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RESEARCH ARTICLE

HYPTISCAPITATA JACQ. (HYPTIDINAE: LAMIACEAE) NEW RECORD FOR FLORA OF MAHARASHTRA, INDIA

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Abstract

Hyptis capitata Jacq. reported here first time from the Southern Konkan region of Maharashtra. Previously, this species was recorded from Andaman and Nicobar Island, Kerala, Tripura, West Bengal and Goa. In the present article brief description, photographs, and relevant notes are provided to facilitate its easy identification.

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Introduction:-

The genus Hyptis Jacq. belongs to the subtribe Hyptidinae in the family Lamiaceae. A genus accounts 144 species, distributed in tropical and subtropical zones from North America to the Caribbean and southward to Argentina and Peru, often occurring in humid savannas and a few species extend to the Old-World tropics, mainly as weeds. It can be distinguished by annual or perennial herbs, subshrubs, or shrubs, of variable habit, with flowers in pedunculate to sessile, cymose capitula with an involucre of bracteoles, and borne singly in the axils of foliaceous or reduced bracts and sometimes forming complex synflorescences. Flowers usually small, with narrow, cylindrical calyx, often accrescent in fruit, usually with subequal lobes; corolla small often white or occasionally lilac and with spotted posterior lip, tube cylindrical; Nutlets ovoid or narrowly ellipsoid (Harley & Pastore, 2012). Presently, in India the genus is represented by 4 species by (Mukerjee, 1940) but now Hyptis pectinata (L.) Poit. is synonym of Mesosphaerum pectinatum (L.) Kuntze and Hyptis suaveolens (L.) Poit. is synonym of Mesosphaerum suaveolens (L.) Kuntze (POWO, 2024) Hence, now India represented by only two species namely Hyptis capitata Jacq. and Hyptis brevipes Poit. and after this present report only one species H. capitata Jacq. found in Maharashtra State.

Material and Methodology:-

During the recent plant survey in Humarmala village, Kudal, Sindhudurg District. The first author has collected some specimens of Hyptis Jacq. Upon critical studies, scrutiny of authentic literature (Harley et al. 2004; Harley & Pastore, 2012; Mukerjee, 1940; Datar et al., 2007; Thothathri, 1961; Varghese, 1979) and comparing with authentic specimen (<https://indiaflora-ces.iisc.ac.in/herb-sheet.php?id=6442&cat=13>), the identity of the species was confirmed as Hyptis capitata Jacq. This species previously known from Andaman and Nicobar Island, Kerala, Tripura, West Bengal and recently it was reported from Molem National park Goa (Datar et al., 2007).

Taxonomic treatment

Hyptis capitata Jacq. in collectanea 1:102. 1786 (1787). S. K. Mukerjee in Rec. Bot. Surv. India 14: 63. 1940; Keng in Steenis, Fl. Males. 1, 8: 369. 1978. Cramer in Dassan. & Fosberg, Rev. Handb. Fl. Ceylon 3: 156. 1981. Sivarajan

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et al., J. Econ. Taxon. Bot. 7: 224-225. 1985. Mandar et al., Ind. J. For. 30(3): 355-356. 2007. Harley et al. in Phytotaxa 58:25. 2012. Varghese in J. Bombay Nat. Hist. Soc. (76): 200. 1979. (Figure 1-2)

Herb, reaching height 1–1.5m; branches quadrangular, pubescent. Leaves 10–15 × 5–8 cm long, broadly ovate-oblong, hairy, acute at apex, tapering at base, nerves 6–8 pairs; petiole up to 5 cm long, hairy. Flowers in head, axillary peduncles larger than floral head; bracts ovate lanceolate, reflexed, sepals 5-lobed, lobes subulate, densely hairy, shorter than the tube. Petal white, larger than the sepals, lobes subequal. Stamens 4, didynamous; filament free, exerted, anther cell confluent. Ovary 4-lobed; style short, bifid. Nutlets 4, minute, 1.25 × 1 mm, ovoid, smooth, brownish-black.

Flowering and Fruiting:

September – April.

Distribution:

The native range of this species is Florida, Mexico to Tropical America (POWO, 2024). In India, Andaman and Nicobar Island, Kerala, Tripura, West Bengal, Goa and now in Maharashtra.

Illustration:

Datar et al. 2007 op.cit.

Habitat:

Along road side often associated with *Callicarpus tomentosus* (L.) L., *Hemidesmus indicus* (L.) R.Br., *Ageratum conyzoides* L., *Haplanthodes neilgherryensis* (Wight) Mujumbdar

Exsiccata:

India, Maharashtra:

Humarmala village, Kudal, Sindhudurg District, 24th March 2024, Paithane V. A. 1435. (VH); Humarmala village, Kudal, Sindhudurg District, 24th March 2024. Paithane V. A. 1436. (VH); Humarmala village, Kudal, Sindhudurg District, 7th April 2024. Paithane V. A. 1457. (Herbarium Dept of Botany, ARACS College, Vaibhavwadi, Sindhudurg district, Maharashtra).

Additions specimen Examined:

Kerala. Adimali, Idukki District, 26.11.2018., Raja K. Swamy & Noel Sebastian 1856. (HJCB).

Conclusion:-

So far this species has not yet been reported from the Flora of Maharashtra State (Kulkarni & Das Das, 2001). The present collection of *Hyptis capitata* Jacq. from Southern Konkan region forms a new record for the flora of Maharashtra State.

The nomenclature and taxonomic description, field photographs and images of inflorescences with persistent, accrescent calyx and seeds is provided to facilitate its easy identification.

Voucher specimens have been deposited at Herbarium Department of Botany, Anandibai Raorane Arts, Commerce and Science College, Vaibhavwadi, Sindhudurg District (ARACS College Herbarium) and Herbarium Department of Botany, Vivekanand Arts and S. D. Commerce and Science College, Aurangabad, Maharashtra (VH).

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References:-

1. Datar M. N., Lakshminarasimhan P., Rao P. S. N. (2007): *Hyptis capitata* Jacq. (Lamiaceae)- a New record for Northern Western Ghats. Indian Journal of forestry. Vol. (30)3:355-356.
2. Kulkarni B. G. & Sujit Kumar Das Das in N. P. Singh, P. Lakshminarasimhan, Karthikeyan and Prasanna (2001): Flora of Maharashtra State Dicotyledons, Botanical Survey of India (2): 718.

3. Sankara Rao, K., Deepak Kumar (2023). India Flora Online. [http://indiafloraonline-ces.iisc.ac.in/plants.php?name=Hyptis capitata](http://indiafloraonline-ces.iisc.ac.in/plants.php?name=Hyptis%20capitata). Downloaded on 28 March 2024.
4. Sivarajan, V.V., A. Babu & T.U.A. Kunju (1985). Hyptiscapitata Jacq. (Lamiaceae), a new record for India. *Journal of Economic Taxonomic Botany* 7: 224–225.
5. The International Plant Names Index and World Checklist of Vascular Plants 2024. Published on the Internet at <http://www.ipni.org> and <https://powo.science.kew.org/>
6. Thothathri K. (1961) New Record of plants from Andaman and Nicobar Island. *Journal of the Bombay Natural History Society* (58)310-317.
7. Varghese T. S. (1979) Record of Hyptiscapitata Jacq. (Labiatae) from Peninsular India. *Journal of the Bombay Natural History Society*, (76): 200.

Legends:-

1. Figure 1. Hyptiscapitata Jacq. A & B. Habit, C. Inflorescence, D. Calyx, E. Seeds.
2. Figure 2. Distributional map of Hyptiscapitata Jacq. in India.