

## PLANTAE PAPUANAE ARCHBOLDIANAE, XII\*

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IN continuation of our work on the plants collected by the Archbold Expeditions in New Guinea, this article consists of a miscellany of notes and a few new species in the Cruciferae, Violaceae, Passifloraceae and Apocynaceae.

## CRUCIFERAE

**Cardamine** Linnaeus

**Cardamine papuana** (Lauterb.) O. E. Schulz, Bot. Jahrb. **55**: 271. 1918.

*Cardamine africana* subsp. *borbonica* var. *papuana* Lauterb. in K. Schum. & Lauterb. Fl. Deutsch. Schutzgeb. Südsee Nachtr. 271. 1905.

NETHERLANDS NEW GUINEA: 15 km. southwest of Bernhard Camp, Idenburg River, *Brass* 12164, January 1939, alt. 1600 m., rain-forest, common on rocks in small streams (tufts 15–25 cm. high; flowers white); 6 km. southwest of Bernhard Camp, Idenburg River, *Brass* 12922, February 1939, alt. 1500 m., banks of a forest stream. BRITISH NEW GUINEA: Mafulu, *Brass* 5540, September–November 1933, alt. 1250 m., wet rocks of a forest stream, rare (flowers white).

We have accepted Schulz's designation of the Papuan material. Whether it is really more than a localized form of the wide-ranging *Cardamine africana* L. is impossible to determine with our limited collections.

**Cardamine altigena** Schlechter ex Schulz, Bot. Jahrb. **62**: 479. 1929.

NETHERLANDS NEW GUINEA: Lake Habbema, *Brass* 9285, August 1938, alt. 3225 m., with *Marchantia* in a long-grass marsh (flowers white); same locality, *Brass* 9472, on a mossy bank; 9 km. northeast of Lake Habbema, *Brass* 10553, October 1938, alt. 2800 m., stony bed of a stream, rare; 7 km. northeast of Wilhelmina-top, *Brass* & *Myer-Drees* 10026, September 1938, alt. 3560 m., wet grassy cliffs, rare.

Siliques 1.5–2 cm. long, 0.2 cm. wide, attenuate into a style 1–2 mm. long; stigma 0.5 mm. broad; seeds oblong, 1.6 mm. long, 1 mm. wide.

**Papuzilla** Ridley

**Papuzilla minutiflora** Ridley, Trans. Linn. Soc. II. Bot. **9**: 17. *t.* 1, *figs.* 7–14. 1916; Schulz, Nat. Pflanzenfam. ed. 2, **17b**: 275, 410. 1936.

NETHERLANDS NEW GUINEA: 2 km. east of Wilhelmina-top, *Brass* & *Myer-Drees* 9986, 10334, September 1938, alt. 3800 m., alpine grassland, massed on limestone rocks, also wet open places along small waterfall (flowers greenish to violet and white); northern slopes of Mt. Wilhelmina, *Brass* & *Myer-Drees* 10053, alt. 3900 m., prostrate in dense mats or forming loose cushions on screes (flowers and fruits purple).

Since the genus appears to be known only from the type-material of the species, we have placed these collections on record. They agree pretty well with the plate of the original material, but the pubescence of the stem varies from minutely pubescent to glabrous, and the leaves are often 7–9-incised-dentate.

\*Botanical Results of the Richard Archbold Expeditions. See Jour. Arnold Arb. **24**: 34–59. 1943.

## VIOLACEAE

**Rinorea** Aublet

**Rinorea fasciculata** (Turcz.) Merr. Philip. Jour. Sci. Bot. **12**: 286. 1917, Enum. Philip. Fl. Pl. **3**: 104. 1923.

*Pentaloba fasciculata* Turcz. Bull. Soc. Nat. Mosc. **27**(2): 341. 1854.

SOLOMON ISLANDS: Florida (N'Gela): northern end of island, *Brass* 3509, January 1933, alt. 75 m., hill rain-forests (slender small tree with thin brown bark and hard yellow wood; leaves dull dark green, all the tips destroyed by insects; flowers yellow-green).

This specimen compares reasonably well with the isotype in our herbarium. In the latter the anthers are a little larger and, in part of the inflorescences, the pedicels are scarred at the base, but this may be owing to the age of the growth. The inflorescences on the year old twigs have pedicels apparently scarred at the base; the scarred part we take to be the very short persistent axis of the old inflorescence. In the collection from the Solomon Islands the inflorescences are all on new growth and do not show this character.

**Rinorea salomonensis** (Rechinger) Melchior, Nat. Pflanzenfam. ed. 2, **21**: 352. 1925.

*Alsodeia salomonensis* Rechinger, Rep. Sp. Nov. **11**: 184. 1912, Denkschr. Math.-Nat. Kl. Akad. Wiss. Wien **89**: 579. t. 6, f. 11 B. 1913.

