

NOTES ON NEW GUINEA UMBELLIFERAE¹P. BUWALDA²*With one text-figure*

INCLUDED ORIGINALLY in this study were plants collected by (1) Mr. L. J. Brass (1933 and 1936) in Papua; (2) Mr. L. J. Brass and Dr. E. Meyer-Drees (1938) on the Archbold Expedition to Netherlands New Guinea; (3) Mrs. M. S. Clemens (1936 and 1940) in the Morobe district of Northeast New Guinea; and (4) Prof. R. Kanehira and Dr. S. Hatusima in the Arfak Mts. of Netherlands New Guinea. All these specimens were put at my disposal through the courtesy of the Herbarium of the Arnold Arboretum. Later a set of specimens collected by Mr. C. E. Carr in Papua and deposited at the Rijksherbarium, Leyden, was included.

To make this study more complete, fragments from plants collected in Papua by Mr. H. O. Forbes (1885–1886), Sir W. MacGregor (1894), and Mr. W. E. Armit (1894), were received through the efforts of Mr. A. Jessep, the Director and Government Botanist at the National Herbarium, Melbourne, Australia. The originals from which these fragments were taken are in the National Herbarium at Melbourne, Victoria; the fragments are deposited at the Rijksherbarium at Leyden.

Hydrocotyle javanica Thunb., Diss. *Hydrocotyle* 3 (no. 17), 6 (descr.), t. 1798; Buwalda in *Blumea* 2: 122. 1936.

DISTRIBUTION: Southeast and eastern Asia to Solomon Islands, Australia, Tasmania, tropical Africa, Malaysia, sea-level to 2900 m. alt.

NETHERLANDS NEW GUINEA: Arfak Mts., Angi, on edge of forest by Lake Gita, *Kanehira & Hatusima* 13449; Bele River, 18 km. NE. of Lake Habbema, 2200 m. alt., one example on loose wet earth on a landslip, *Brass* 11306; same locality, 2300 m. alt., forest ground plant found frequently in wet hollows, *Brass* 11253.

NORTHEAST NEW GUINEA: Morobe District, Boana, 750–1350 m. alt., *Clemens* 41638; Wantoat (Wantot), 1050–1800 m. alt., flowers dull white, *Clemens* 11049; Wantoat vicinity, 1500–1800 m. alt., *Clemens* 11333z; Matap, 1500–1800 m. alt., herb with white flowers, *Clemens* 11311 bis; Rawlinson Range, 2100–3600 m. alt., inflorescence green, *Clemens* 12346; Ogeramang, 1740 m. alt., open forest trails, *Clemens* 4995; Tobon, 1650 m. alt., *Clemens* 6579.

PAPUA: Mt. Goudenough, 2610 m. alt., *MacGregor s.n.* in 1895; Boridi, open places, 4700 ft. alt., flowers green, Sept. 29, 1935, *C. E. Carr* 14285; Isuarava, open places, 4500 ft. alt., Feb. 1, 1936, *C. E. Carr* 15340; Isuarava, secondary forest on rock, flowers white, 3500 ft. alt., Feb. 26, 1936, *C. E. Carr* 15779.

¹ Botanical Results of the Richard Archbold Expeditions.

² Deceased April 28, 1947.

Among the specimens examined, *Brass* 11253, *Clemens* 11333z, 11311 bis, 12346 and 6579, and *Kanehira & Hatusima* 13449 are very remarkable by their long-pedicelled flowers; a study of material from all parts of Malaysia proves that such forms are connected by a complete series of transitions with the more common form having sessile or nearly sessile flowers. *Brass* 11306 and *Clemens* 11049 are small forms that show an approach to *H. sibthorpioides* and are difficult to separate from this species. I consider them as belonging to *H. javanica* when there are more than fifteen fruits in the umbellule.

Hydrocotyle sibthorpioides Lam., Enc. Méth. Bot. 3: 153. 1789;
Buwalda in *Blumea* 2: 128. 1936.

DISTRIBUTION: Tropical Asia, tropical Africa, South America (?), Australia.

