Xylopia parvifolia (Wight) Hook. f. & Thoms. (Annonaceae): A New Report for Eastern Ghats, India

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Abstract

Xylopia parvifolia (Wight) Hook. f. & Thoms. is reported for the first time for Eastern Ghats from Dindigul District.

Introduction

During the recent botanical survey conducted along the hilly tracts of Dindigul District of Eastern Ghats, the authors have collected some interesting specimens of the family *Annonaceae*. After a critical study based on relevant literature, it has been identified and confirmed as *Xylopia parvifolia* (Wight) Hook. f. & Thoms.

In South India, the genus *Xylopia* L. is represented by only one species, *Xylopia parvifolia*; hitherto reported only from the Western Ghats of Tamil Nadu (Ramamurthy, 1983) and Kerala (Mitra, 1997). Though Madras Herbarium (MH) has collections from Alagar Hills of Eastern Ghats, this species has not been reported from Eastern Ghats in any of the previous publications (Kottaimuthu *et al.*, 2008; Matthew, 1983; Pallithanam, 2001; Pullaiah, & Rao, 2002; Subramanyam & Henry, 1959). Hence, the present collection of this species is being reported here as a new record for Eastern Ghats. A brief description with a photograph is provided here to facilitate futue collection and easy identification of the taxa in the field.

Xylopia parvifolia (*Wight*) *Hook. f. & Thoms.* Fl. Ind. 125. 1855 & in Hook. f. Fl. Brit. India 1: 84. 1872; Dunn in Gamble, Fl. Pres Madras 1: 15. 1957 (repr. ed.).

Tree, 6-8m tall, slightly buttressed; bark smooth, brown. Leaves oblong-elliptic / lanceolate, 6-9 x 1.8-3cm, glossy, margin entire, apex bluntly acuminate, acute at base; petioles purplish, 0.5-1 cm long. Inflorescence 2-4

flowered axillary fascicle; peduncles short, up to 0.3 cm long. Flowers brownish yellow, scented; pedicels 0.5 cm long, glabrescent; bracts broadly ovate, 0.1-0.2cm long, evanescent. Sepals ovate-triangular, 0.2-0.3 x 0.1-0.3 cm, apex obtuse-apiculate, glabrous inside, pubescent outside. Petals 6, linear, 1.5-2cm long, base concave. Stamens many, linear, 0.2cm long; anthers concealed by connective. Carpels 6-8, pubscent. Fruit a ring of obovoid monocarps, rugose, reticulate; seeds 6-10, ellipsoid, 0.6-1.2 x 0.5-0.8cm, dark or brown on drying.

Flowering & Fruiting: February - May

Distribution: India (Tamil Nadu & Kerala) & Ceylon.

Specimens examined: Eastern Ghats: Tamil Nadu: Dindigul District: Along the streamlets of Kallanai valley, Karandamalai, 529m, 1-3-2008, R. Kottaimuthu & V. Balasubramanian 40025 & 25-5-2008, R. Kottaimuthu & R. Ponnuchamy 40180; Nooparagangai, Alagarkoil R.F., 500m, 28-2-1978, Chandrabose 53415 (MH); Silambar valley, Alagar Hills, 270m, 20-6-1985, K. Ravikumar 2168 (MH); On way to Periya aruvi, Alagar Hills, 468m, 8-3-2008, R. Kottaimuthu, V. Meenakhsi Sundaram & K. Natarajan 3018 & 10-6-2008, R. Kottaimuthu & M. Jeyakumar 3180, On way to Puncholai, Sirumalai, 820m, 13-3-08, R. Kottaimuthu & V. Meenakshi Sundaram 10019 & 8-6-08, R. Kottaimuthu & K. Natarajan 10057.

Ecology: In Dindigul District, only very few individuals of Xylopia parvifolia is recorded from three hilly tracts viz., Alagar Hills, Karandamalai & Sirumalai. It is found in moist and shady localities near streamlets of moist deciduous forests. It is seen growing with trees like Alphonsea sclerocarpa Thwaites, Nothopegia beddomei Gamble, Artocarpus hirsutus Lam., Aphanamixis polystachya (Wall.) Parker and Lepisanthes senegalensis (Juss. ex Poir) Leenh.



Plate 1. *Xylopia parvifolia* (Wight) Hook. f. & Thoms.



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Bibliography

Kottaimuthu, R., *et al.*, 2008. Additions to the Flora of Eastern Ghats, Tamil Nadu, India. *Ethnobot. Leaflets* USA. http://siu.edu/~ebl/leaflets/kotta2.htm.

- Matthew, K. M. 1983. *The Flora of the Tamil Nadu Carnatic*. The Rapinat Herbarium, St. Joseph's College, Tiruchirapalli: pp 5-15.
- Mitra, D. 1997. Annonaceae. In: B. D. Sharma, N. P. Balakrishnan, R. R. Rao & P. K. Hajra (eds.). *Flora of India* Volume 1, Botanical Survey of India, Calcutta: pp 202-307.
- Pallithanam, J. M. 2001. A Pocket Flora of Sirumalai Hills, South India. The Rapinat Herbarium, St. Joseph's College, Tiruchirapalli: pp 1-3.
- Pullaiah, T. & D. M. Rao. 2002. Flora of Eastern Ghats Hill Ranges of South East India. Vol. 1, Regency Publications, New Delhi: pp. 34-45.
- Ramamurthy, K. 1983. Annonaceae. In: N. C. Nair & A. N. Henry (eds.), *Flora of Tamil Nadu, India*. Series I: Analysis, Volume One, Botanical Survey of India, Coimbatore: pp.3-7.
- Subramanyam, K. & A. N. Henry. 1959. A contribution to the flroa of Alagar Hills, Karandamalais and surrounding regions in Madurai District Madras State. *J. Indian bot. Soc.* 38: 492-527.