SOLOMON ISLANDS: Bougainville: Karngu, Buin, *Kajewski* 2295, October 1930, alt. 50 m., rain-forest, common (medium-sized tree up to 15 m. high; petals white with cream-colored edges; fruit somewhat triangular, 6 mm. long, 7 mm. diameter, with small appendage 2 mm. long).

In the specimen above cited there are, on the lower surface, minute tufts of brownish hairs in the axils between the primary veins and the midrib. The petals, about 5 mm. long, in full grown flowers are about twice as long as the sepals. The fruit has reticulate valves with 3 mottled brown seeds about 4 mm. in diameter. In general habit the species closely resembles *Rinorea carolinensis* Kaneh., as pictured in Bot. Mag. Tokyo **48**: 922. f. 8. 1934, but the anther-appendages are different; in the former they are simply acute at the apex, not lobed or erose as in Kanehira's species.

**Hybanthus** Jacquin

**Hybanthus enneaspermus** (Linn.) F. v. Muell. Fragm. Phytogr. Austr. **10**: 81. 1877, Pap. Pl. **2**: 4. 1885.

*Viola enneasperma* Linn. Sp. Pl. **1**: 937. 1753.

*Ionidium enneaspermum* Vent. Jard. Malm. sub 27. 1803-04; Merr. Enum. Philip. Fl. Pl. **3**: 106. 1923.

BRITISH NEW GUINEA: Western Division, Penzara, between Morehead and Wassi Kussa Rivers, *Brass* 8434, December 1936, occasional on savanna-forest ridges.

The species has once before been reported from New Guinea, but modern workers on the family in this region seem to have overlooked the record. The species is also reported from the Philippines under *Ionidium*.

**Agatea** A. Gray

**Agatea macrobotrys** Lauterb. & K. Schum. Fl. Deutsch. Schutzgeb. Südsee 453. t. 14. 1900; Melchior, Nat. Pflanzenfam. ed. 2, **21**: 360. f. 157 D. 1925, Bot. Jahrb. **62**: 373. 1929.

NETHERLANDS NEW GUINEA: Bernhard Camp, Idenburg River, *Brass 14057*, April 1939, alt. 50 m., flooded rain-forests of river plain (large climber in dense marginal growths of forest; flowers purple).

This specimen agrees with the original description in all details except that the ovary is sparsely hairy. In the previous records of this species only the type from Northeastern New Guinea has been cited.

***Agatea salomonensis* sp. nov.**

Frutex scandens; ramulis maturis glabris novellis  $\pm$  pubescentibus; foliis chartaceis utrinque glabris manifeste reticulatis petiolatis, petiolo glabrato 2.5–3 cm. longo, stipulis minutis subulatis, lamina late ovata 7–11 cm. longa 5.5–7.5 cm. lata, basi rotundata apice acute breviterque acuminata margine subintegra vel minute denticulata, venis primariis utrinsecus 6 vel 7 utrinque manifestis; inflorescentiis axillaribus paniculatis  $\pm$  20 cm. longis, rhachi ramulis pedicellisque  $\pm$  patenti-pubescentibus, bracteis bracteolisque minutis; sepalis circiter 2 mm. longis oblongis obtusis ciliatis; petalis ciliolatis: posterioribus oblongis 4 mm. longis, lateralibus 5 mm. longis 3 mm. latis, labello 8–9 mm. longo medio valde ligulato constricto 2 mm. lato, parte distali subdolabriformi  $\pm$  6 mm. longa lataque emarginata extus glabra, intus apice et margine lato involuto excepto villosa, parte basali gibboso-saccata intus basi excepta villosa margine valde undulato; filamentis brevissimis 1 mm. longis connatis utrinque pubescentibus 2 anterioribus extus glandulosis vel tuberculatis, antheris 1 mm. longis, extus connectivo inter loculos pilosis, apice anguste appendiculatis, connectivo in appendicem petaloideam 1.5 mm. latam 2 mm. longam producto; ovario globoso ad basim piloso; fructibus immaturis.

SOLOMON ISLANDS: Bougainville: Karngu, Buin, *Kajewski 2309* (TYPE), October 1930, alt. 50 m., rain-forest, common (vine climbing rain-forest trees; petals white, the labellum with a touch of purple).

*Agatea salomonensis* is closely allied to *A. macrobotrys* Lauterb. & K. Schum. The flowers are larger, the pubescence of the inflorescence is more shaggy, the leaves are much more shortly acuminate or scarcely more than acute.

