

THE GENUS FARADAYA (LABIATAE)

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SUMMARY

A revision of the genus *Faradaya* F. Muell. (Labiatae) is presented with taxonomic history, keys, full descriptions, distribution maps and ecological and ethnobotanical notes. Only three species are recognised: *F. amicorum* (Seem.) Seem., *F. lehuntei* (Horne ex Baker) A.C. Sm. and *F. splendida* F. Muell.; fifteen names are put into synonymy for the first time.

Key words: *Faradaya*, Labiatae, morphology, taxonomy, distribution.

INTRODUCTION

The genus *Faradaya* was revised as part of a PhD thesis at the Department of Plant Sciences, Oxford (De Kok, 1997). Revisions of the genera *Oxera* Labill. and *Hosea* Ridl. and a cladistic analysis of the whole group, based on morphological, flavonoid and nrDNA characters, were also part of that project. The other revision (De Kok & Mabberley, in press), the data on the flavonoid contents (Grayer & De Kok, 1998) and the cladistic analysis will be published elsewhere (De Kok et al., in prep.)

In this article a full taxonomic account of the genus *Faradaya* is given, including taxonomic history, keys, full descriptions, distribution maps and ecological and ethnobotanical notes. Observations, regarding the pollination biology, were made during fieldwork in Fiji and Vanuatu in the autumn of 1995.

TAXONOMIC HISTORY

The first scientific collection referable to *Faradaya* was a specimen of *F. amicorum*, made in the Friendly Islands (Tonga), by Banks and Solander in 1769 (Banks & Solander, collection label), during the first voyage of Captain Cook (1768–1771). The genus was described for the first time by Von Mueller in 1865 and was named in honour of Michael Faraday (1791–1867), the physicist. The genus was based on one species, *Faradaya splendida*, from Queensland. Originally it was placed in the Bignoniaceae. Von Mueller sent his analysis and a specimen to Seemann, and asked for his comments on the genus. After his examination of the specimen, Seemann concluded that *F. splendida* belonged to the same group as two recently described *Clerodendrum* species from Tonga, Fiji and Samoa. One of these was based on three different collections.

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The first specimens were collected by G.W. Barclay, who accompanied Sir Edward Belcher as botanist on his world voyage. Strangely, this collection was not included in Bentham's (1843) account of the plants collected on the voyage. Later, specimens of the same species were collected by the U.S. Exploring Expedition under Captain C. Wilkes in 1840 and by W.H. Harvey in 1855. These plants were described by Seemann (1862) and named *Clerodendrum amicum* Seem.

Asa Gray (1862), who also had plants from Fiji, wanted to describe what was the same species and give it the same name: *Clerodendrum amicum*. However, when a copy of Bonpland's account had reached him, he recognised Seemann's priority and described an other 'new' species as *Clerodendrum ovalifolium*. Furthermore, he formed a new section of *Clerodendrum*, sect. *Tetrathyranthus*, to accommodate them. As distinctive characters, he mentioned the four-lobed regular calyx and corolla. Recognising that Von Mueller's *Faradaya splendida* and the two *Clerodendrum* species (*C. amicum* and *C. ovalifolium*) belonged to the same group, Seemann referred *Clerodendrum* sect. *Tetrathyranthus* to *Faradaya*. Furthermore he placed the genus, with *Oxera* and *Clerodendrum*, in the 'Natural Order Verbenaceae' (Seemann, 1865). The decision that the genus *Faradaya* belonged to the Verbenaceae was accepted by all later authors up to Cantino (1992a, b).

Long before, Solander had recognised in manuscript a new section of *Clerodendrum*, sect. *Terminalioides*, for what was to become *Clerodendrum amicum* from Tonga. However, he never published it. In 1866 Seemann recognised that this section was similar to *Faradaya*, and placed it in synonymy under *Faradaya* in his Flora Vitiensis. In his treatment of the Verbenaceae for the Flora Australiensis, Bentham put *Faradaya* with *Oxera* in the subtribe Oxereae (Bentham, 1870).

In 1891, Baillon described a Jacquinot collection from Coupang (Timor) as a new species of a new genus: *Schizopremna timorensis*. This genus was accepted as distinct from *Faradaya* by Junell (1934) and Lam (1919). It was overlooked by Lam & Bakhuizen van den Brink (1921). Van Steenis re-examined the type specimen collected by Jacquinot, which seems to be incorrectly labelled, as the handwriting on the label is not that of Jacquinot himself. One other collection by Jacquinot with the label Coupang (Timor) could be found, and proved to be a *Cyperus* restricted to Melanesia. A *Faradaya* collection from Samoa was found, which was almost identical to the Jacquinot collection. Van Steenis concluded that *Schizopremna* is congeneric with *Faradaya* (Van Steenis, 1955).

Lam (1919), in his treatment of the Verbenaceae of the Malayan Archipelago, recognised ten species of *Faradaya*, of which two were newly described by him. In 1921, in a treatment of the Verbenaceae for the Dutch East-Indies and surrounding countries, he recognised only eight species (Lam & Bakhuizen van den Brink, 1921). Moldenke (1982a, b), in two uncritical articles with notes on the genus, recognised 22 taxa. The Australian species were revised by Munir in 1987. He accepted two species for the country. This number was reduced to one by Mabblerley (1992). Smith & Darwin (1991) recognised five species in their treatment for the Fiji Islands, of which two are newly described by them. Currently, about 20 species are recognised (Smith & Darwin, 1991).

THE POSITION OF FARADAYA IN THE TAXONOMIC SYSTEM
FROM JUNELL (1934) TO THE PRESENT

In his detailed discussion of the structure of the gynoecium of the Verbenaceae and Labiatae, Junell (1934) placed *Oxera*, *Faradaya* and *Hosea* together with *Clerodendrum*, *Kalaharia*, *Amasonia*, *Monochilus*, *Tetraclea*, *Holmskioldia* and *Huxleya* in the Verbenaceae, tribe Viticoideae, subtribe Clerodendreae. Based on differences in the placing of the placenta, he informally distinguished a subgroup within the Clerodendreae, consisting of *Oxera*, *Faradaya*, *Hosea* and *Holmskioldia*. Based on overall similarity of the gynoecium he placed *Hosea* between *Oxera* and *Clerodendrum* (Junell, 1934).

In Raj's (1983) study of the pollen morphology of the Verbenaceae, he concluded that the pollen grains of eight (*Clerodendrum*, *Faradaya*, *Hosea*, *Huxleya*, *Kalaharia*, *Oncinocalyx*, *Oxera*, *Tetraclea*) of the eleven genera of the Clerodendreae, are very similar to each other and distinct enough from other pollen types to be grouped under a separate one (Raj, 1983).

In a phenetic analysis of the genus *Clerodendrum* and allies, based on chemical and morphological characters, *Faradaya amicorum* was placed in the group comprising the bulk of the Indo-Malesian species of *Clerodendrum* (Stenzel et al., 1988). This is not too surprising, as geographical distribution was used as one of the characters in the analysis. Winterhalter (1991) continued the work, but analysed the data cladistically with other taxa from the subfamilies Viticoideae and Verbenoideae. In this analysis, *Oxera*, *Faradaya* and *Hosea* form a monophyletic group closely related to *Clerodendrum*, *Tetraclea*, *Holmskioldia*, *Kalaharia* and *Rotheca*.

In his thesis on the pollen of the Labiatae subfamily Lamioideae, Abu-Asab (1990) distinguished a group of Ajugeae within the subfamily based on the presence of spinulose sculpturing. The pollen of some verbenaceous genera (*Oxera*, *Faradaya*, *Hosea*, *Aegiphila*, *Amasonia*, *Caryopteris*, *Clerodendrum*, *Glossocarya*, *Huxleya* and *Kalaharia*) resemble the pollen of these Ajugeae. In his final analysis, a clade of various taxa (*Oxera*, *Faradaya*, *Hosea*, *Amethystea*, *Cardioteucriis*, *Rubiteucriis*, *Schnabelia*, *Tetraclea*, *Trichostema*, *Aegiphila*, *Amasonia*, *Caryopteris* sect. *Pseudocaryopteris*, *Clerodendrum*, *Glossocarya*, *Huxleya* and *Kalaharia*) comprises the sister group of the Ajugeae with spinulose pollen (Abu-Asab, 1990).

In 1992 Cantino published a cladogram of the Labiatae, with some Verbenaceae genera which he thought were closely related (Cantino, 1992a, b). The cladogram is based on 71 macromorphological, three embryological, five palynological, one phytochemical and five leaf epidermal characters. *Oxera* was placed together with *Hosea*, as part of an unresolved node at the base of the Ajugeae clade with spinulose or verrucate supracteal pollen sculpturing, the clade including the tribe Monochileae (Verbenaceae), the genera *Aegiphila* (Callicarpeae) and *Spartothamnella* (Chloantheae) and most genera of the tribes Clerodendreae and Caryopterideae. In the discussion Cantino expressed his doubt about the exclusion of the genus *Faradaya* from this group. *Faradaya* is included in the analysis, but turns up in a different clade. He blames this on insufficient data concerning *Faradaya* for some characters used in the analysis (Cantino, 1992a: 376–377). This hypothesis has been strengthened by later research

which showed that *Faradaya* indeed has an exine with branched columellae like *Oxera*, *Hosea* and a few species of *Clerodendrum* (Cantino, pers. comm.).

In the same year, Rimpler published a cladogram of the Caryopteridoideae and related taxa, based on 66 morphological and chemical characters. The genus *Faradaya* was represented by *F. splendida*. In the cladogram *Oxera* and *Faradaya* are part of a well-supported clade, together with *Amasonia*, *Holmskioldia* and some members of the genus *Clerodendrum* (Rimpler et al., 1992). In a new analysis of the data set, but with more taxa, *Oxera* and *Faradaya* were placed together at the largely unresolved base of the cladogram (Rimpler et al., 1993).

In Cantino, Harley & Wagstaff's provisional intra-familial classification, *Oxera*, *Faradaya* and *Hosea* were placed in the subfamily Teucrioideae (Cantino et al., 1992).

In 1995, Steane wrote a thesis on the molecular systematics of the genus *Clerodendrum s.l.* In her analysis she used *Oxera* and *Faradaya* as outgroups, but did not include *Hosea* as she was unable to obtain samples of this taxon. In her cladistic analysis, she used 329 discrete, binary restriction site characters of chloroplast DNA and 281 sequence characters of ITS region of the nuclear DNA. In the separate cladistic analysis of the chloroplast and nuclear data and in the analysis of all the combined data, *Oxera* and *Faradaya* were placed together as a separate clade, and as the sister group of *Clerodendrum s.s.* or as the sister group of *Clerodendrum s.l.* (*Clerodendrum s.s.* + *Rothea*). In some analyses, the genera *Caryopteris* and *Trichostema* appeared to be the sister group of the combined *Oxera-Faradaya* and the *Clerodendrum s.s.* clades (Steane, 1995; see also Steane et al., 1997). This was confirmed by a separate analysis based on morphological, flavonoid and nrDNA characters (De Kok, 1997).