NETHERLANDS NEW GUINEA: Arfak Mts., Angi, *Kanehira & Hatusima* 13825; Lake Gita, 1900 m. alt., on edge of forest, *Kanehira & Hatusima* 13449; in open marsh, *Kanehira & Hatusima* 13674; Balim River, 1600 m. alt., creeping in ditches, common, flowers white, *Brass* 11790; Bele River, 18 km. NE. of Lake Habbema, 2200 m. alt., creeping on wet rock in bed of forest stream, *Brass* 11307; Lake Habbema, 3225 m. alt., wet sandy banks of a grassland stream, *Brass* 9320; Lake Habbema, creeping over rock face, *Brass* 9473; Lake Habbema, plentiful amongst grass tussocks of marshy hollows, *Brass* 9474; Lake Habbema, open places at edge of forest, pubescent, *Brass* 9545; 2 km. E. of Wilhelmina-top, 3850 m. alt., on wet limestone near waterfall, flowers violet, *Brass & Meyer-Drees* 10349; 11 km. NE. of Wilhelmina-top, 3400 m. alt., creeping in wet open places along small river, corolla violet, *Brass & Meyer-Drees* 9687; hanging over perpendicular banks of stream to length of 1 m., upper surface of leaves smooth and shining, *Brass & Meyer-Drees* 9811; associated with 9811 on banks of stream, *Brass & Meyer-Drees* 9812; N. slopes of Mt. Wilhelmina, 4050 m. alt., alpine grasslands, carpeting wet rocks, *Brass & Meyer-Drees* 10088; Idenburg River, 15 km. SW. of Bernhard Camp, on wet mossy rocks of a waterfall, *Brass* 12390.

NORTHEAST NEW GUINEA: Morobe District, Upper Camp A, *Clemens* 10086R; Wantoat (Wantot), 1050–1800 m. alt., *Clemens* 11086; Wantoat vicinity, 1500–2100 m. alt., flowers garnet-maroon, *Clemens* 11336; Ogeramnang, *Clemens* 6395.

PAPUA: Lala, creeping on rocks in forest, flowers green, 5500 ft. alt., Dec. 27, 1935, *C. E. Carr* 14054.

The specimens are very variable in respect to leaf incisions; specimens from Malaysia show all grades of intermediate variation.

Hydrocotyle vulgaris Linné, Sp. Pl. 234. 1753; Buwalda in *Blumea* 2: 133. 1936.

DISTRIBUTION: Europe, North Africa, Australia, apparently not on the Asiatic continent.

NETHERLANDS NEW GUINEA: Arfak Mts., Angi, 1900 m. alt., in open marsh by Lake Giji, *Kanehira & Hatusima* 13824.

From the same region discovered by Gibbs. The specimens collected by Kanehira & Hatusima have petioles up to 17.5 cm. long, inflorescences to 14 cm. long with up to nine whorls of flowers; the fruits are smooth, not beset with reddish warts as in the European form.

Centella asiatica (L.) Urb. in Mart., Fl. Bras. 11(1): 287, *t.* 78, *fig.* 1. 1879; Buwalda in Blumea 2: 134. 1936.

DISTRIBUTION: Tropical and subtropical regions all over the world.

PAPUA: Daru Island, W. Division, completely covers patches of ground on old garden clearings in light rain forest, *Brass* 6242; Lake Daviumbu, Middle Fly River, creeping over leafy ground in damp patches of *Tristania* savannah-forest, *Brass* 7538; Koitaki, open savannah land under grasses, stems and stolons dull red, flowers pale red-purple, 1500 ft. alt., July 20, 1935, *C. E. Carr* 12848; Koitaki, stream bank in the open, 1500 ft. alt., flowers reddish, July 29, 1935, *C. E. Carr* 12902.

Trachymene saniculaefolia Stapf in Hook. Ic. Pl. 24: *t.* 2308. 1894; Buwalda in Blumea 2: 141. 1936.

DISTRIBUTION: Borneo (Mt. Kinabalu); Philippine Isl. (Mindoro, Mt. Halcon); New Guinea (southeastern part, Wharton Range, Mt. Albert Edward, Mt. Scratchley); Australia (N. S. Wales, Jenolan Caves).

NORTHEAST NEW GUINEA: Morobe District, Matap, 1500–1800 m. alt., *Clemens* 41152.

