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FICUS SUBGENUS PHARMACOSYCEA SECTION OREOSYCEA (MORACEAE) IN THE SOLOMON ISLANDS, FIJI, AND THE NEW HEBRIDES

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SUMMARY

A survey of the species of *Ficus* subg. *Pharmacosycea* sect. *Oreosycea* for the western Pacific region (excl. New Caledonia) with descriptions of and a key to the species presently recognised for the region is presented. Ten species are recognised, of which three species and one subspecies are new: *F. bubulia* C.C. Berg, *F. magwana* C.C. Berg, *F. magwana* subsp. *maragona* C.C. Berg, and *F. setulosa* C.C. Berg.

Key words: *Ficus*, sect. *Oreosycea*, Moraceae, western Pacific.

INTRODUCTION

Ficus subg. *Pharmacosycea* (Miq.) Miq. sect. *Oreosycea* (Miq.) Miq. comprises 55–60 species and has a range of distribution from West Africa and Madagascar to Fiji and New Caledonia. Corner (1960) recognised three major subdivisions for the section: series *Vasculosae* Corner, series *Nervosae* Corner, and series *Austrocaledonicae* Corner. Series *Vasculosae* comprises 9 species and has a mainly African–Asian mainland distribution. It is distinguished by the absence of waxy glandular spots. Series *Nervosae* (with c. 20 species) and series *Austrocaledonicae* (with 25–30 species) show closer affinities to each other than to series *Vasculosae*, such as in the presence of waxy glandular spots in the axils of the basal lateral veins and the common occurrence of '*Terminalia*-branching', i.e. having shoots with mostly the second internode long and subsequent ones gradually shorter so that the leaves become (more or less clearly) clustered distally. Series *Nervosae* is centred in eastern Malesia and Corner (1960, 1967, 1970, 1975) included all *Oreosycea* species of the Solomon Islands, as well as *F. smithii* from Fiji and the New Hebrides, in this series and he placed the species from New Caledonia and adjacent islands in series *Austrocaledonicae*.

Studies on the genus *Ficus* carried out during the preparation of a treatment for Flora Malesiana – making use of a manuscript submitted about 30 years ago by Corner – led to an investigation of material of sect. *Oreosycea* in the Solomon Islands in order to delimit the Malesian species and to verify the recognition of the series *Nervosae* and *Austrocaledonicae*. This sideline study includes *F. granatum*, a species placed in the latter series, with a distribution overlapping that of *F. smithii*, and regarded by Corner (1970) to be related to *F. pseudojaca*, a member of the former series. The study showed that only three Malesian species of sect. *Oreosycea* extend to the Solomon

Islands: *F. hombroniana* Corner, *F. polyantha* Warb., and *F. subtrinervia* Lauterb. & K. Schum. Moreover, it became clear that these three species are distinct from other species from the Solomon Islands placed in series *Nervosae* by Corner; they differ in the texture of the lamina and its colour when dried, in the more often and more clearly clustered leaves, the presence of cordate lamina bases, and the variation in the length of the petioles on the same twig. These characters match the range of variation of series *Austrocaledonicae* rather than that of series *Nervosae*, and the species with these characters have to be included in the former series.

A detailed study of the New Caledonian species (presently carried on by S. Ungricht, Montpellier) is needed to define the Malesian and the Pacific groups (series) more accurately and to decide on the taxonomic rank.

The sideline study also revealed the presence of three new species, two in series *Autrocaledonicae*, *F. bubulia* and *F. magwana* (with subsp. *maragona*), and one in series *Nervosae*, *F. setulosa*. Moreover, it made clear that *F. cristobalensis* and *F. edelfeltii* var. *bougainvillei* have to be included in *F. novae-georgiae*. Therefore, eight *Oreosycea* species are presently recognised for the Solomon Islands.

KEY TO THE SPECIES OF SECTION OREOSYCEA FROM THE SOLOMON ISLANDS, FIJI, AND THE NEW HEBRIDES

1a. Stipules glabrous or only ciliolate; lamina glabrous or only very sparsely hairy on the midrib beneath 2
b. Stipules hairy; lamina mostly distinctly hairy beneath or sometimes subglabrous 6
2a. Stipules 0.5–1 cm long ..... **4. F. illiberalis**
b. Stipules 1–3.5 cm long 3
3a. Indumentum (minutely and white) on the petiole adaxially only; fig receptacle 0.3–0.6 cm in diam. when dry ..... **1. F. bubulia**
b. Indumentum on the petiole also abaxially or absent; fig receptacle 0.6–1.5 cm in diam. when dry 4
4a. Tertiary venation parallel to the lateral veins (with 1–3 secondary lateral veins between the primary ones) ..... **10. F. subtrinervia**
b. Tertiary venation of the lamina scalariform, reticulate to subscalariform (with one or few transverse veins in the intercostal area) or to (largely) parallel to the lateral veins 5
5a. Leaves in spirals; basal pair of lateral veins distinct; figs (sub)sessile (but the receptacle stipitate), the basal bracts verticillate ..... **3. F. hombroniana**
b. Leaves (sub)distichous; basal pair of lateral veins not or hardly distinct; figs pedunculate, the basal bracts usually scattered ..... **7. F. polyantha**
6a. Stipules 0.5–1 cm long. — Solomon Islands, widespread ..... **5a. F. magwana** subsp. **magwana**
b. Stipules 1–3.5 cm long 7
7a. Petioles varying in length on the same twig; lamina mostly chartaceous to subcoriaceous 8
b. Petioles about similar in length on the same twig; lamina mostly coriaceous to subcoriaceous 10

8a. Lamina ± densely hairy on the veins beneath, the base often cordate. — Solomon Islands ..... **6. F. novae-georgiae**
b. Lamina glabrous or sparsely hairy in the main vein beneath. — Fiji and New Hebrides 9
9a. Fig peduncle 0.8–1.3 cm long, the receptacle 0.6–1 cm in diam. when dry; leafy twig ± angular, sparsely hairy. — Fiji and New Hebrides ..... **9. F. smithii**
b. Fig peduncle up to 0.8 cm long, the receptacle 1.5–2 cm in diam. when dry; leafy twig subterete and mostly rather densely hairy. — New Hebrides ..... **2. F. granatum**
10a. Tertiary venation parallel to the lateral veins (with 1–3 secondary lateral veins between the primary ones) ..... **10. F. subtrinervia**
b. Tertiary venation of the lamina reticulate to largely parallel to the lateral veins 11
11a. Petiole 0.5–1 cm long; fig receptacle with abundant internal bristles ..... **8. F. setulosa**
b. Petiole (0.5–)1–3.5 cm long; fig receptacle without internal bristles 12
12a. Lamina coriaceous, drying brown; figs subsessile and the receptacle with a stipe 0.2–0.8 cm long. — Solomon Islands, widespread ..... **3. F. hombroniana**
b. Lamina subcoriaceous, drying greenish to yellowish; figs with a peduncle (0.1–) 0.3–7 cm long and the receptacle non-stipitate or with a stipe up to 0.3 cm long. — Solomon Islands, Santa Cruz island group only ..... **5b. F. magwana** subsp. **maragona**

1. Ficus bubulia C.C. Berg, *spec. nov.* — Fig. 1

Stipulae glabrae, 1–3.5 cm longae. Petiolus tantum adaxialiter pubescens. Fici receptaculum glabrum 0.3–0.6 cm diam. in sicco. — Typus: *I. Gafui et al. BSIP 15346* (holo BSIP; K, L), Solomon Islands, Small Nggela, Salesapa Bush, 5 May 1969.

