A NOTE ON *CELASTRUS PANICULATUS* WILLD. (CELASTRACEAE) FROM ANDAMAN ISLANDS, INDIA

Celastrus L., is represented by 30 species in tropical and subtropical part of the world (Airy Shaw, 1973). Santapau and Henry (1973) mentioned that 4 species are known under this genus from different parts of India. Hooker (1875) included *Celastrus paniculata* from tropical and subtropical Himalayas and some part of the plains up to the height of 1000 m. Parkinson (1923) recorded *Celastrus paniculata* Willd., from Andaman group of Islands and also mentioned that this species is not common. Vasudeva Rao (1986) in his preliminary list of plants of these Islands recorded this species from Andaman Islands on the basis of literature. Chakrabarty & Gangopadhyay (1990) in their work on Celastraceae of Andaman & Nicobar Islands included *C. paniculatus* based on literature and the old collections made in the year 1891 and 1900 lodged at CAL.

One of the authors (BKS) has collected and identified *C. paniculatus* in fruiting during the extensive survey of Karmatang forest areas of North Andaman in December 1992. Thorough study of the plant specimens and scrutiny of the literature about its availability in these Islands reveals that *C. paniculatus* is represented of scarce distribution. Hence, brief citation with description, phenology, ecology with distribution and illustration of the plant twig have been provided.

Celastrus paniculatus Willd. Sp. Pl. 1: 1125. 1797; Lawson in Hook. f., Fl. Brit. India 1: 617. 1875; Ridley, Fl. Malay Penins. 1: 451. 1922; Parkinson, For. Fl. Andaman Is. 128. 1923; Ding Hou in Fl. Males. 1.6 : 235. 1962; Vasudeva Rao in J. Econ. Tax. Bot. 8: 118. 1986; Chakrab. et Gang. in J. Econ. Tax. Bot. 14: 116. 1990. (Fig. 1).

Scandent shrubs, branchlets 2-6 mm thick, terete, glabrescent, with lenticels, brown. Leaves alternate, 8-18 × 4.5-9.5 cm, broadly elliptic to oblong elliptic, acute to subacute at base, shortly acuminate at apex, crenulate at margins, chartaceous to thinly coriaceous, glabrous, dark brown when dry ; lateral nerves 4-8 pairs, prominent; nervules prominent reticulate; petiole 8-10 mm long. Flowers not seen. Infrutescences 5-7 cm long, terminal, narrow. Capsules 7-10 mm long, subglobose, 3-valved, stalk 5-7 mm long. Seeds 3, ovoid-conical, yellow towards scarlet. Seeds enclosed in fleshy red aril.

Fr. : Nov. - Dec.

Distribution : India: Tropical and subtropical Himalayas up to 3000 ft., plains of Punjab, Andaman Islands. Wide spread from India to S.E. Asia, China, Malesia to Australia and New Caledonia.

Ecology : Rare in hill forests at low altitude.

Notes : Seeds yield black oil which is used as a diuretic (Parkinson, 1923). Efforts will be made to collect the flowering specimens of *C. paniculatus* Willd.

Specimens examined : ANDAMAN & NICOBAR ISLANDS : North Andaman, Mayabunder, Karmatang, 9.12.1992, *B.K. Sinha*, 16305 (PBL). South Andaman Islands, *sine loc. exact.*, : 23.1.1901, *Prain's coll.* 78 (CAL); *Ibid.*, Sept. 1900, *Prain's coll.* 70 (CAL); North Bay, 2.8.1891, *King s.n.*, Herb. Acc. No. 86179 (CAL).

