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PHYLLANTHUS RANGACHARIARII – A NEW SPECIES OF EUPHORBIACEAE FROM AGASTHIYAMALAI, INDIA

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During a plant exploration tour in the eastern slopes of the Agasthiyamalai Biosphere Reserve of Tamil Nadu, the authors collected an interesting *Phyllanthus* L. (Euphorbiaceae) from the Papanasam hills, Tirunelveli district, Tamil Nadu. Critical examination of these specimens and perusal of relevant literature (Hooker, 1887; Trimen, 1898; Gamble, 1925; Grady, 1997; Chakrabarty & Balakrishnan, 2007) revealed that it is a novelty, closely allied to *Phyllanthus heyneanus* Muell.Arg. This new species is described and illustrated here.

Phyllanthus rangachariarii C. Murugan, K.A.A. Kabeer & G.V.S. Murthy **sp. nov. (Fig.1)**

Phyllanthus heyneanus Muell. Arg. affinis, sed foliis coriaceis, margine recurvatis, non glaucis; nervis lateralium 4 – 5-jugis; sepalis marium orbicularis, apice rotundis; filis base connatis, apice libris; stylis reflexis; fructibus sessilibus et seminibus glabris differt.

Type : India: Tamil Nadu, Tirunelveli district, Papanasam hills, near Nagapodavu, 09 Oct. 2004, c. 900 m, *C. Murugan & K.A.A. Kabeer* 119102 (Holotype, CAL; Isotypes, MH); Kanyakumari (Tinnevelly) district, Mahendragiri hills, 17 Sep. 1916, *K. Rangachariar* 13152 (Paratype, MH).

Monoecious shrub, to 2 m high, entirely glabrous; branches terete, 3 – 5 mm thick, smooth, greenish; leaf bearing branchlets 8 – 15 cm long, c. 1 mm thick, spreading, jointed and terete towards base, flattened towards apex, ultimately deciduous. Leaves on main stem reduced to scales, those on leaf bearing branches well developed, 15 – 60, distichous; lamina stiff, oblong, oblique, 5 – 10 × 2 – 5 mm, inequilaterally acute at base, entire, recurved at margins, acute at apex, coriaceous, not glaucous below; midrib slender, flat above, raised beneath; lateral nerves 4 – 5 pairs, distant, faint; tertiary nerves obscure; petioles 1 – 2 mm long, shallowly channeled above; stipules lanceolate, peltate, 2 – 3 × 0.2 – 0.3 mm, broad at base, acuminate at apex, persistent. Inflorescence axillary glomerules on leaf-bearing branches; male cymules at proximal axils, 2 – 3-flowered; female cymules at distal axils, 1-flowered; bracts linear to filiform, c. 1 mm long, entire. Male flowers c. 4 mm across, creamy – white, withering after pollination; pedicels 3 – 4 mm long, filiform, thickened towards apex; sepals 4(2+2), orbicular, c. 2 × 2 mm, 1-veined, entire along margins; disk glands 4, alternate to sepals, reniform, < 0.5 mm; stamens 4, opposite to sepals; filaments connate below into a slender c. 0.5 mm long column, free above into 4 connectives to c. 0.25 mm long; anthers in a ring, 1-loculed, muticous, rounded at apex, dehiscing horizontally. Female flowers c. 6 mm across, creamy-white; pedicels c. 1 cm long, thickened towards apex; sepals 6 (3+3), oblong, 3 – 4 × 1.5 – 2 mm, entire at margins, obtusely acute at apex, persistent; disc annular, cupular, thin, pulvinate; ovary globose, 3-loculed, c. 2 mm, smooth; ovules 2 in each locule, collateral; styles 3, deeply 2-fid, to 3 mm long, reflexed; stigmas simple, acute at apex. Capsules depressed-globose, c. 4 mm, sessile, smooth, with persistent calyx; fruiting pedicels to 12 mm long; seeds 6, triquetrous, c. 2.5 × 1 mm, glabrous.

Fl. & Fr.: September October.

Distribution : India (Tamil Nadu- Agasthiyamalai), rare.

Habitat : Evergreen forests, c. 900 m altitude.