### Viola Linnaeus

***Viola betonicifolia* Sm. subsp. *nepalensis* (Ging.) W. Becker, Bot. Jahrb. **54**, Beibl. 120: 166. 1917; Melchior, Bot. Jahrb. **62**: 374. 1929.**

NETHERLANDS NEW GUINEA: Balim River, *Brass 11653*, December 1938, alt. 1600 m., occasional on grassy deforested slopes (flowers pale, almost white).

This species is widespread from the Himalayas southward, but it has not previously been reported from Netherlands New Guinea.

***Viola lunata* Ridl. Trans. Linn. Soc. II. Bot. **9**: 17. 1916; Melchior, Bot. Jahrb. **62**: 374. 1929.**

NETHERLANDS NEW GUINEA: Southern slopes of Grand Valley, *Brass 9521* (coll. *Toxopeus*), August 1938, alt. 2350 m.; 9 km. northeast of Lake Habbema, *Brass 10732*, October 1938, alt. 2800 m., plentiful in herbaceous cover of a native clearing in the forest (ascending and spreading; flowers pale, almost white); Bele River, 18 km. northeast of Lake Habbema, alt. 2200 m., abundant on wet grassy banks of river (flowers pale). BRITISH NEW GUINEA: Murray Pass, Wharton Range, *Brass 4656*, July 1933, alt. 2840 m., among *Sphagnum* in a grassland hollow (small creeping herb); same locality, *Brass 4756*, on banks of stream (flowers pale purple); Vanapa Valley,

Urunu, *Brass* 4800, August 1933, rare in swampy hollows on open grassland (flowers pale purple, marked with darker lines).

Apparently fairly common in the mountains of New Guinea; recorded by Melchior from the Arfak Mountains, the Carstensz Range (type-locality) and Mount Sarawaket.

***Viola diffusa*** Ging. subsp. ***tenuis*** (Benth.) W. Becker, Philip. Jour. Sci. **19**: 714. 1921; Merr. Enum. Philip. Fl. Pl. **3**: 105. 1923.

*Viola tenuis* Benth. in Hook. Lond. Jour. Bot. **1**: 482. 1842.

NETHERLANDS NEW GUINEA: Bele River, 18 km. northeast of Lake Habbema, *Brass* 11469, November 1938, alt. 2200 m., rare herb growing under *Imperata* on formerly cultivated slopes (flowers pale violet). Southern China, Formosa, Philippines.

The only collection of this subspecies we have seen is a probable topotype from Hongkong. The New Guinean material differs in being a plant with smaller leaves and somewhat more narrowly winged petioles longer than the leaf-blades; the flower, however, seems to agree reasonably well with the description of that of the species.

## PASSIFLORACEAE

### **Hollrungia** K. Schumann

***Hollrungia aurantioides*** K. Schum. Bot. Jahrb. **9**: 212. 1888; K. Schum. & Hollr. Fl. Kaiser Wilhelms Land 82. 1889; K. Schum. & Lauterb. Fl. Deutsch. Schutzg. Südsee 456. 1900; Harms, Nat. Pflanzenfam. **3**(6a): 86. fig. 25, *E, F*. 1893; Harms, op. cit. ed. 2, **21**: 495. fig. 218, *E, F*. 1925.

NETHERLANDS NEW GUINEA: 6 km. southwest of Bernhard Camp, Idenburg River, *Brass* 12880, February 1939, alt. 1200 m., rain-forest canopy liane.

Apparently otherwise known only from the type-material collected in Northeastern New Guinea.

## APOCYNACEAE

The study of the Apocynaceae has brought to light some range-extensions and a few new species. *Carruthersia*, a Polynesian and Philippine genus, is reported for the first time from the Solomon Islands, and *Bleekeria* Hasskarl has been re-established.

### **Clitandropsis** S. Moore

***Clitandropsis novo-guineensis*** (Wernh.) S. Moore ex Markgr. Nov. Guin. **14**: 279. 1926; Markgr. Bot. Jahrb. **61**: 174. 1927.

NETHERLANDS NEW GUINEA: Bele River, 18 km. northeast of Lake Habbema, *Brass* 11441. BRITISH NEW GUINEA: Mafulu, *Brass* 5253; Tarara, *Brass* 8676. NORTHEASTERN NEW GUINEA: Morobe District, *Clemens* 3914, 4523, 5266, 5419, 5443, 6462, 11096. SOLOMON ISLANDS: Bougainville: Koniguru, Buin, *Kajewski* 2075, October 1930, alt. 900 m., common in rain-forest (flowers cream-colored, strongly scented; fruit greenish yellow, ovoid, 4 × 2.3 cm.); Guadalcanal: Uulolo, Tutuve Mountain, *Kajewski* 2572, 2614, April 1931, alt. 1200 m., rain-forest, common (vine climbing well into the tops of rain-forest trees; fruit orange, 4 cm. long, with a sharp apex, 2 cm. diam.).

