



Rotala malabarica, a new species of Lythraceae from India

A. K. Pradeep, K. T. Joseph¹ and V. V. Sivarajan

Department of Botany, University of Calicut, 673 635, Kerala, India

(Received September 13, 1989; Accepted November 24, 1989)

Abstract. A new species of *Rotala* (*Rotala malabarica*) is described from Kerala, India.

Key words: Angiosperms; *Lythraceae*; *Rotala*.

The genus *Rotala* L. in peninsular India has been revised recently (Joseph and Sivarajan, 1989). Since then, we collected another interesting species from the rocky, lateritic slopes of Aduthila near Payangadi in Kerala State on the western coast of India. The plants were growing together with *R. malampuzhensis* R. V. Nair ex C. D. K. Cook in temporary pools in depressions on lateritic rocks containing rich deposits of humus. However, this new species could be easily distinguished from *R. malampuzhensis* by its distinctly 4-winged stems, longer internodes and narrower leaves, prominently bimucronate at apex. The material does not agree with any of the known species of *Rotala* and hence is described as new.

Rotala malabarica Pradeep, Joseph & Sivarajan, sp. nov. (Figs. 1-10)

Crescit cum *R. malampuzhensis* quae valde similis, sed facilliter distinguenda caule quadrangulati, foliis bimucronatis et floribus pentameris, petalis orbicularibus unguiculatisque. Characteribus floris similior *R. roseae* et *R. densiflorae*, a quibus foliis linearibus, bimucronatis, appendicibus calycis carentibus, et squamis nectariferis manifestis distinguenda.

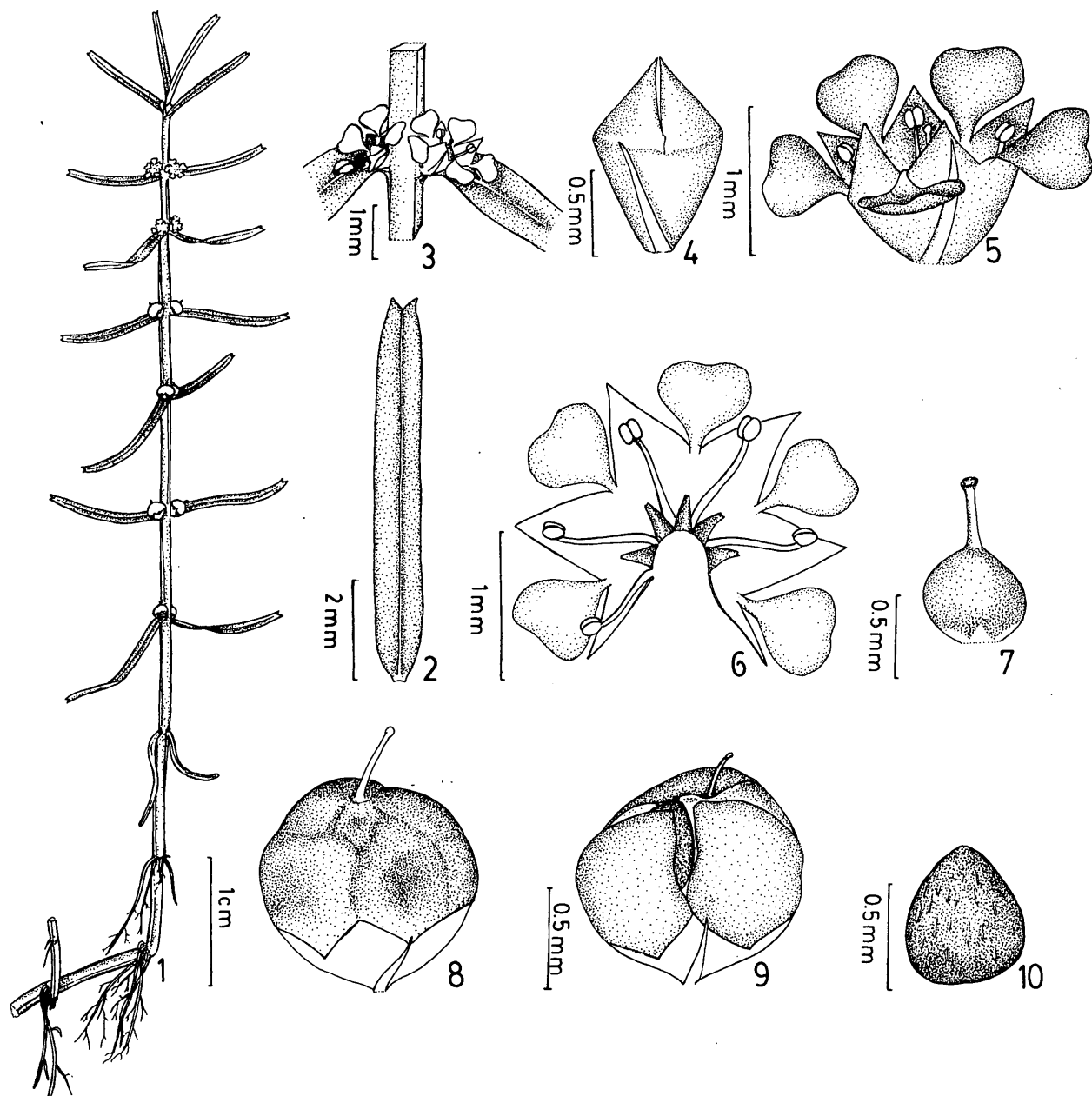
Type: India, Kerala, Cannanore Dt., Payangadi, Aduthila. Pradeep 5139 (holotype: MH; isotype:

CALI).

Amphibious or terrestrial, much branched, erect annual. Stem creeping and rooting below, distinctly 4-gonous, up to 15 cm tall; internodes elongated, up to 1 cm long. Leaves sessile, linear, simple, decussate up to 1 cm long and 1 mm wide, distinctly bimucronate at apex, mid-vein distinct, impressed above, lateral veins absent. Bracts leaf-like; bracteoles scarious, linear, 0.5 mm long, persistent in fruit. Flowers axillary, solitary, sessile, monomorphic; calyx campanulate, up to 1 mm long, light pinkish, lobes 5, triangular-acute, 0.5 mm long, persistent; appendages absent; petals 5, pink, 0.5 mm long, distinctly clawed at base, limb suborbicular, retuse or emarginate at apex; stamens 5, inserted at the base of calyx tube, filaments flat, pink; anthers slightly exceeding the calyx tube, purplish; nectar scales ovate oblong, purplish, 0.25 mm long, alternating with stamens; ovary globular, 0.5 mm long, purplish; style simple, as long as or slightly exceeding the calyx, up to 0.5 mm long; stigma capitate. Capsule globose, 1.5 mm across, dehiscent by 3-valves; seeds ovoid, brownish, 0.5 mm long.

Rotala malabarica is very similar to *R. malampuzhensis*, but can be easily recognized by its 4-angled stem, bimucronate leaves and 5-merous flowers with orbicular clawed petals. In floral characters it is more similar to *R. rosea* and *R. densiflora* from which it can be distinguished by the linear bimucronate leaves, absence of calyx appendages and presence of prominent nectar scales.

¹To whom correspondence should be addressed.



Figs. 1-10. *Rotala malabarica* Pradeep, Joseph, & Sivarajan, sp. nov. 1. Habit; 2. Leaf; 3. Portion of flowering shoot; 4. Flower bud; 5. Flower, side view; 6. Flower, dissected; 7. Gynoecium; 8. Fruit; 9. Dehiscent fruit; 10. Seed.

Acknowledgements. The authors are thankful to Dr. K. U. Kramer, Zurich for the latin diagnosis. One of us (KTJ) is grateful to STED, Trivandrum, for financial assistance.

Literature Cited

Joseph, K. T. and V. V. Sivarajan. 1989. *Rotala* Linn. in peninsular India. Proc. Indian Acad. Sci. (Plant Sci.) **99**(3): 179-197.

印度產之千屈菜科新種：馬拉巴節節菜

A. K. Pradeep, K. T. Joseph and V. V. Sivarajan

Department of Botany, University of Calicut
673 635, Kerala, India

本文發表採自印度 Kerala 地區的節節菜屬 (*Rotala*) 一新種：馬拉巴節節菜 (*Rotala malabarica*)。