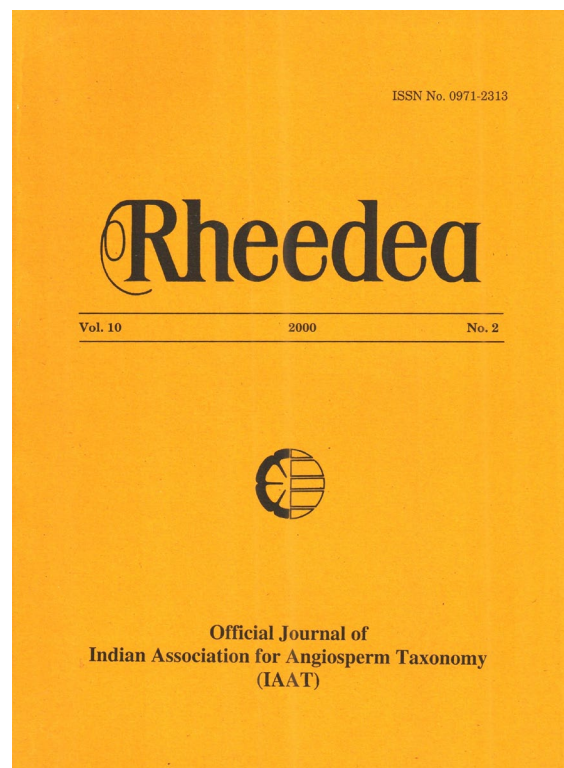




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Sanjai V.N. & N.P. Balakrishnan



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A new species of *Viscum* L. (Viscaceae) from India

V.N. Sanjai and N.P. Balakrishnan

Botanical Survey of India, Southern Circle

T.N.A.U. Campus, Lawley Road P.O., Coimbatore - 641 003, India

Abstract

Viscum subracemosum Sanjai & N.P. Balakr., a new species in the family Viscaceae from Karnataka State of India, is described with illustrations.

INTRODUCTION

During the revision of the family Viscaceae for the new Flora of India, the senior author had opportunities for visiting various parts of India where species of the family were known to occur. During one such visit to Karnataka State he could collect a species of *Viscum* at the village Krishnarajapuram. Detailed studies showed that this plant did not fit into the circumscription of any of the earlier known species, though it was found to be close to *V. acaciae* Danser (Hooker, 1886; Gamble, 1925; Danser, 1941; Rao, 1957; Sanjai, 2000). Hence this species is described here with illustrations.

Viscum subracemosum Sanjai *et* N.P. Balakrishnan, *sp. nov.* (Fig. 1).

Viscum acaciae Danser affinis, sed inflorescentis plerumque subracemosis et raro cymosis; presentia inflorescentiarum omnino floriis femineis; floribus una 5 vel raro minus 5; floribus femineorum parvioribus; floribus marium globosis, ca 1.5 x 1 mm et baccis globosis differt.

Types: India, Karnataka, Krishnarajapuram, 900 m, 20 Oct. 1995, Sanjai 104912 (*Holo* - CAL; *Iso* - MH).

Monoecious evergreen, herbaceous, semi-parasite on stems and branches of hosts, up to 75 cm long, dichotomously or trichotomously branched; branches slender, dark green in colour, lower internodes terete, 3-5 x 0.2 - 0.4 cm; upper internodes slender and longitudinally grooved, 5-7 x 0.1 - 0.2 cm; nodes swollen. Leaves opposite, broadly lanceolate, tapering towards base, rounded at apex, 3-6 x 1.5-2.5 cm, with 3 veins, more distinct above than below. Inflorescences distinctly subracemose, rarely cymose, pedunculate, laterals arising from the axils of the leaves at nodes, up to 6 at each node; flowers enclosed in a cupule formed out of 2 connate acute bracts; bracts ca 1 x 1 mm, broadly ovate, caudate at base and acute at apex; flowers usually 5 in a group, very rarely 3, the central flower female and the laterals male, at