For the present we are assigning all these collections to *Clitandropsis novo-guineensis* (Wernh.) S. Moore ex Markgr. In the Solomon Islands material the fruits are a little smaller, but we are not inclined to do more than give a provisional determination at present. We have not found the

generic lines as drawn between *Melodinus*, *Clitandropsis* and *Pseudo-Willughbeia* very satisfactory in determining our rather scanty material.

### **Alstonia** R. Brown

**Alstonia macrophylla** Wall. List no. 1648. 1829, nomen nudum; A. DC. Prodr. **8**: 409. 1844; vel aff.

SOLOMON ISLANDS: Bougainville: Kugumaru, Buin, *Kajewski* 1834, June 1930, alt. 150 m., rain-forest, common (medium-sized tree up to 20 m. high; follicles up to 50 cm. long).

This species is seemingly new for the Solomon Islands.

**Alstonia longissima** F. v. Muell. Pap. Pl. **5**: 91. 1877; Rehder in C. T. White, Jour. Arn. Arb. **10**: 260. 1929.

SOLOMON ISLANDS: Guadalcanal: Berande, *Kajewski* 2449, January 1931, sea-level, rain-forest, common (large tree up to 25 cm. high with very small buttresses; follicles 28 cm. long, 5 mm. diameter; timber used in making houses); San Cristobal: Kira Kira, *Brass* 3014, October 1932, coastal rain-forests, common (large tree with grey scaly bark; leaves thin, the midrib almost white).

The species was described from New Guinea and has since been reported from Queensland.

**Alstonia Reineckeana** Lauterb. Bot. Jahrb. **41**: 233. 1908; Stapf in Setchell, Amer. Samoa 58, *pl.* 12, *fig. A.* 1924; Christophersen, B. P. Bish. Mus. Bull. **128**: 177. 1935.

SOLOMON ISLANDS: Ysabel: Tiratona, *Brass* 3404, December 1932, alt. 600 m., rain-forest (small tree with shining leaves and cream-colored flowers); Guadalcanal: Uulolo, Tutuve Mountain, *Kajewski* 2575, April 1931, common in rain-forest (small tree up to 10 m. high, with showy white faintly scented flowers).

These flowering collections are a reasonably good match for *Christopheresen* 1903 from Samoa (of which we have only a fruiting specimen) and also for Setchell's plate of this Samoan species. The leaves are larger than those of the original description but not larger than those of Christophersen's collection. They differ from the New Caledonian material of *Alstonia plumosa* Labill. in the chartaceous texture of the leaves, the slightly more remote lateral veins, and the tendency to larger flowers. Some *Kajewski* collections from the New Hebrides previously recorded as *Alstonia villosa* f. *calvescens* Markgr. are certainly of this alliance and probably conspecific.

### **Alyxia** R. Brown

**Alyxia floribunda** Markgr. Bot. Jahrb. **61**: 184. 1927.

NETHERLANDS NEW GUINEA: Bele River, 18 km. northeast of Lake Habbema, *Brass* 11439, November 1938, alt. 2200 m., occasional in forest undergrowth on steep limestone slopes (large scrambling shrub; panicles white).

This is an entirely glabrous fruiting specimen which seems most like the above-named species. It differs from the isotype in that the branchlets are less definitely angled and the leaves are 3–8 mm. petiolate.

**Alyxia pugio** Markgr. Bot. Jahrb. **61**: 182. 1927.

NETHERLANDS NEW GUINEA: 15 km. southwest of Bernhard Camp, Idenburg River, *Brass* 12060, January 1939, alt. 1800 m., mossy forest seral growths (slender scrambling shrub; flowers white).

Except for the broader and shorter leaves ( $4-6 \times 1-3$  cm.), this collection suits the description of *Alyxia pugio* Markgr. from the mossy forest of the Sepik Territory.

***Alyxia subalpina*** Markgr. Bot. Jahrb. **61**: 183. 1927.

NETHERLANDS NEW GUINEA: 18 km. southwest of Bernhard Camp, Idenburg River, *Brass* 12180, 12627, January and February 1939, alt. 2100 and 2150 m., in shruberies of a steep summit; low stunted mossy forest (scrambling shrub 1.5 m. high; corolla orange-colored with yellow lobes; fruit unripe); 15 km. southwest of Bernhard Camp, Idenburg River, *Brass* 12361, January 1939, alt. 1700 m., epiphytic on a tall tree in mossy forest (shortly climbing slender shrub).

The first two cited collections vary from the original description in having slightly narrower leaves, longer peduncles (5-7 mm.) and pedicels (4-5 mm.), shorter corolla-tube (2.5 mm.), and shorter stigmatic appendages. These differences, however, are so small that they cannot be considered specific without actual comparison with the type-specimen. *Brass* 12361 differs in being more freely growing, with larger leaves and longer internodes, whereas the other two are compact with short branches. Possibly two species are represented, but, lacking flowers in the last number, we suspect that the contrast represents different phases of growth or age.

