

ROOTALA ANDAMANENSIS MATHEW & LAKSHMINARASIMHAN — A NEW SPECIES OF LYTHRACEAE FROM ANDAMAN ISLANDS, INDIA

Airy Shaw (1973) mentions 50 species of *Rotala* L. to be occurring in wet places of the tropical and sub-tropical regions. Cook (1979) in his revision of the genus has accepted 44 of the 97 taxa recognized by various authors and has recorded 17 species from India. Joseph and Sivarajan (1989) while studying the *Rotala* species in the peninsular India have dealt *R. cookii* Joseph & Sivar., in addition to describing a new species, viz., *R. vasudevanii* Joseph & Sivar. from Kerala.

While studying the genus *Rotala* from the Andaman-Nicobar Islands at PBL, the authors came across an unidentified herbarium specimen, N. P. Balakrishnan 761 collected from Wright Myo in the South Andaman Island which has turned out to be a new species of *Rotala*.

Rotala andamanensis* Mathew et Lakshminarasimhan *sp. nov.

R. ramosiori (L.) Koehne (cognita ex America, Philippines et Italy borealis) affinis, sed differt, (1) foliis sessilibus, (2) bracteis ad basin attenuatis, (3) bracteolis semper linearibus, (4) calycis lobis acute triangularibus longioribusque, (5) calycis appendicibus parvioribus, (6) ovarioque oblongo.

Herba terrestris, annua, patens. Caules deorsum radicales; caules florentes ca 15 cm longi, subtereti. Folia decussata, sessilia, 10-13 × 3-6 mm, oblanceolata ad basin, attenuata, ad marginem integra, ad apicem acuta vel obtusa, graciliter coriacea, glabra; costa supra complanata vel sulcata, infra elevata, nervi laterales 5-7 paribus, obscuri. Bracteae 5-6.5 mm longae, late ellipticae ad oblanceolatae, ad basin attenuatae, ad apicem acutae; bracteolae ca 1.8 mm longae, lineares. Flores monomorphi, sessiles, solitarii in bractearum axillis. Calyx ca 2.5 mm longus, rubellus, infundibuliformis; tubus ca 1.5 mm

longus; lobi 4, ca 1 mm longi, acute triangulares; appendices 4, ca 0.1 mm longae, triangulares. Petala nulla. Stamina 4; filamenta ca 1 mm longa, prope basin calycis tubi inserta; antherae ca 0.1 mm longae. Ovarium ca 0.9 mm longum, oblongo, 4-loculare; stylus 0.3-0.7 mm longus; stigma capitatum. Fructus ignotus. (Figs. 1 & 2 : a-f).

Holotypus lectus a N. P. Balakrishnan, ad locum Wright Myo, Insula Andaman australis, die 9.1.1974, sub numero 761 A, positus in CAL, et Isotypi N. P. Balakrishnan 761 B-E positi in PBL.

Rotala andamanensis* Mathew & Lakshminarasimhan *sp. nov.

Allied to *Rotala ramosior* (L.) Koehne (known from America, Philippines and N. Italy), but differs from it in having—(1) leaves sessile, (2) bracts attenuate at base, (3) bracteoles always linear, (4) calyx lobes acutely triangular and longer, (5) calyx appendages smaller, and (6) ovary oblong.

A terrestrial annual, spreading herb. Stem rooting below; flowering stems ca 15 cm long, almost terete. Leaves decussate, sessile, 10-13 × 3-6 mm, oblanceolate, attenuate at base, entire at margins, obtuse or acute at apex, thinly coriaceous, glabrous; midrib flattened or slightly grooved above, elevated beneath, lateral nerves 5-7 pairs, obscure. Bracts 5-6.5 mm long, broadly elliptic to oblanceolate, attenuate at base, acute at apex; bracteoles ca 1.8 mm long, linear. Flowers monomorphic, sessile, solitary in axils of bracts. Calyx ca 2.5 mm long, reddish, funneliform; tube ca 1.5 mm long; lobes 4, ca 1 mm long, acutely triangular; appendages 4, ca 0.1 mm long, triangular. Petals absent. Stamens 4; filaments ca 1 mm long, inserted near base of calyx tube;

