

who most recently revised some of the Pacific species (Brittonia 23:394-412, 1971) and who kindly examined this specimen.

In Exell's key (Fl. Males I, 4:551-554, 1954) this plant runs to T. foetidissima Griff. to which it is undoubtedly most closely related. It differs in its broader, much more shortly petiolate leaves with more main veins, much more shortly pedunculate, longer spikes, strongly hooked style, and differently shaped, strongly beaked fruit. In Exell's synopsis (op. cit. p. 550) T. rostrata would seem to fit in his "Series E" with T. crassifolia, T. samoensis, and T. insularis, but does not seem close to any of these species, which have drupaceous fruits.

A single large tree was found by Marjorie V. C. Falanruw, on Asuncion Island, in forest on lower slopes. Nothing like it is known elsewhere in Micronesia.

The name alludes to the strongly beaked fruit.

Marianas Is.: Asuncion Island, about 400 ft. elevation, July 7, 1972, Falanruw 2290 (US, type).

A NEW VARIETY OF FAGRAEA BERTERIANA (GENTIANACEAE)

by F. R. Fosberg and M.-H. Sachet

Presented below is a brief discussion of the taxonomy of the Pacific Islands collective species, Fagraea berteriana Gray ex Benth., and the description of a new variety of this species from the Marquesas Islands.

Fagraea Thunb., Vet. Acad. Handl. Stockh. 3:132, t.4, 1782.

This genus is usually placed in the Loganiaceae, but is regarded by us as closer to the Gentianaceae. A discussion of this is reserved for a future, more comprehensive paper.

Fagraea berteriana Gray ex Benth., Jour. Linn. Soc. Bot. 1:98, 1856.

This species, first described from Tahiti, has been given an enormously wide circumscription by Leenhouts (Bull. Jard. Bot. Brux. 32:419-420, 1962; Fl. Males I, 6:335, 1962), with a geographical distribution extending from the Marquesas to New Guinea and Queensland, and north to the Marianas. We agree with

this broad circumscription except that we do not include the quite distinct but related Fagraea ksid Gilg and Bened., of Palau.

However, we cannot agree with Leenhouts that a subdivision into taxa of lower rank is impossible. We have had the greater part of such a subdivision in manuscript for quite a few years, but have not been able to study adequate material of some of the proposed varieties, so have refrained from publishing this work.

It is necessary to include one of the varieties in a forthcoming treatment of certain families for the Flora of the Marquesas, so a description of this variety and a discussion of its relationship to the Tahitian varieties is offered here.

Fagraea berteriana var. marquisensis Fosberg and Sachet, n. var.

Arbor glabra, foliis obovatis, venis obscuris, lobis calycis 5-8 mm longis, tubo corollae 4.3-6 cm longo, pistillo incluso 4 cm longo.

Glabrous tree, leaves obovate, blades up to 20 x 10 cm, rounded at apex with a slight blunt acumen, base cuneate, texture coriaceous, venation obscure, veins 10-12 on a side, petiole 1.2-4 cm long, free portion of intrapetiolar stipules 1.5-2 mm long, thick, blunt; inflorescence with up to 15(-16) flowers; calyx lobes 5, broadly ovate to semicircular, obtuse to subtruncate, 5-8 mm long, margins scarious, corolla tube 4.3-6 cm long, somewhat dilated above into a slightly broader throat 1.5 cm long, the 2 cm below this transversally wrinkled within, lobes (4-)5 about 2 x 1.3 cm, rounded to slightly obovate, spreading to recurved, waxy, very fragrant, white turning yellowish with age, stamens inserted at base of throat, filaments 1 cm long, anthers 1 cm long, broadly linear; pistil included in corolla tube, ovary cylindric, 1 cm long, style thick-filiform, about 2.5 cm long, stigma 5 mm long, bifid into 2 somewhat spreading flat obovate lobes, rounded at apex; fruit a glossy orange to red berry, globose to subglobose or very broadly elliptic, 3.5-4.5 x 2.5-4.0 cm, not umbonate, not or only slightly beaked, with many seeds.

The Marquesan vernacular name is "Pua."

Marquesas Is.: without data. Herbier S.F.I.M. (P). Nukuhiva I.: Taiohae Valley, 150 m, Adamson and Mumford 597 (NY); Tovii, Hallé 2062 (US). Ua Pou I.: Poumaka, Haka Hetau Valley, Adamson and Mumford UP-1 (NY, BISH, A). Hiva Oa I.: Puamau village, Decker 918 (US, type); Atuona, Sachet 1310

(US,P); Adamson and Mumford 435 (NY); east of airstrip, F. Hallé 2130 (US).

Herbarium abbreviations are those in Index Herbariorum, ed. V, Regn. Veg. 31, 1964.

This Marquesan population has heretofore been regarded as identical with that of Tahiti, and most descriptions of F. berteriana from eastern Polynesia have been partly based on it. However, the Tahitian plants, themselves, are by no means uniform, and one very distinctive group of these has been segregated as F. longituba Grant (considered a variety of F. berteriana by us).

The remaining Tahitian specimens known to Grant were cited by him as F. berteriana [sensu stricto] and characterized by a corolla tube 6.5-8 cm long with style 5-6 cm long, obviously included, thus differing in longer corolla tube and style from the Marquesan plant described here.

Our notes on Tahitian specimens (which are not now available to us), with one exception, indicate a different variety, characterized by a much shorter corolla, 3.5-6.5 cm, with an exerted style, differing in this latter respect from the Marquesan plant. The exception is one of the two U.S. Expl. Exped. sheets in NY which has corolla tube 7.7 cm long and style 6.7-7.5 cm. The calyx lobes of this are unusually short, only 5 mm long. For the time being we follow Grant in accepting the Tahitian plant with corolla tube 6.5-8 cm long as var. berteriana, though this may be hard to establish until we can examine the material available to Bentham on which this species was founded. Bentham cited four specimens from the Society Islands, one from the Marquesas, and one from the Louisiade Archipelago. Of these Leenhouts (loc. cit.) has indicated that the Bertero specimen is type. This statement we are accepting as lectotypification, though this specimen is said by Guillemin (Ann. Sci. Nat. Bot. II, 7:248, 1937) to lack flowers. This fact will make it very difficult to establish which of the three Tahitian varieties should be called var. berteriana. This problem we may take up in a later paper after we have examined the original specimens.



Fosberg, F. Raymond and Sachet,
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ne. 1974. "A new variety of *Fagraea berteriana* (Gentianaceae)." *Phytologia*
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