Trees up to 12 m tall, with buttresses up to 1 m high. *Branchlets* drying (pale) brown. *Leafy twigs* 2–3 mm thick, hollow, ± angular, minutely whitish appressed-puberulous to subglabrous. *Leaves* in spirals, distant along the twig or ± clearly clustered distally; lamina oblanceolate to subobovate to oblong, 4–15(–20) by 1.5–6 cm, symmetric, coriaceous, drying brown, base cuneate to subattenuate or to obtuse, margin entire, flat, apex (sub)acuminate to obtuse; upper surface glabrous, dull when dry, lower surface glabrous, smooth; cystoliths only beneath; midrib almost flat above, lateral veins (7–)9–12(–13) pairs, tertiary venation reticulate, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins, often faint or small; petiole 0.4–2 cm long, similar in length on the same twig, minutely white appressed-puberulous, only adaxially, epidermis flaking off; stipules 1–2 cm long, often finely striate, glabrous or ciliolate, caducous. *Figs* axillary, solitary or in pairs; peduncle 0.2–0.6 cm long; basal bracts 3, (almost) verticillate, 0.5–1 mm long, persistent; receptacle subglobose, when dry 0.3–0.6 cm in diam., non-stipitate or with a stipe up to 0.2 cm long, receptacle glabrous, at maturity yellow, apex convex, ostiole 0.5–1 mm in diam., slightly prominent. *Internal bristles* absent. *Tepals* red, glabrous. *Stamen* 1.

Distribution — Solomon Islands (Big Nggela, Bougainville, Guadalcanal, Malaita, New Georgia, Small Nggela, and Santa Isabel).

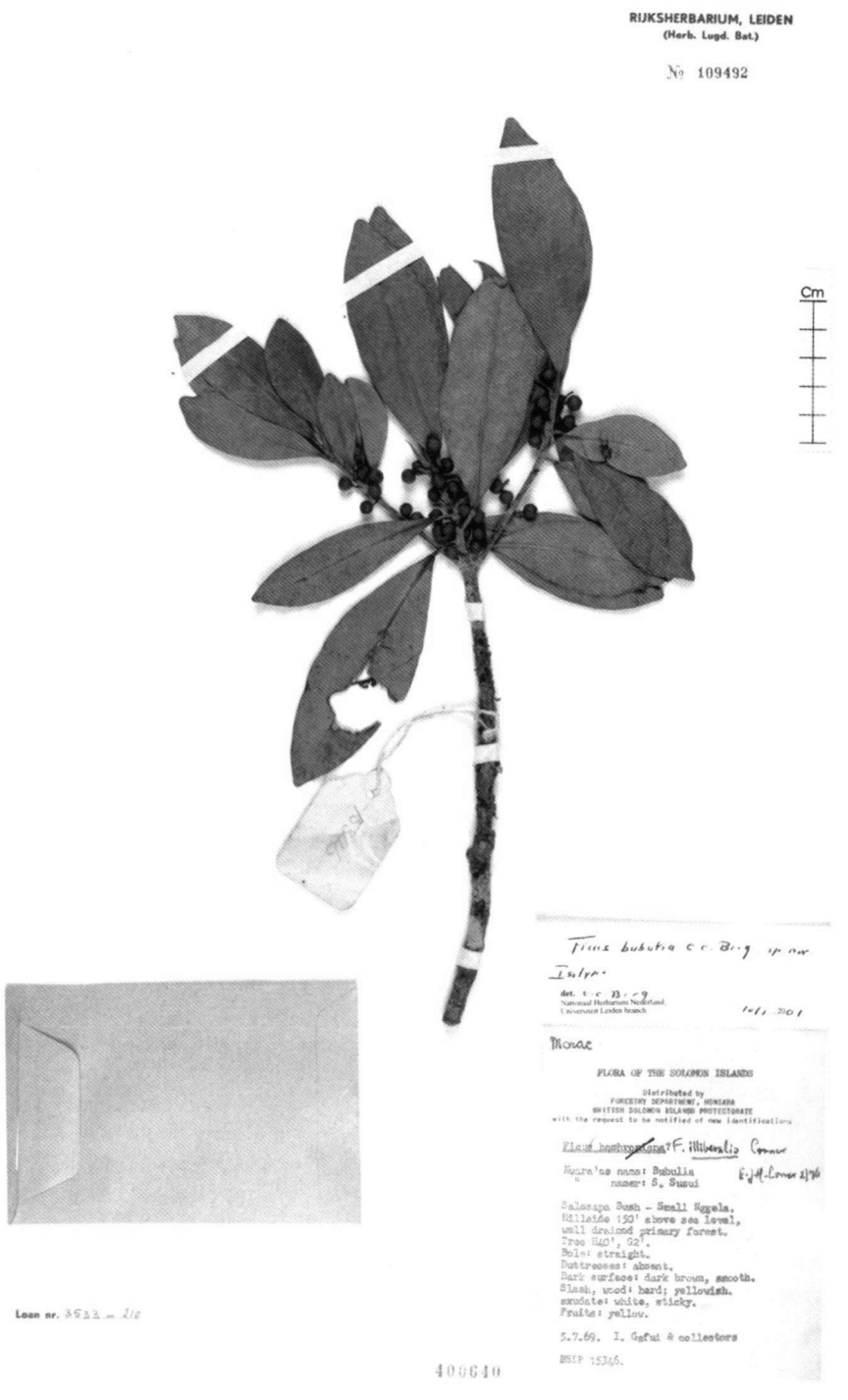

Fig. 1. *Ficus bubulia* C.C. Berg (*Gafui et al. BSIP 15346*, L), Solomon Islands, Small Nggela.

Habitat — Forest; at low altitudes.

Notes — 1. The epithet is based on one of the vernacular names (*Beer et al. BSIP 7844* and *Gafui et al. 15346*).

2. Material of this species (including *Lipaqueto BSIP 3463*), as well as that presently treated under *F. magwana*, was included in *F. smithii* by Corner (1967).