PAPUA: Crest of Owen Stanley Range, *MacGregor s.n.*

In leaf shape the specimens show an approach to *T. novoguineensis*, but the leaf blades are broader than long. The specimen collected by MacGregor was originally identified as a *Hydrocotyle* sp. Most probably it is the *Hydrocotyle azorellacea* F. v. Muell., *nomen*, recorded by F. v. Mueller in Jour. Bot. 31: 324. 1893.

Trachymene novoguineensis Buwalda in Blumea 2: 144, *fig.* 2a. 1936.

DISTRIBUTION: New Guinea (Doorman-top, Wichman Mts., Hubrecht valley, Mt. Scratchley, Owen Stanley Range).

NETHERLANDS NEW GUINEA: Lake Habbema, 3225 m. alt., banks of a small brook in edge of forest, *Brass* 9343; 2 km. E. of Wilhelmina-top, 3650 m. alt., under small shrubs in grassy places, flowers dark violet, *Brass & Meyer-Drees* 10387; 4 km. NE. of Wilhelmina-top, 3660 m. alt., amongst grass and moss on shores of a lake, *Brass & Meyer-Drees* 9985; 7 km. NE. of Wilhelmina-top, 3720 m. alt., few plants on wet grassland, *Brass & Meyer-Drees* 9944; Mt. Wilhelmina, 3560 m. alt., common in moist grass glades, petioles and inflorescence red, *Brass & Meyer-Drees* 10019.

NORTHEAST NEW GUINEA: Morobe District, Sarawaket, 2400–3900 m. alt., *Clemens* 5773 (mixed with *T. adenodes*!).

PAPUA: Mt. Dayman, 2700 m. alt. (summit of the Owen Stanley Range, W. of Goudenough Bay), Jan. 1, 1894, *Armit s.n.*

The specimens *Clemens* 5773 and *Armit s.n.* are very small forms. The height varies from 2 to 3 cm.; the petioles are 10–15 mm., the lamina 3–6 × 2.5–6 mm., cuneate, tripartite; peduncles 1.5–2.5 cm.

Trachymene koebrensis (Gibbs) Buwalda in *Blumea* 2: 146, fig. 1a. 1936.

DISTRIBUTION: New Guinea (Arfak Mts., Wilhelmina-top).

NETHERLANDS NEW GUINEA: Arfak Mts., Angi Lake, 2400 m. alt., in open burnt summit plateau between Lake Gita and Lake Giji, height of plant 20–30 cm., flowers white, *Kanehira & Hatusima* 13689; Lake Habbema, 3225 m. alt., sterile limestone slope, abundant on sandy soil rich in peaty matter, habit erect, flowers white with purple tinge, *Brass* 9529.

Kanehira & Hatusima 13689 agrees with the specimens found in the same region by Gibbs, whereon the species was based. *Brass* 9592 has finely papillose stems and fruits that are densely beset with scale-like trichomes; in all its other characters it agrees with the plants from the Arfak Mts., and on the same plant there occur densely tuberculate fruits as well as a very few that are entirely smooth.

Trachymene arfakensis (Gibbs) Buwalda in *Blumea* 2: 154, fig. 2b. 1936.

NETHERLANDS NEW GUINEA: Arfak Mts., Angi, in open marsh by Lake Gita, 1900 m. alt., height of plant 60 cm., flowers white, rare, *Kanehira & Hatusima* 13489, 13624.

Both specimens agree well with the type material from the same locality collected by Gibbs.

Trachymene adenodes Buwalda in *Blumea* 2: 155, fig. 4a, b. 1936.

NORTHEAST NEW GUINEA: Morobe District, Sarawaket, *Clemens* 5233, 5256, 5773 *pro parte*.

This species was described from a fragment in the British Museum collected in the Saruwaged Mts. by Keysser. From the more abundant material now at hand, it appears that the plant has rosettes at the base of ascending stems. In leaf form it resembles *T. arfakensis* but differs in the longer petioles, longer peduncles, and the glandular indumentum of petioles, stems, and peduncles. When more material becomes available, it may prove to be the same as *T. arfakensis*. At present I prefer to keep them apart, as there are no intermediates.

