

Research Article

ADDITIONS TO THE FLORA OF DELHI: Part III

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ABSTRACT

The present paper deals with addition of 3 taxa of flowering plants to the Flora of Delhi. These taxa are *Leonotis nepetifolia*, *Mecardonia procumbens* and *Scoparia dulcis*. A brief description, phenological data, locality, flowering and fruiting season, distribution and voucher specimen no. are given for each species. Family name of each taxa is provided in parenthesis. Photographs of each species are also given in this article.

Keywords: New Delhi, Flora, New Records

INTRODUCTION

After the Publication of Flora of Delhi by Maheshwari (1963), some sporadic publications are available about new records such as, Dakshini and Vijayaraghavan (1970), Viswanathan *et al.*, (1982; 1984); Viswanathan and Singh (1986); Sharma and Ahmad (1990; 1991); Sharma (1994; 1997; 2002); Kumar and Yadav, (2005); Naithani *et al.*, (2006, 2007) and Mishra *et al.*, (2014, 2015). During our field survey, many taxa were collected from the region. After critical investigations authors found that 3 species are not reported from the region. Correct and updated citation, a short description and note on its phenology is depicted for each taxon followed by a note on ecology and taxonomic identity. The voucher specimens are deposited in Department of Botany, Jamia Hamdard University, New Delhi.

Enumeration of the Species: In the present paper, 3 species has been reported from the Delhi region, India (Plate I). Short description and distribution pattern of each species has been described.

Leonotis nepetifolia R. Br. FBI. 4:691, FGUP. 2:253 (Lamiaceae)

About 12 species of *Leonotis* has been reported from tropical Africa, America and Asia; 1 species in India (Dhawan *et al.*, 2013).

Note: A new genus, alien as well as medicinal plant species.

Local Name: Deep mala; bada gumma

Description: An erect tall herb. Leaves 5-10 cm long, ovate, acute, crenate-serrate, hairy on both sides, base cuneate Petioles winged above. Flowers orange scarlet, in axillary, in dense, globose, whorls. Bracts 1-1.4 cm long, deflexed, spine-pointed. Calyx 1.5-1.8 cm. long, ribbed, villous, mouth oblique. Lower lip of corolla short than upper. Nutlets obliquely truncat.

Flowering and Fruiting: Aug.-Nov.

Locality and Habitat: A new report from agricultural fields in Palla village; 762; 10/08/2015.

Distribution: Pantropical

Mecardonia procumbens (Mill.) Small, Fl. Southeast U.S. 1065, 1338. 1903 (Scrophulariaceae).

About 9 species of *Mecardonia* has been reported from tropical Africa, America and Asia (Yakandawala and Yakandawala, 2007); 1 species in India

Note: This is a new genus and alien species in Flora of Delhi.

Local Name: -

Description: Erect or ascendant glabrous ephemeral herb, often branched from the base, rooting at lower nodes. Stem sharply quadrangular, glabrous. Leaves opposite, glabrous, short-petioled or petioles indistinct, elliptic to ovate-elliptic, 1.0-2.5 x 0.6-1.2 cm, apically obtuse, basally cuneate or obtuse. Flowers axillary, solitary yellow colored; pedicel thin, glabrous, 0.4-0.6 cm long, bracts 0.2-0.4 cm long, linear, mostly entire, located at the base of the pedicel. Fruit a capsule, narrowly ellipsoid, 2 – valved, glabrous, 0.5 – 0.6 cm. long, dehiscent loculicidally and septically from apex.

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Flowering and Fruiting: Aug.-Nov.

Locality and Habitat: A new reports from Wazirabad along the Yamuna River banks; AKM 761; 2/08/2015.

Distribution: Sierra Leone, Cameroon; Tropical North and South America, India.

Scoparia dulcis L., Sp. Pl. 1: 116, 1753 (Plantaginaceae)

About 20 species of *Scoparia* has been reported from tropical America and one species from India (Mabberley, 2008)

Note: A new genus, alien species for Delhi Flora

Local Name: *Mitha patta*; *Mithi patti*.