FARADAYA

Faradaya F. Muell., Fragm. Phyt. Austral. 5 (1865) 21; Seem., J. Bot. 3 (1865) 256–258; Fl. Vit. (1866) 188; Benth., Fl. Austral. 5 (1870) 33, 69; Benth. & Hook.f., Gen. Pl. 2 (1876) 1131; Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4, 3A (1895) 132; H.J. Lam, Verbenac. Malay. Arch. (1919) 228; Junell, Symb. Bot. Upsal. 1 (1934) 109, 202; Moldenke, Phytologia 51 (1982) 384; 52 (1982) 20; Raj, Rev. Palaeobot. Palynol. 39 (1983) 373; Munir, J. Adelaide Bot. Gard. 10 (1987) 165–177; A.C. Sm. & S.P. Darwin, Fl. Vit. Nova 5 (1991) 195–202; Abu-Asab & Cantino in Harley & Reynolds, Advances Labiate Sci. (1992) 107; Cantino in op. cit. (1992) 27, 511; Rimpler et al. in op. cit. (1992) 39. — Type: *Faradaya splendida* F. Muell.

Clerodendrum sect. *Tetrathyranthus* A. Gray, Proc. Amer. Acad. Art. Sci. 6 (1862) 50; Benth. & Hook.f., Gen. Pl. 2 (1876) 1156 [*Tetrathyranthi*]. — Syntype: *Clerodendrum amicum* Seem. [= *Faradaya amicum* (Seem.) Seem.], *Clerodendrum ovalifolium* A. Gray [= *Faradaya amicum* (Seem.) Seem.].

[*Clerodendrum* sect. *Terminalioides* Soland. ex Seem., Fl. Vit. (1866) 190, nom. in synon.]

[*Faradaija* Wigman, Teysmannia 1 (1890) 488, sphalm.]

Schizopremna Baill., Hist. Pl. 11 (1891) 119; cf. Steenis, Acta Bot. Neerl. 4 (1955) 477. — Type: *Schizopremna timorensis* Baill. [= *Faradaya amicum* (Seem.) Seem.].

Lianes or small trees, stems with (hardly) raised lenticels. *Leaves* simple, decussate or ternate, petiolate, exstipulate, margin entire; venation reticulate, main veins abaxially prominent, adaxially not so; small glands 0.04–0.10 mm diam., sunken, round, scattered, many; big glands 0.2–2.2 mm diam., scattered or concentrated at base, few; stomata hypostomatic, anomocytic and sometimes actinocytic or anisocytic (Cantino, 1990). *Inflorescence* a determinate thyrses, axillary and/or terminal, sometimes cauliflorous;

bracts linear to fusiform, 1.5–32 mm long, apex acute to acuminate, erect to reflex, flat, sessile to petiolate. Flowers tetramerous, large, conspicuous, bisexual, hypogynous. *Calyx* 2–4-lobed, persistent, campanulate, united to adherent, but during flowering split into 2–4 lobes. *Corolla* hypocrateriform or campanulate, 4-lobed, symmetrical, fleshy to stiff, white or creamy to yellowish white, deciduous. *Stamens* four, antisepalous, epipetalous, filiform, exerted, usually all equal in length; anthers extrorse, dorsifixed; pollen in monads, elliptic in equatorial view, rounded triangular, $P = 66\text{--}90$, $E = 37\text{--}95\ \mu\text{m}$; colpi narrow, with pointed ends, margin uneven; tectum thin; spines 3–4 μm long, 5–10 μm apart, solid, few; nexine form a thin, homogeneous layer (Raj, 1983). *Ovary* deeply lobed, 4-locular, with one ovule in each cell, seated on a disk; style filiform, terete, gynobasic, with two short stigmatic lobes. *Disk* round. *Fruit* schizocarp, 4-celled; mericarps 1–4 by abortion, exocarp fleshy, relatively thin; endocarp stony, smooth. *Seed* one per mericarp.

Distribution — Three species: in Samoa (1), Tonga (1), Fiji (2), Vanuatu (1), Solomon Islands (2), New Guinea (1), New Ireland (2), Australia (1), Aru Islands (1), Seram (1), Talaud Island (1) and Sabah (1). In Van Balgooy (1971) the North and South Tuamotu Islands are erroneously included as part of the distribution. The distribution pattern of *Faradaya* is characterised by Van Balgooy as a genus which is restricted to, or centred in, East Malesia and Australia (type 6a).

Notes — 1. The type of the fungus species *Phyllosticta faradayae*, was found growing on a *Faradaya* specimen and was named after the genus (Anonymous, 1957).

2. A more detailed literature list is given in Moldenke (1982a, b) and De Kok (1997).

KEY TO THE SPECIES

- 1a. Inflorescence pendulous. Calyx lobes velutinous, completely reflexed when fruiting. Corolla bucket-shaped, completely velutinous. Ovaries glabrous **2. *F. lehuntei***
- b. Inflorescence pendulous to erect. Calyx lobes glabrous or velutinous at apex only, erect to completely reflexed when fruiting. Corolla bucket-shaped to hypocrateriform, glabrous or velutinous at the apex of the lobes only. Ovaries glabrous to velutinous **2**
- 2a. Calyx lobes reflexed when fruiting. Ovaries glabrous. Fruit bright red when mature **1. *F. amicum***
- b. Calyx lobes erect when fruiting. Ovaries velutinous, seldom glabrous. Fruit white to yellow when mature **3. *F. splendida***

1. *Faradaya amicum* (Seem.) Seem. — Fig. 1, Map 1

Faradaya amicum (Seem.) Seem., J. Bot. 3 (1865) 258; Fl. Vit. (1866) 189; Cantino, J. Arnold Arbor. 71 (1990) 335, 355. — *Clerodendrum amicum* Seem., Bonplandia 10 (1862) 249 'Clerodendron amicum'; Reinecke, Bot. Jahrb. Syst. 25 (1898) 672; Burkill, J. Linn. Soc. Bot. 35 (1901) 50; Gibbs, J. Linn. Soc. Bot. 39 (1909) 160, 205. — Lectotype (Moldenke, 1982a: 394): *Barclay* 3373 (holo BM; iso K), Tonga.

Clerodendrum ovalifolium A. Gray, Proc. Amer. Acad. Art. Sci. 6 (1862) 50 'Clerodendron ovalifolium'. — *Faradaya ovalifolia* (A. Gray) Seem., J. Bot. 3 (1865) 258; Fl. Vit. (1866) 189;

- A.C. Sm., *Allertonia* 1 (1978) 413; Raj, *Rev. Palaeobot. Palynol.* 39 (1983) 357; Cantino, *J. Arnold Arbor.* 71 (1990) 335; A.C. Sm. & S.P. Darwin, *Fl. Vit. Nova* 5 (1991) 200. — Type: *United States Exploring Expedition s.n.* (holo US?; iso K), Samoa. Syn. nov.
- Faradaya vitiensis* Seem., *J. Bot.* 3 (1865) 258; *Fl. Vit.* (1866) 188, pl. 44; Horne, *Year Fiji* (1881) 262; Seem., *Descr. Notes Papuan Pl. Imp.* 1 (1886) 8; Gibbs, *J. Linn. Soc. Bot.* 39 (1909) 160, 205; Moldenke, *Phytologia* 52 (1982) 44; A.C. Sm. & S.P. Darwin, *Fl. Vit. Nova* 5 (1991) 195. — Type: *Storck s.n.* (holo BM; iso K), Viti. Syn. nov.
- ?*Faradaya powellii* Seem. in Powell, *J. Bot.* 6 (1868) 342; Christoph., *Bernard Bishop Mus.* 128 (1935) 192; Krämer, *Samoa-Inseln* 2 (1903) 118, 373; Steenis, *Acta Bot. Neerl.* 4 (1955) 477; Parham, *New Zealand Dept. Sci. Ind. Res. Inf. series* 85 (1972) 72; Whistler, *Allertonia* 2 (1980) 163. — *Clerodendrum powellii* (Seem.) Drake, *Ill. Fl. Ins. Mar. Pac.* (1892) 261 '*Clerodendron powellii*'. — Type: ? (see last paragraph Note 1). Syn. nov.
- [*Clerodendrum arthurgordonii* Horne, *Year Fiji* (1881) 259 '*Clerodendron arthurgordonii*', nom. nud.]
- Faradaya gordonii* Baker, *J. Linn. Soc. Bot.* 20 (1884) 370 '*gordonii*'; Moldenke, *Phytologia* 57 (1985) 354; A.C. Sm. & S.P. Darwin, *Fl. Vit. Nova* 5 (1991) 195. — Type: *Horne s.n.* (holo K), Fiji Islands, Viti Levu.
- Schizopremna timorensis* Baill., *Hist. Pl.* 11 (1891) 119; cf. Steenis, *Acta Bot. Neerl.* 4 (1955) 477. — Type: *Jacquinot s.n.* (holo P), Timor, Coupang.
- Faradaya savaiiensis* Rech., *Denkschr. Akad. Wien, Math. Nat.* 35 (1910) 340. — Type: *Rechinger 3728* (holo W), Samoa. Syn. nov.
- Faradaya neo-ebudica* Guillaumin, *J. Arnold Arbor.* 13 (1932) 28; Parham, *Pl. Fiji Is.* (1964) 213, ed. 2 (1972) 299. — Type: *Kajewski 813* (holo A; iso BISH, BO, K, P), Vanuatu, Aneityum Island. Syn. nov.
- Faradaya amicorum* (Seem.) Seem. var. *salomonensis* Bakh., *J. Arnold Arbor.* 16 (1935) 71.
- Faradaya salomonensis* (Bakh.) Moldenke, *Phytologia* 4 (1952) 54; 51 (1982) 391, 396; 52 (1982) 35. — Syntypes: *Brass 3399* (L, BM, BO), Solomon Islands, Isabel Island; *Brass 2635* (BISH, BO), Solomon Islands, San Cristobal. Syn. nov.
- Faradaya vitiensis* Seem. var. *puberulenta* Moldenke, *Phytologia* 3 (1949) 60; 52 (1982) 44. — *Faradaya neo-ebudica* Guillaumin var. *puberulenta* (Moldenke) Moldenke, *Phytologia* 4 (1952) 53; Parham, *Pl. Fiji Is.* (1964) 213, f. 76. — Type: *Smith 5799* (holo NY, n.v.; iso BISH, K, L, P), Fiji, Naitasiri.
- Faradaya neo-ebudica* Guillaumin var. *degeneri* Moldenke, *Phytologia* 4 (1952) 53; Parham, *Pl. Fiji Is.* (1964) 213, ed. 2 (1972) 299. — *Faradaya lehuntei* (Horne ex Baker) A.C. Sm. var. *degeneri* (Moldenke) Moldenke, *Phytologia* 52 (1982) 21. — Type: *Degener & Ordenez 13762* (holo NY; iso NY), Fiji, Naitasiri.
- Faradaya ovalifolia* var. *glabra* Moldenke, *Phytologia* 4 (1952) 53; Parham, *Pl. Fiji Is.* (1964) 213, ed. 2 (1972) 299. — *Faradaya glabra* (Moldenke) A.C. Sm. & S.P. Darwin, *Fl. Vit. Nova* 5 (1991) 202. — Type: *Gillespie 3513* (holo NY, n.v.; iso BISH, K), Fiji, Naitasiri. Syn. nov.
- [*Faradaya lehuntei* sensu A.C. Sm. non (Horne ex Baker) A.C. Sm., *Allertonia* 1 (1978) 412; A.C. Sm. & S.P. Darwin, *Fl. Vit. Nova* 5 (1991) 195.]

