



***Cucumis dipsaceus* Ehrenb. ex Spach: An addition to the Flora of Eastern Ghats from Andhra Pradesh, India**

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Abstract: *Cucumis dipsaceus* Ehrenb. ex Spach is reported as a new distributional record for Eastern Ghats as well as in Andhra Pradesh which was hitherto not reported from this region. In this paper a brief description, distribution with photographs for supplementing their easy identification and ecological notes are provided.

Key words: *Cucumis dipsaceus*; Eastern Ghats; Andhra Pradesh.

Introduction

The genus *Cucumis* L. (Family: Cucurbitaceae; Tribe: Benincaseae) is cosmopolitan in distribution and represented by ca. 52 species (Mabberley, 2008) and in India, 13 species and 2 varieties are reported (Chakravarty, 1982; Nayar *et al.*, 2014). In course of the floristic expeditions in the Eastern Ghats, we came across certain interesting specimens of *Cucumis* inhabiting the scrub forest of Kuppam foot hills in Chittoor District of Andhra Pradesh. On critical examination of specimens and thorough scrutiny of Protologue and monograph (Chakravarty, 1982; Kirkbride, 1993; Pessarakli, 2016) the identity of the species was confined as *Cucumis dipsaceus* Ehrenb. ex Spach hitherto not reported from Andhra Pradesh state as well as from Eastern ghats. Taxonomic identity was done by consultation of different herbaria (CAL, MH, SVUTY, BSID), crosschecking of online specimens (JSTOR Global Plants: RSA0024042!!; UBT-0002993!!; NYBG: 2099970; K: K001139694) and web resources (Hassler 2020; FPI 2019; DFEG 2019) revealed taxonomic identity and global distribution. Perusal of relevant literature (Pullaiah and Sri Ramamurthy, 2007; Pullaiah *et al.*, 2018; Chetty *et al.*, 2019) confirmed its plausible occurrence locally. Some researchers reported this species from Karnataka (Sutar *et al.*, 2013),

Kerala (Geethakumary *et al.*, 2015), Tamil Nadu (Sarva-lingam *et al.*, 2010) and from Maharashtra (Rahangdale and Rahangdale, 2016) The present collection forms a new record for flora of Eastern ghats and an extension in the distribution of this species to the flora of Eastern Ghats and Andhra Pradesh. In the present paper, Taxonomic description, note on ecology and distribution, photographs of the species are provided to facilitate easy identification. The voucher specimen has been deposited in the National Medicinal Herbarium, Bangalore (FRLH).

Description

Cucumis dipsaceus Ehrenb. ex Spach. Hist. Nat. Veg. 6: 211. 1838; Sarvalingam *et al.*, Int. J Biol. Tech. 1: 37. 2010; Sutar *et al.*, J. Bombay Nat. Hist. Soc. 110 (3): 233–234. 2013; Geethakumary *et al.*, Asian J. Sci. Tech. 6 (3):1194-1196. 2015. *Cucumis dasycarpa* Hochst. ex A. Rich., Tent. Fl. Abyss. 1: 291. 1847. *Momordica dasycarpa* Hochst. ex A. Rich., Tent. Fl. Abyss. 1: 291.1848. (**Figure 1. A, B, C**).

Terrestrial perennial Climber with fibrous roots. Stems quadrangular, weakly grooved, branched and hispid. Leaves ovate, shallowly trilobed,

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cordate at base, serrate at margins, acute to obtuse at apex, densely hairy on both surfaces; petioles 1.5 – 4.5 cm long; tendril simple, pubescent. Inflorescence monoecious, solitary axillary; Male flowers 1 – 1.2 × 2 – 2.5 cm; calyx lobe linear, c. 0.13 – 0.20 cm long, apex acute; corolla yellow; tube campanulate; lobes c. 1 – 1.2 × 0.5 – 0.7 cm, ovate, obtuse at apex, hispid outside, glabrous inside; stamens three; filament long;

straight, dorsifixed, ciliate. Female flowers 0.2 – 0.23 × 0.2 – 0.22 cm; turbinate, hispidulous; calyx lobes linear, c. 0.2 cm long; corolla lobes obovate, 0.6 – 0.8 cm long, acute at apex. Ovary oblong-ellipsoid or ovoid, densely aculeate, 3-locular. Fruits, oblong - ellipsoid or broadly ovoid, 3 – 8 × 2.5 – 5 cm, green, smell like the cucumber and are bitter to taste, yellow when ripe, many seeded and densely aculeate.



Figure 1. *Cucumis dipsaceus* Ehrenb. ex Spach;

A. Habit & Flowering twig; **B.** Close-up view of flower., **C.** Close-up of fruit.

Flowering and Fruiting: December–February.

Common name: Hedgehog gourd, teasel gourd.

Specimen examined: INDIA, Andhra Pradesh, Chittoor district, Kangundhi village, Kuppam forest, N 12° 45' 35.5" 78° 26' 04.4", 338 m, 1. 12. 2019, Sumanth M.V 120050 (FRLH).

Associated species: The associated species were *Acanthospermum hispidum* DC., *Aristida setacea* Retz., *Barleria acuminata* Wight ex Nees, *Calpurnia aurea* (Aiton) Benth., *Cenchrus ciliaris* L., *Desmodium heterophyllum* (Willd.) DC., *Gymnema sylvestre* (Retz.) Schult., *Hibiscus panduriformis* Burm. f., *Ipomoea barlerioides* (Choisy) Benth. ex C.B. Clarke, *Ipomoea obscura* (L.) Ker Gawl., *Ipomoea parasitica* (Kunth) G. Don, *Senna montana* (Roth) V. Singh.

Distribution: Commonly found in African continent (Somalia, Tanzania, Uganda, Sudan, Ethiopia, Kenya, Southern Egypt), Caribbean and Asia. In India, it was reported from Western Ghats of Karnataka, Tamil Nadu and Kerala and Maharashtra. Present studies report the addition to the flora of Eastern Ghats as well as Andhra Pradesh. Sarvalingam and Rajendran (2016) reported this species as Rare in India and has to be conserved.

Ecological Note: The specimens were collected from open scrub and thickets at Kuppam forest. Habit of this species is trailing and extended its growth to 3- 4 meters in gravely soil and very less number of individuals are present. Four populations possessing xeric adaptability with almost 18 mature individuals were observed along a 12 km-long transect. Human intervention is the only threat observed for this species. Floristic exploration in other possible localities to assess exact conservation status in India is essential.

Conclusion

In this present study, *Cucumis dipsaceus*, adventive taxon assign a new distributional record to the flora of Eastern ghats as well as to the flora of Andhra Pradesh.

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