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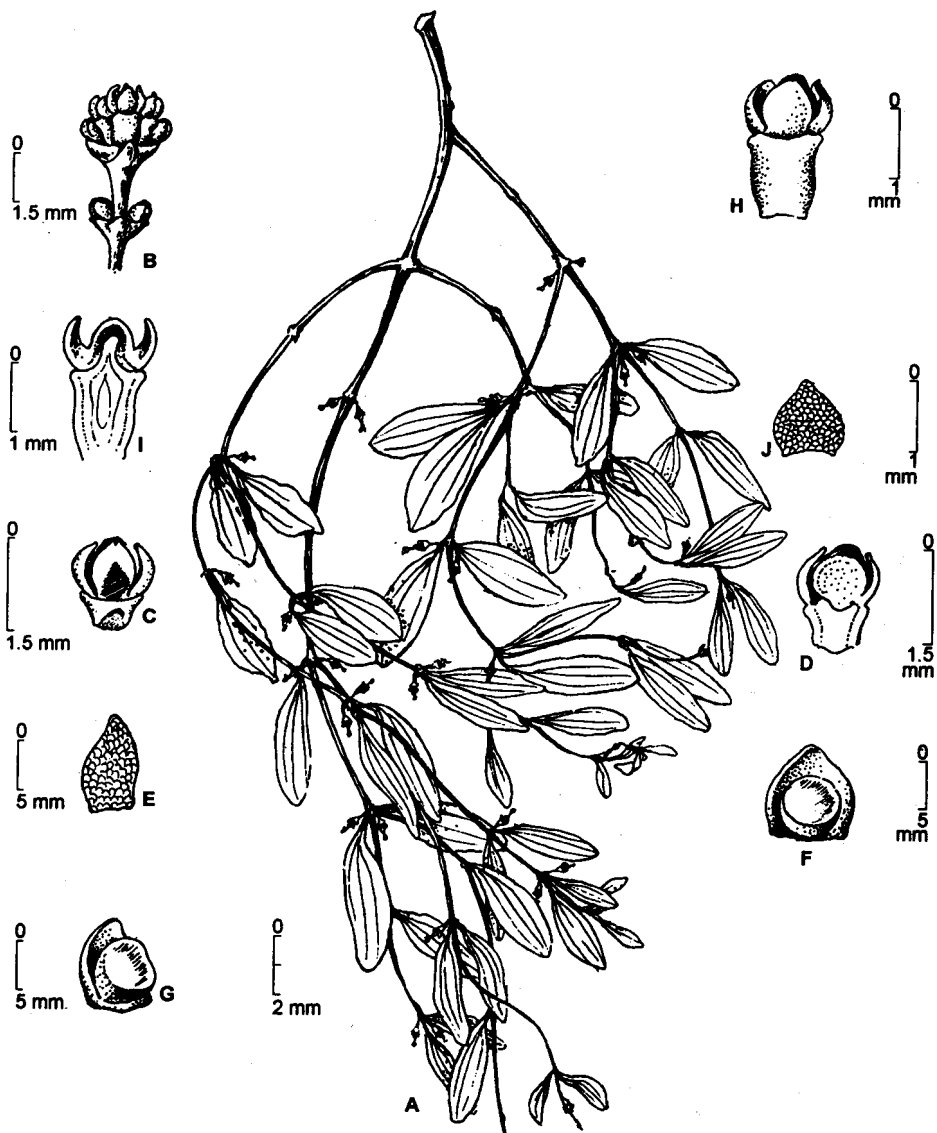


Fig. 1. *Viscum subracemosum* Sanjai et N.P. Balakr.: A. Habit; B. Inflorescence; C. Male flower; D. Male flower - L.S.; E. Small perianth lobe of male flower; F & G. Large perianth lobe of male flower with anther; H. Female flower; I. Female flower - L.S.; J. Single perianth lobe of female flower.

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times all female-flowered inflorescences are also noticed. *Male flowers* sessile, slightly globose, ca 1.5 x 1 mm; perianth lobes 4, free, of two types, the larger ones two, oppositely placed, ovate, acute at apex, ca 1 x 0.75 mm, bearing an anther each on the inner surface, the smaller ones two, opposite, acuminate at apex, ca 1 x 0.5 mm, bearing no anthers; stamens 2, filaments absent; anthers sessile, attached to the inner surface of the larger perianth lobes, dehiscence by means of pores; pistillode absent. *Female flowers* oblong, ca 2 x 1 mm; perianth lobes 4, free, valvate, broadly ovate, acute at apex, ca 1 x 0.5 mm; staminodes absent; ovary inferior; ovules not distinct; style short; stigma nipple-shaped. Fruit a berry, globose, smooth, up to 5 mm in diameter.

Flowering and fruiting: January - September.

Distribution: Endemic to South India, found only in the states of Tamil Nadu and Karnataka.

This species is allied to *Viscum acaciae* Danser but differs in the inflorescences being generally subracemose and rarely cymose, in the presence of inflorescences with only female flowers, the flowers grouped 5 or rarely less together, the female flowers smaller, the male flowers globose, ca 1.5 x 1 mm and fruits being globose. The major differences are given in table 1.

The plant was found at several locations in Krishnarajapuram of Karnataka State. The host trees were always *Pongamia glabra*. Heavy parasitisation of the host was noticed in various places. No medicinal or economic importance was known for the species. Later we could locate the same species in Tamil Nadu Agricultural University Campus, Coimbatore, on the same host.

Table 1. Comparison of major characters of *Viscum acaciae* Danser and *V. subracemosum* Sanjai & N.P. Balakr.

<i>V. acaciae</i>	<i>V. subracemosum</i>
<ul style="list-style-type: none"> • Inflorescences generally cymose, rarely subracemose • All female-flowered inflorescences absent • Usually 3 flowers in a group, rarely more • Female flowers large, ca 3 x 1 mm • Male flowers oblong, ca 1.5 x 0.5 m • Fruits oblong 	<ul style="list-style-type: none"> • Inflorescences generally subracemose, rarely cymose • All female-flowered inflorescences present • Usually 5 flowers in a group, rarely less • Female flowers small, ca 2 x 1 mm • Male flowers globose, ca 1.5 x 1 mm • Fruits globose

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Specimens examined: India: Karnataka, Krishnarajapuram, near the ITI gate, on trees of *Pongamia glabra*, 900m, 20 Oct. 1995, *Sanjai 104912* (CAL, MH); Tamil Nadu, Coimbatore, TNAU Campus, in front of the canteen on *Pongamia glabra*, 260m, 3 June 1997, *Sanjai 104936* (MH).

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