Liane or small tree, 3–23 m high. Stem 5–30 cm diam.; internodes round, hollow, glabrous or somewhat scabrous, smooth, sometimes with a granular layer. *Leaves* leathery, decussate or ternate, shiny; blade elliptic to oblong to broadly obovate, 2.2–23 by 1.2–13.8 cm, index 0.68–3, glabrous to few patent hairs abaxial at base, apex round to acuminate, cuspidate or emarginate, base cuneate; venation sometimes 3-palmate at base; big glands oval to round, craterlike, 0.4–10 by 0.2–3 mm, scattered or concentrated at base, few; petiole 6.5–35 by 0.5–2.8 mm, shallowly channelled to half terete in cross section, glabrous to scabrous, sometimes covered with glands. *Inflorescence* 1.6–24.2 by 1.1–3.8 cm, axillary and/or terminal, sometimes cauline, determinate thyrse, pendulous to erect, borne on old and young wood, glabrous to villous; hairs non-transparent, simple. *Calyx* campanulate, 6–17 by 5.5–12 mm,

2–4-lobed, round in cross section, glabrous to few hairs at base, cartilaginous to fleshy, (light) green to pure white; lobes 0.8–8.2 by 3–9 mm, apex round to acute, glabrous or with a few hairs at apex, all open and erect during flowering, completely reflexed during fruiting; glands round to oval, craterlike, 0.3–0.8 by 0.4–0.6 mm, brown,

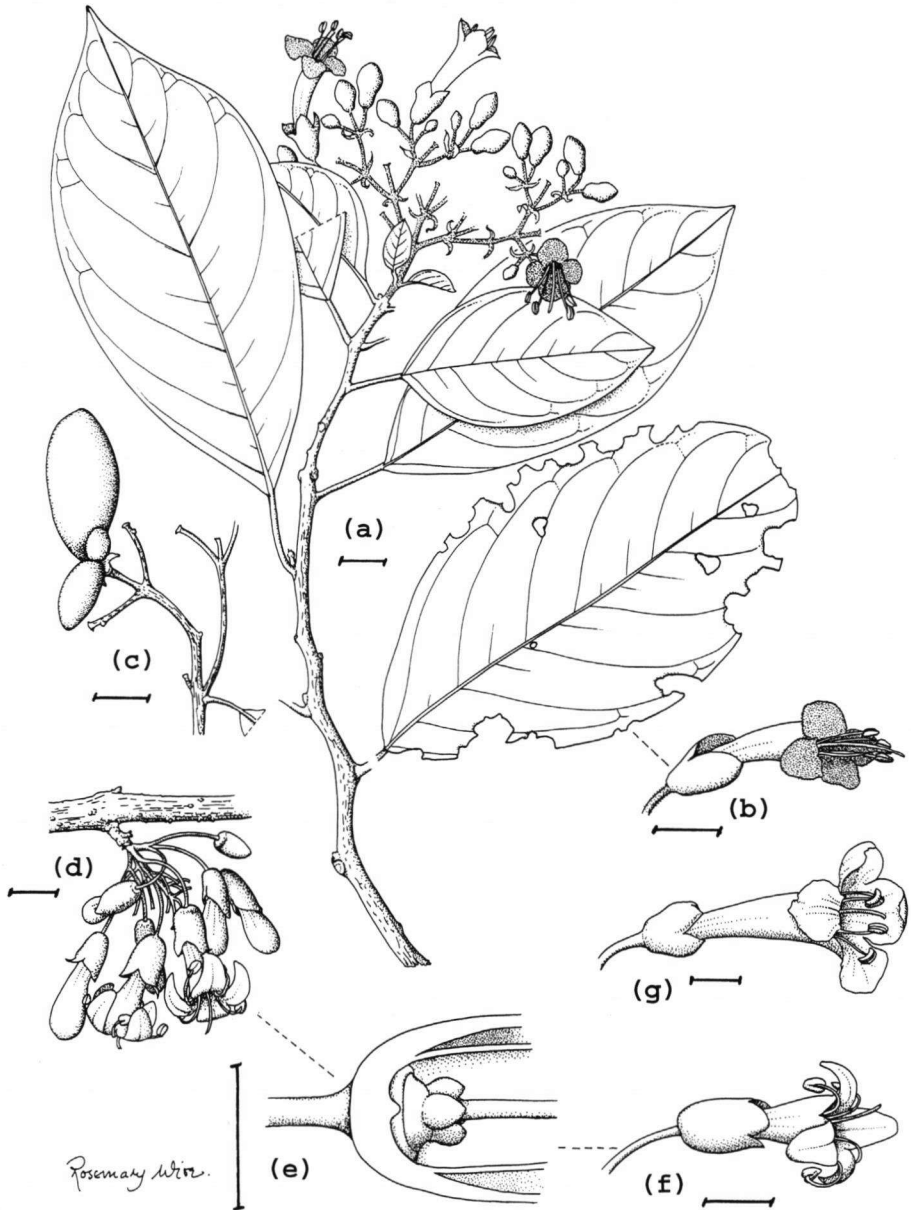


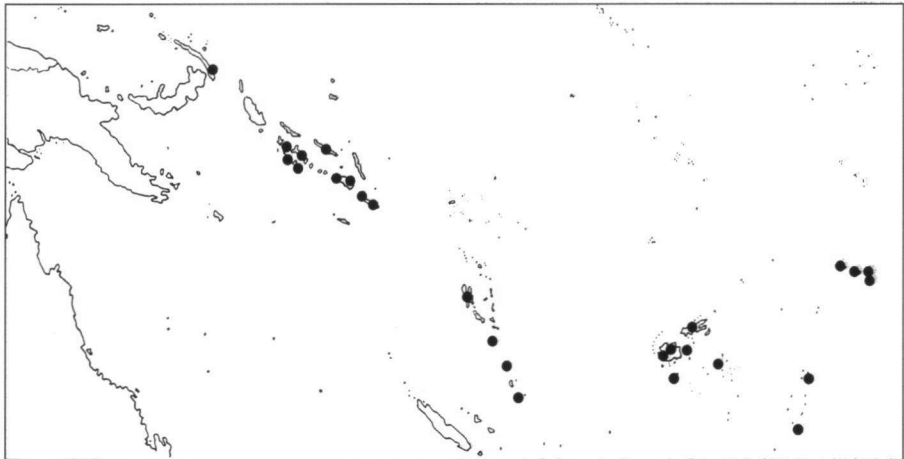
Fig. 1. *Faradaya amicum* (Seem.) Seem. a. Habit; b. flower; c. fruit; d. inflorescence; e. lateral view of ovary; f. flower; g. flower [a, b: Gibbs 576 (BM); c: De Kok 561 (K); d–f: De Kok 564 (K); g: De Kok 563 (K)]. — Scale bars are 1 cm long.

abundant adaxially; glandular hairs subsessile, few to abundant, abaxially. *Corolla* hypocrateriform to almost bucket-shaped, 32–60 mm long, (creamy to yellow) white, erect to pendulous, fleshy, sometimes scented; tube 32–55 mm long, 1.4–7.5 mm wide at base, gradually broadening to 7–18 mm at mouth; lobes round to oblong or spatulate, all equal, 4.8–12 by 4.8–12 mm, apex round to emarginate, first erect, after shedding of the pollen erect or reflexed; glandular hairs 0.3–1 mm long, subsessile, around the mouth and on the lobes, multicellular, transparent. *Stamens*: filaments 13–35 by 0.4–1 mm, inserted centrally or in upper third of the corolla, (cream) white, exerted, first erect, after shedding of pollen reflexed; hairs 0.22–1 mm long, base to middle part, many, multicellular, transparent, patent, sometimes glandular; anthers 2.5–5 by 1–2 mm, glabrous, straight to curled up when dehisced, yellow to (dark) brown; pollen yellow. *Ovary* lobes light green, round to conical, 1–2 by 1 mm, glabrous or with craterlike glands; style 32–46 by 0.5–1 mm, glabrous, (cream) white; stigma linear to round, 0.5–0.8 mm long. *Disk* 0.3–2 mm high, 1.8–4 mm wide, glabrous, very light green. *Fruit* (bright) red to orange with small white spots; mericarps clavate, 16–40 by 9–18 by 5.5–13.2 mm (dried), glabrous, smooth, 1–4 developing per fruit; endocarp 0.6–0.8 mm thick, smooth. *Seed* smooth, yellow.

Distribution — Solomon Islands and Bismarck Archipelago: New Ireland, Vanuatu, Fiji, Samoa, Tonga. Common in Vanuatu (Chanel, pers. comm.; De Kok, 1997), Fiji (De Kok, 1997) and Samoa (*Spence* 490).

Habitat — Growing in primary to secondary coastal to montane forest at 0–1160 m altitude, in well drained soil, in forest dominated by *Agathis* in Vanuatu (*Chew Wee-Lek* 129), *Serianthes*, *Elmerrillia* & *Syzygium* in New Ireland (*LAE* 57177). Flowering and fruiting all year round.

