

TWO NEW SPECIES OF MERREMIA FROM FIJI,
REPRESENTATIVES OF A NEW SECTION, WAVULA
(CONVOLVULACEAE)

by

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1. *Merremia pacifica* VAN OOSTSTR., nov. spec.; fig. 1, *a—g*.

Scandens, ramis teretibus, fistulosis, laevibus, glabris, ad 5 mm diam.; foliis petiolatis, petiolo 5 cm longo, glabro vel praesertim parte superiore pilis nonnullis brevissimis appressis praedito, herbaceis, late ovatis vel orbicularibus, apice abrupte acuminatis vel cuspidatis, acumine acuto mucronulato, 1.5—2 cm longo, basi leviter cordatis, 11—12 cm longis, 10—11 cm latis, glabris vel basi superne ad insertionem petioli pilis nonnullis brevissimis praeditis; nervis primariis utrinque 9—10, curvatis, subtus prominentibus, secundariis pluribus subparallelis, tertiaris subtus reticulatis supra indistinctis; inflorescentiis axillaribus 15—20 cm longis, pedunculis teretibus, glabris vel basi pilis nonnullis brevissimis praeditis, 10—13 cm longis, apice ramosis, ramis brevissimis 3—5 mm longis, ergo floribus ad apicem pedunculi subaggregatis subumbellatis; bracteis probabiliter minutis, mox deciduis, in specimine descripto non praestantibus; pedicellis 3—3.5 em longis, glabris, longitudinaliter striatis vel subangulosis, apice sub calyce annulo crasso undulato praeditis; sepalis aequilongis vel exterioribus paullo brevioribus, membranaceis, intus glandulis punctiformibus praeditis, ad 12 mm longis (vel exterioribus 8—9 mm longis), exterioribus obovatis, apice rotundatis vel retusis, mucronulatis, interioribus plerumque latioribus obovatis vel late obovatis, retusis, mucronulatis; corolla alba, campanulata vel infundibuliforme, circ. 3 cm longa, limbo sublobato, glabra; filamentis brevibus, 5 mm supra basin corollae insertis, 5 mm longis, basi valde dilatatis, plus minusve papillosum, antheris 2.5 mm longis, glabris; ovario conico, glabro; stylo glabro, circ. 10 mm longo, stigmatibus globosis, papillosis.

Fiji ISLANDS, Vanua Levu, Mbua, southern slope of Mount Seatura, alt. 400 m, a high-climbing vine in dense forest, A. C. SMITH