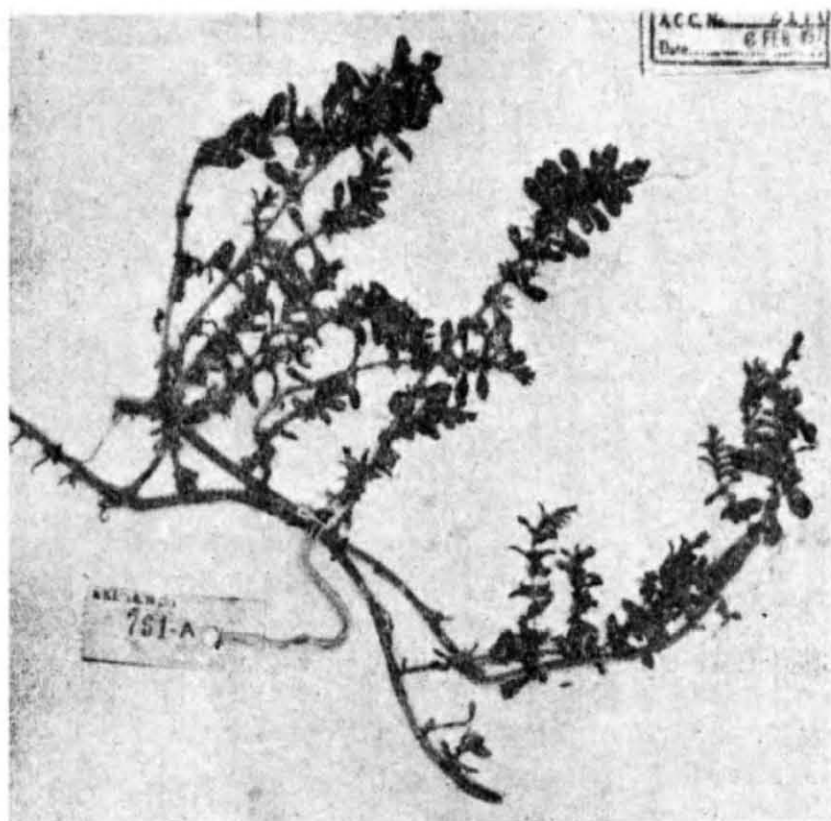


Fig.1. *Rotala andamanensis* Mathew & Lakshminarasimhan. Holotype photo.

anthers ca 0.1 mm long. Ovary ca 0.9 mm long, oblong, 4-loculed; style 0.3-0.7 mm long; stigma capitate. Fruits not seen. (Figs. 1 & 2 : a-f).

Holotype N. P. Balakrishnan 761 A (Wright Myo, South Andaman Island, 9.1.1974) is in CAL, and Isotypes N. P. Balakrishnan 761 B-E are in PBL.

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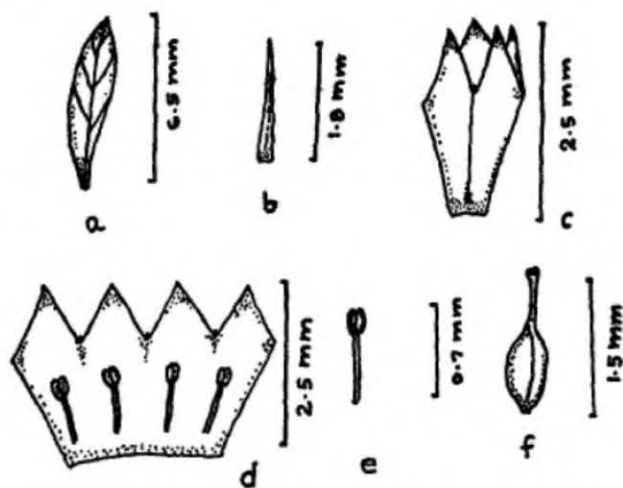


Fig. 2: a-f: *Rotala andamanensis* Mathew & Lakshminarasimhan

a. Bract. b. Bracteole. c. Calyx. d. Calyx (cut open).
e. Stamen and f. Pistil.