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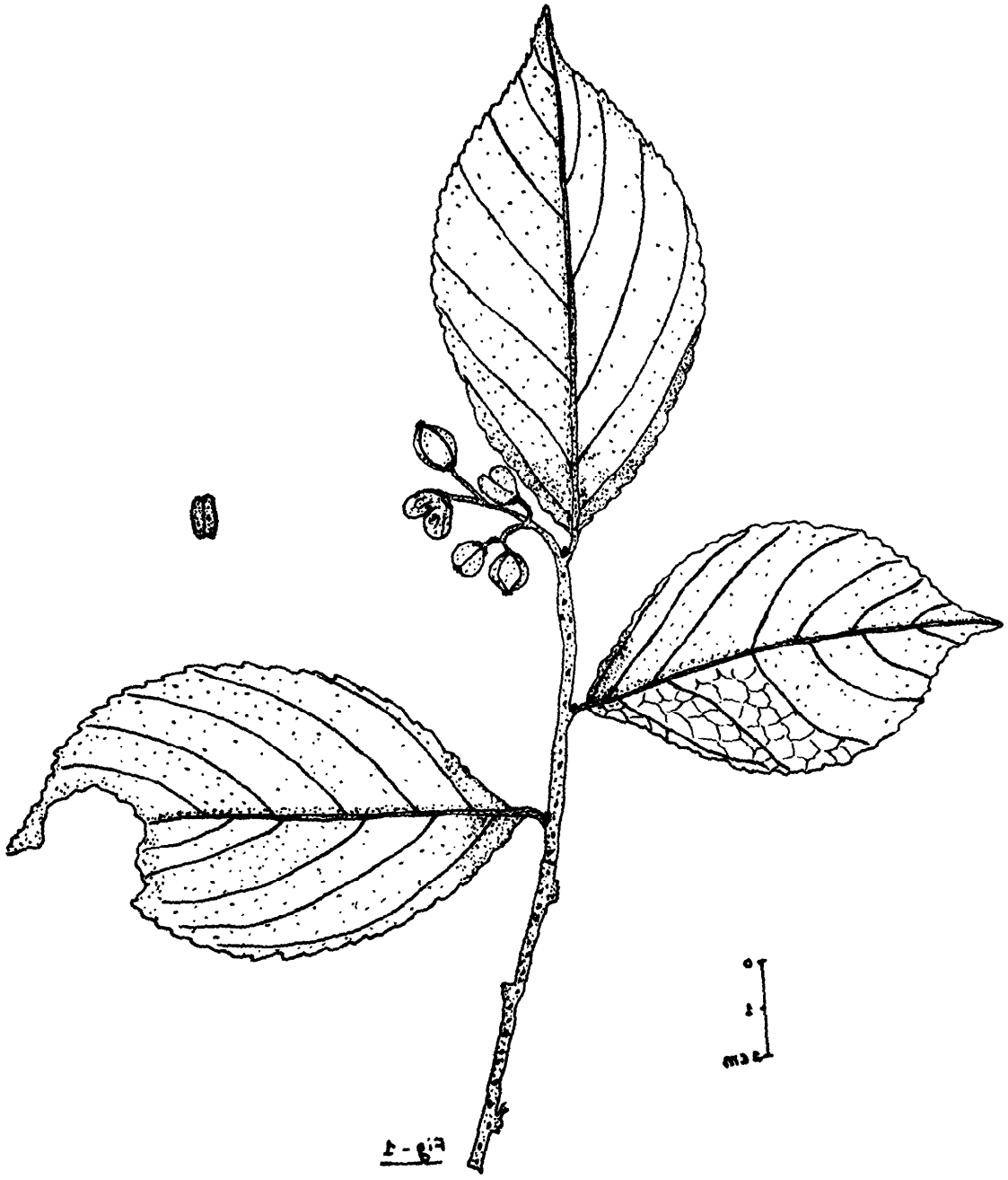


Fig. 1: *Celastrus paniculatus* Willd. - A fruiting twig and seed.

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AIRY SHAW, H.K. Willis' Dictionary of the Flowering Plants and Ferns, Ed. 8. London. 1973.

SANTAPAU, H. & A.N. HENRY. A Dictionary of the Flowering Plants in India. CSIR, New Delhi. 1973.

SOME NOTES ON INDIAN ANNONACEAE

As a result of revisionary study of Indian Annonaceae the following new combination and change in taxonomic rank have become necessary and are made here, in addition to describing a new variety.

a. *New combination :*

Safford (*Bull. Torrey Bot. Club* 39:503. 1912) discovered that the type of the genus *Unona* L.f., is a species of the genus *Xylopia* (an American genus) and all the asiatic species hitherto referred under *Unona* belong to a district genus. He chose the earliest available name *Desmos* Lour. (1790) under that genus and transferred 16 asiatic species to it. While doing so he did not transfer *Unona discolor* Vahl var. *laevigata* Hook.f. & Thomson to *Desmos*, therefore, the required new combination is effected here as follows :

Desmos chinensis Lour. var. **laevigata** (Hook.f. & Thomson) D. Mitra, comb. nov. *Unona discolor* Vahl var. *laevigata* Hook.f. & Thomson, Fl. Ind. 1:133.1855 & in Hook.f., Fl. Brit. India 1:59.1872. *Uvaria undulata* Roxb., Hort. Bengal. 43.1814, *nom. nud. Unona undulata* (Roxb.) Wall. in Pl. Asiat. Rar. 3:42, t. 265.1832.

Type : *Wallich* Cat. No. 6423.1832 sub *Unona roxburghiana* (CAL, Lecto).

Distribution : India (cultivated in Indian Botanic Garden, Howrah). Bangladesh (Chittagong, Silhet), Malesia, China.

b. *Change of rank* :

On a critical study of the genus *Melodorum* Lour., Merrill (*Philippine Journ. Sci.* 15: 125-130. 1919) concluded that only one species i.e. *Melodorum fruticosus* Lour., needs to be retained under the genus and almost all other species belong to another distinct genus for which he resurrected *Fissistigma* Griffith (1854) and transferred its species including *Melodorum polyanthum* Hook.f.& Thomson. Subsequently Sinclair (1955) transferred variety *elliptium* King of *Melodorum polyanthum* to *Fissistigma polyanthum* (Hook.f. & Thomson) Merr. But a critical study of this variety revealed that it demands a distinct specific status as it differs from *Fissistigma polyanthum* by its broad elliptic leaves, very short extra axillary peduncles, longer pedicels, smaller sepals that are connate at the base and larger ovate-oblong petals. The correct nomenclature is as given below :

Fissistigma ellipticum (King) D. Mitra, comb. et Stat. nov. *Melodorum polyanthum* Hook.f.& Thomson var. *ellipticum* King in Ann. Roy. Bot. Gard. Calcutta 4: 131.1893. *Fissistigma polyanthum* (Hook.f.& Thomson) Merrill var. *elliptica* (King) Sinclair in Bull. Bot. Soc. Bengal 9:86.1955.