3. This species resembles *F. magwana*, in particular subsp. *magwana*, under which some differences are mentioned.

2. Ficus granatum Forst. f.

Ficus granatum G. Forst. (1786), n. 408; Corner (1965) 33; (1970) 413, f. 18. — Type: *G. Forster 248b* (holo? BM), New Hebrides, Tanna.

Ficus granatum G. Forst. var. *minor* Corner (1960) 414; (1970) 415, f. 18. — Type: *Kajewski 324* (holo K), New Hebrides, Aneityum, Eromanga.

Trees up to 25 m tall. *Branchlets* drying brown to greyish. *Leafy twigs* 2.5–9 mm thick, hollow, slightly angular to subterete, ± densely brownish puberulous to subglabrous. *Leaves* in spirals, distant along the twig to ± clearly clustered distally; lamina elliptic to oblong, (3.5–)10–24(–30) by (1.2–)4–12(–14) cm, symmetric, subcoriaceous to coriaceous, drying brownish, base rounded to narrowly truncate, margin entire, flat, apex shortly and bluntly acuminate to subacute; upper surface glabrous, dull when dry, lower surface (very) sparsely appressed-puberulous on the midrib to glabrous, smooth; cystoliths only beneath; midrib almost flat above, often not reaching the apex, lateral veins (8–)9–14 pairs, tertiary venation loosely scalariform to reticulate, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins; petiole 1–7(–9) cm long, ± clearly varying in length on the same twig, sparsely white appressed-puberulous, epidermis flaking off; stipules 1–2 cm long, densely brownish to whitish appressed-puberulous to subsericeous, caducous. *Figs* axillary, solitary (on the main shoots or on short and small-leaved shoots on the older wood), with a peduncle 0.2–0.8 cm long or sessile; basal bracts 3, verticillate, 2–3 mm long, persistent; receptacle subglobose to ellipsoid, when dry 1.5–2 cm in diam., with a stipe up to 0.8 cm long or absent, receptacle densely brownish puberulous on the whole surface or mainly around the ostiole, at maturity red, apex convex to umbonate or to crateriform, ostiole 1.5–3 mm in diam., prominent or sunken. *Internal bristles* abundant. *Pedicels* hairy. *Tepals* reddish, glabrous. *Stamens* (1), 2 or 3.

Distribution — New Hebrides (Ambrym, Aneityum, Eromanga, and Tanna).

Habitat — Forest; at altitudes up to 800 m.

Note — This species shows close affinities to *F. smithii*, from which it differs, e.g., in the larger fig receptacle, the brownish colour of dried leaves, the denser indumentum on the leafy twigs and stipules, and the hairy pedicels.

3. Ficus hombroniana Corner

Ficus hombroniana Corner (1960) 410; (1965) 30; (1967) 73, f. 12. — Type: *Brass 28598* (holo A; L), Papua New Guinea, Woodlark Island, Kulumadau, 3 Nov. 1956.

Ficus madhucifolia Corner (1960) 412; (1965) 32. — Type: *Buwalda 3719* (holo L), Indonesia, S Sulawesi, Bantimurung, 20 Feb. 1938.

Trees up to 30 m tall, with buttresses up to 1.5 m high. *Branchlets* drying brown. *Leafy twigs* 3–5 mm thick, solid, ± angular, minutely white puberulous to glabrous. *Leaves* in spirals, ± clearly distant along the twig; lamina elliptic to oblong to (sub)-obovate, 8–20 by 4.5–10.5 cm, symmetric, coriaceous, drying brown, base cuneate to truncate, margin entire, flat, apex shortly and bluntly (sub)acuminate to obtuse (to rounded); upper surface glabrous, ± shining to dull when dry, lower surface (very) sparsely puberulous on the midrib or also on the lateral veins to glabrous, smooth; cystoliths only beneath; midrib almost flat above, lateral veins 7–12 pairs, the basal pair ± distinct, tertiary venation reticulate to largely parallel to the lateral veins, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins; petiole 1–3 cm long, similar in length on the same twig, appressed-puberulous to glabrous, epidermis flaking off; stipules (1–)1.5–3.5 cm long, densely white appressed-puberulous to glabrous, caducous. *Figs* axillary, in pairs, (sub)sessile; basal bracts 3, 0.5–1.5 mm long, persistent, densely puberulous; receptacle subglobose, when dry 0.6–1.2 cm in diam., with a stipe 0.2–0.8 cm long, receptacle sparsely white puberulous to glabrous, at maturity reddish, apex convex, ostiole c. 2 mm in diam., ± prominent. *Internal bristles* absent. *Tepals* red, glabrous. *Stamen* 1.

Distribution — Sulawesi, Moluccas, New Guinea, and Solomon Islands (Bougainville, Kolombangara, Malaita, Malaupaina, San Cristobal, and Santa Cruz).

Habitat — Forest; at low altitudes.

Note — The material from the Solomon Islands is slightly different from that from Malesia, most clearly so in the relatively short stipules.

4. **Ficus illiberalis** Corner

Ficus illiberalis Corner (1967) 80, f. 17. — Type: *Corner RSS 20* (holo K; L), Solomon Islands, San Cristobal, Warahito/Pegato divide, 28 July 1965.

Trees up to 30 m tall, with buttresses up to 1 m high. *Branchlets* drying brown to blackish. *Leafy twigs* 2.5–4 mm thick, hollow, ± angular, sparsely and minutely white puberulous to subglabrous. *Leaves* in spirals, distant along the twig; lamina oblanceolate to subobovate, 6–14 by 1.8–5.5 cm, symmetric, subcoriaceous to chartaceous, drying greenish to yellowish, base cuneate to obtuse, margin entire, flat, apex obtuse to rounded; upper surface glabrous, dull when dry, lower surface glabrous, smooth; cystoliths only beneath; midrib almost flat above, not reaching the apex, lateral veins 8–10 pairs, tertiary venation reticulate to largely parallel to the lateral veins, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins; petiole 0.6–1.5 cm long, almost similar in length on the same twig, sparsely white appressed-puberulous, epidermis flaking off; stipules 0.5–1 cm long, glabrous, caducous. *Figs* axillary, solitary or in pairs; peduncle 0.2–0.5 cm long; basal bracts 3, (almost) verticillate, 0.5–1 mm long, persistent; receptacle subglobose, when dry 0.6–0.7 cm in diam., with a stipe up to 0.2 cm long or absent, receptacle glabrous, at maturity red, apex convex, ostiole 0.5–1 mm in diam., slightly prominent. *Internal bristles* absent. *Tepals* red, glabrous. *Stamens* 1 (or 2).

Distribution — Solomon Islands (San Cristobal, Guadalcanal, and Kolombangara).

Habitat — Forest.

5. Ficus magwana C.C. Berg, *spec. nov.*

Stipulae pubescentes 0.5–1 cm longae. Petiolus 0.7–2 cm longus. Fici receptaculum glabrum 0.4–0.6 cm in diam. in sicco. — Typus: *L. Maenu'u BSIP 6032* (holo BSIP; L), Solomon Islands, New Georgia, Tira River, 17 June 1965.

