PHYLLANTHUS KOZHIKODIANUS SIVAR. & MANI. (EUPHORBIACEAE) - A NEW RECORD FOR TAMIL NADU

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web supplement

Yercad, located in the Shevaroy hills of Salem district in Tamil Nadu is situated between 11°48'N and 78°11'E at an altitude of 1300m. While the rest of this region is generally dry, including the predominantly low and rocky hills of the Eastern Ghats, Yercad with its cool weather is a welcome contrast. The maximum temperature ranges between 25°C-30°C and minimum between 13°C-16°C. The average annual rainfall is around 1750mm. The soil is deep to very deep and non-calcareous. The topmost hill area is characterised by clay loam soil whereas the bottom of the valley is characterised by alluvial and clay loam soil. The forest types range from evergreen to moist deciduous. On the western side of the hills, fragments of sholas still exist, though a great portion of the plateau is cleared.

The present study conducted in 2004 in the Shevaroy hills of Yercad has resulted in the collection of 80 taxa of angiosperms. Of these, *Phyllanthus kozhikodianus* Sivar. & Mani., is a new record for Tamil Nadu. It is briefly described here with phenological data, distribution, specimen examined and notes for better understanding of this taxon. The voucher specimens are deposited at the Centre for Medicinal Plants Research, Kottakkal.

Phyllanthus kozhikodianus

Sivar. & Mani., Jour. Ind. Bot. Soc. 56: 165. 1977; Sivar. & Joseph, J. Bombay Nat. Hist. Soc. 17: 369. 1981; Manilal & Sivarajan, Fl. Calicut 264. 1982; Manilal *et al.*, Fl. Silent Valley 254. 1988; Sasi. & Sivar., Fl. Thrissur Forests 413. 1996; Nayar, Hot Spots End. Pl. India, Nepal & Bhutan 212. 1996. Sivarajan & Philip Mathew, Fl. Nilambur 639. 1997. (Euphorbiaceae)

Material examined: 10.vii.2004, 02887, Shevaroy Hills, Salem district, Tamil Nadu, ± 1330 m, coll. Udayan *et al.* A good population of mature individuals was observed in the study

Distribution: Kerala and eastern Himalaya.

Description: Erect annual herbs, up to 60cm tall. Leaves elliptic or obovate, glabrous, 2.5 x 1.5cm, obtuse to subacute at apex, rounded at base; lateral nerves obscure; petioles ca. 1mm long. Male flowers greenish-white, 2.5mm across, in axillary fascicles of 2-3; tepals six, subequal; outer three ovate, acute at apex; inner three ovate, obtuse at apex; stamens three, filaments connate, anthers dehiscing transversely; disc glands six, star shaped. Female flowers green with prominent white margins,

3-4mm across, solitary, axillary; tepals six, same as male flowers, styles three, spreading. Capsules depressed globose, 3mm, glabrous, with accrescent long tepals. Seeds trigonous, vertically striate (Image $1^{\rm w}$).

Habitat: Common in moist deciduous to evergreen forests.

Phenology: Flowering and fruiting almost throughout the year.

Biotic association: It is common and found to grow near moist and shady localities of moist deciduous to evergreen forests. The associated species are Ageratum houstonianum Miller, Bidens pilosa L., Cotula australis (Spreng.) Hook.f., Crassocephalum crepidioides (Benth.) S. Moore, Emilia sonchifolia (L.) DC., Eupatorium glandulosum Kunth and Spilanthes calva DC. Murry, (Asteraceae); Cynoglossum zeylanicum (Vahl ex Hornem.) Thunb. ex Lehm. (Boraginaceae); Lobelia nicotianifolia Roth ex Schult. (Lobeliaceae); Physalis peruviana L., Solanum americanum Mill., Solanum giganteum Jacq. and Solanum viarum Dunal (Solanaceae); Polygonum chinense L. (Polygonaceae); Richardia scabra L. (Rubiaceae); Rubus ellipticus Smith (Rosaceae), Stephania japonica (Thunb.) Miers (Menisperamaceae) etc.

Remarks: This species was earlier reported from Calicut, (Silent Valley) Palakkad, Thrissur and Malappuram districts of Kerala state (Manilal & Sivarajan, 1982; Manilal, 1988; Sasidharan & Sivarajan, 1996; Sivarajan & Mathew, 1997). The collection from Kuttikkanam, near Peermade of Idukki district extends its distribution further south in Kerala (20.v.2004, 02605, Kuttikkanam, Idukki district, Kerala, +900m, Udayan *et al.*). So far none of the published floras of Tamil Nadu has reported this species. The present collection from Shevaroy Hills of Salem district is not only a new report to the state but also extends its distribution to the Eastern Ghats. It can be easily distinguished from the other herbaceous species of *Phyllanthus* in having more than 2 x 1.5cm leaf size, connate anthers and fruiting perianth lobes that are as long as the capsule (Manilal & Sivarajan, 1982).

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w see Image 1 in the web supplement at www.zoosprint.org