Trachymene papillosa Buwalda in *Blumea* 2: 157, fig. 4c, d. 1936.

NETHERLANDS NEW GUINEA: Balim River, 1600 m. alt., deforested slopes, plentiful in the grass on sandy soil, flowers pink, *Brass* 11636; 20 km. N. of Lake Habbema, 2200 m. alt., abundant amongst bracken on poor sandy soil of formerly cultivated slopes, ascending to 20–30 cm., red-hairy, flowers pink, *Brass* 10836; 11 km. NE. of Wilhelmina-top, 3400 m. alt., on moist sandy slope in edge of subalpine forest, *Brass & Meyer-Drees* 9754.

The original description of *Trachymene papillosa* was based on specimens collected in southwest New Guinea, probably from the Hellwig Mts., 3300–3500 m. alt. Among the specimens mentioned above, *Brass & Meyer-Drees* 9754, collected at 340 m. alt., corresponds exactly with the originals. The other two are somewhat different, although in general appearance they agree with the originals. *Brass* 10836 at 2200 m. alt.

is very densely hairy with partly glandular hairs; between the hairs the stem is subpapillose but later becomes glabrous and smooth. *Brass 11636*, at 1600 m. alt., is about 40 cm. high and very much branched from 15 cm. above the base; the stems are sparingly hirsute, more densely so above the leaf insertions and there subpapillose; the leaves are very sparingly hirsute to entirely glabrous, the segments are narrower than in the type specimens.

The pedicels of both plants are suberect to reflexed in fruit, the fruits are smooth. There are a few fruits with a very few tubercles.

Trachymene flabellifolia Buwalda in Fl. Males. ser. 1, 4(2): 124. 1949.

Herba perennis e caudice 7–12 mm. crasso caules ad 31 cm. longi proferentes. Caules e basi ramosi, adscendentes, sulcati vel subangulati, parte inferiore atro-suberoso, scaberulo, parte superiore dense papilloso, pilis ad 1 mm. longis substrigoso hirsuto. Folia singula et in rosulis paucifoliis axillaribus, 5–15 mm. distantia disposita; vagina 2–3 mm. longa, 1.5–2 mm. lata, in petiolum attenuata margine pilis ad 2 mm. longis ciliata; petiolus 6–11 mm. longus, pilis ad 1 mm. longis sparse hirsutus; lamina 10–25 mm. longa, 10–30 mm. lata, flabelliforma, tripartita vel trifida segmentis cuneatis 2–3-partitis ad 2–3-fidis, apice dentibus acutis mucronulatis, margine subincrassato subrecurvo; nervatura utrinque distincta flabellata. Inflorescentiae umbellae simplices foliis oppositae in caulium parte superiore; pedunculus teres, striatus, subpapillosus, 4–5.5 cm. longus, pilis ad 1.5 mm. longis divaricatis sparse hirsutus; bracteae involucrantes ad 11, ad 11 mm. longae, circiter 0.75 mm. latae, oblongae vel lanceolatae acutae, margine piloso-dentatae basi connatae; pedicelli 30–50, tenues, teretes, glaberrimae, exteriores ad 5 mm. longi, interiores breviores, fructiferae paullum auctae divaricatae. Calycis dentes circiter 0.25 mm. longi, acuti; petala 0.75–1 mm. longa, circiter 1 mm. lata, ovata subconcaeva; stamina 5 filamentis ad 1.25 mm. longis, antheris dorsifixis rotundato-ellipsoideis; styli 2 subfiliformes 1.25–1.5 mm. longi, inflexi. Fructus valde applanatus reniformis, mericarpiis ad 3 mm. longis ad 2.5 mm. latis, jugis intermediis circiter 1 mm. a commissura remotis, stylis paullum auctis coronatus, trichomatibus tuberculiformibus dense vestitus; carpophorum integrum, 1.5–1.75 mm. longum, vix biapiculatum.