Trees up to 12 m tall, with buttresses up to 0.6 m high. *Branchlets* drying (pale) brown. *Leafy twigs* 2.5–4 mm thick, hollow or solid, ± angular, white puberulous on the scars of the stipules to subglabrous. *Leaves* in spirals, ± clearly clustered distally on the twig; lamina oblanceolate to subobovate, 7–20 by 1.5–6.5 cm, symmetric, chartaceous to subcoriaceous, drying greenish, base cuneate to obtuse to narrowly truncate or to narrowly subcordate, margin entire, flat, apex acuminate; upper surface glabrous, dull when dry, lower surface (sparsely) appressed-puberulous on the midrib (or glabrous), smooth; cystoliths only beneath; midrib slightly impressed above, reaching the top of the acumen or not, lateral veins 8–12 pairs, the basal pair (slightly) distinct, tertiary venation reticulate to largely parallel to the lateral veins, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins; petiole 0.7–2 cm long, similar in length on the same twig, sparsely white appressed-puberulous, epidermis flaking off; stipules 0.5–1 or 1–2 cm long, yellowish appressed-puberulous to subsericeous, often only on the keel, caducous. *Figs* axillary, solitary or in pairs; peduncle 0.1–2 cm long; basal bracts 3, (almost) verticillate, 0.5–1 mm long, persistent; receptacle subglobose, when dry 0.4–1.2 cm in diam., non-stipitate or with a stipe up to 0.3 cm long, receptacle glabrous, at maturity yellow to red, apex convex to slightly umbonate, ostiole 0.5–1 mm in diam., flat to slightly sunken, surrounded by a low rim. *Internal bristles* absent. *Tepals* red, glabrous. *Stamen* 1.

Notes — 1. The epithet is based on one of the vernacular names for this species (*BSIP 6032*).

2. Two subspecies can be distinguished: one widespread in the Solomon Islands and the other confined to the Santa Cruz island group.

a. subsp. **magwana** — Fig. 2

Leaves clustered distally on the twig; lamina chartaceous to subcoriaceous, base cuneate to narrowly truncate, apex distinctly acuminate; lower surface (sparsely) appressed-puberulous on the midrib; midrib reaching the top of the acumen; petiole brown when dry; stipules 0.5–1 cm long. *Fig peduncle* (0.5–)1–2 cm long; receptacle 0.4–0.6 cm in diam. when dry, non-stipitate or up with a stipe to 0.3 cm long.

Distribution — Solomon Islands (Big Nggela, Guadalcanal, Kolombangara, New Georgia, Ranongga, Santa Isabel, and Vella Lavella).

Habitat — Forest.

Notes — 1. The material on which this new species is based, has been included in *F. smithii* Baker by Corner (1970: 84, f. 20).

2. This subspecies resembles somewhat *F. bubulia*, which is distinct by the coriaceous lamina with the apex subacuminate to obtuse, the (almost) glabrous stipules, and the leaves usually more or less clearly distant along the twig.

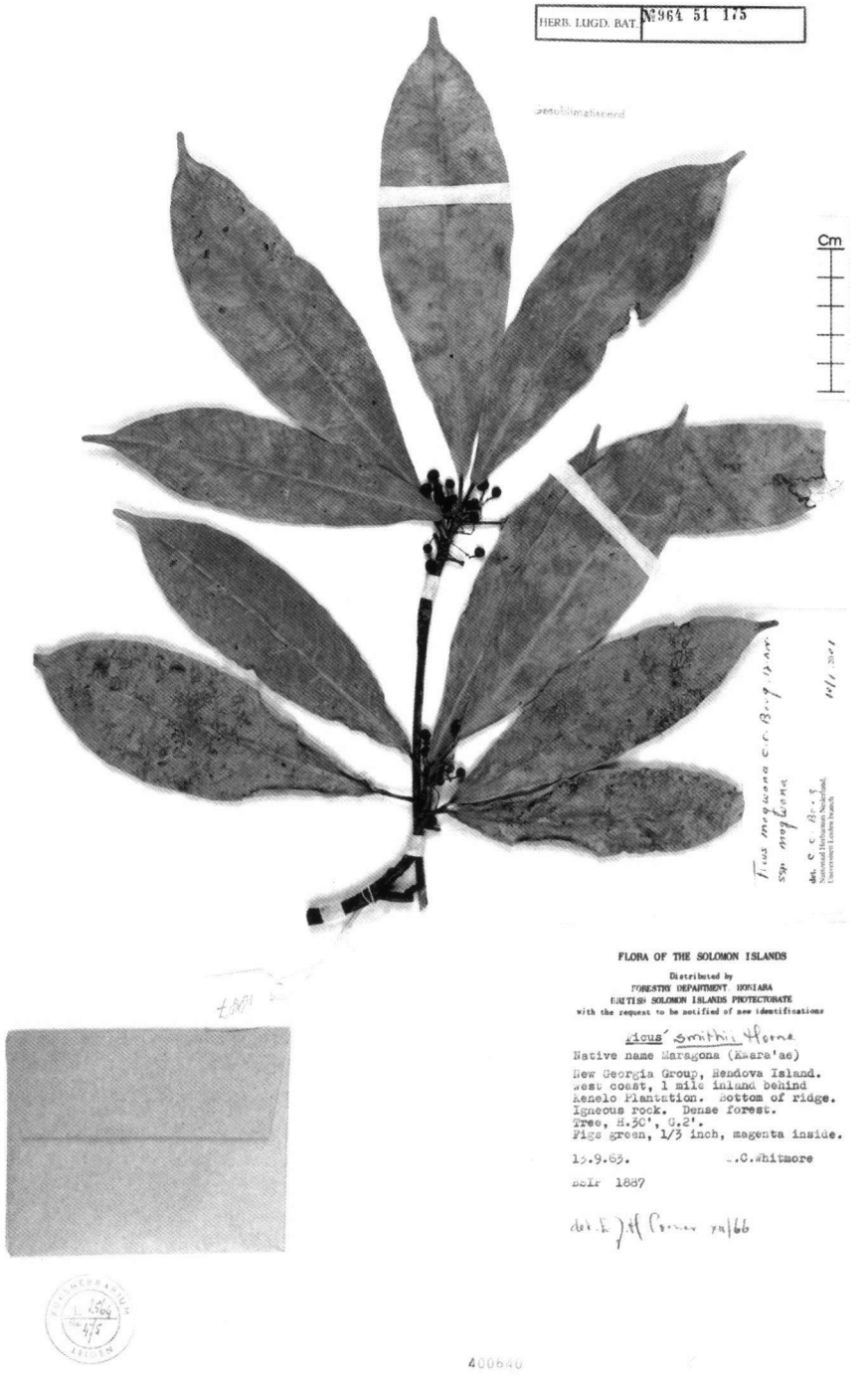

Fig. 2. *Ficus magwana* C.C. Berg subsp. *magwana* (*Whitmore BSIP 1887*, L), Solomon Islands, Rendova Island.