Local names — Solomon Islands: Kwalo ebo (Kwara'ae language, *BSIP* 2460, 2781, 10991, 11468, 15897); Santa Isabel Island: Naosokoño (Bakhuizen van den Brink, 1935); Guadalcanal: Kwalongarimadio Kwao (Kwara'ae language, *BSIP* 8124), Kwalo Duri (Kwara'ae language, *BSIP* 9177) or Ala-ta-homa (*Kajewski* 2543); Georgia, Guadalcanal and Kolombangara Island: Kwalo alomae (Kwara'ae language, *BSIP*



Map 1. Distribution of *Faradaya amicornum* (Seem.) Seem.

4931, 5076, 8914). Vanuatu: Efate: Naas peta (*Cabalion* 1117); Aneityum: Nao masi jal (*Cabalion* 1894); Erromango: Nosortenton (*Cabalion* 1704); Espiritu Santo: Ashtamlapa (*Cabalion* 2779) and Wonag wona (*Cabalion* 888); Nguna: Nas navu (*Cabalion* 1704). Fiji: Wa Korovudi, Wa kuru vundi or Wakarovungi (*Degener* 14621; *Gillespie* 2670, 3640; *Smith* 4752, 5799, 5859, 7032, 7388, 7523, 7764; *St. John* 18274); Wa vatu (*Smith* 1717, 1845); Wa vundi (*Tuisawau* AT0056); Ngakawa (*Smith* 81); Karavau (*MacDaniels* 1052); Wa masi (*St. John* 18308); Beta (*De Kok* 563), Wa vuti and Wa Kuroyudi or Wa Kurovudi (Cambie & Ash, 1994; Parham, 1972a). Samoa: Filitavati'o or more commonly Tavati'o (Krämer, 1903; Powell, 1868), Mamalupe (Powell, 1868; Christophersen, 1935; Reinecke, 1898; *Garber* 671); Tutuila: Afa or Avalupe (Reinecke, 1898; *Bryan* 956); Savai'i: Fue or Fue vai (*Bristol* 2131; *Christophersen* 340). Tonga: Fufula (Whistler, 1992); Tofua: Mamange (Whistler, 1991).

Uses — Solomon Islands: Guadalcanal: In common with other vines this species is used for treating gonorrhoea. The bark is macerated with water, the resulting concoction being drunk (*Kajewski* 2543). Vanuatu: Erromango: Bark and leaves from the top branches of the plant are used as a medicine in curing what the islanders call the illness of the Yam (*Cabalion* 1704). Fiji: A decoction of the chewed or grated leaves is reported to be a very effective mild purgative (Cambie & Ash, 1994). Samoa: The bark was used as a medicine against infantile fever. The fruit of a *Fagraea* species and scrapings of the bark of *Faradaya amicum* were ground in water. The liquid was then given to the child to drink (Krämer, 1903). The flowers are also used in chaplets at weddings (Setchell, 1924). Tonga: Eua: The woody stems of the plants are collected, and sold to native healers in the markets of Nuku'alofa. An infusion of the bark is taken as a potion to relieve stomach-ache by acting as a purge (Whistler, 1992). The bark is also used against cancer (Whistler, 1991).

Notes — 1. In his description of *F. amicum* var. *salomonensis*, Bakhuizen van den Brink (1935) gives only the glabrous corolla as the difference from the typical form. The abundance of hairs on the corolla in the whole geographical range of *F. amicum* varies greatly and no clear distinction between glabrous and less glabrous forms can be drawn.

The presence or absence of the hairs on the inflorescence is very variable and a whole range of intermediates between glabrous and velutinous specimens can be found. The taxa *F. vitiensis* var. *puberulenta*, *F. neo-ebudica* var. *degeneri* and *F. ovalifolia* var. *glabra* were entirely based on this variation.

The shape of the corolla varies greatly in this species. The corollas can be hypocrateriform in shape (Fig. 1b, g) to almost bucket-shaped (Fig. 1d, f). In between these two extremes, all possible intermediates can be found (see also Gibbs, 1909). The type of *F. ovalifolia* is hypocrateriform, while the types of *F. vitiensis* and *F. amicum* are more bucket-shaped.

Faradaya vitiensis was said to differ from *F. amicum* only in having a cauline, rather than a terminal and/or axillary inflorescence. During field work in Fiji specimens were seen with both cauline and terminal and/or axillary inflorescences (see also the *F. splendida* discussion).

A number of forms were described as local entities: *F. gordonii*, *F. savaiensis* and *F. neo-ebudica*, but no characters can be found on the type specimens to separate these from *F. amicum*.

From the description, it is clear that *F. powellii* is a *Faradaya*. Given the collection locality of the type it is probably conspecific with *F. amicomum*. Van Steenis had expressed the same opinion in a letter to Moldenke (Moldenke, 1982b) and in his article on *Schizopremna* (Van Steenis, 1955).

2. Named after the Friendly Islands (Tonga) where the type specimen was collected (Seemann, 1862).

3. The flowers are visited by birds, most likely honeyeaters (De Kok, 1997) and by bees (*Cabalion* 888).

4. Fruit said to be eaten by pigeons (*St. John* 18274), in one case *Ducula latrans* (*De Kok* 562). One of the Samoan names for the species (Mama lupe) means pigeon's food (Parham, 1972b).

2. *Faradaya lehuntei* (Horne ex Baker) A. C. Sm. — Fig. 2, Map 2

Faradaya lehuntei (Horne ex Baker) A. C. Sm., *Allertonia* 1 (1978) 412. — *Clerodendrum lehuntei* Horne, Year Fiji (1881) 259 '*Clerodendron lehuntei*', nom. nud.; Baker, J. Linn. Soc. Bot. 20 (1884) 369. — Type: *Horne* 1002 (holo K), Fiji, Viti Levu.

Faradaya ampliflora A. C. Sm. & S. P. Darwin, Fl. Vit. Nova 5 (1991) 195–202. — Type: *Smith* 5505 (holo BISH; iso K), Fiji, Rairaimatuku Plateau. Syn. nov.

Liane 4 m tall. Stem 10 cm diam.; internodes round, glabrous, smooth. *Leaves* decussate, leathery; blade obovate, 5.9–9.4 by 3.9–6 cm, index 1.5–1.57, glabrous, apex acute to round, base cuneate; big glands oval to round, craterlike, 0.2–0.8 by 0.2 mm, basal, few; petiole 9.8–23 by 0.8–3 mm, semi-terete in cross section, glabrous. *Inflorescence* 5.1–7.1 by 1.5–2.5 cm, determinate double thyrse with decussate bracts, axillary and/or terminal, velutinous, pendulous; pedicel 8–18 mm long. *Calyx* campanulate, 7 by 7–11 mm, fleshy, light green to white, velutinous abaxially and adaxially, base 0.8 mm long; lobes 4.5–7 by 4.2–5 mm, apex acute, all open and erect during flowering, completely reflexed when fruiting. *Corolla* bucket-shaped, 17.2–19 mm long, tube 10–11 by 4–10.5 mm, mouth square in cross section, fleshy, velutinous, (cream) white; lobes spatulate, all equal, 7.2–9 mm long, 7 mm wide at apex, apex emarginate to 4 mm. *Stamens*: filaments 27 by 0.5 mm, inserted in upper third of the corolla, greatly exerted, (cream) white; hairs 0.22–0.5 mm long, multicellular, transparent, patent, basal to middle part of stamen; anthers 5 by 1.5 mm, glabrous, straight, cream white; pollen white. *Ovary* lobes round, 2 by 2 mm glabrous, light green at first later bright green; style 47 by 0.7 mm, glabrous, white; stigma linear, 0.4 mm long. *Disk* 2 by 3.5 mm glabrous, light green. *Fruit*: mericarps clavate, 29–32 by 13–14 by 7–9 mm (dried), glabrous, smooth, colour unknown, four developing per fruit; endocarp 0.5–1.8 mm thick, smooth. *Seed* smooth.

Distribution — Fiji, Viti Levu. Restricted to the northern part of the Rairaimatuku plateau, where it is very common (De Kok, 1997).

Habitat — Growing in primary and secondary forest at 725–850 m altitude. Flowering from August to September. Fruiting from September to November.

Local name — Wavundi (*Gillespie* 3166).

Notes — 1. Baker, who first validly published the name *Clerodendrum lehuntei*, cites one specimen: *Horne* 1002 (Baker, 1884). In 1978, Smith transferred the name from *Clerodendrum* to *Faradaya*; in discussion about the typification he cites the cor-

rect type (*Horne 1002* at Kew), but then states “the holotype is essentially identical with Moldenke’s concept of *F. neo-ebudica* var. *puberulenta*, typified by *Smith 5799*” (Smith, 1978). This is a bit odd as the specimen *Horne 1002* differs from *Smith 5799* in exactly those characters (velutinous corolla, shape of corolla, number of flowers per