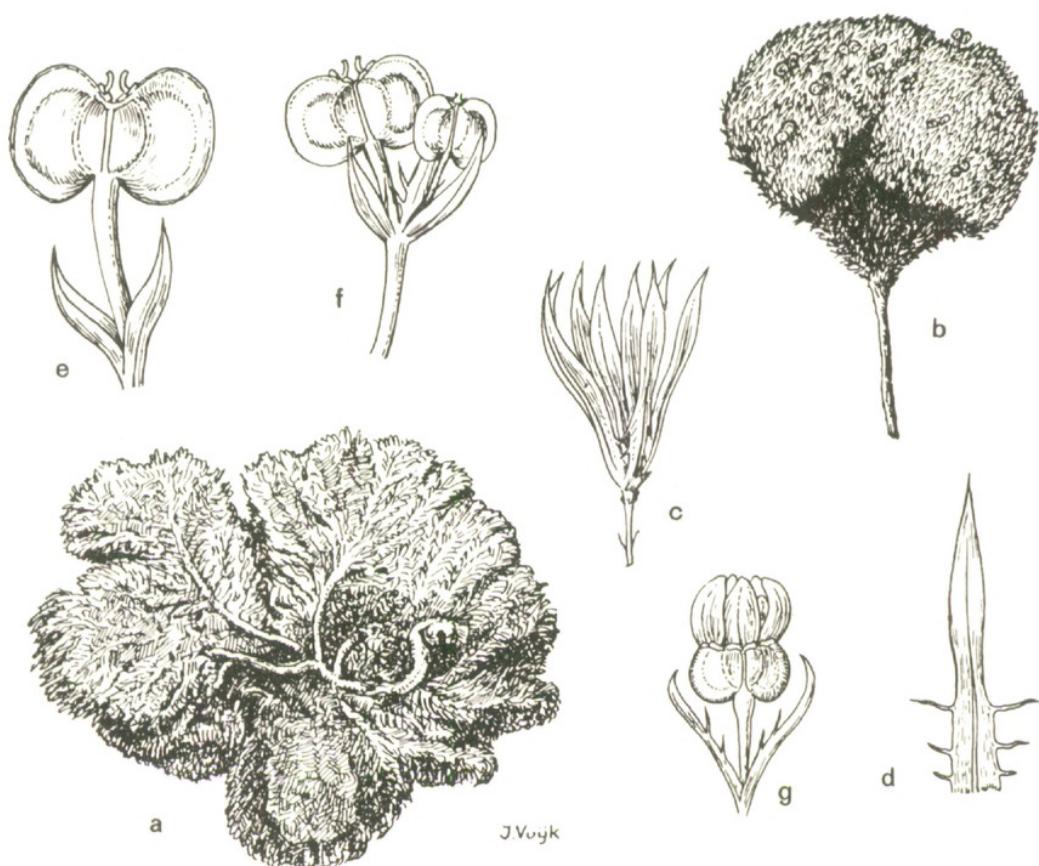
NETHERLANDS NEW GUINEA: Lake Habbema, 3225 m. alt., common in mossy glades, *Brass 9586*.

This new species is nearest to *T. papillosa*, from which it differs in its leaves being cuneate to flabelliform.

Trachymene pulvilliforma Buwalda in Fl. Males. ser. 1, 4(2): 125. 1949.

Herba probabiliter perennis, omnino glabra; radix fusiformis ramosa fibrosa; caulis prostratus e basi valde ramosus, rami compacti superiores subadscendentes pulvillum semiglobosum ad 1 cm. altum, 5–15 cm. longum et latum formantes. Folia densissime imbricata apices versus magis minusve in rosulas conferta, parte inferiore semiamplexicaule vaginante; vagina adpressa 1.5–3 mm. longa, 0.5–1 mm. lata lamina versus attenuata;