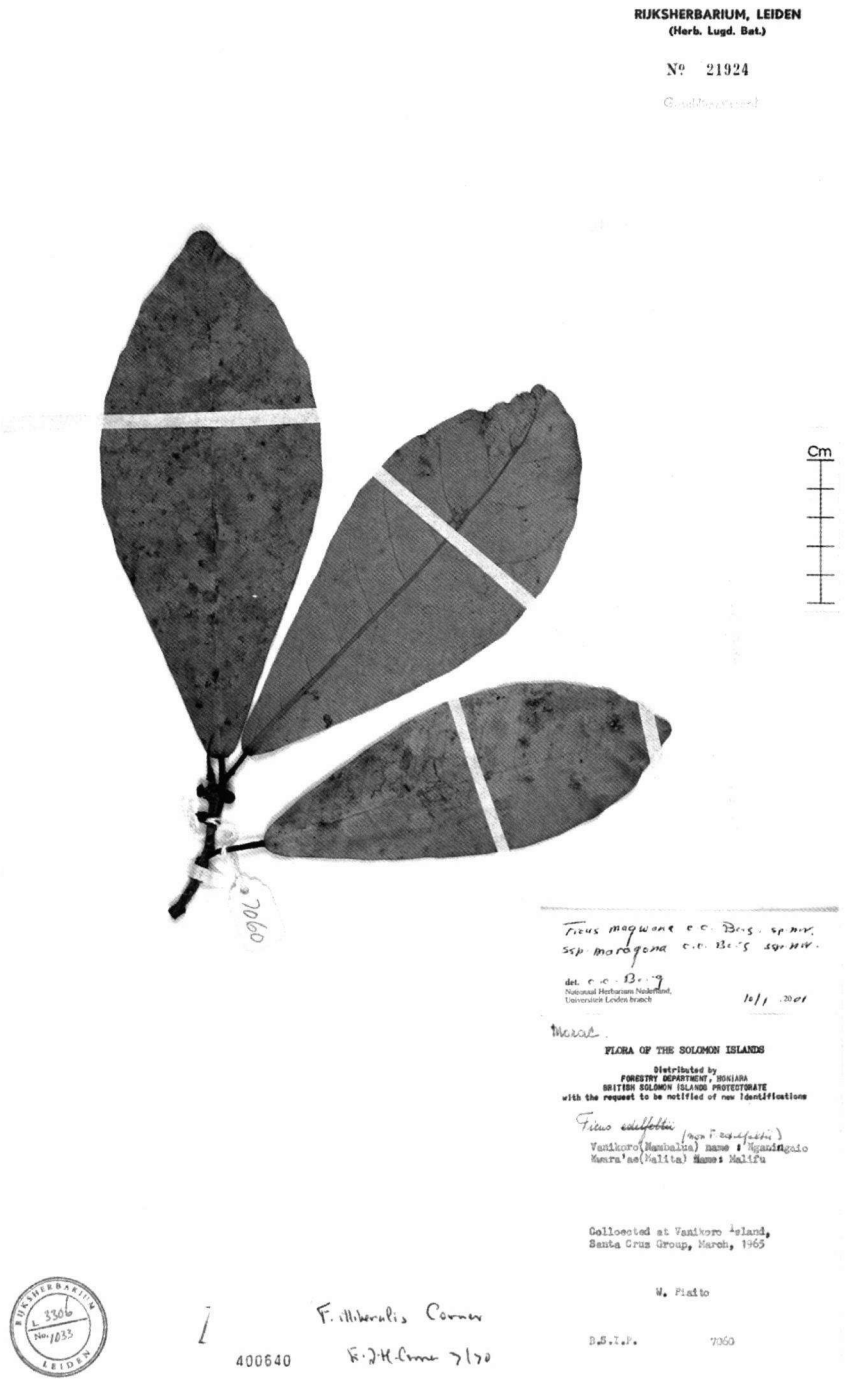

Fig. 3. *Ficus magwana* C.C. Berg subsp. *maragona* C.C. Berg (*Piaito BSIP 7060*, L), Solomon Islands, Vanikoro Island.

b. subsp. **maragona** C.C. Berg, *subsp. nov.* — Fig. 3

Stipulae pubescentes 1–2 cm longae. Petiolus 0.7–2 cm longus. Fici receptaculum glabrum 0.6–1.2 in diam. in sicco. — Typus: *R. Mauriasi et al. BSIP 17738* (holo L), Solomon Islands, Santa Cruz, 20 Oct. 1969.

Leaves ± clearly distant along the twig to clustered distally; lamina subcoriaceous, base truncate to subcordate (or to obtuse), apex shortly and bluntly acuminate to obtuse; lower surface very sparsely appressed-puberulous to glabrous; midrib often not reaching the top of the acumen; petiole red-brown when dry; stipules 1–2 cm long. *Fig peduncle* (0.1–)0.3–0.7 cm long; receptacle 0.6–1.2 cm in diam. when dry, non-stipitate to with a stipe up to 0.3 cm long.

Distribution — Solomon Islands (Santa Cruz).

Habitat — Forest.

Notes — 1. The epithet is based on the vernacular name used in Santa Cruz (*Mauriasi BSIP 16723* and *17738*).

2. This subspecies resembles somewhat *F. smithii* from Fiji.

3. Collection *T.C. Whitmore BSIP 1627* was included with doubt in *F. illiberalis* (Corner, 1967: 81).

6. Ficus novae-georgiae Corner

Ficus novae-georgiae Corner (1967) 76, f. 15. — Type: *Whitmore BSIP 1275* (holo L), Solomon Islands, New Georgia, West Vangunu, Bopo Village, 17 Dec. 1962.

Ficus edelfeltii King var. *bougainvillei* Corner (1961) 85, f. 1; (1967) 76, f. 14. — Syntypes: *Corner NGF 13559* (L), New Guinea, Bougainville, Arawa, Oct. 1960; *Corner NGF 13568* (K, L) and *NGF 13570* (K, L), New Guinea, Bougainville, Crown Prince Mountains, Oct. 1960, and *Waterhouse B313* (not traced), New Guinea, Bougainville; *Corner NGF 13570* (L) herewith designated as the lectotype; isolectotype K.

Ficus cristobalenensis Corner (1967) 78, f. 16. — Type: *Whitmore RSS 6199* (holo K; L), Solomon Islands, San Cristobal, confluence of Warahito and Pegato Rivers, 22 July 1965.

Ficus cristobalensis Corner var. *malaitana* Corner, ined.