***Alyxia fragrans*** sp. nov.

Frutex scandens; ramulis novellis puberulis; foliis quaternatim verticillatis glabris coriaceis anguste obovato-ellipticis, basi cuneatis breviter acutiusculis vel brevissime et obtuse acuminatis, 5-9 cm. longis 2.5-4.5 cm. latis, nervis lateralibus utrinque manifestis 2-3 mm. inter se distantibus rectis late patentibus; petiolo 5-9 mm. longo; inflorescentiis axillaribus paniculatis 13-(in fructu)16 cm. longis 4 cm. latis, pedunculo  $\pm$  7 cm. longo puberulo, ramulis 0.5-2.5 (in fructu 3) cm. longis pubescentibus angulatis; bracteis lanceolato-ovatis acutis 3 mm. longis interdum carinatis; lobis calycis ovatis 3.5 mm. longis subcarinatis extus pubescentibus intus glabris; corolla albida, tubo 4 mm. longo infra stamina 1 mm. et inter antheras piloso, lobis oblongis 1.5 mm. longis; staminibus in medio tubo insertis, filamentis circiter 0.4 mm. longis glabris, antheris lineari-oblongis 1.2 mm. longis apiculatis; stylo 1 mm. longo; stigmatate ellipsoideo apice setoso, ovario dense piloso; fructu aurantiaco; mericarporum articulis 1 vel 2, ellipsoideis,  $\pm$  16 mm. longis et 12 mm. crassis, stipite circiter 7 mm. longo.

NETHERLANDS NEW GUINEA: Bele River, 18 km. northeast of Lake Habbema, *Brass* 11577 (TYPE), 11300, November 1938, alt. 2350 m., scrambling in a forest opening and frequent in open undergrowth under oaks (large shrub; leaves stiff, convex; inflorescence white; flowers fragrant; fruit orange-colored).

This species is closely allied to *Alyxia scabrida* Markgr. but is readily distinguished by the considerably larger and fewer flowers of the inflorescence.

***Alyxia Lamii*** Markgr. Nov. Guin. Bot. **14**: 280. 1926, Bot. Jahrb. **61**: 183. 1927, vel aff.

BRITISH NEW GUINEA: Mt. Tafa, *Brass* 5011, May-September 1933, alt. 2400 m., common throughout forests (slender high climbing liane; corolla-tube pale brown, the lobes cream-colored; fruits green).

The collection differs from *Brass* 12679 (from Netherlands New Guinea),

which we have accepted as typical, chiefly in its lack of pubescence; also the leaves are less revolute on drying. Lacking further material and the privilege of examining types, the determination can only be accepted provisionally.

### **Ochrosia** Jussieu

**Ochrosia glomerata** (Bl.) F. v. Muell. *Fragm. Phytogr.* **7**: 130. 1871; *Markgr. Bot. Jahrb.* **61**: 191. 1927.

SOLOMON ISLANDS: Y s a b e l: Tatamba, *Brass 3442*, January 1933, alt. 50 m., hill-forests, common (tall tree with brown fissured bark, yellow when cut; wood hard, yellow; leaves smooth and shining; flowers white).

This collection is a reasonably good match for one so determined by Valeton in 1912, cultivated at the Botanic Garden of Buitenzorg. According to Markgraf the species is known from the Philippines and New Guinea.

### **Bleekeria** Hasskarl

Although, for the most part, we have accepted generic names in current usage, on account of the difficulty which we encountered in determining a fruiting specimen from the Solomon Islands we have looked into the nomenclatural problems of *Ochrosia* Juss. sensu lato. Markgraf, *Bot. Jahrb.* **61**: 192–194. 1927, in a reasonably adequate discussion of the generic limits of the genus, decided that the two sections of *Ochrosia* Juss. as accepted by Valeton (as subgenera) and by F. v. Mueller (as sections) possessed generic value. Retaining the epithet *Ochrosia* Juss. for one group, he proposed the new name *Excavatia* Markgr. for the other, the sectional name *Lactaria* not being acceptable as a genus on account of having been coined for the true *Ochrosia* Juss.; further, Markgraf indicated that all the names given as synonyms of *Ochrosia* Juss. were to be considered in the same way. In so doing, he must have overlooked the little mentioned but greatly detailed description of Hasskarl's genus *Bleekeria*, based according to Hasskarl himself on the species *Bleekeria calocarpa* "(e *Bleekeria kalokarpa sumptus*)." Valeton, commenting on *Ochrosia calocarpa* Miq. (a transfer from Hasskarl's species), made this rather significant remark on the generic limits of *Bleekeria*: "introduisant toutefois dans la description du genre quelques-unes des propriétés qui n'appartiennent qu'à cette espèce." That is to say the type of the genus *Bleekeria* Hassk. has to be *Bleekeria calocarpa* Hasskarl, and the secondary application of this generic name to Rumphius' species is incidental and has nothing whatever to do with the typification of the genus. In addition, the fact that, four years later, Hasskarl considered the same two species under the genus name *Lactaria* is irrelevant, according to the present International Rules of Nomenclature. In 1923 Koidzumi, *Bot. Mag. Tokyo* **37**: 48–52, apparently divided *Ochrosia* Juss. into two parts, using the generic name *Lactaria* Rumph. for the true *Ochrosia* Juss. and *Bleekeria* Hassk. for the Section *Lactaria* F. v. Muell. (subg. Valeton). The name *Lactaria* Rumph. cannot supersede *Ochrosia* Juss., for it is a later designation first described by Rafinesque (1838) under the binomial system; but *Bleekeria* Hasskarl, *Retz.* **1**:

38–40. 1855, must replace *Excavatia* Markgraf, Bot. Jahrb. **61**: 194. 1927.

**Bleekeria solomonensis** sp. nov.

Arbor usque 15 m. alta glabra; ramulis teretibus novellis compressis; foliis oppositis vel ternatis chartaceis oblongis utrinque angustatis, 9–16 cm. longis 3.5–5.5 cm. latis, basi cuneatis apice subabrupte acuminatis, acumine 5–10 mm. longo acutiusculo, nervis lateralibus crebris subtransversis utrinque manifestis nervo marginali conjunctis; petiolo 1–1.5 cm. longo; inflorescentiis ternis in axillis verticilli summi foliorum; pedunculo communi  $\pm$  1.5 cm. longo compresso vel subalato; alabastro tantum viso bracteato; lobis calycis 5 lanceolato-ovatis, apice obtusiusculis, intus non glandulosis, 2 mm. longis 1 mm. latis; tubo corollae 6 mm. longo, lobis 7 mm. longis invicem sese dextrorsum tegentibus; antheris vix 1.5 mm. longis lanceolatis, filamentis 0.5 mm. longis infra faucem insertis; stylo 2 mm. longo; stigmatate turbinato-conico; fructu apocarpo, mericarpiis 2 ovoideis obtusis compressis in sicco versus apicem alatis,  $\pm$  3.5 cm. longis et 2.5 cm. latis et 1 cm. crassis, obscure laxe reticulatis sub lente striate granulosis; excavationibus mesocarpii 2.2 cm. longis 0.5 cm. latis; semine unico elliptico plano 1.7 cm. longo 0.8 cm. lato.

SOLOMON ISLANDS: Bougainville: Kugumaru, Buin, *Kajewski 1859* (TYPE), June 1930, alt. 150 m., rain-forest, common (small tree up to 15 m. high; fruits boat-shaped, borne in pairs).

This species appears to be most like *Bleekeria mariannensis* (DC.) Koidz., but the latter has a narrower oblong fruit with more pointed apex and lateral wings. In *B. solomonensis* the dried fruit is winged at the apex and the wing extends down on both sides about  $\frac{2}{3}$  of the length of the fruit.

**Bleekeria minima** (Markgr.) comb. nov.

*Excavatia minima* Markgr. in Merr. & Perry, Jour. Arnold Arb. **21**: 199. 1940.

Type-collection: *Brass 8512*.

### Micrechites Miquel

**Micrechites Archboldiana** sp. nov.

Frutex scandens, ramulis ultimis et bracteis inflorescentiae puberulis exceptis glaber; foliis coriaceis 9–17 cm. longis 3–8 cm. latis ellipticis, basi late cuneatis vel obtusis apice acuminatis, acumine 1–1.5 cm. longo, nervis lateralibus utrinsecus 7–10 oblique adscendentibus, reticulo inconspicuo; petiolo 1–2 cm. longo; inflorescentiis axillaribus et terminalibus paniculatis, 8–15 cm. longis 6–10 cm. latis, 4- vel 5-dichotomis; ramulis ultimis brevissimis, bracteatis, bracteis rotundatis circiter 1 mm. magnis; lobis calycis rotundatis 1 mm. longis ciliolatis interdum puberulis; corolla hypocrateriformi, tubo inflato sub faucem paullo angustato, 3.5 mm. longo 1.5 mm. lato, lobis sinistrorsum obliquis, parte inferiore oblongis dextrorsum tegentibus, parte superiore linearibus undulatis 3.5 mm. longis, fauce dense barbatis; antheris 1.5 mm. longis, inclusis, filamentis 1.5 mm. supra basim tubi affixis usque ad basim corollae decurrentibus, glabris; stigmatate conico basi annulo angusto cincto; ovario dense setuloso 1–1.5 mm. longo, disco quam ovario paullo brevior 5-partito; mericarpiis glabris cylindricis horizontaliter patentibus immaturis 9 cm. longis et 6 mm. crassis; seminibus lineari-oblongis 2 cm. longis 2.5 mm. latis erostratis apice coma brunnea 2–2.5 cm. longa coronatis.