lamina cochlearis 2–2.5 mm. longa 0.5–0.75 mm. lata apice mucronata uninervata. Inflorescentiae umbellae simplices pauciradiatae ad apices ramorum terminales vel rosulis oppositae, floriferae inter folia absconditae, fructiferae folia paulum superantes; pedunculus planiusculus circiter 2 mm. longus; bractae involucrantis 2–4, 1.5–2 mm. longae ad 0.5 mm. latae lanceolatae vel spathulato-lanceolatae; pedicelli 1–2 planiusculi circiter 1 mm. longi, fructiferi ad 2.5 mm. longi; calycis dentes inconspicui; petala 5 circiter 1 mm. longa, circiter 0.75 mm. lata; stamina 5 filamentis circiter mm. [sic] longis, antheris dorsifixis rotundato-ellipsoideis; styli 2 sub-filiformes circiter 0.5 mm. longi. Fructus glaber valde applanatus reniformis mericarpiis ad 2 mm. longis et ad 1.5 mm. latis, jugis indistinctis, intermediis 0.75 mm. a commissura remotis, stylis paullo auctis coronatus; carpophorum indivisum circiter 1 mm. longum vix biapiculatum.



TEXT-FIGURE 1. *Trachymene pulvilliforma* Buwalda. a. pin-cushion from below, showing branching, $\times 1$. b. young pin-cushion, with central root-stock, fruits just emerging from densely set leaves, $\times 1$. c. tuft of leaves with imbricating sheaths (lower leaves removed), $\times 4$. d. upper part of a leaf, $\times 7$. e. one-flowered umbel with 2 involucres, in fruit, $\times 7$. f. 2-flowered umbel with 3 involucres, in fruit, $\times 7$. g. flower, $\times 8$.

NETHERLANDS NEW GUINEA: 3 miles E. of Wilhelmina-top, 3650 m. alt., in bright green cushions 5–15 cm. diameter on old camp site, flowers minute, white with pink anthers, *Brass* 9426.

This new species differs from all known species of *Trachymene* in the dense mode of growth, the peculiar leaf shape, and the 1–2-pedicelled umbels. In its mode of growth it comes nearest to *T. rosulans* (Danser) Buw.

Oreomyrrhis andicola Hook. f., Fl. Antarct. 2: 288, *t.* 101. 1846; Buwalda in *Blumea* 2: 173. 1936.

DISTRIBUTION: Central and South America from the Falkland Islands, Australia, New Zealand, Malaysia, Borneo (Mt. Kinabalu), New Guinea.

NETHERLANDS NEW GUINEA: Lake Habbema, 3225 m. alt., locally abundant and covering ground in open bogs, *Brass* 9517; 4 km. NE. of Wilhelmina-top, 3660 m. alt., alpine grassland, small cushions on a mossy rock, flowers white, *Brass & Meyer-Drees* 9982; north slopes of Mt. Wilhelmina, 4000 m. alt., tufted on old grassy screes, *Brass & Meyer-Drees* 10083; same locality, 4150 m. alt., alpine grassland, on dry soil under rocks, petioles and peduncles purple, *Brass & Meyer-Drees* 10082; same locality, alpine grassland, common under rocks, soft gray-green cushions, flowers red, *Brass & Meyer-Drees* 10207; south slope of Mt. Wilhelmina, 4240 m. alt., alpine grassland, cushioned on rocky slopes, plentiful, flowers red, *Brass & Meyer-Drees* 10095.

NORTHEAST NEW GUINEA: Mt. Sarawaket, 4020 m. alt., summit, sheltered nook, uncommon, flowers dark wine, minute, *Clemens* 5641.

Oreomyrrhis andicola was hitherto known only from New Guinea from the Wollaston Expedition, at 3150–3750 m. alt. The rather abundant material collected by Brass provides a good idea of the polymorphy. Mostly the plants are small tufted specimens, sometimes they form soft-haired spreading cushions. *Clemens* 5641 is somewhat different, with long-petioled leaves and the peduncles much longer than the leaves.

Oreomyrrhis papuana Buwalda in *Blumea* 2: 175. 1936.

DISTRIBUTION: New Guinea (Doorman-top, Wilhelmina-top).

NETHERLANDS NEW GUINEA: Lake Habbema, 3225 m. alt., common in grass on sandy banks of grassland streams, weak rosette, herb, *Brass* 9323; 11 km. NE. of Wilhelmina-top, 3400 m. alt., in grass on rather dry western slope, corolla violet, *Brass & Meyer-Drees* 9708.

These specimens agree with the material from Doorman-top collected by Lam, whereon the species was based.

Oreomyrrhis azurellacea Buwalda in Fl. Males. ser. 1, 4(2): 130, *figs.* 7, 8. 1949.