Trees up to 24 m tall, with buttresses up to 1 m high. *Branchlets* drying (dark) brown. *Leafy twigs* 4–10(–20) mm thick, hollow, ± angular, brownish appressed-puberulous; internodes short. *Leaves* in spirals, ± clearly clustered distally to distant along the twig; lamina subobovate to obovate to oblanceolate to subpandurate to oblong or to elliptic, 12–40 by 5–18 cm, symmetric, subcoriaceous to chartaceous, drying greenish to pale brown, base (deeply) cordate to truncate to cuneate, margin entire, flat, apex acuminate (to subacute); upper surface glabrous or sparsely puberulous and glabrescent, dull when dry, lower surface sparsely to densely appressed-puberulous on the midrib or also the lateral veins to hirtellous (to subhispidulous also on the smaller veins, smooth (or scabridulous; cystoliths only beneath; midrib slightly impressed in the lower part to flat in the upper part above, lateral veins 10–20 pairs, 1–4 smaller lateral veins below the major basal ones, tertiary venation scalariform to reticulate, the smaller veins slightly prominent beneath; waxy glands in the axils of the (main) basal lateral veins; petiole 1.5–5 cm long, ± different in length on the same twig, (sparsely) to densely puberulous to subvelutinous, epidermis flaking off; stipules 1–3.5 cm long, brownish subsericeous, caducous. *Figs* axillary, in pairs or solitary, sessile or with a peduncle up to 1.5 cm long; basal bracts 3, verticillate, 1–6 mm long, persistent or

caducous; receptacle subglobose to ovoid, when dry 0.6–2.5 cm in diam., non-stipitate or with a stipe up to 0.4 cm long, receptacle sparsely to densely puberulous, sometimes with lateral bracts – displaced apical bracts? –, at maturity red, apex convex to unbonate, ostiole 1.5–3 mm in diam., ± prominent, surrounded by a tuft of hairs and often also by apical bracts or a rim. *Internal bristles* absent. *Tepals* red to pink, glabrous. *Stamen* 1.

Distribution — Solomon Islands (Bougainville, Choiseul, Guadalcanal, Kolombangara, Malaita, New Georgia, Ranonnga, Rendova, San Cristobal, Santa Isabel, Tetepari, and Ulawa).

Habitat — Forest.

Notes — 1. This species is extremely variable, as with regard to the dimensions of the lamina and fig receptacle, the shape of the lamina, in particular the base, the denseness of indumentum on the leaves and figs, the length of the basal bracts and peduncle, and the length of the stipe of the receptacle. The extremes of the variation as found in material Corner included in *F. edelfeltii* King (a species that does not occur in the Solomon Islands!) and that Corner included in *F. cristobalensis* are linked by numerous intermediates as found in material Corner included in *F. edelfeltii* var. *bougainvillei* and in *F. novae-georgiae* (see Corner, 1967: f. 13, 14, 15, and 16).

2. The species can be distinguished from other species in the Solomon Islands by the usually cordate base of the lamina, the number of lateral veins (mostly more than 12), the often (sub)scalariform tertiary venation, the densely hairy stipules, and/or the tuft of hairs around the ostiole.

7. **Ficus polyantha** Warb.

Ficus polyantha Warb. (1905) 250; Diels (1935) 193 (sub *Ficus subulata* Blume); Corner (1965) 30; (1967) 81, f. 18. — Syntypes: *Schlechter 13769* (B n.v, destroyed?), Papua New Guinea, near Mandres; *Warburg 20871* (holo B), Papua New Guinea, Ralum.

Ficus frondosa S. Moore (1923) 50; Diels (1935) 186. — Type: *H.O. Forbes 474* (not traced), Papua New Guinea, Sogere; fide Corner (1965).

Trees up to c. 40 m tall, with buttresses up to 3.5 m high. *Branchlets* drying brown to blackish, (always?) drooping. *Leafy twigs* 2–4 mm thick, solid (or hollow), terete or slightly compressed, glabrous or yellowish appressed-puberulous. *Leaves* (sub)distichous, distant along the twig; lamina oblong to subovate, (5–)10–28 by (2–)4–10 cm, (almost) symmetric, coriaceous, drying brown, base equilateral to slightly inequilateral, rounded to cuneate, margin entire, flat, apex acuminate to subacute; upper surface glabrous, dull when dry, lower surface glabrous, smooth; cystoliths only beneath; midrib slightly prominent to flat above, lateral veins 10–17 pairs, the basal pair not distinct, tertiary venation reticulate, in large leaves to loosely (sub)scalariform, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins, often partly on the midrib; petiole (0.5–)1–3 cm long, almost similar in length on the same twig, glabrous, epidermis persistent (or flaking off); stipules 1–3 cm long, glabrous, caducous. *Figs* axillary, solitary or in pairs; peduncle 0.2–0.6 cm long; basal bracts 3, c. 1 mm long, persistent, often ± scattered; receptacle subglobose, when dry 1–1.5 cm in diam., when fresh 2–2.5 cm in diam., non-stipitate or with a stipe up to 1.5 cm long, receptacle glabrous, at maturity yellow, apex convex, ostiole