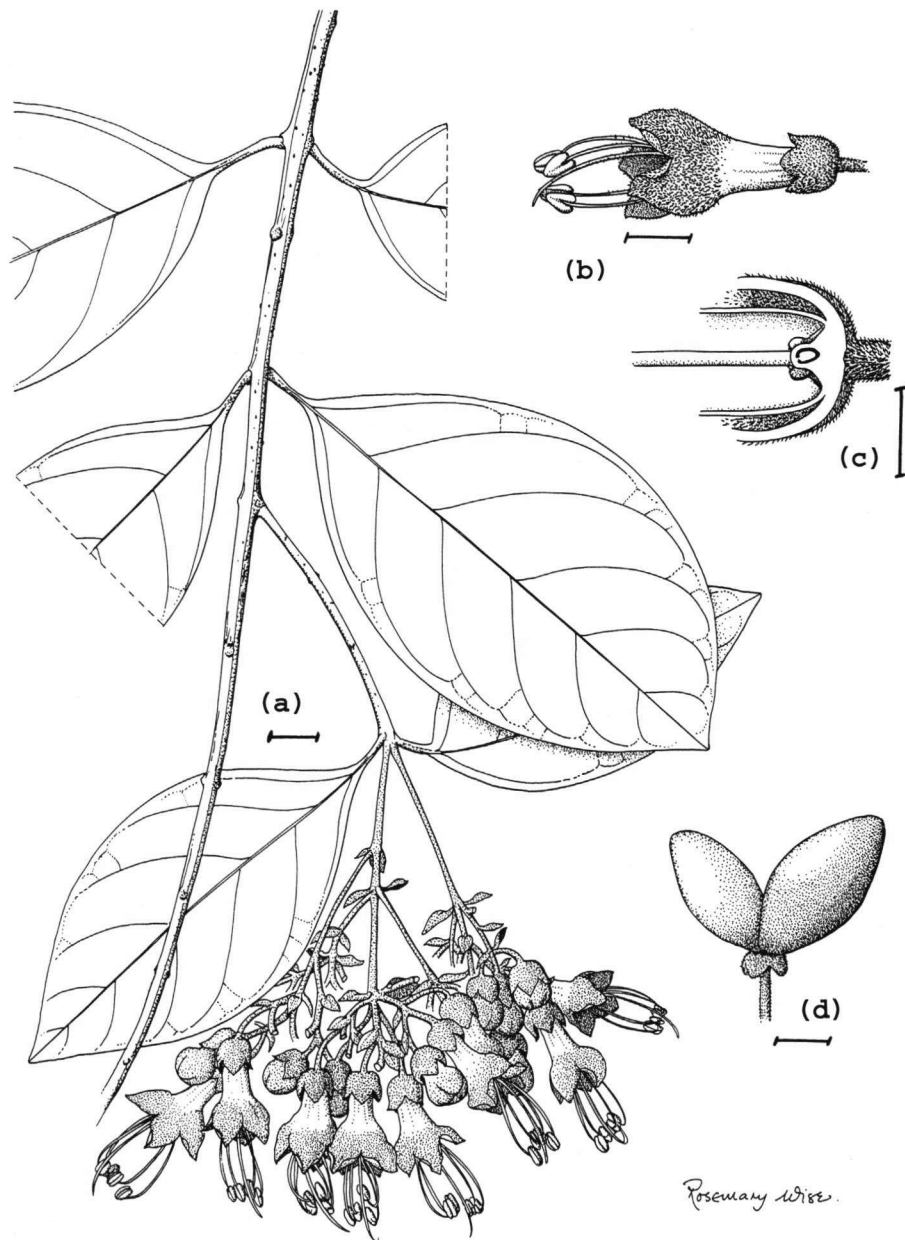
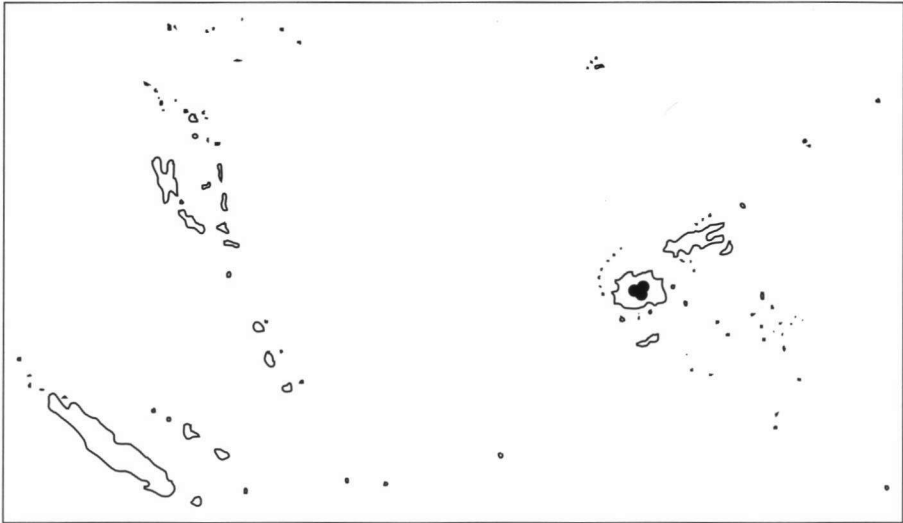


Fig. 2. *Faradaya lehuntei* (Horne ex Baker) A.C. Sm. a. Habit; b. flower; c. vertical section of ovary; d. fruit [a–c: *De Kok 560* (K); d: *Gillespie 3166* (BISH)]. — Scale bars are 1 cm long.



Map 2. Distribution of *Faradaya lehuntei* (Horne ex Baker) A.C. Sm.

inflorescence, etc.) which made him describe a completely new taxon (*F. ampliflora*) in 1991 (Smith & Darwin, 1991). From the descriptions given by Smith & Darwin in their treatment of the genus, and from their cited specimens it is clear that *F. lehuntei* sensu A.C. Sm. is identical with *F. amicorum* F. Muell. and not with *C. lehuntei* Baker.

2. Named after Sir Ruthven Le Hunte (1852–1925), the Government Commissioner of a portion of the interior of Viti Levu, who gave Horne much help in gathering specimens.

3. The flowers are visited by birds, most likely honeyeaters, and by bees who rob the nectar through a hole at the base of the flower (De Kok, 1997).

3. *Faradaya splendida* F. Muell. — Fig. 3, Map 3

Faradaya splendida F. Muell., *Fragm. Phyt. Austral.* 5 (1865) 21; Seem., *J. Bot.* 3 (1865) 256; F. Muell., *Fragm. Phyt. Austral.* 6 (1867–1868) 153; Benth., *Fl. Austral.* 5 (1870) 69; K. Schum. & Hollrung, *Fl. Kaiser Wilhelmsland* (1889) 122; K. Schum. & Lauterb., *Fl. Deutsch. Schutzgeb. Südsee* (1900) 524, *Nachtr.* (1905) 370; H.J. Lam, *Verbenac. Malay. Arch.* (1919) 234; *Bot. Jahrb. Syst.* 59 (1924) 94; Raj, *Rev. Palaeobot. Palynol.* 39 (1983) 357, 373; Cantino, *J. Arnold Arbor.* 71 (1990) 335, 355. — Lectotype (Munir, 1987: 173): *Dallachy s.n.* (holo K; iso MEL), Australia, Queensland, Rockingham Bay.

Faradaya albertisii F. Muell., *Descr. Notes Papuan Pl.* 8 (1875?) 46; K. Schum. & Hollrung, *Fl. Kaiser Wilhelmsland* (1889) 122; H.J. Lam, *Verbenac. Malay. Arch.* (1919) 230; Raj, *Rev. Palaeobot. Palynol.* 39 (1983) 357, 373; Munir, *J. Adelaide Bot. Gard.* 10 (1987) 165. — Lectotype (Munir, 1987): *D'Albertis s.n.* (holo MEL; iso MEL), Papua New Guinea, Fly River.

Faradaya ternifolia F. Muell., *Descr. Notes Papuan Pl.* 8 (1875?) 46; K. Schum. & Hollrung, *Fl. Kaiser Wilhelmsland* (1889) 122; H.J. Lam, *Verbenac. Malay. Arch.* (1919) 236. — Type: *Australian Geographic Society s.n.* (holo MEL; iso MEL), southern New Guinea. *Syn. nov.*

Faradaya papuana Scheff., *Ann. Jard. Bot. Buitenzorg* 1 (1876) 42; K. Schum. & Hollrung, *Fl. Kaiser Wilhelmsland* (1889) 122; K. Schum. & Lauterb., *Fl. Deutsch. Schutzgeb. Südsee* (1900) 524, *Nachtr.* (1905) 370; Moore, *J. Bot.* 61 (1923) 39; Munir, *J. Adelaide Bot. Gard.* 10 (1987) 166, 172. — Type: *Teijsmann 6773* (holo BO; iso L), Nova Guinea, d'Andaj.

- ?*Faradaya parviflora* Warb., Bot. Jahrb. Syst. 18 (1894) 208; K. Schum. & Lauterb., Fl. Deutsch. Schutzgeb. Südsee (1900) 524; H.J. Lam, Verbenac. Malay. Arch. (1919) 231; Bot. Jahrb. Syst. 59 (1924) 94; Hartley et al., Lloydia 36 (1973) 293. — Syntypes: *Hellwig 164, 179* (B, n.v.), Papua New Guinea, Finschhafen. Syn. nov.
- Faradaya dimorpha* Pulle, Fl. Nova Guinea 8 (1912) 686; H.J. Lam, Verbenac. Malay. Arch. (1919) 233; Bot. Jahrb. Syst. 59 (1924) 94; Raj, Rev. Palaeobot. Palynol. 39 (1983) 357, 373; Moldenke, Phytologia 51 (1982) 396. — Type: *Von Römer 146* (holo L; iso BO), Irian Jaya, North River in Ebene. Syn. nov.
- Faradaya hahlii* Rech., Feddes Repert. Spec. Nov. Regni Veg. 11 (1912) 185; Moldenke, Sixth Summary Verbenac. etc. 1 (1980) 329; Phytologia 51 (1980) 399. — Type: *Rechinger 3927* (holo W), New Britain, Kabakaul. Syn. nov.
- Faradaya magniloba* Wernham, Trans. Linn. Soc., Bot. 9 (1916) 136; H.J. Lam, Verbenac. Malay. Arch. (1919) 229. — Type: *Boden Kloss s. n.* (holo BM), Irian Jaya, Utakwa River to Mt Carstenz, camp I. Syn. nov.
- Faradaya matthewsii* Merr., J. As. Soc. Straits 26 (1917) 115; Meijer, Bot. News Bull. Forest Dept. Sandakan 4 (1965) 29. — Type: *Villamil 253* (holo PNH?; iso BO, K), Sabah, Sandakan.
- [*Faradaya dimorpha* Pulle var. *α opposita* H.J. Lam, Verbenac. Malay. Arch. (1919) 233; H.J. Lam & Bakh., Bull. Jard. Bot. Buitenzorg 3 (1921) 72, nom. nud.]
- [? *Faradaya parviflora* Warb. var. *α typica* H.J. Lam, Verbenac. Malay. Arch. (1919) 232, nom. superfl. — *Faradaya parviflora* var. *parviflora*, nom. nud.]
- [? *Faradaya parviflora* Warb. var. *β angustifolia* H.J. Lam, Verbenac. Malay. Arch. (1919) 232; Bot. Jahrb. Syst. 59 (1924) 94, nom. nud.]
- ? *Faradaya nervosa* H.J. Lam, Verbenac. Malay. Arch. (1919) 232; Bot. Jahrb. Syst. 59 (1924) 94. — Type: *Lauterbach 2822* (B?), New Guinea, Bismarck-plain. Syn. nov.
- Clerodendrum peekelii* Markgr., Notizblatt des Bot. Gardens und Museums zu Berlin-Dahlem 10 (1927) 121; Peekel, Ill. Fl. Bismarck-Archipel (1984) 1561. — *Faradaya peekelii* (Markgr.) Moldenke, Phytologia 52 (1982) 31; 57 (1985) 354; cf. Mabb., Sci. New Guinea 19 (1992) 45. — Type: *Peekel 696* (holo BO?), New Britain, Vunapope.
- [*Faradaya dimorpha* Pulle var. *β ternata* H.J. Lam, Verbenac. Malay. Arch. (1919) 233; H.J. Lam & Bakh., Bull. Jard. Bot. Buitenzorg 3 (1921) 72, nom. nud.]
- Faradaya dimorpha* Pulle var. *cauliflora* Moldenke, Phytologia 4 (1952) 53. — Type: *Brass 7427* (holo L), Papua, Fly River, Oroville camp. Syn. nov.
- [? *Faradaya parviflora* Warb. var. *angustifolia* H.J. Lam ex Moldenke, Phytologia 31 (1975) 398, nom. in synonym.]
- Faradaya excellens* K. K. Schum. ex Moldenke, Phytologia 34 (1976) 274. — Type: *Lauterbach 528* (holo BM; iso K), Neu-Guinea. Syn. nov.
- [*Clerodendrum fissicalyx* Scheff. ex Moldenke, Phytologia Mem. 2 (1980) 385 'Clerodendron fissicalyx', nom. in synonym.]

