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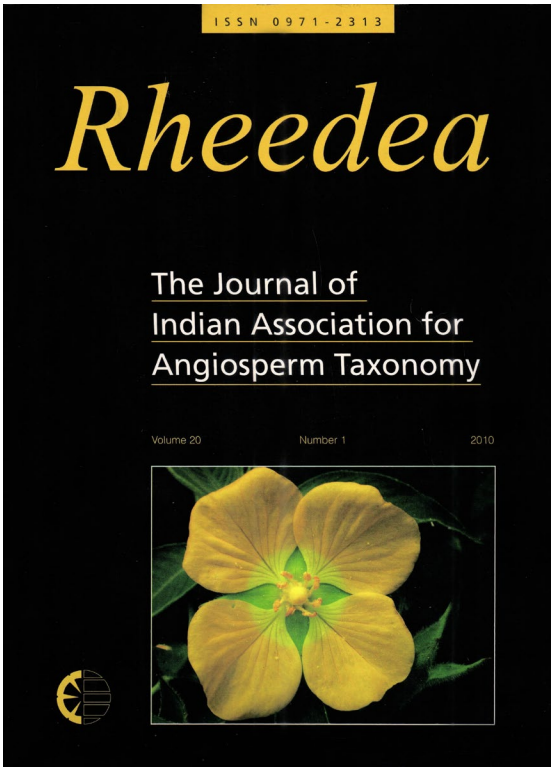

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Hybanthus stellarioides (Violaceae), a new record for India

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Abstract

Hybanthus stellarioides (Domin) P.I. Forst., a new distributional record to India, is described, illustrated and compared with allied species.

Keywords: Description, *Hybanthus enneaspermus, Hybanthus stellarioides, Hybanthus vatsavayii*

Introduction

The genus *Hybanthus* Jacq. has *c.* 100 species distributed throughout tropics (Mabberley, 2008). In India, three species were reported; two of them, namely, *H. enneaspermus* (L.) F. Muell. and *H. travancoricus* Melch. were included in Flora of India (Banerjee & Pramanik, 1993) and the third one, *H. vatsavayii* C.S. Reddy was described as a new species much later (Reddy, 2001). The authors have collected a *Hybanthus* species while exploring the flora of Greater Hyderabad. On critical study of the specimens (both fresh and dry), combined with literature concerning the revisionary study on *Hybanthus* in Australia by Bennett (1972) particularly the key and description provided by him, Flora of Australia by George (1982) and also by examining the images accessed in Australian Tropical Rain Forest Plants (http:/www.anbg.gov.au/cpbr/cd-keys/rfk) and New South Wales Flora (http:/plantnet.rbgsyd.nsw.gov.au)], the authors confirmed the material as *H. stellarioides* (Domin) P.I. Forst., hitherto not known from India. It is described, illustrated and compared with *H. enneaspermus*. Further, the authors also attempted its comparison with the description of *H. vatsavayii* that shows much similarity in certain features described in the text by the author. The type at MH, cited in the protologue could not be traced. Nor could we see an illustration in the publication to advance a judgment on the taxon concerned.

Hybanthus stellarioides (Domin) P.I. Forst., Muelleria 8(1): 18. 1993. *H. enneaspermus* var. *stellarioides* Domin, Bibl. Bot. 89(4): 983. 1928. *H. enneaspermus* subsp. *stellarioides* (Domin) E.M. Benn., Nuytsia 1(3): 229. 1972; George, Fl. Australia 8: 103. 1982. **Fig. 1, 2**

Annual, 15 – 30 cm high. Stem erect, grooved, unbranched (rarely branched), hairy; hairs antrorse-divaricate. Leaves simple, alternate, clustered at apex, linear or linear to lanceolate, 1.5 − 8 × 0.1 − 0.4 cm, attenuate at base, entire with occasional marginal tooth and ciliate (recurved in preserved specimens) at margins, acute at apex, sparsely hairy; stipules linear, 1 – 2 mm long, densely hairy; hairs subsessile, gland-tipped. Flowers solitary, axillary; peduncle filiform, with scattered to sparse indumentum, *c.* 7 mm long; pedicels *c.* 2 mm long; a distinct joint exists between peduncle and pedicel; bracts triangular, *c.* 1 mm long, ciliate at margins. Sepals 5, ovate-lanceolate, subequal, 2.5 – 4 mm long, acuminate, bent backwards at apex, keeled, hairy. Petals 5, unequal; upper oblong, 3 – 4 mm long, pale yellow; lateral 2 falcate, 2 – 3 mm long, pale yellow; lower enlarged into a spathulate limb with a claw; limb broader than long, *c.* 6 × 10 mm, acute at middle, bright orange; claw *c.* 4 mm long. Stamens 5, *c.* 3 mm long; filaments free; anterior 2 filaments with hairy appendages; anthers connate, 2 of them villous, others glabrous; connective extended vividly. Pistil *c.* 4 mm long; ovary ovoid, glabrous; ovules 6 – 9; style suberect; stigma enlarged, flat. Capsules 3-angled, 4 – 6 mm long, 3-valved, with remnant petals; seeds 6 – 9, ellipsoid, *c.* 2 mm long, longitudinally ribbed, glabrous, pale yellow.