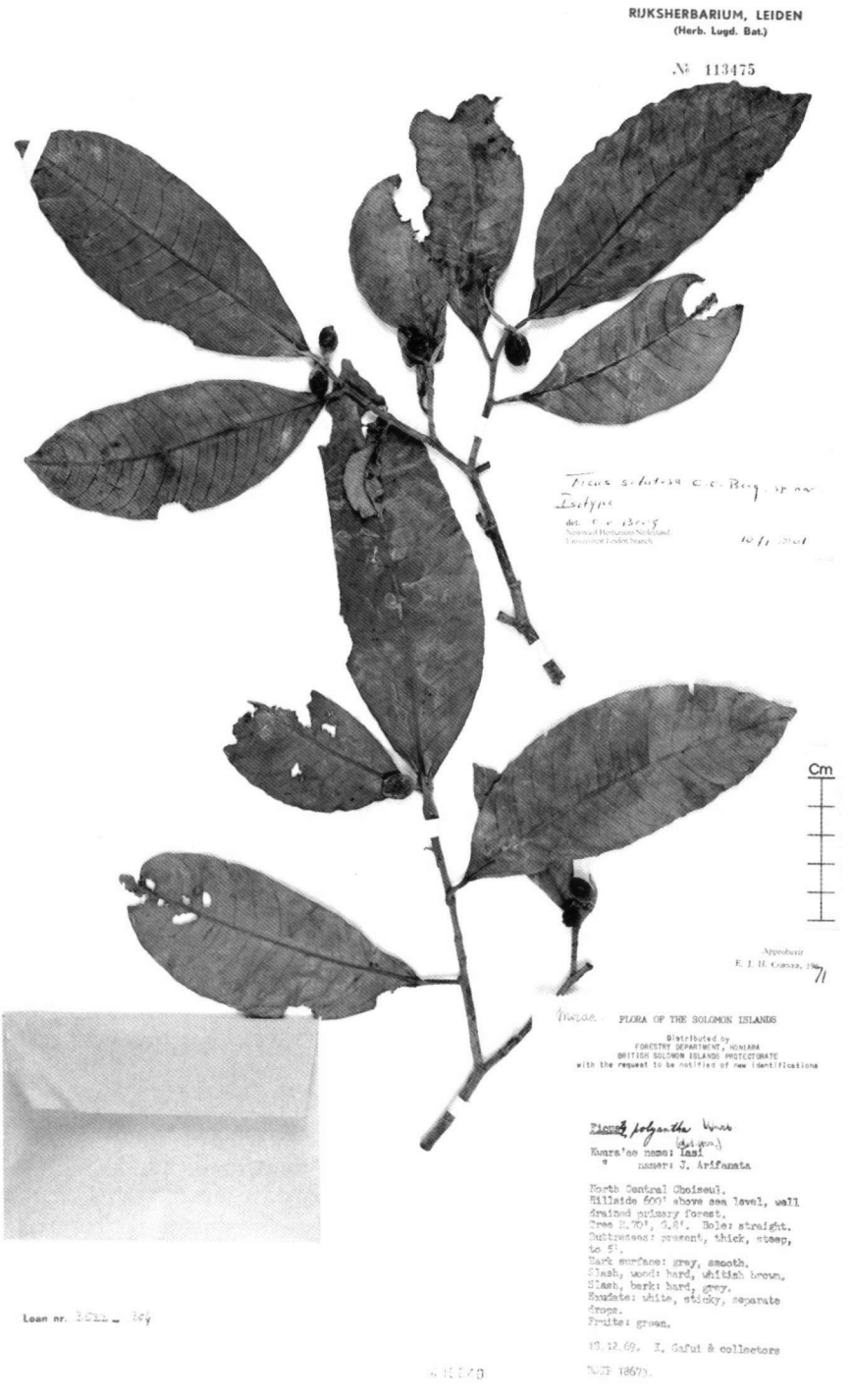

Fig. 4. *Ficus setulosa* C.C. Berg (*Gafui et al. BSIP 18673*, L), Solomon Islands, Choiseul.

c. 1–1.5 mm in diam., flat or slightly sunken. *Internal bristles* absent. *Tepals* red, glabrous. *Stamens* 1 or 2.

Distribution — Philippines, Moluccas, New Guinea, and Solomon Islands (Bougainville, Big Nggela, Guadalcanal, Kolombangara, Malaita, Malaupaina, Santa Isabel).

Habitat — Forest.

Note — The figs are smaller, the peduncle shorter, and the basal bracts more often scattered along the peduncle in the Solomon Islands than in the Malesian region.

8. Ficus setulosa C.C. Berg, *spec. nov.* — Fig. 4

Fico pseudojacae affinis e.g. in laminae venatione tertiaria retuculata, basi cuneata distincta. — Typus: *I. Gafui et al. BSIP 18673* (holo L; K), Solomon Islands, North Central Choiseul, 18 Dec. 1969.

Trees up to c. 18 m tall, with buttresses up to 1.5 m high. *Branchlets* drying brown. *Leafy twigs* 2–3 mm thick, hollow, ± angular, densely brownish appressed-puberulous. *Leaves* in spirals, distant along the twig; lamina oblong, 6–15 by 2.5–6 cm, slightly asymmetric, coriaceous, drying brown, base slightly inequilateral, cuneate, margin entire, ± revolute (towards the base), apex shortly and bluntly (sub)acuminate to obtuse; upper surface glabrous, dull when dry, lower surface sparsely puberulous on the midrib or also the lateral veins, smooth; cystoliths only beneath; midrib slightly impressed above, lateral veins 10–17 pairs, the basal pair hardly or not distinct, tertiary venation reticulate to largely parallel to the lateral veins, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins; petiole 0.5–1 cm long, almost similar in length on the same twig, densely yellowish appressed-puberulous, epidermis flaking off; stipules 1–2 cm long, almost similar in length on the same twig, densely yellowish appressed-puberulous, caducous. *Figs* axillary, in pairs, sessile; basal bracts 1 (at the base or somewhere else on the peduncle?) or none (?), c. 0.5 mm long, persistent; receptacle ellipsoid, when dry 0.6–0.9 cm in diam., with a densely brownish puberulous stipe 0.2–0.4 cm long, receptacle brownish puberulous to subtomentose, at maturity green (?), apex convex to slightly umbonate, ostiole c. 2 mm in diam., ± prominent. *Internal bristles* abundant, brown. *Pedicels* hairy. *Tepals* red, glabrous. *Stamens* 2 or 1.

Distribution — Solomon Islands (Choiseul).

Habitat — Forest.

Notes — 1. The presence of internal bristles, bristles on the pedicels, and the dense indumentum on the leafy twigs and petioles, indicate that this species is related to *F. pseudojaca* Corner from New Guinea (see Corner, 1970: 390, f. 3). It is distinct in the cuneate base of the lamina and the essentially reticulate tertiary venation.

2. The fact that basal bracts can be absent is exceptional in the subgenus.

9. Ficus smithii Horne ex Baker

Ficus smithii Horne ex Baker (1883) 372; Corner (1965) 34; (1970) 387; A.C. Sm. (1981) 177. — Type: *Horne 516* (holo K), Fiji, Rabi Island, March 1878.

Ficus smithii Baker var. *robusta* Corner (1960) 414. — Type: *A. C. Smith 8339* (holo CGE n.v.; L), New Hebrides, Taveuni, Mt Manuka, E of Wairiki, 3–14 Aug. 1953.

Trees up to 30 m tall. *Branchlets* drying brown to greyish. *Leafy twigs* 2.5–4 mm thick, hollow or solid, ± angular, (very) sparsely and minutely white puberulous to subglabrous. *Leaves* in spirals, distant along the twig to ± clearly clustered distally; lamina elliptic to oblong (to oblanceolate), (5–)8–22 by (2.5–)4.5–10 cm, symmetric, subcoriaceous, drying greenish to yellowish, base obtuse to rounded (to narrowly truncate), margin entire, flat, apex shortly and bluntly acuminate to rounded; upper surface glabrous, dull when dry, lower surface (very) sparsely appressed-puberulous on the midrib to glabrous, smooth; cystoliths only beneath; midrib almost flat above, often not reaching the apex, lateral veins (7–)9–12(–14) pairs, tertiary venation reticulate to largely parallel to the lateral veins, the smaller veins almost flat beneath; waxy glands in the axils of the basal lateral veins; petiole (0.5–)1–3.5 cm long, ± varying in length on the same twig, sparsely white appressed-puberulous, epidermis flaking off; stipules 1–2 cm long, appressed-puberulous to subsericeous, caducous. *Figs* axillary, solitary or in pairs; peduncle 0.8–1.3 cm long; basal bracts 3, (almost) verticillate, 0.5–1 mm long, persistent; receptacle subglobose, when dry 0.6–1 cm in diam., with a stipe up to 0.2 cm long or absent, receptacle glabrous, at maturity red, apex convex, ostiole c. 1 mm in diam., slightly prominent to slightly sunken. *Internal bristles* absent. *Tepals* reddish to pink, glabrous. *Stamen* 1.