Liane 6–25 m tall. Stem 2.5–10 cm diam.; internodes round, glabrous to scabrous, smooth, sometimes covered in gland secretion. *Leaves* decussate or ternate, cartilaginous to subcoriaceous, sometimes shiny; blade ovate to elliptic, 9–29 by 5.2–16.2 cm, index 1.16–2.64, apex acute to acuminate, base cordate to rounded, glabrous to scabrous at base and midvein; venation 3-palmate at base; big glands round to oval, craterlike, 0.2–2.2 by 0.6–1.6 mm, brownish, at base, few; petiole 15–54 by 1.2–3 mm, half-terete in cross section, glabrous to scabrous abaxial; glands round, 0.12–0.32 mm diam., raised, covered or partly covered. *Inflorescence* 6.2–35 by 2.5 cm, axillary and/or terminal, determinate double thyrses with decussate bracts, erect, glabrous to covered with patent hairs; glands craterlike, 0.06–0.7 mm diam., few. *Calyx* campanulate, linear to bulbous, 8–23 by 4–8 mm, 1–4 lobes, split irregularly during flowering, erect during flowering, persistent, fleshy to membranous, greenish white to (pale) green, abaxially glabrous to covered with patent transparent hairs, erect when

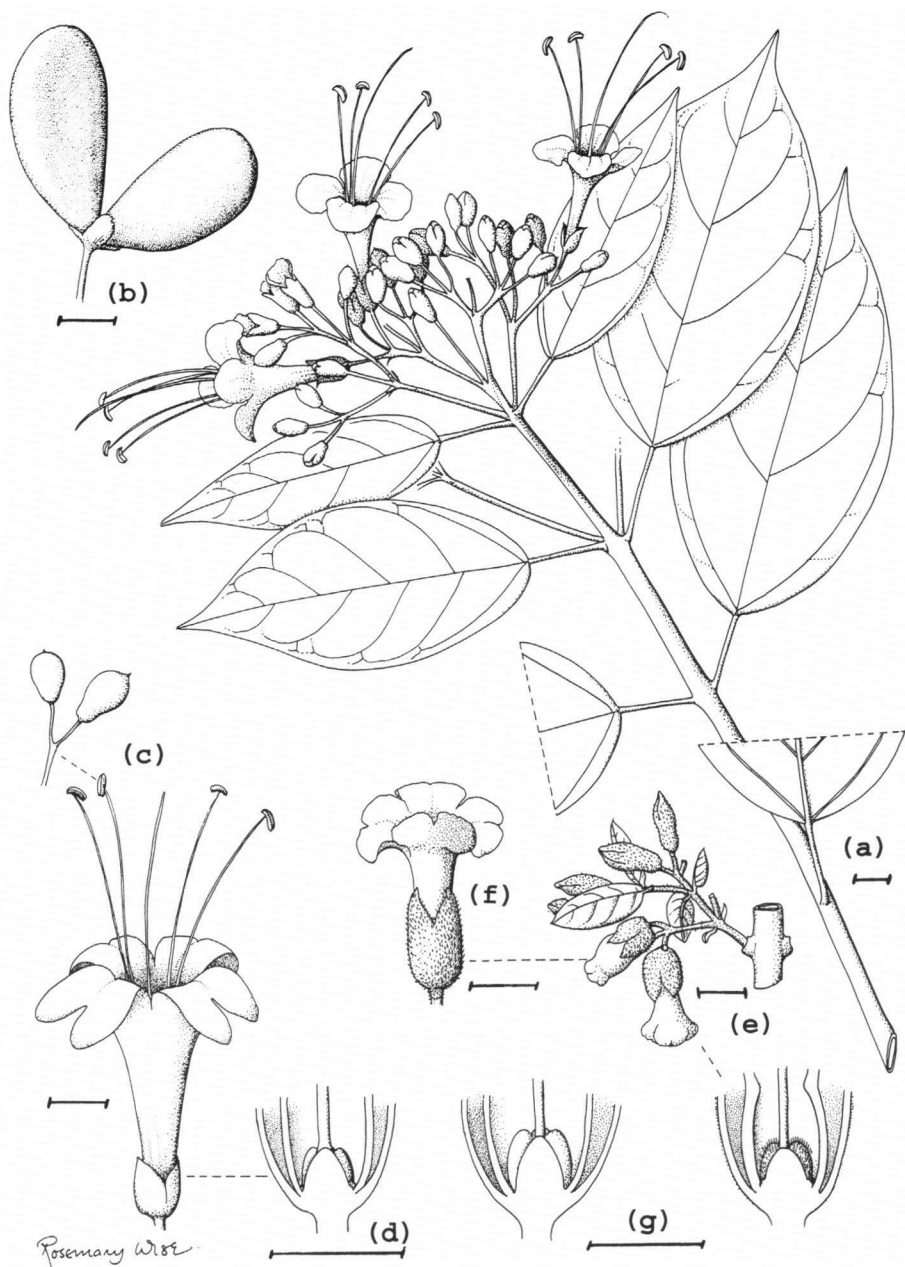
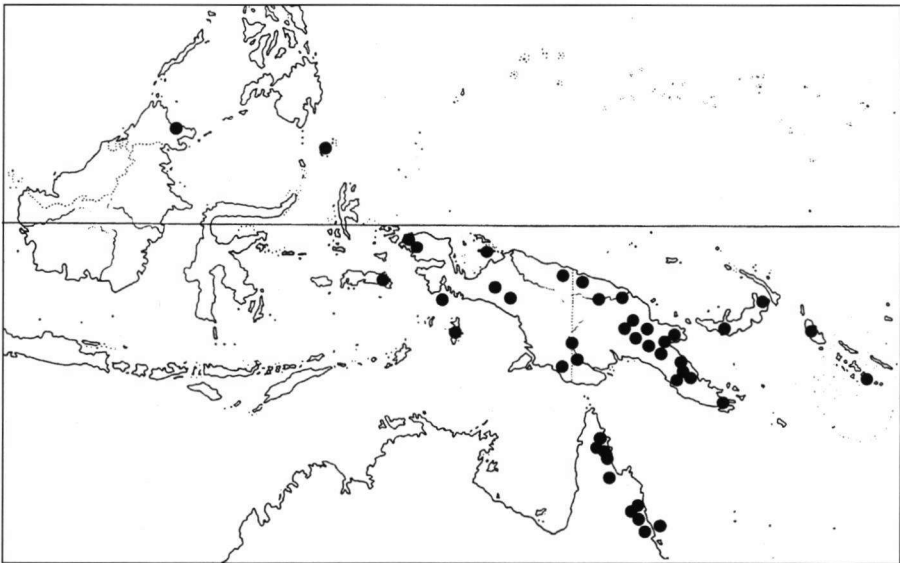


Fig. 3. *Faradaya splendida* F. Muell. a. Habit; b. fruit; c. part of inflorescence and flower; d. section of ovary; e. inflorescence; f. flower; g. sections of ovaries [a: Brass 8069 (L); b: Carr 14951 (K); c, d: Van Royen 4611 (K); e-g: Mabberley & Siaguru 2428 (FHO)]. — Scale bars are 1 cm long.

fruiting; lobes 7–18 by 4–11 mm, 0.1–1 mm thick, apex acute to acuminate or mucronate; glands round, craterlike, 0.06–0.9 mm diam., outside brown, few. *Corolla* narrowly infundibular, 22–76 mm long, tube 10–30 by 2–7 mm, abaxially glabrous or middle to apex with few multicellular transparent hairs, (weak to strong) sweet scented, fragile or fleshy, white or greenish-white; lobes spatulate to oblong, 5–54 mm long, 8–33 mm wide at apex, 6–15 mm at base, erect, apex entire to lobed or emarginate to 0–10 mm. *Stamens*: filaments 16–75 by 0.3–1 mm, usually equal, in upper third of the tube, exerted to greatly exerted, white; hairs 0.3–1 mm long, from base to middle part, absent to abundant, multicellular, transparent, patent; anthers 2.5–4 by 1–2 mm, glabrous, brownish; pollen orange yellowish to yellow. *Ovary* lobes round, 1–2 by 1–2 mm, velutinous to glabrous, light green, sometimes with craterlike glands; style 45–80 by 0.6–1 mm, glabrous, white; stigma triangular, 2-lobed, 0.2–1.5 mm long. *Disk* 0.5–1.4 mm high, 1.6–3.5 mm wide, glabrous, light green. *Fruit* ellipsoid to egg-shaped, falcate, white to pale or creamy yellow; mericarp 38–60 by 18.2–30 by 17–30 mm (dried), 55–70 by 45–55 mm (fresh; Munir, pers. comm.), sparingly scabrous; glands round, 1–1.5 mm diam.; seed coat 1–3 mm thick, with 2 mm high irregular ridges. *Seed* smooth.

Distribution — Malaysia: Sabah. Indonesia: Seram, Talaud Island, Aru Islands, Irian Jaya, Japen. It is reported from Misool, Mansimana and Karakelong by Moldenke (1980). Papua New Guinea: Mainland, New Britain (Munir, 1987), Bougainville. It is reported from New Ireland by Moldenke (1980). Solomon Islands: San Cristobal. Australia: NE Queensland.

Habitat — Growing in primary to secondary forest, in swamp and flood forest to hill forest, altitude 0–2000 m, in humus or clay soils. Often common (*Docters van*



Map 3. Distribution of *Faradaya splendida* F. Muell.

Leeuwen 9101, Hoogland & Womersley 3243, Brass 8200). Found growing on *Inocarpus fagifer* (*Van Royen 3124*), *Timonius* (*Streimann 28826*), *Neonauclea* (*Van Royen 4518*), *Nypa* (*Takeuchi 4620*) and *Heritiera littoralis* (*Van Royen 4611*) and in sago swamps (*Van Royen & Sleumer 6605*). Flowering all year round but mainly from June to October. Fruiting all year round but mainly from September to January.

