

DECALEPIS NERVOSA (APOCYNACEAE, PERIPLOCOIDEAE): A RARE AND LITTLE KNOWN ENDEMIC PLANT FROM KERALA

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A botanical survey was conducted in Silent Valley National Park of Palakkad district, lying between 11°05' N latitude and 75°27' E longitude, in Kerala state, to collect plants for the revisionary studies of the family Lauraceae from South India. During the survey, an interesting species of *Decalepis* Wight & Arn. was collected. Critical studies have confirmed it as *Decalepis nervosa* (Wight & Arn.) Venter. The specimens have also been compared with the specimens housed in the herbarium of Botanical Survey of India, (MH), Coimbatore, Tamil Nadu. This species was so far known only from the type locality Balimjuttu (Jagtap & Singh, 1999) and Nilgiris of Tamil Nadu state (Hooker, 1883; Gamble, 1923; Fyson, 1932). Ahmedullah & Nayar, (1986) included this species in the Endemic Plants of the Indian Region and placed it under rare category. A brief description with ecological notes is provided for better understanding of this endemic and little known taxon.

Decalepis nervosa (Wight & Arn.) Venter, Taxon. 46: 712. 1997. *Baeolepis nervosa* (Wight & Arn.) Decne. ex Moq. in DC. Prodr. 13 (2): 216. 1849; Henry & al., Fl. Tamil Nadu Analysis 2: 90. 1987; Jagtap & Singh, Fasc. Fl. India 287. 1999. *Brachylepis nervosa* Wight & Arn. in Wight, Contrib. Bot. India 64. 1834; Hook.f., Fl. Brit India 4: 7. 1883; Fyson, Fl. South Indian Hill St. 2: t. 418. 1932; Gamble, Fl. Pres. Madras 2: 581 (827). 1923. **(Pl. 1)**

Perennial twining herbs; stems branched, tomentose, terete; internodes slightly ridged, densely pubescent when young, less pubescent at age; bark greyish-yellow with pale lenticels. Leaves opposite, decussate, lamina 1.5 - 12 × 0.5 - 6 cm, elliptic-lanceolate, acute or acuminate at apex, acute or rounded at base, margin ciliate, pubescent, midrib and lateral veins violet, lateral veins 8 - 16 pairs, petioles terete, 0.5 - 2 cm long. Flowers axillary or terminal, in dichotomous cymes; peduncles villous; bracts ovate, pedicels terete, 1 - 1.5 mm long, villous. Calyx 5-lobed, divided up to base, lobes contorted, 2 × 1.5 mm long, ovate, apex acute, margin villous. Corolla rotate, lobes 5, ca 3 × 1 mm, ovate-oblong. Corona 5, broad, membranaceous, brown scales, 0.5 × 0.5 mm, ovate, apex acute with slightly bifid tip. Stamens 5, ca 1 mm long. Follicles paired, divaricate, acuminate, thick; seeds many, ovate oblong.

Fl. & Fr.: March - May.

Distribution : Endemic to the Western Ghats of Nilgiris district of Tamil Nadu (Wellington to Kotagiri, Kodanadu & Coonoor (Fyson, 1932), Pykara & Naduvattam (Krishnakumar & Udayan, 1992). P.S. Udayan & al., 03541 collected from Naduvattam forests, near Gudalur of Nilgiris District, Tamil Nadu State, at an altitude of ± 1820 m on 11.05.2005. A good population of mature individuals was observed from the area.

Habitat : Rare in semi-evergreen forests.

Specimen examined : Kerala, Palakkad District, Silent Valley National Park, Walakaad forest, 1100 m, 07.03.2009, P.S. Udayan & al., 05701 (CMPR).

Biotic association : This endemic climber is rare and found to grow along the stream side in moist and shady localities of semi evergreen forests. It is seen growing on *Memecylon angustifolium* Wight (Melastomataceae) and *Pseudaidia speciosa* (Bedd.) Tirveng. The common associated plants are *Eurya nitida* Korth. (Theaceae);