Distribution — New Hebrides (Aneityum) and Fiji.

Habitat — Forest.

10. Ficus subtrinervia Lauterb. & K. Schum.

Ficus subtrinervia Lauterb. & K. Schum. (1901) 271; Diels (1935) 184; Corner (1965) 32. — Type: *Lauterbach 2172* (holo B), Papua New Guinea, Gori River, 18 May 1896.

Ficus mangiferifolia Lauterb. & K. Schum. (1901) 275; Diels (1935) 192; Summerh. (1941) 88. — Type: *Lauterbach 1487* (holo B), Papua New Guinea, Finschhafen, 7 Jan. 1891.

Ficus pachystemon Warb. (1905) 242; Diels (1935) 184; Corner (1960) 412; (1965) 32; (1970) 83, f. 19. — Type: *Dahl s.n.* (B), Papua New Guinea, Bismarck Archipelago, Ralum, 27 July 1896.

Ficus aechmophylla Summerh. (1933) 62. — *Ficus brassii* Summerh. (1929) 146, nom. illeg., non Sabine 1824. — Type: *Brass 1660* (holo A), Papua New Guinea, Lotoki River, 17 June 1926.

Ficus saxicola Summerh. (1929) 147. — Type: *Brass 699* (holo A), Papua New Guinea, Iawerere, 25 Nov. 1925.

Ficus doormaniana Diels (1935) 192. — *Ficus subtrinervia* Lauterb. & K. Schum. var. *doormaniana* (Diels) Corner (1960) 412. — Type: *Lam 1380* (holo B), Indonesia, Papua, Mamberamo, Doorman River, 24 Sept. 1920.

Ficus behrmanniana Diels (1935) 192. — Type: *Ledermann 8249* (holo B), Papua New Guinea, Hunsteinspitze, 11 Aug. 1912.

Trees up to 20 m tall, with buttresses up to 1 m high. *Branchlets* drying brown to blackish. *Leafy twigs* 1–2 mm thick, solid or hollow, ± angular, glabrous. *Leaves* in spirals to subdistichous, distant along the twig or slightly clustered distally; lamina lanceolate, (2.5–)8–17 by (1–)2–4.5 cm, (almost) symmetric, coriaceous, drying brown, base (almost) equilateral obtuse to cuneate margin entire, ± revolute, apex subacuminate to subacute; upper surface glabrous, dull when dry, lower surface glabrous, smooth; cystoliths only beneath; midrib almost flat above, lateral veins 9–16 pairs, those of the basal pair departing from the midrib in acute angles, the others at angles up to 80°, tertiary venation largely parallel to the lateral veins, creating 1–3 secondary lateral

veins in between the major ones, often running into the 'marginal' vein, the smaller veins flat to slightly prominent beneath; waxy glands in the axils of the basal lateral veins; petiole 0.5–1 cm long, almost similar in length on the same twig, glabrous, epidermis flaking off sooner or later; stipules 1–2 cm long, densely to sparsely yellowish appressed-puberulous, caducous. *Figs* axillary, in pairs, sessile; basal bracts 3, 1–1.5 mm long, persistent; receptacle subglobose, when dry c. 0.6 cm in diam., non-stipitate, glabrous, at maturity red, apex convex, ostiole c. 1 mm in diam., mostly slightly prominent. *Internal bristles* absent. *Tepals* red(dish), glabrous. *Stamen* 1.

Distribution — New Guinea and Solomon Islands (Guadalcanal, Malaita, and Santa Isabel).

Habitat — Forest.

Note — The species is represented in the Solomon Islands by a narrow-leaved form with small figs.

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IDENTIFICATION LIST

1. *F. bubulia*
2. *F. granatum*
3. *F. hombroniana*
4. *F. illiberalis*
5. *F. magwana*

5a. *F. magwana* subsp. *magwana*

5b. *F. magwana* subsp. *maragona*
6. *F. novae-georgiae*
7. *F. polyantha*
8. *F. setulosa*
9. *F. smithii*
10. *F. subtrinervia*

Beer et al. BSIP 6602: 10; 6635: 5a; 7747: 6; 7844: 1 — Boraule et al. BSIP 9282: 1 — Brass 699: 10; 1660: 10; 28598: 3 — Burn-Murdoch et al. BSIP 6919: 1; 6923: 6; 7174: 5a; 7185: 6; 7483: 6 — Buwalda 3719: 3.

Chew Wee-Lek RSNH 110: 2; 112: 2; 136: 2 — Corner BSIP 4405: 7; NGF 13559: 6; 13568: 6; 13570: 6; 13573: 1; RSS 2: 6; 20: 4; 167: 6; 1172: 6; 1174: 7; 2656: 6; 6155: 3; 6180: 6 — Cottle 9558: 9 — Cowmeadow et al. BSIP 4789: 5a.

Degener 15131: 9; 15621: 9.

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Horne 516: 9.

Kajewski 324: 2; 2419: 7 — Kere BSIP 6189: 5a — Kotali et al. BSIP 11165: 5a.

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Maenu'u BSIP 5983: 6; 6032: 5a; 6472: 6 — Mauriasi et al. BSIP 7587: 5a; 8500: 4; 9557: 6; 11363: 3; 11491: 5a; 11547: 6; 11634: 5a; 11811: 10; 12496: 6; 13462: 6; 13565: 6; 13644: 3; 13734: 3; 14384: 6; 14415: 5a; 14501: 6; 15586: 6; 15873: 6; 15948: 6; 16005: 6; 16723: 5b; 16965: 5a; 17674: 3; 17738: 5b; 17755: 3; 18008: 3; 18011: 7 — Melville et al. 7047: 9.

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Sayers NGF 19701: 1 — Schlechter 13769: 7 — Schodde et al. 3603: 6; 4065: 6 — Sirutet'e et al. BSIP 9855: 1 — Smith 5357: 9; 5879: 9; 5952: 9; 5995: 9; 8339: 9; 8497: 9; 8709: 9; 9162: 9 — Snyder BSIP 4481: 3.

Teona BSIP 6203: 6.

Warburg 20859: 10; 20871: 7 — Waterhouse B286a: 7 — Whitmore [et al. BSIP] 699: 6; 1275: 6; 1452: 5a; 1547: 5a; 1627: 5b; 1887: 5a; 2721: 7; 2785: 6; 2908: 5a; 3577: 5a; 3848: 7; 4412: 5a; 5656: 6; RSS 6199: 6.