Herba probabiliter perennis, omnino glabra; caulis suberectus 3–4.5 cm. longus, e basi valde ramosus, ramuli ad 3 cm. longi compacti conferti strictiusculi, superiores gradatim breviores pulvillum densiusculum formantes. Folia densissime imbricata 2–4-fariam, 3–4 mm. longa, parte inferiore amplexicaule vaginante; vagina adpressa ad 1 mm. lata pellucida margine ciliolulata in laminam gradatim attenuata; lamina ad 1.5 mm. longa, ad 1 mm. lata rigidiuscula patula coriacea concava margine submembranacea anthororso ciliolulata apice obtusa uninervata. Inflorescentiae uniflorae ad caulium ramorum brevium apices, floriferae fructiferaeque

inter folia absconditae. Pedunculus 2 mm. longus subplanus bractae involucentes 4 patulae lanceolatae 1.5–2 mm. longae, 0.5–1.25 mm. latae, foliis similes basi connatae. Flores ad 0.5 mm. pedicellati; calycis tubus breve campanulatus lateraliter subcompressus, circiter 1 mm. longus, 1.5 mm. latus, jugis indistinctis; calycis dentes nullae; petala 1 mm. longa, 0.5 mm. lata elliptica acuta uninervata; stamina filamentis circiter 0.5 mm. longis dorsifixis rotundato-ellipsoideis ad 0.5 mm. longis ad mm. [sic] latis; styli 2 conici ad 0.5 mm. longi. Fructus circiter 1.5 mm. longus, 0.75 mm. latus apice subcontractus a latere leviter compressus; juga obtusa aequaliter prominula lateralia ad commissuram, ad apicem fructu confluentia; stylopodium conicum ad 0.5 mm. longum; mericarpium subteres altero nunc abortiente.

PAPUA: Mt. Albert Edward, 3680 m. alt., common on alpine grasslands, tiny vivid green plant in dense pin-cushion masses on grasslands, flowers red, *Brass* 4306.

In mode of growth and inflorescence this plant fallaciously resembles some *Azorella* species. It has, however, a parenchymatous endocarp, the vittae are solitary in the furrows and two at the commissure, the endosperm is furrowed at the commissure in cross-section. According to these characters it must be an *Oreomyrrhis*. In its leaf shape it comes nearest to *O. linearis* Hemsl., but it is much smaller in all its parts.

Oenanthe javanica DC. Prodr. 4: 138. 1830; Buwalda in *Blumea* 2: 194. 1936.

DISTRIBUTION: Southeastern and eastern Asia, Formosa, Japan, Queensland, Malaysia.

NETHERLANDS NEW GUINEA: 9 km. NE. of Lake Habbema, 2800 m. alt., common on native clearings in the forest, up to 1 m. high, flowers white, *Brass* 10701; Bele River, 18 km. NE. of Lake Habbema, 2200 m. alt., common as a weed in old gardens, native food plant used as a green vegetable, *Brass* 11220; same general locality, very abundant as a weed in old grassy gardens about villages, *Brass* 11386; Balim River, 1600 m. alt., common weed in old grass-grown gardens, flowers white, *Brass* 11795.

NORTHEAST NEW GUINEA: Morobe, Yunzaing vicinity, 1500 m. alt., open wet places, flowers white, *Clemens* 3593; above Ogeramngang, 1650 m. alt., wet forest trail, height of plant 15 in., flowers white, fruit green, *Clemens* 4435; Ogeramngang, 1620 m. alt., hill trails, *Clemens* 4897.

PAPUA: Koitaki, edges of stream, flowers white, 1500 ft. alt., Apr. 18, 1935, *C. E. Carr* 11933; locality uncertain, *Forbes* 885.

Apium tenuifolium (Moench.) Thell. in *Hegi, Ill. Pl. Mitt.-Eur.* 5(2): 1140. 1926.

Cnidium tenuifolium Moench. *Meth.* 98. 1794, excl. syn.

NORTHEAST NEW GUINEA: Morobe, Sattelberg, near house, flower white, not frequent, 3000 ft. alt., Jan. 31, 1936, *Clemens* 1720.

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