Flowering & Fruiting: July – September (noticeably flowers in July and August).

Habitat: Rocky terrains on hill slopes along rock margins and in rock crevices.

Distribution: Australia and now in India from Andhra Pradesh.

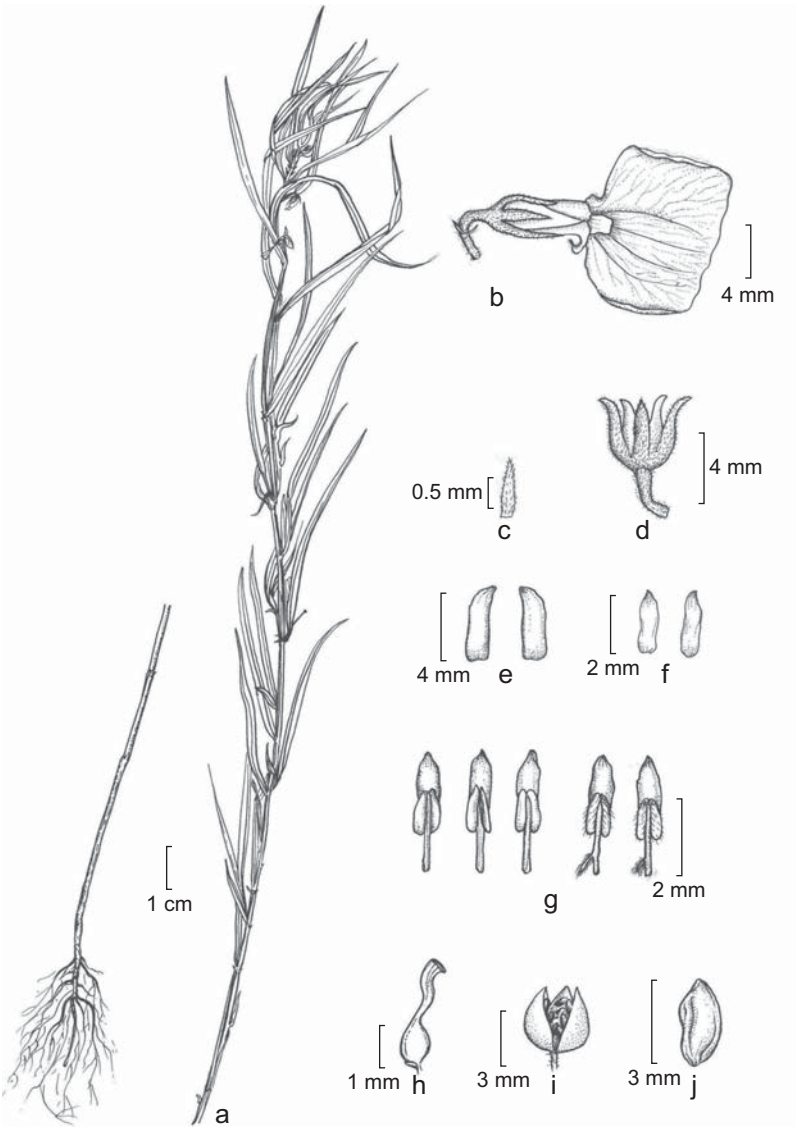

Fig. 1. *Hybanthus stellarioides* (Domin) P.I. Forst.: a. Habit; b. Flower; c. Bract; d. Calyx; e. Upper petals; f. Lateral petals; g. Stamens; h. Pistil; i. Dehisced capsule; j. Seed.

Specimen examined: INDIA, **Andhra Pradesh**, Greater Hyderabad, Dammaiguda Hills (17°30′33.8″ N, 78°36′02.1″ E), 538 m, August 2010, *M. Venkat Ramana & P.V. Prasanna* 1961 (BSID).

Note: *Hybanthus stellarioides* appears annual, as opposed to *H. enneaspermus* which is a perennial. *Hybanthus stellarioides*, published primarily as a variety of *H. enneaspermus* and later elevated to specific status, is distinctive in occurrence on rocky terrains (open sandy localities in *H. enneaspermus*), with un-branched erect stem with antrorse-divaricate hairs (sparingly to profusely branched herb with woody base, branches ascending with spreading hairs in *H. enneaspermus*); leaves linear or linear-lanceolate, margins entire with occasional tooth, recurved in preserved specimens (oblong-lanceolate, 2.5 − 4 × 0.3 − 0.5 cm, margins subentire to crenate-serrate, revolute in dried specimens in *H. enneaspermus*); stipules 1 – 2 mm long, densely hairy (stipules 3 – 4 mm long, sparsely hairy in *H. enneaspermus*); corolla bright orange, turning blood red (rose-coloured, turning dark purplish in *H. enneaspermus*); anthers connate (free in *H. enneaspermus*); whole plant turns yellow on drying (retains original colour in *H. enneaspermus*).