Local names — Talaud Island: Latára (*Lam 3342*). Irian Jaya: Sijai (Bian dialect, *Van Royen 4611*); Gieselompoes (Mooi language, *Boswezen 12762*); Rieraroh (Argoeni language, *Versteeg 7582*). Papua New Guinea: Northern Prov.: Pitutu (Orokaiva language, *Hoogland & Womersley 3243*); Western Highlands: Bemingkan (Yoowi dialect, Hagen-Chimbu language, *Vink 16396*); Eastern Highlands: Nekamanoei (Okapa language, *Wheeler 5887*); E Sepik Prov.: Tek ontrek (Miyamin language, *Frodin et al. 2636*); Bougainville, Siwai: Kuteha (*Waterhouse 364b*). Australia: Fragrant Faradaya (Munir, 1987); Tully River Natives: Buku (Bailey, 1909); Dunk Island Natives: Koieyan (Bailey, 1909).

Uses — Australia: The stripped outer bark is used as a fish poison. The middle layer of the bark is carefully scraped off and rubbed onto stones previously heated by fire. The stones are then thrown into a creek or a little lagoon, with fatal results to all fish and other marine animals. The bark contains sapotoxin, which even in a great dilution is an effective and rapid fish poison. Agitation, subsequent stupefaction and approach to the surface quickly sets in, and death comes in as little as one hour (Hamlyn-Harris & Smith, 1916). Papua New Guinea: In 1974, the toxicity of *F. splendida* was part of a criminal investigation in Madang. It appeared that sap, or perhaps an infusion of the bark, had been given to the victim (Henty, 1980). The fruit is said to be edible (Moldenke & Moldenke, 1983).

Ornamental climber which can be grown in tropical and subtropical regions, in open sunny places with plenty of water (Elliot & Jones, 1986).

Notes — 1. *Faradaya albertisii*, *F. splendida* and *F. dimorpha* var. *cauliflora* used to be distinguished by the type of inflorescence only (lateral, terminal or cauliflorous) (Munir, 1987; Moldenke, 1982b). Field observations in Madang Province (Papua New Guinea), showed that the shoot apices flower first, followed by the shoots back along the axis so that, dependent on the time during a flowering event that collections are made, plants may seem to have 'terminal' or 'lateral' or both types of inflorescence (Mabberley, 1992). This can even be seen in dried material, the specimen *Kajewski 1293* (K) showing both types of inflorescence. Other specimens with cauliflorous and lateral and/or terminal inflorescence have also been found.

The two varieties of *F. dimorpha* were based on the difference in the leaf insertion (opposite or ternate, Lam, 1919). However, after finding a plant in the botanical garden in Bogor with both character states, Lam & Bakhuizen van den Brink dropped these varieties (Lam & Bakhuizen van den Brink, 1921).

The acuminate apex of the calyx was one of the first distinguishing characters mentioned in the genus *Faradaya* (Seemann, 1865). This character, however, only occurs in *F. splendida* and is very variable and sometimes even absent. There is a clear line from the southern part of the species range to the northern in which this acuminate apex reduces into an acute apex. The same is true for the consistency of the calyx and the stamens/corolla tube length/length ratio. Specimens from the northern

part of the species range often have greatly exerted stamens, while specimens from the southern part only have stamens which just exceed the corolla tube. In southern Papua New Guinea all possible intermediate forms between the 'Northern' and 'Southern' form can be found. The types of *Faradaya papuana*, *F. ternifolia*, *F. dimorpha*, *F. magniloba*, *F. matthewsii* and *F. excellens* are all representatives of intermediates.

A number of specimens from New Guinea and the Bismarck Archipelago, including the type of *F. hahlii*, have distinctly didynamous stamens (Lam, 1919; Moldenke, 1982b). However, the difference in length between the pair of stamens varies considerably and cannot be used as a distinguishing character.

From the original description it is clear that *F. peekelii* has a 3-lobed calyx, irregular unequal stamens and a fragile 4-lobed corolla. Markgraf originally placed it in *Clerodendrum* sect. *Tridens*. But this was rejected by Lam in a personal communication to Van Steenis (Moldenke, 1982b). Lam based his arguments on observations of *Peekel 145*, and on his belief that *Clerodendrum* species are shrubs and not lianes like *Peekel 696* (Moldenke, 1982b). Moldenke subsequently transferred the name from *Clerodendrum* to *Faradaya*. Peekel (1984) gives a drawing and description of the taxon in his *Illustrated Flora of the Bismarck Archipelago*. He cites three specimens, one of which is the type. It is not clear however if the type specimen is the one which is depicted. The drawings and description do not differ greatly from the original description by Markgraf (1927), and fall within the variability of *F. splendida*. On the basis of this drawing and description, Mabberley (1992) placed it in the synonymy of *F. splendida*.

From the descriptions, it is clear that *F. parviflora* and *F. nervosa* belong to *Faradaya* and, given the collection locality of the types, they are probably conspecific with *F. splendida*.

2. On North Borneo sterile and fruiting collections of a liane species of *Gmelina* are often confused with collections of this species (Van Balgooy, pers. comm.).

3. *Faradaya splendida* is named as one of the food-plants of the larvae of the Australian butterfly *Narathura micale amphis* (Burns & Rotherham, 1969).

4. The flowers of a plant growing in the botanical garden in Bogor were attacked by a beetle (*Sphaerometopa* sp.); bees robbed the nectar and ants are attracted by the extrafloral nectaries (Nieuwenhuis-von Üxküll-Güldenbandt, 1907). The leaves are often insect-galled (Moldenke & Moldenke, 1983).

5. Saponins, possibly triterpenoid or steroidal, were detected in the leaf, stem and roots (Simes et al., 1959). Alkaloids have been isolated from plants in the botanical garden in Bogor (Greshoff, 1898). The roots of a plant from Cairns in Queensland tested positive for alkaloids, while the leaves tested negative (Webb, 1949). Stem material tested negative for the presence of syringin, and negative for the HCL/Methanol test (Gibbs, 1974). The presence of iridoid glucosides, 8 β -hydroxy-iridoids and 4-unsubstituted iridoids is recorded by Rimpler et al. (1992).

EXCLUDED SPECIES

Faradaya chrysoclada K. Schum. in K. Schum. & Lauterb., Nachtr. Fl. Deutsch. Schutzgeb. Südsee (1905) 370. — Type: *F.H. Brown s.n.* [B, n.v; iso NSW ('158')], New Guinea, Astrolabe Range = *Deplanchea tetraphylla* (Bignoniaceae). See Lam & Meeuse (1938).

Faradaya squamata H.J. Lam, Verbenac. Malay. Arch. (1919) 230; Bot. Jahrb. Syst. 59 (1924) 94. — Type: *Ledermann 13117* (L), New Guinea, Fells Spitze near Kais.-Augusta River.

According to the original description and key, this plant differs from all other *Faradaya* species in having a dense inflorescence and stellate hairs on the adaxial side of the leaves. Because the type specimen is incomplete and only had buds, Lam expressed doubt about his basing a new species on such poor material (Lam, 1919). Dense inflorescences are common in the genus, but stellate hairs are unknown, which makes it unlikely that it belongs to *Faradaya*.

ACKNOWLEDGEMENTS

The authors wish to thank the directors of the following herbaria for sending loans and/or allowing visits to their institutions: BISH, BM, CANB, CGE, FHO, K, L, MEL, NOU, NSW, NY, OXF, P, PVV, SUVA, TCD, TI and W. We also wish to thank A. Paton, A. Sing, A. Strugnell and R. Wise in England; M. Doyle and D. Fuller for their help while De Kok was in Fiji; and S. Chanel and H. Corrigan in Vanuatu. The first author was supported by a grant from the 'EC Human Capital and Mobility Programme, Cooperative Network in the Botanical Diversity of the Indo-Pacific Region', which is gratefully acknowledged. The Hugo de Vries-fonds provided most welcome financial support towards the illustrations.

REFERENCES

- Abu-Asab, M.S. 1990. Phylogenetic implications of pollen morphology in subfamily Lamioideae (Labiatae) and related taxa. PhD thesis, Ohio University.
- Anonymous. 1957. Index of Fungi. Petrak's list (1920–1939), Cumulative index, comprising the index of generic names and the index of specific epithets, Vol. 2. Oxford University Press, Oxford.
- Bailey, F.M. 1909. Comprehensive catalogue of Queensland plants. Government Printer, Brisbane.
- Baillon, H. 1891. Verbénacées. In: Histoire des Plantes 11: 78–121. Hachette & Co., Paris.
- Baker, J.G. 1884. Recent additions to our knowledge of the flora of Fiji. J. Linn. Soc. Lond., Bot. 20: 358–373.
- Bakhuizen van den Brink, R.C. 1935. Notes on some of the Ebenaceae and Verbenaceae of the Solomon Islands collected on the Arnold Arboretum expedition, 1930–1932. J. Arnold Arbor. 16: 68–75.
- Bentham, G. 1843. The botany of the voyage of H. M. S. Sulphur, under the command of Captain Sir Edward Belcher, during the years 1836–1842. J. Bot. 2: 211–240.
- Bentham, G. 1870. Verbenaceae. In: Flora Australiensis 5: 31–70. Reeve & Co., London.
- Burns, A. & E.R. Rotherham. 1969. Australian butterflies in colour. A.H. & A.W. Reed, Sydney/Melbourne.
- Cambie, R.C. & J. Ash. 1994. Fijian medicinal plants. C.S.I.R.O., Melbourne.
- Cantino, P.D. 1990. The phylogenetic significance of stomata and trichomes in the Labiatae and Verbenaceae. J. Arnold Arbor. 71: 323–370.
- Cantino, P.D. 1992a. Evidence for a polyphyletic origin of the Labiatae. Ann. Missouri Bot. Gard. 79: 361–379.
- Cantino, P.D. 1992b. Toward a phylogenetic classification of the Labiatae. In: R.M. Harley & T. Reynolds (eds.), Advances in Labiate Science: 27–37. Royal Botanic Gardens, Kew.
- Cantino, P.D., R.M. Harley & S.J. Wagstaff. 1992. Genera of Labiatae: Status and Classification. In: R.M. Harley & T. Reynolds (eds.), Advances in Labiate Science: 511–522. Royal Botanic Gardens, Kew.
- Christophersen, E. 1935. Flowering plants of Samoa. Bull. Bernice P. Bishop Mus. 128: 3–221.
- De Kok, R.P.J. 1997. The biology and systematics of *Oxera*, *Faradaya* and *Hosea* (Labiatae). PhD thesis. University of Oxford. Copies at K, L, NSW & OXF.