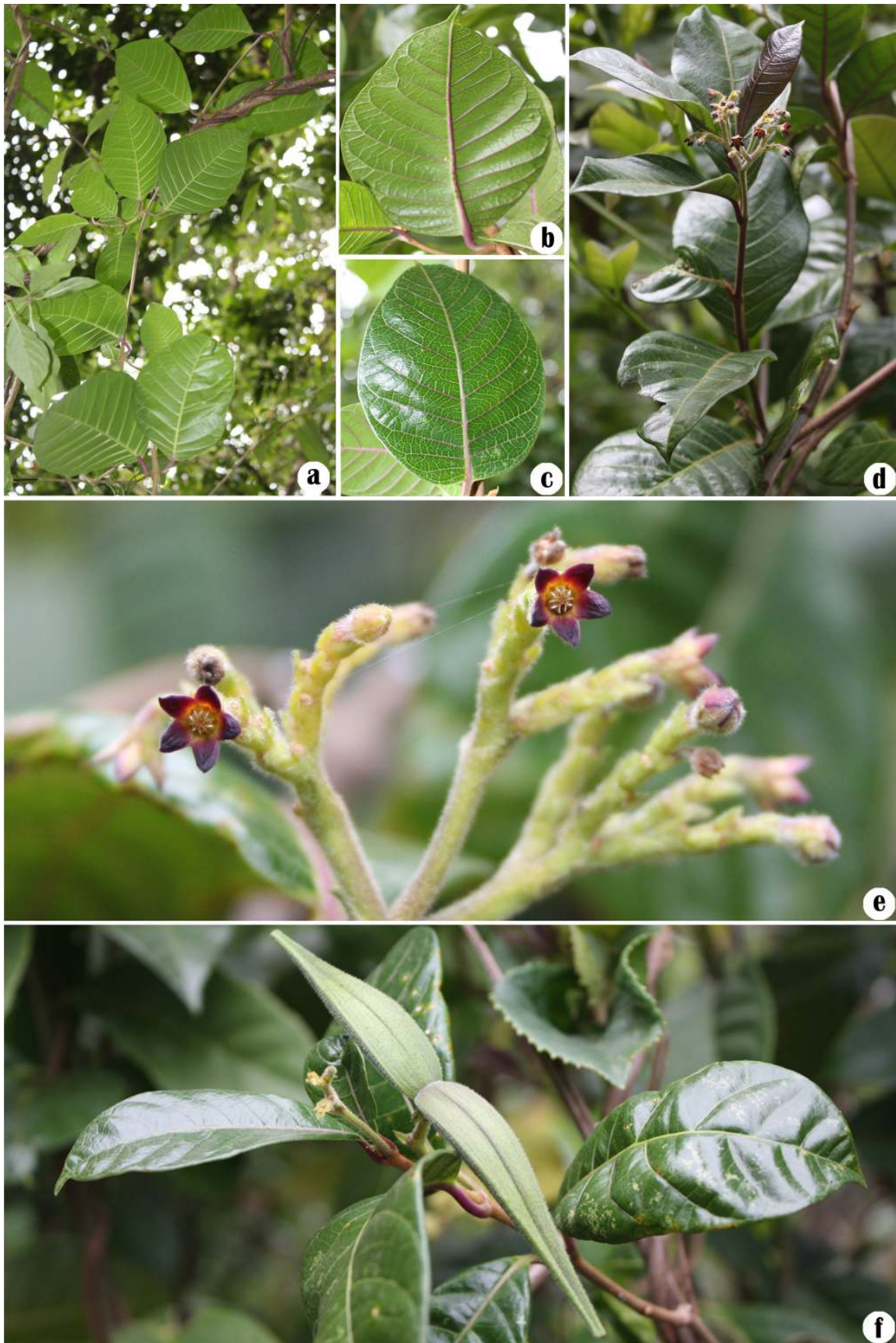


Plate 1 : a Habit; b. & c. Leaf-abaxial and adaxial view; d. Inflorescence; e. Flowers enlarged; f. Fruit

Vaccinium neilgherrense Wight (Vacciniaceae); *Psychotria globicephala* Gamble and *Psydrax dicoccos* Gaertn. (Rubiaceae); *Osmunda regalis* L. (Osmundaceae) and *Vernonia conyzoides* DC. (Asteraceae).

Recent taxonomic and phylogenetic studies of reveal that the genera, viz. *Brachylepis* Wight & Arn., *Baeolepis* Wight & Arn., *Janakia* Joseph & Chadras. and *Utleria* Bedd. ex Hook.f. are all monotypic genera, which have been merged under *Decalepis* Wight & Arn. by Venter (1997) based on the morphological characters. Presently, the genus *Decalepis* Wight & Arn. is having four endemic species occurring in Peninsular India under the family Apocynaceae, subfamily Periplocoideae based on the unified classification for the Apocynaceae (Mary & Peter, 2000; Venter & Verhoeven, 2001).

Notes : This endemic species was known only from the type locality (Balimjuttu) and different places of Nilgiri district, Tamil Nadu state. Jagtap & Singh (1999) doubtfully mentioned the presence of this species in Kerala. But so far none of the published floras of Kerala has reported this species. The present collection from Walakkad forests of Silent Valley National Park, Palakkad district is not only a new record to the state of Kerala but also extends its distribution to the Southern parts of Western Ghats. This species is easily recognised by its greenish yellow with purplish brown flowers and pubescent leaves with violet petiole and nerves.

ACKNOWLEDGEMENTS

The authors are thankful to the authorities of Arya Vaidya Sala (AVS), Kottakkal and Department of Science & Technology, Government of India, for the financial support. We express our gratitude to the authorities of Kerala Forest Department and Mr. Nagaraj, Assistant Wild Life Warden, Silent Valley National Park, Palakkad District for granting permissions and co-operation during field visit. We are also thankful to Mr. Arumugan, Field guide for assisting during the field visit.

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