.

Endemic to Fiji. Previously known from Viti Levu, Vanua Levu, Ovalau and Matuku. Liana or scrambling shrub with opposite leaves. In dense or open forest. **N:** F & K.

Premna serratifolia L.

Synonyms: *P. gaudichaudii* Schauer; *P. integrifolia* L.; *P. obtusifolia* R.Br.; *P. taitensis* Schauer

Nayau Name: waro

Indigenous. Trop. Asia to the Marquesas. Shrub or small tree with opposite leaves, tiny white flowers in dense, flat-topped panicles, and a small, black, ovoid drupe. Common in beach thickets and coastal forest. **L:** Garnock-Jones 764; **N:** JF 164.

Stachytarpheta cayennensis (Rich.) J.Vahl

Synonym: *Stachytarpheta urticaefolia* (Salisb.) Sims

Nayau Name: seka rawa

Pre World War II introduction. Trop. America. Subshrub with opposite leaves, narrow spikes of purple flowers, and a small 2-seeded capsule. Common weed of disturbed places. **L:** Garnock-Jones 772; **N:** F & K.

Vitex trifolia var. *bicolor* (Willd.) Moldenke

Indigenous. E. Africa to the Pacific islands. Small aromatic trifoliolate tree or shrub found in coastal strand vegetation, occasionally inland and on inner margins of mangrove. **L:** Garnock-Jones 797; JF 22; **N:** F & K.

VITACEAE

Cayratia seemanniana A.C.Sm.

Endemic. Viti Levu, Vanua Levu, Ovalau and Moturiki. First record for the Lau Group of this climber with digitately-compound leaves and forking tendrils. Lowland forest. **N:** GK 75.

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