- De Kok, R.P.J. & D.J. Mabberley. (In press). A synopsis of *Oxera* Labill. (Labiatae). Accepted by Kew Bulletin.
- De Kok, R.P.J., A. Paton, R.J. Grayer & D.J. Mabberley. (In prep.). Cladistic analysis of *Oxera* Labill., *Faradaya* F. Muell. and *Hosea* Ridl. (Labiatae).
- Elliot, W.R. & D.L. Jones. 1986. Encyclopedia of Australian plants suitable for cultivation, Vol. 4. Lothian publishing, Melbourne/Sydney/Auckland.
- Gibbs, L.S. 1909. A contribution to the montane Flora of Fiji (including cryptogams) with ecological notes. J. Linn. Soc. Lond., Bot. 39: 130–212.
- Gibbs, R.D. 1974. Chemotaxonomy of flowering plants 3: 1751–1755. McGill-Queen's University Press, Montreal/London.
- Gray, A. 1862. Characters of some new or obscure species of plants, of Monopetalous Order, in the collection of the United States South Pacific Exploring Expedition under Captain Charles Wilkes, U.S.N. with various notes and remarks. Proc. Amer. Acad. Art. Sci. 6: 49–51.
- Grayer, R.J. & R.P.J. de Kok. 1998. Flavonoids and verbascoside as chemotaxonomic characters in the genera *Oxera* and *Faradaya* (Labiatae). Syst. Ecol. 26: 729–741.
- Greshoff, M. 1898. Tweede verslag van het onderzoek naar de plantenstoffen van Nederlandsch-Indië. Meded. Lands Plantentuin 25: 1–199.
- Hamlyn-Harris, R. & F. Smith. 1916. On fish poisoning and poisons employed among the aborigines of Queensland. Mem. Queensl. Mus. 5: 1–22.
- Henty, E.E. 1980. Harmful plants in Papua New Guinea. Bot. Bull. 12. Department of Forests, Lae.
- Junell, S. 1934. Zur Gynäceummorphologie und Systematik der Verbenaceen und Labiaten. Symb. Bot. Upsal. 1: 1–219.
- Krämer, A. 1903. Die Samoa Inseln, Entwurf einer Monographie mit desponderer Berücksichtigung Deutsch-Samoa. Schweizerbartsche Verlag, Stuttgart.
- Lam, H.J. 1919. The Verbenaceae of the Malayan Archipelago. M. de Waal, Groningen.
- Lam, H.J. & R.C. Bakhuizen van den Brink. 1921. Revision of the Verbenaceae of the Dutch East-Indies and surrounding Countries. Bull. Jard. Bot. Buitenzorg 3: 1–116.
- Lam, H.J. & A.D.J. Meese. 1938. Miscellaneous and bibliographical notes. Blumea 3: 201–202.
- Mabberley, D.J. 1992. Architecture of Verbenaceae of Madang Province, Papua New Guinea, with preliminary notes on their reproductive biology. Sci. New Guinea 19: 37–45.
- Markgraf, F. 1927. Vermischte Diagnosen IV. Notizblatt des Botanischen Gartens und Museums zu Berlin-Dahlem 10: 112–121.
- Moldenke, H.N. 1980. A sixth Summary of the Verbenaceae, Avicenniaceae, Stilbaceae, Dicrostyliaceae, Symphoremaceae, Nyctanthaceae and Eriocaulaceae of the World as to valid Taxa, Geographic Distribution and Synonymy. Moldenke, New Jersey.
- Moldenke, H.N. 1982a. Notes on the genus *Faradaya*. Phytologia 51: 384–400.
- Moldenke, H.N. 1982b. Additional notes on the genus *Faradaya* (Verbenaceae). Phytologia 52: 20–45.
- Moldenke, H.N. & A.L. Moldenke. 1983. Verbenaceae. In: M.D. Dassanayake (ed.), A Revised Handbook to the Flora of Ceylon 4: 196–487. Amerind Publishing, New Delhi.
- Munir, A.A. 1987. A taxonomic revision of the genus *Faradaya* F. Muell. (Verbenaceae) in Australia. J. Adelaide Bot. Gard. 10: 165–177.
- Nieuwenhuis-von Üxküll-Güldenbandt, M. 1907. Extraflorale Zuckerausscheidungen und Ameisen-schutz. Ann. Jard. Bot. Buitenzorg 21: 195–327.
- Parham, J.W. 1972a. Plants of the Fiji islands. Government Printer, Suva.
- Parham, J.W. 1972b. Plants of Samoa. New Zealand Department of Scientific and Industrial Research, Information Series no. 85. Wellington.
- Peckel, G. 1984. Illustrated Flora of the Bismarck Archipelago. Lae.
- Powell, T. 1868. On various Samoan plants and their vernacular names. J. Bot. 6: 342–347.
- Raj, B. 1983. A contribution to the pollen morphology of Verbenaceae. Rev. Palaeobot. Palynol. 39: 343–422.
- Reinecke, F. 1898. Die Flora der Samoa-Inseln. Bot. Jahrb. Syst. 25: 578–708.
- Rimpler, H., U. Falk, S. Bremer & R. Hiltunen. 1993. Iridoids from some Caryopteridoideae, Viti-coideae (Verbenaceae), and Ajugoideae (Labiatae): Chemical characters for a cladistic analysis of Lamiales. Pl. Med., Suppl., 59: 692–693.

- Rimpler, H., C. Winterhalter & U. Falk. 1992. Cladistic analysis of the subfamily Caryopteridoideae Briq. and the related taxa of Verbenaceae and Lamiaceae using morphological and chemical characters. In: R.M. Harley & T. Reynolds (eds.), *Advances in Labiate Science*: 39–54. Royal Botanic Gardens, Kew.
- Seemann, B. C. 1862. Über neue und verkannte Clerodendron-Arten. *Bonplandia* 10: 249–250.
- Seemann, B. C. 1865. On *Faradaya*, a new Australian genus. *J. Bot.* 3: 256–259.
- Seemann, B. C. 1866. *Flora Vitiensis*. L. Reeve & Co., London.
- Setchell, W.A. 1924. American Samoa, part I–III. Department of Marine Biology of the Carnegie Institution of Washington, Vol. 20. Carnegie Institute, Washington.
- Simes, J.J.H., J.G. Tracey, C.J. Webb & W.J. Dunstan. 1959. An Australian phytochemical survey III, Saponin in Eastern Australian flowering plants. *Bull. C.S.I.R.O.*, Australia 281.
- Smith, A. C. 1978. A precursor to a new flora of Fiji. *Allertonia* 1.
- Smith, A. C. & S. P. Darwin. 1991. *Flora Vitiensis Nova* 5. National Tropical Botanical Garden, Hawaii.
- Steane, D.A. 1995. *Molecular Systematics of Clerodendrum L. s.l. (Lamiaceae)*. PhD thesis, University of Oxford.
- Steane, D.A., R.W. Scotland, D.J. Mabberley, S.J. Wagstaff, P.A. Reeves & R.G. Olmstead. 1997. Phylogenetic Relationships of *Clerodendrum* s.l. (Lamiaceae) Inferred from Chloroplast DNA. *Syst. Bot.* 22: 229–243.
- Stenzel, E., J. Heni, H. Rimpler & D. Vogellehner. 1988. Phenetic relationships in *Clerodendrum* (Verbenaceae) and some phylogenetic considerations. *Pl. Syst. Evol.* 159: 257–271.
- Van Balgooy, M.M.J. 1971. *Plant-Geography of the Pacific*. *Blumea* Suppl. 6.
- Van Steenis, C.G.G.J. 1955. Reduction of the genera *Schizopremna* Baill. (Verb.), and *Worcesterianthus* Merr. (Olacac.). *Acta Bot. Neerl.* 4: 477–480.
- Von Mueller, F. 1865. *Fragmenta Phytographiae Australiae* 5: 21–22. Govt. Printer, Melbourne.
- Webb, L.J. 1949. Phytochemical survey I. Alkaloids and cyanogenetic compounds in Queensland plants. *Bull. C.S.I.R.O.*, Australia 241.
- Whistler, A.W. 1991. *The ethnobotany of Tonga: the plants, their Tongan names, and their uses*. Bishop Museum Press, Honolulu.
- Whistler, A.W. 1992. *Tongan herbal medicine*. *Isle Botanica*, Hawaii.
- Winterhalter, C. 1991. *Cladistische Untersuchungen zur Gliederung der Clerodendreae und Viticeae (Verbenaceae)*. Inaugural-dissertation zur Erlangung der Doktorwürde der Fakultät für Chemie und Pharmazie der Albert-Ludwigs-Universität zu Freiburg im Breisgau.

IDENTIFICATION LIST

Faradaya: 1 = *F. amicum*; 2 = *F. lehuntei*; 3 = *F. splendida*

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- | | |
|---|------------------------------------|
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| sect. <i>Tetrathyranthus</i> A. Gray [p. 324] | <i>peekelii</i> Markgr. 3 |
| sect. <i>Terminalioides</i> Soland. ex Seem. [p. 324] | <i>powellii</i> (Seem.) Drake 1 |
| <i>amicorum</i> Seem. 1 | <i>Faradaija</i> Wigman [p. 324] |
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| <i>lehuntei</i> Horne 2 | amicorum (Seem.) Seem. 1 |
| <i>ovalifolium</i> A. Gray 1 | var. <i>salomonensis</i> Bakh. 1 |

(Faradaya)

- ampliflora* A.C. Sm. & S.P. Darwin 2
chrysoclada K. Schum. [excl.]
dimorpha Pulle 3
 var. *α opposita* H.J. Lam 3
 var. *β ternata* H.J. Lam 3
 var. *cauliflora* Moldenke 3
excellens K. Schum. ex Moldenke 3
glabra (Moldenke) A.C. Sm. &
 S.P. Darwin 1
gordonii Baker 1
hahlii Rech. 3
lehuntei (Horne ex Baker) A.C. Sm. 2
 var. *degeneri* (Moldenke) Moldenke 1
lehuntei sensu A.C. Sm. non (Horne ex Baker)
 A.C. Sm. 1
magniloba Wernham 3
matthewsii Merr. 3
neo-ebudica Guillaumin 1
 var. *degeneri* Moldenke 1
 var. *puberulenta* (Moldenke) Moldenke 1

(Faradaya)

- nervosa* H.J. Lam 3
ovalifolia (A. Gray) Seem. 1
 var. *glabra* Moldenke 1
papuana Scheff. 3
parviflora Warb. 3
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 var. *β angustifolia* H.J. Lam 3
 var. *angustifolia* H.J. Lam ex Moldenke 3
 var. *parviflora* 3
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powellii Seem. 1
salomonensis (Bakh.) Moldenke 1
savaiiensis Rech. 1
splendida F. Muell. 3
squamata H.J. Lam [excl.]
ternifolia F. Muell. 3
vitiensis Seem. 1
 var. *puberulenta* Moldenke 1
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