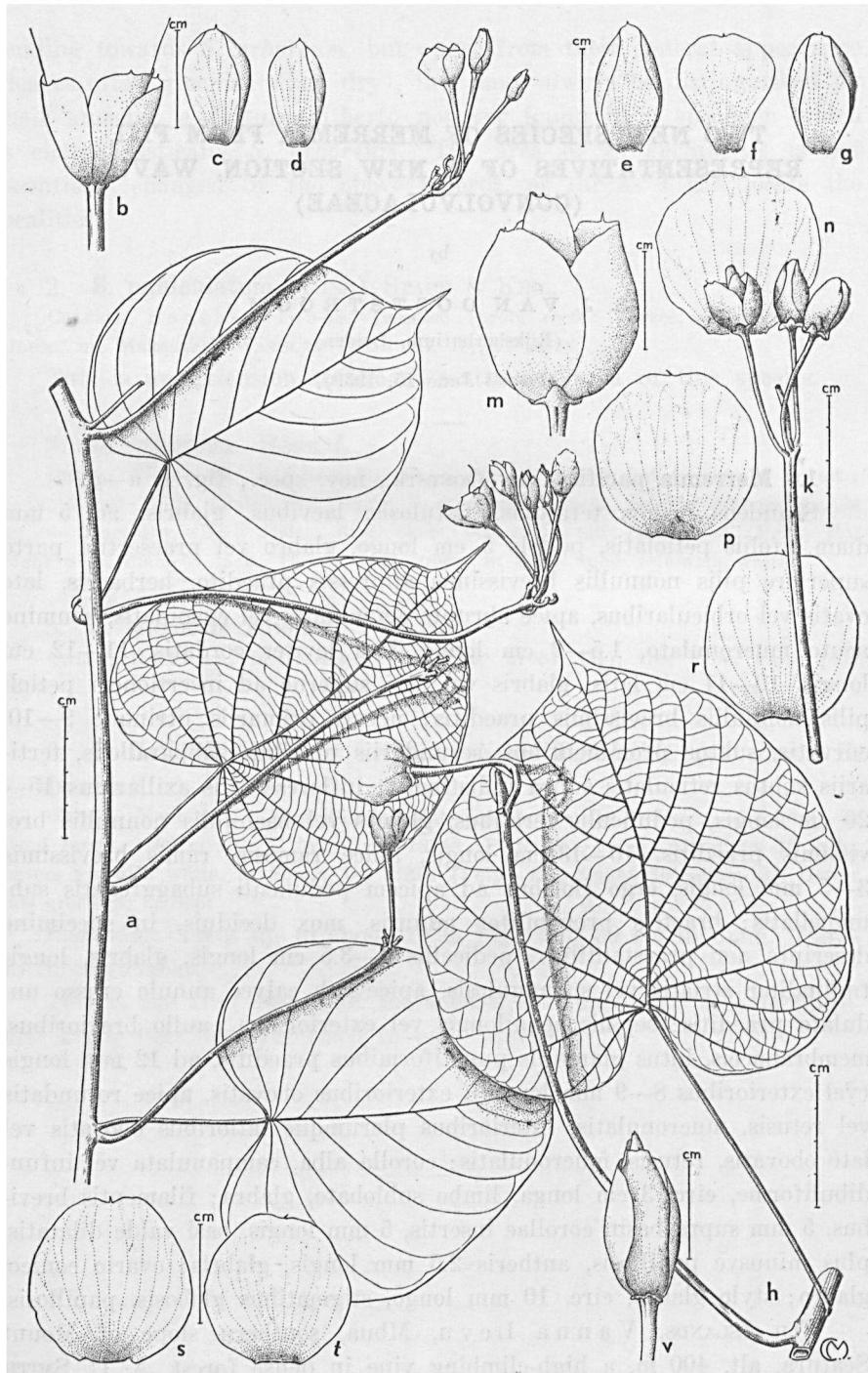


Fig. 1.

1690, Apr. 27, 28, 1934, *type* in Herb. Leiden; dupl. in Herb. Bernice P. Bishop Museum and in Herb. New York Botanical Garden.

Vernacular name: veliyawa.

2. *Merremia calyculata* VAN OOSTSTR., nov. spec.; fig. 1, *h—t*.

Verisimiliter scandens; ramis teretibus, fistulosis, longitudinaliter striatis, glabris, brunneis, ad 7 mm diam.; foliis petiolatis, petiolo circ. 10—13 cm longo, gracili, glabro, herbaceis, suborbicularibus, apice abrupte acuminatis, acumine acuto, mucronulato, 1.5—2 cm longo, basi late cordatis, 14—15 cm longis, 12—13 cm latis, subtus ad nervorum basaliū axillas parce flavidō-pilosis, ceterum glabris; nervo mediano nervis primariis subtus prominentibus, nervis primariis utrinque 10—11, marginem versus curvatis, nervis secundariis pluribus subparallelis, nervis tertiarīis indistincte reticulatis; inflorescentiis axillaribus, ad circ. 25 cm longis, pedunculis teretibus, glabris, ad circ. 20 cm longis, apice parce ramosis, ramis brevibus ad 1 cm longis, ergo floribus apice pedunculi subaggregatis (in specimine descripto floribus juvenilibus 3); bracteis deciduis, in specimine descripto non praestantibus; pedicellis 3—4 cm longis, glabris, longitudinaliter striatis vel subangulosis, apice sub calyce in lobos circ. 4 parvos late triangulares obtusos calycem alterum (calyx, epicalyceum circ. 9 mm in diam.) simulantes productis; sepalisaequilongis, membranaceis, 17—20 mm longis, valde concavis, suborbicularibus, mucronulatis; corolla alba, basin versus intus lutea (SEEMANN), in floribus praestantibus valde juvenilibus

Fiji ISLANDS, Puna, B. SEEMANN 324, June 1860, *type* in Herb. Royal Bot. Gard. Kew.