Type : Chittagong Hill Tracts, Soortee range, *Lister* 244 (CAL, Lecto.).

Distribution : India (Assam), Bangladesh (Chittagong).

Note : This is the first record for India.

c. *New variety :*

Goniothalamus macranthus (Kurz) Borerl. var. **brevipetalus** D. Mitra, var. nov.

Differt a varietate *macrantho* sepalis *triangularibus, ca* 1 × 1 cm, apice sub-acaulis; petalis exterioribus late lanceolatis 6 -7 × 1.5 cm.

Small trees or shrubs. Leaves *ca* 10 × 4-5 cm, elliptic-oblong, obtuse or shortly acuminate, cuneate at base, puberulous on both surfaces when young; petioles *ca* 1 cm long. Flowers usually solitary, axillary; pedicels *ca* 1 cm long, puberulous; fruits few, small, deciduous. Sepals 3, connate at base, *ca* 1 × 1 cm, triangular, subacute, pubescent to puberulous on both surfaces, densely brown pubescens towards tip on inner surface. Petals 3+3, thickly coriaceous, outer ones 6 -7 × 1.5 cm, broadly lanceolate, subacute at apex, narrowly clawed at base, pubescent on both surfaces densely so at base and on ridge outside; inner ones *ca* 2 × 0.5-0.6 cm, clawed, triquetrous, cohering by their edges, brown pubescent. Stamens numerous, 3.5-5 mm long, linear with pubescent

apiculate connective. Carpels many, cylindrical, *ca* 5 mm long, curved; ovary narrowly oblong, rufous pubescent; style cylindric, pubescent, bent outwards; stigma obscurely bifid. Ripe carpels many, club-shaped when young.

Type : India, S. Andaman, Manganj hill jungle, 7.5.1892, *King's collector s.n.* (CAL, holo).

Distribution : India (Andaman & Nicobar Islands); also cultivated in Indian Botanic Garden, Howrah.

Other specimens examined : Indian Botanic Garden, Howrah, 1904. *D. Prain s.n.* (CAL); March 1993, *D. Mitra* 436,437 (CAL).

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MISCELLANEOUS FUNGI FROM SOUTHERN INDIA

1. **Asperisporium caricae** (Speg.) Maubl., Lavoura 16: 212, 1913.

Infection spots hypophyllous, carbonaceous black, up to 2 mm in diameter, rarely coalesced, corresponding upper surface of the infected spots turned necrotic and resulted in shot holes. Sporodochia hypophyllous, carbonaceous black, punctiform, pulvinate, up to 2 mm in diameter. Stroma subepidermal, up to 400 µm; conidiophores macronematous, mononematous, compact, straight to curved, usually simple, rarely branched, entire to septate, smooth, brown to pale brown, 27-46.5 × 5-8 µm; conidiogenous cells polyblastic, integrated, terminal, sympodial, cylindrical to clavate, cicatrized, scars permanent; conidia solitary, cry, acropleurogenous, ovoid, clavate to rarely cylindrical, pale brown to dark brown, 0-2 horizontally septate, 12-24 × 9-12.5 µm, wall smooth in young spores while verrucose at maturity.

On leaves of *Carica papaya* L. (Caricaceae), Erattiyar Estate, Seithur hills, Kamarajar dist., Tamil Nadu, Nov. 12, 1992, *V.B. Hosagoudar* HCIO 40847.

This species was recorded from Brazil, Costa Rica, Cuba, Dominican Republic, Jamaica and Venezuela (Ellis, 1971). Ullasa *et al.* (1978) have reported it from Karnataka and is reported here for the first time from Tamil Nadu (Bilgrami *et al.* 1991).

2. **Phyllachora bambusae** (Sydow & Butler) Sydow & Butler var. **ochlandrae** var. nov. (Fig. 1-3).

Differt a var. **bambusae** ascosporis longioribus.

Stromata amphigenous, dark, raised, shining, oval to elongated, up to 2 mm in diameter, rarely coalesced, 1-3 loculate; locules oval to bowl shaped, 300-360 × 170-215 µm; asci many, long, cylindrical, stipitate, octosporous, 114-155 × 6-9.5 µm; ascospores biseriate, hyaline, ovate-acuminate, one end rounded and other end acuminate to sharply pointed, 43-46.5 × 3-5 µm.

Holotype : On leaves of *Ochlandra travancorica* Benth. ex Gamble (Poaceae), Top of Seithur hills, Kamarajar dist., Tamil Nadu, Nov. 12, 1992, *V.B. Hosagoudar* HCIO 40898.