Description: An erect, glabrous, much branched, annual, 0.25-1.0 m, shrub with striated stem. Leaves simple, opposite or in whorls of three, 2.0-4.5 x 0.5-1.6 cm, rhomboidal or elliptic, with tapering bases serrate. Flowers small, white, 3-6 from each whorl or slender pedicels, in axils of leaves or terminal. Capsule small, sub-globose, glabrous, 0.2 cm, across, enclosed by the calyx, septicidal. Seeds minute.

Flowering & Fruiting: Oct.-Dec.

Locality and Habitat: A new records from Rajghat, ISBT, Sarai Kale Khan, Jaitpur, Yamuna River banks; AKM 1792; 7/10/2011.

Distribution: Tropical and subtropical of the world.



Leonotis nepetifolia R. Br.



Mecardonia procumbens (Mill.) Small



Scoparia dulcis L.

Plate I: Photos are new taxa in our study

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REFERENCES

- APG III (2009).** An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III. *Botanical Journal of the Linnean Society* **161** 105-121.
- Dakshini KMM and Vijayaraghavan MR (1970).** *Cotula australis* (Sieb. Ex. Spreng.) Hook. f.- A new record for North india. *Indian Forester* **96**(1) 24-25.
- Dhawan NB, Khan AS and Srivastava (2013).** A General Appraisal of *Leonotis nepetifolia* (L.) R.Br: An Essential Medicinal Plant. *Bulletin of Environment, Pharmacology and Life Science* **2**(8) 118-121.
- Kumar A and Yadav SR (2005).** Addition to the grasses of Delhi. *Journal of Economic and Taxonomic Botany* **29**(4) 815-827.
- Lal C, Ghidiyal JC and Maheshwari DK (2002).** Survey of Aquatic Vegetation in and around Delhi. *Journal of Economic and Taxonomic Botany* **26**(3) 547-549.
- Mabberley DJ (2008).** *The Plant-Book: A Portable Dictionary of the Vascular Plants*, 2nd edition (Reprinted) (Cambridge University Press) 652.
- Maheshwari JK (1963).** *Illustrations of the Flora of Delhi*. C.S.I.R., New Delhi.
- Maheshwari JK (1963).** *The Flora of Delhi*. C.S.I.R., New Delhi.
- Mishra AK, Mir SA Sharma MP and Singh HB (2014).** Addition to the Flora of Delhi. *Indian Journal of Plant Sciences* **4**(3) 64-67.
- Mishra AK, Mir SA, Sharma MP and Singh HB (2015).** Addition to the Flora of Delhi: Part II. *Indian Journal of Plant Sciences* **4**(2) 1-6.
- Naihani HB, Chandra S and Mohinder P (2006).** Additions to the Flora of Delhi. *Indian Forester* (132) 589-599.
- Naihani HB, Negi SS, Pal M, Chandra S and Khanduri VP (2007).** *Vegetational Survey and Inventorisation of species in the ridge forest of Delhi Forest*. Research Institute (Indian Council of Forestry Research and Education) New Forest, Derhadun-248006 1-624.
- Sharma MP (1994).** *Alternanthera paronychioides* (Amaranthaceae) New Plant Record for Delhi. *Journal of Economic and Taxonomic Botany* **18**(2) 395.
- Sharma MP (2002).** *Balanophora dioica* Royle. *Journal of Economic and Taxonomic Botany* **26**(1) 103-104.
- Sharma MP and Ahmad J (1990).** *Capparis zeylanica* (L.) (Capparidaceae): An addition to flora of Delhi. *Journal of Economic and Taxonomic Botany* **14**(3) 740.
- Sharma MP and Ahmad J (1991).** *Cocculus pendulus* (J.R. & Forst.) Diels (Menispermaceae): New record for Delhi. *Indian Journal of Forestry* **14**(1) 76.
- Viswanathan MV and Singh HB (1986).** A new exotic Solanaceous weed in old world. *Journal of the Bombay Natural History Society* **83**(Suppl.) 226-330.
- Viswanathan MV, Singh HB and Bhawat PR (1982).** Additions to the Flora of Delhi. *Journal of Economic and Taxonomic Botany* **14**(3) 579-580.
- Yakandawala D and Yakandawala K (2007).** *Mecardonia procumbens* (mill.) small, an addition to the Sri lankan Scrophulariaceae JUSS. *Ceylon Journal of Science (Biological Sciences)* **36**(1) 61-64.