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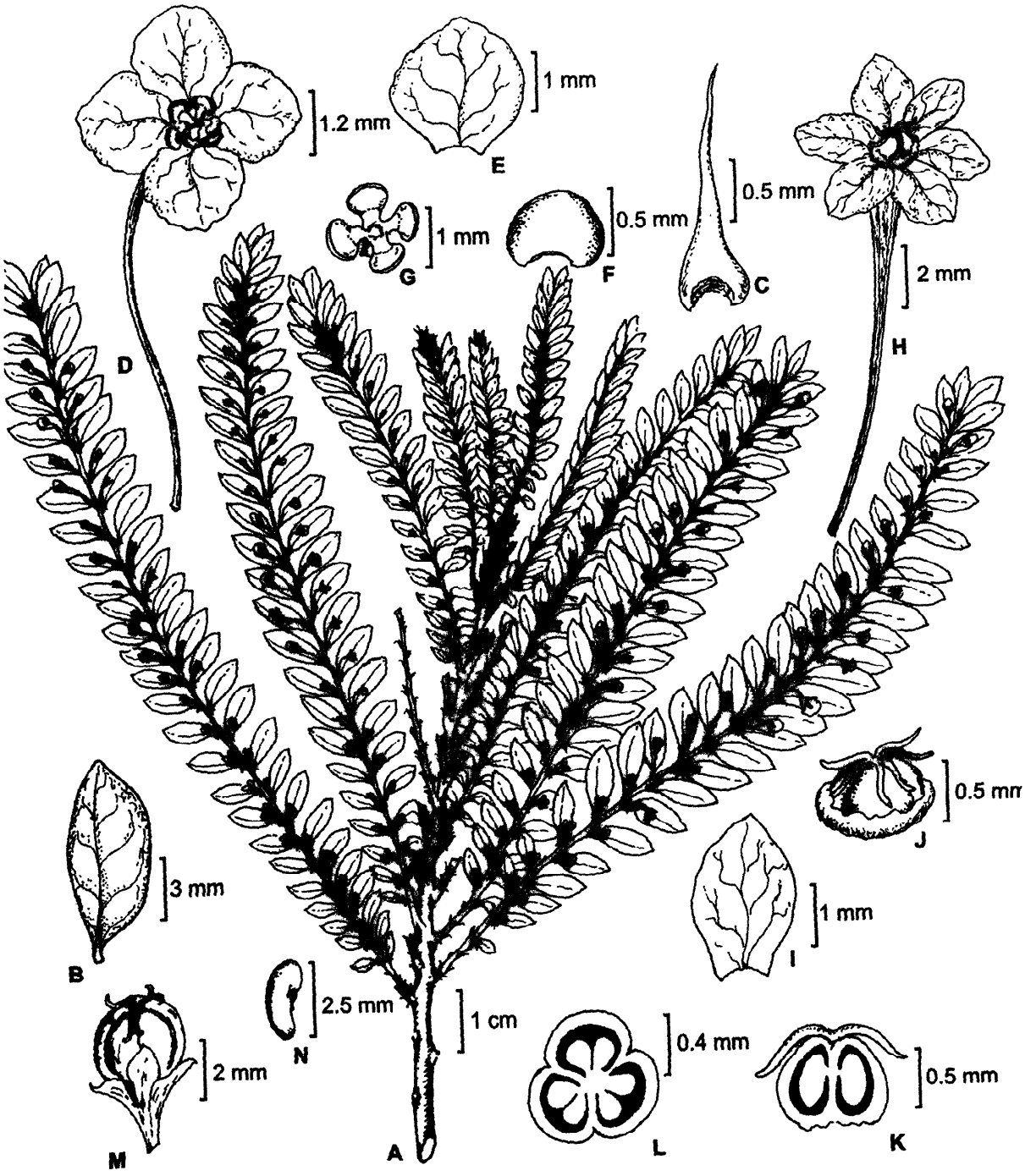


Fig.1. *Phyllanthus rangachariarii* C. Murugan, K.A.A. Kabeer & G..V.S. Murthy :
A. Twig; **B.** Leaf; **C.** Stipule; **D.** Male flower; **E.** Sepal; **F.** Disc gland; **G.** Stamens; **H.** Female flower;
I. Sepal; **J & K.** Pistils entire & L.S.; **L.** Ovary C.S.;
M. Fruit; **N.** Seed (A - N drawn from *C. Murugan & K.A.A. Kabeer* 119102)

Etymology : The specific epithet is in honour of K. Rangachariar, a very well-known Indian Botanist.

Note: The new species is closely allied to *Phyllanthus heyneanus* Muell.Arg. but can be distinguished from it by the characters given in **Table-1**.

Table 1. Comparison of *Phyllanthus heyneanus* and *Phyllanthus rangachariarii*

Characters	**Phyllanthus heyneanus** Muell.Arg.	**Phyllanthus rangachariarii** C. Murugan, K.A.A. Kabeer & G.V.S. Murthy
Leaves	chartaceous, glaucous beneath, flat along margins; lateral nerves 6-11 pairs	coriaceous, not glaucous beneath, recurved along margins; lateral nerves 4-5 pairs
Male sepals	elliptic-oblong, acute to obtuse at apex	orbicular, rounded at apex
Filaments	connate throughout	connate below and free above
Style	erect	reflexed
Fruits	stipitate	sessile
Seeds	hairy	glabrous

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