NETHERLANDS NEW GUINEA: 4 km. southwest of Bernhard Camp, Idenburg River, *Brass* 13071, 13401 (TYPE), March 1939, alt. 850 m., rain-forest, common (canopy liane; corolla yellow with red lobes; fruit immature).

The general habit of this species is like that of Markgraf's *Papuechites*, but the seeds are unbeaked, with a terminal coma, whereas those of *Papuechites* are narrowed into an elongated somewhat filiform beak covered with long spreading hairs.

### **Carruthersia** Seemann

#### **Carruthersia Brassii** sp. nov.

Frutex scandens glaber vel consperse pilosus, ramulis teretibus; foliis oppositis ovato-ellipticis basi retusis vel leviter cordatis apice longiuscule acuminatis, 5–14 cm. longis 3–8 cm. latis, utrinque glabris (vel consperse pilosis) brunneis subdiscoloribus, nervis lateralibus utrinsecus 9–11 utrinque perspicuis patenti-adscendentibus marginem versus arcuatim conjunctis, reticulo conferto subtus in sicco atro-brunneo; petiolo 1–2.5 cm. longo; inflorescentiis axillaribus terminalibusque 6–10 cm. longis, paniculatis, lobis calycis et bracteis ciliatis exceptis glabris; lobis calycis 1.5 mm. longis ovatis obtusiusculis intus pluriglandulosis; corolla hypocrateriformi fauce pubescente, tubo 9 mm. longo ad antheras paullum inflato extus glabro intus pubescente, lobis dextrorsum tegentibus 7–8 mm. longis 4 mm. latis, obliquis; staminibus circiter 2 mm. supra basim tubi insertis, filamentis vix 1 mm. longis pubescentibus, antheris circiter 2 mm. longis apiculatis liberis; disci squamulis tantum 2 oppositis inter carpodia; ovario apocarpo; stylo 1 mm. longo, stigmatе anguste conoideo.

SOLOMON ISLANDS: Guadalcanal: Sorvorhio basin, *Kajewski* 2702, January 1932, alt. 180 m., rain-forest, common (vine with white flowers); San Cristobal: Huro River, *Brass* 2609 (TYPE), August 1932, lowland rain-forests (scandent; sap milky; leaves coriaceous, pale below; flowers white).

The genus is already known to occur in the Philippines and Polynesia. This species from the Solomon Islands is closely allied to *C. Macgregori* Merr., but the inflorescence of the latter is constantly minutely pubescent and the flower is a little smaller than in the new species.

### **Wrightia** R. Brown

**Wrightia laevis** Hook. f. Fl. Brit. Ind. **3**: 654. 1882; Markgr. Bot. Jahrb. **61**: 212. 1927.

NETHERLANDS NEW GUINEA: Bernhard Camp, Idenburg River, *Brass* 13893, April 1939, alt. 570 m., rain-forest of mountain slopes (subsidiary tree 12 m. high; flowers white). BRITISH NEW GUINEA: Mt. Tafa, *Brass* 5570, May-September 1933, alt. 100 m., rain-forest on low ridges, common (large tree; trunk corrugated; bark pale brown, slightly flaky; foliage pale green; flowers profuse, pale yellow, perfumed).

Markgraf reported this species from the Bismarck Archipelago, but we have not found any other record of it from Papuasias, although Markgraf determined the above-cited collection from Mt. Tafa.

### **Parsonsia** R. Brown

**Parsonsia curvisepala** K. Schum. Bot. Jahrb. **9**: 215. 1888; Markgr. Bot. Jahrb. **61**: 219. 1927.

SOLOMON ISLANDS: San Cristobal: Waimamura, *Brass* 2653, August 1932,

lowland rain-forest (one plant seen; large climber; leaves thin, very much paler below, the margins wrinkled; flowers yellow; follicles striate, green; coma on seeds pale brown; sap colorless, slightly viscid).

This specimen differs from those collected in New Guinea chiefly in the larger leaves (6–8 × 2.5–4.5 cm.).

**Parsonsia Helicandra** Hook. & Arn. Bot. Beechey's Voy. 197. 1836; Merr. Brittonia **1**: 236. 1933; Kaneh. & Hatus. Bot. Mag. Tokyo **53**: 11. 1939.