Vernacular name: wavula.

Remarks: According to SEEMANN the flowers are "white, inside the base yellow".

From an examination of one of the young flower-buds it resulted that the corolla is glabrous outside, that the filaments are hairy at their base, that the anthers are straight in bud and almost 5 mm long, that the ovary and the style are glabrous and that the stigma is bi-globular and papillose. Immediately below the calyx the pedicel bears some four small broadly triangular obtuse lobes, forming together a

Fig. 1, *a—g*: *Merremia pacifica* VAN OOSTSTR.; *a*: type-specimen, A. C. SMITH 1690 (Leiden); *b*: calyx; *c—g*: sepals 1—5; *h—t*: *M. calyculata* VAN OOSTSTR.; *h*: part of type-specimen, B. SEEMANN 324 (Kew); *k*: peduncle with 3 young flowers; *m*: calyx; *n—t*: sepals 1—5; *v*: *M. similis* ELMER, calyx.

kind of epicalyx; this "epicalyx" has a diameter of about 9 mm in the type specimen. It is an interesting fact that *M. pacifica*, also from Fiji, has in the same manner a thick undulate ring below the calyx. A similar lobed ring occurs in

3. *M. similis* ELMER (fig. 1, v) from the Philippines.

As to the nature of these outgrowths I am still in uncertainty; it is possible that they represent a kind of extrafloral nectaries.

Besides this similarity the three species mentioned have still more points of resemblance viz. 1. their general habit, 2. the form and texture of the leaves; but especially 3. the subumbellate inflorescence, 4. the possession of remarkably long pedicels and 5. the form and texture of the sepals. They form in this way a well-defined group of species within the genus, a group to which I propose to give the rank of a section, under the name *Wavula*.

Sect. *Wavula* VAN OOSTSTR., nov. sect.¹⁾

Plantae alte scandentes, foliis late ovatis vel orbicularibus, cordatis, mediocris vel majoribus, inflorescentiis longe pedunculatis apice ramosis, ramis brevibus, ergo floribus subumbellatis; pedicellis longiusculis vel longis apice sub calyce annulo plusminusve lobato lobis crassis praeditis vel in lobos parvos calycem alterum (calyculum, epicalycem) formantes productis; alabastris ovoideis vel elongato-ovoideis, subacutis; corolla mediocri vel majore fasciis 5 mesopetalibus male limitatis, indistincte lineatis; sepalis valde concavis, tenuiter coriaceis vel potius membranaceis, late ellipticis vel orbicularibus, mediocribus vel majoribus.

Type species: *Merremia similis* ELMER.

This section seems to be closely related to the section *Xanthips* (GRISEB.) HALL. f. and in general shows certain resemblances to the well-known *Merremia umbellata*, especially as to the form of the inflorescences and the structure of the parts of the flower.

Key to the species of the section *Wavula*.

- 1e. Plant densely hairy. Sepals to 15—18 mm long. "Epicalyx" very small, consisting of a ring of small warts. *Philippine Islands*. 3. *M. similis* ELMER
- b. Plant completely glabrous or only with few scattered hairs 2
- 2a. Sepals to 12 mm long. "Epicalyx" very small, consisting of a thick undulate ring. *Polynesia (Fiji Islands)* 1. *M. pacifica* VAN OOSTSTR.
- b. Sepals 17—20 mm long. "Epicalyx" larger, consisting of broad-triangular, obtuse, flat lobes. *Polynesia (Fiji Islands)* . . . 2. *M. calyculata* VAN OOSTSTR.

¹⁾ *Wavula*, native name of *Merremia calyculata* n. sp.