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THE OCCURRENCE OF *PREMNA LUCIDULA* MIQ. (VERBENACEAE) IN INDIA

Premna flavescens Buch.-Ham. ex C.B. Clarke var. *glabrior* C. B. Clarke is found taxonomically identical with the Javanese *Premna lucidula* Miq., which brings to light the occurrence of *P. lucidula* in India. A description of the species is provided along with an illustration. *P. lucidula* Miq. is also lectotypified.

Clarke (1885) described two varieties under *Premna flavescens* Buch.-Ham. ex C.B. Clarke, non A. L. Juss. 1806 (= *Premna hamiltonii* J. L. Ellis), viz., var. *glabrior* C.B. Clarke and var. *rubens* C.B. Clarke, based on material from Sikkim and Sylhet, and Malacca respectively. Ridley (1923 : 618) elevated var. *rubens* to the status of a species, *Premna rubens* (C.B. Clarke) Ridley. A study of material of var. *glabrior* housed in CAL showed that this variety too warrants the status of a species. However, this taxon is taxonomically identical with *Premna lucidula* Miq., a species so far thought to be confined to Java. *P. flavescens* var. *glabrior*, as a result, is synonymized under *P. lucidula* Miq. A detailed description of the species and an illustration are provided.

Premna lucidula Miq., Fl. Ind. Bat. 2 : 898. 1858 ; Backer & Bakh. f., Fl. Java 2 : 604. 1965. - *Type* : Miquel (*l.c.*) cited the type as "Java, in Patjitan (HORSF.)."

Thomas Horsfield (1773-1859), the American naturalist, was in Java (1800-1818) to make scientific investigations and some of

Horsfield's plants were described by Miquel (Steenis -Krusenman, 1950 : 243, 244). According to Stafleu and Cowan (1979 : 336) Horsfield's herbarium and types are now at BM.

There are three sheets, numbered 1, 2 and 3 in pencil, at BM, collected by Horsfield in Patjitan, Java. All of them have been annotated as type specimen by R. M. Barker. Sheet No. 1 has two specimens, a large one on the left and a much smaller one at the right-hand bottom. The former, the identity of which could not be determined with certainty, has some resemblance to *Premna latifolia* Roxb., but it certainly is not *P. lucidula* Miq. The latter with a few mature fruits is *P. lucidula* Miq. Sheet No. 2 and 3 have one large, good specimen each ; both are *P. lucidula* Miq. As the specimen on sheet No. 3, albeit with only flower buds, resembles most with the description in the protologue, it is selected as lectotype.

P. flavescens Buch.-Ham. ex C. B. Clarke var. *glabrior* C. B. Clarke in Hook. f., Fl. Brit. India 4 : 578. 1885 ; H. J. Lam & Bakh. in Bull. Jard. Bot. Buitenzorg Ser. 3, 3 : 41. 1921 ; Fletcher in Kew Misc. Inform. 1938 : 420. 1938 ; Mold., Sixth Summ. Verbenac. etc. 568. 1980. - *Type* : *Herb. Ind. Or. Hook. fil. & Thomson, Premna* no. 24, Sylhet, J. D. H. & T. T. s.n. (K, lectotype, photo !). Clarke (*l.c.*) cited specimens from subtropical Sikkim and Sylhet. The one from Sylhet, a good specimen, is selected as lectotype.

Gumira lucidula (Miq.) Kuntze, Revis.