Hybanthus vatsavayii appears very similar to *H. stellarioides* in some of its features. But, the author's description of flowers as inconspicuous (though they are usually conspicuous in spite of being small) and of stamens, 2 of the 5 described sterile, added ambiguity in its true nature and

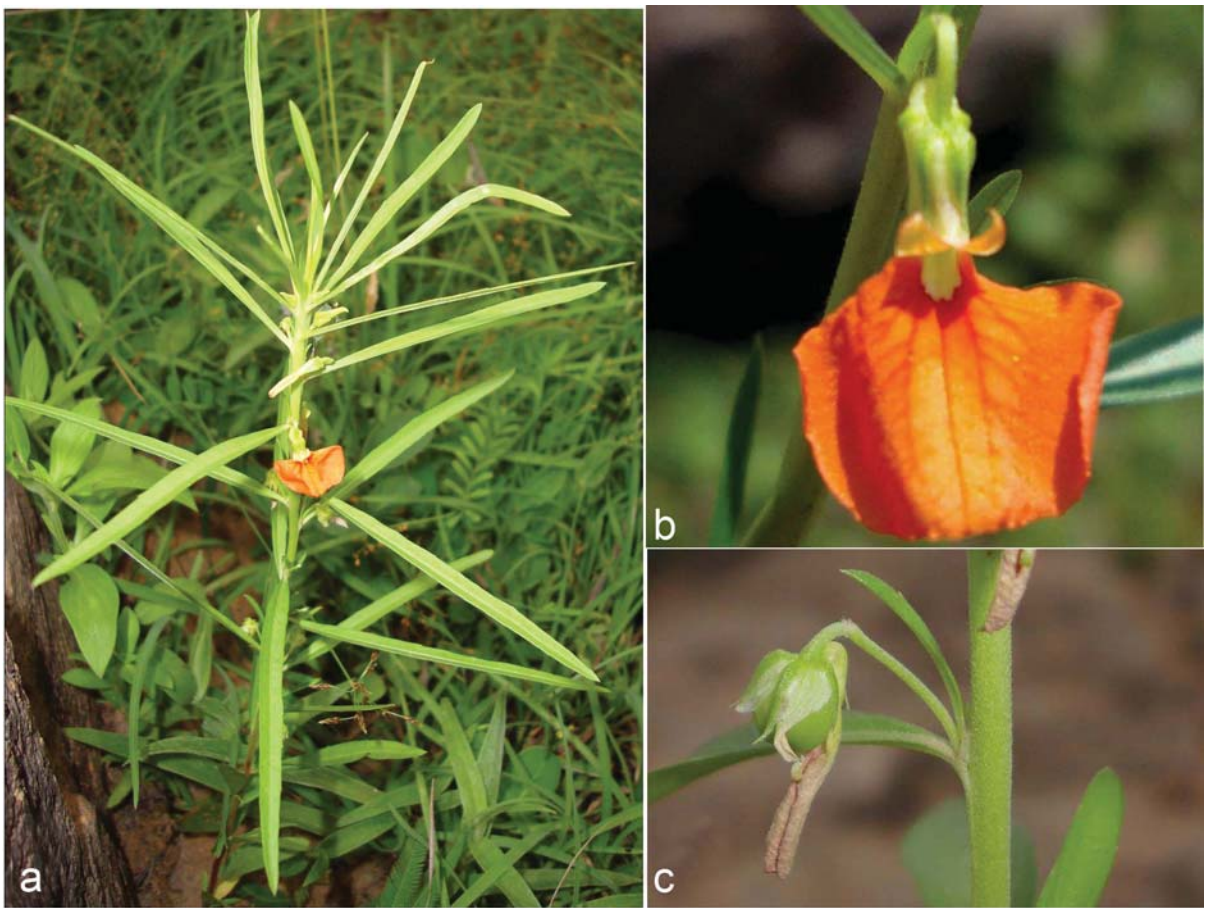

Fig. 2. *Hybanthus stellarioides* (Domin) P.I. Forst.: a. Habit; b. Flower; c. Capsule.

affinity with others. A photo in fruiting given by the author in a later publication (Reddy *et al*., 2008) was proved not adequate for comparison. Since type (*C.S. Reddy* 1268) could not be located from MH, the decision to merge *H. vatsavayii* with *H. stellarioides* is kept, as of now, in abeyance.

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