*Parsonsia spiralis* Wall. List no. 1631. 1829, nomen nudum; G. Don, Gen. Syst. **4**: 80. 1837; Markgr. Bot. Jahrb. **61**: 217. 1927.

SOLOMON ISLANDS: Bougainville: Karngu, Buin, *Kajewski* 2230, October 1930, sea-level, rain-forest, common (vine with green flowers; fruits 19.5 cm. long, 1 cm. diam.); Ysabel: Meringe, *Brass* 3161, November 1932, twining on fore-shore trees, common; San Cristobal: Kira Kira, *Brass* 2771, August 1932, large climber on beach trees, common.

We have not found this widespread species previously recorded from the Solomon Islands.

**Parsonsia lata** Markgr. Bot. Jahrb. **61**: 221. 1927.

NETHERLANDS NEW GUINEA: 4 km. southwest of Bernhard Camp, Idenburg River, *Brass* 13267, March 1939, alt. 850 m., abundant in rain-forest of river plains (large canopy liane; flowers yellow). SOLOMON ISLANDS: Guadalcanal: Berande, *Kajewski* 2434, January 1931, sea-level, common in rain-forest (vine with cream-colored flowers; follicles 12 cm. long, at widest part 3.6 cm. wide, tapering slightly, green, covered with fine brown hairs).

In the Solomon Islands collection the leaves are a little broader in proportion to their length and tend to be less pubescent above than in the material from New Guinea. The species has been collected from Northeastern New Guinea.

**Parsonsia mollissima** (Wernh.) Markgr. Bot. Jahrb. **61**: 220. 1927.

BRITISH NEW GUINEA: Palmer River, 2 miles below junction Black River, *Brass* 7089 (det. Markgraf), June 1936, alt. 100 m., climbing in forest substage (upper leaf surface glossy).

The type was collected in Netherlands New Guinea; the species probably occurs also in Northeastern New Guinea, cf. Markgr. l. c.

**Parsonsia flavescens** sp. nov.

Frutex scandens; foliis oppositis subcoriaceis lanceolatis vel ovato-ellipticis magnitudine ludentibus, 6–7 cm. longis 1.5–2.3 cm. latis vel 7–9 cm. longis 4.5–5 cm. latis, basi obtusis vel rotundatis, apice acutis vel obtuse acuminatis mucronatis, margine ± recurvatis, utrinque glabris subtus minute granulatis, nervis lateralibus ± 9 oblique patentibus utrinque prominulis vel interdum inconspicuis; petiolo 6–9 mm. longo minute pubescente; inflorescentiis axillaribus plurifloris 3–4.5 cm. longis puberulis; pedicello ± 4 mm. longo; calycis lobis ovatis acutiusculis 2 mm. longis intus pauciglandulosus; corolla flava; tubo 4.5 mm. longo extus glabro intus sub antheris minute piloso, lobis 3 mm. longis 1.5 mm. latis oblongo-lanceolatis; filamentis circiter 2 mm. longis, in medio tubo insertis geniculatis pubescentibus, antheris 4 mm. longis; stigmatibus 1.4 mm. longo obtuse conico in basi annulato; ovario glabro 0.5 mm. longo disco glabro aequilongo cincto.

NETHERLANDS NEW GUINEA: Bele River, 18 km. northeast of Lake Habbema, *Brass*

11573, November 1938, alt. 2350 m., on open face of cliff (small twiner; sap not milky; flowers yellow); Balim River, *Brass* 11647 (TYPE), December 1938, alt. 1600 m., climbing in sparse second growths on deforested slopes (sap not milky; flowers yellow).

Among the New Guinean species this seems to approach *Parsonsia diversifolia* (Warb.) Markgr. most closely; the plant, however, is not hispidulous, the leaves are coriaceous, the flower is twice as large as the dimensions given for Warburg's species, and the disk is entire.

***Parsonsia rubra*** Kaneh. & Hatus. ms.

Scandens; foliis coriaceis glabris lanceolato-oblongis, 6–12 cm. longis 1.5–4.5 cm. latis, basi rotundatis apice acuminatis, nervis lateralibus utrinsecus  $\pm$  6 supra impressis subtus prominulis; petiolo 1.5–2 cm. longo; inflorescentiis terminalibus usque 11 cm. longis; ramulis puberulis; corolla rubra extus glabra.

NETHERLANDS NEW GUINEA: Hollandia, *Brass* 8991, July 1938, alt. 100 m., rain-forest (large canopy liane; flowers red).

We have been able to match this collection only with *Kanehira & Hatusima* 12220 from Netherlands New Guinea. We know that the description of this species was already in manuscript before Pearl Harbor and we anticipate that it is now published, although unavailable to us at present. However, not being able to cite the place of publication, and to protect our use of the name, we have appended a brief Latin description.

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