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ADDITION TO THE FLORA OF DELHI

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ABSTRACT

The present paper deals with addition of 6 taxa of flowering plants to the Flora of Delhi. These taxa are *Chromolaena odorata, Glechoma hederacea, Indigofera suffruticosa, Ipomoea triloba, Pogostemon benghalensis, Saussurea heteromalla.* 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

The Flora of Delhi was explored by Maheshwari in 1950s and it was published in 1963. After Maheshwari, some sporadic publications are available, such as, Vishwanthan *et al.*, (1982, 1986), Sharma and Javed (1990, 1991), Shrama (1994, 1997,2002), Chaman *et al.*, (2002), Kumar and Yadav (2005) and Lastly, Naithani *et al.*, (2006). During our field survey, many taxa were collected from the region. After critical investigations authors found that 5 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, 6 species has been reported from the Delhi region, India (Plate I). Short description and distribution pattern of each species has been described.

1. Chromolaena odorata (L.) R.M.King & H.Rob., Phytologia 20(3): 204. 1970; (Asteraceae)

A perennial coarse herbs ca. 2 m long; Leaves 7-12 x 3.5-6 cm, opposite, median one larger, ovate, apex acute, base obtuse to broadly cuneate, lower surface glandular stippled, 3- nerved, margins sparsely dentate. Petiole 1-2.0 cm. long; upper leaves gradually smaller near inflorescence. Inflorescence loose corymbs, heads bluish purple; 1.0×0.5 cm, peduncle 0.8-1.6 cm long, densely pubescent; involucres cylindric 0.5 long; bracts 25-30, seriate, tri-nerved, outer ones ovate to oblong, inner ones narrowly oblong, apex aute, base obtuse, sparsely pubescent. Achenes black 0.4-0.5 cm long, 5-angular, pubescent on ribs.

Fl.- Sept.-Oct. & Fr.-Oct.-Nov. Voucher specimen No.- AKM 2156

Locality - Yamuna river bank (Wazirabad barrage-Delhi)

Distribution- Central, Western, North & South Africa, Asia, Australia, Pacific Islands, North and South America.

2. Glechoma hederacea Linnaeus, Sp. Pl. 2: 578. 1753 (Lamiaceae).

A perennial herbs. Petiole of basal leaves 3.5-4 cm; 0.8-1.8 cm in upper leaves, with sparse, retrorse, minutely hooked hairs; upper blade larger than basal one, reniform to reniform-orbicular, $0.8-1.3 \times 2.0-2.5$ cm, glabrous, margin coarsely crenate, apex rounded. Cymes 2-4-flowered, in verticillasters; bracts and bracteoles subulate, 0.1 cm. Nutlets 0.19×0.11 containing one seed.

Fl.-Oct.-Nov. & Fr.- Nov.Dec. Voucher specimen No.-AKM 1990

Locality –Riverine part of Yamuna river bank from Palla in Delhi region.

Distribution- North America, Europe, Asia, Canada.

3. *Indigofera suffruticosa* Miller, Gard. Dict., ed. 8. *Indigofera* no. 2. 1768. (Fabaceae) Shrubs or shrublets, erect, 0.19 x 0.11. 0.8-1.5 m tall.

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Chromolaena odorata (L.) R.M.King & H.Rob



Glechoma hederacea Linnaeus



Indigofera suffruticosa Miller



Pogostemon benghalensis (Burm. f.) O. Kuntze



Ipomoea triloba L.



Saussurea heteromalla (D.Don) Hand.-Mazz.,

Plate I: Photograph of some newly records plant species of Delhi region

Stems grayish green, with appressed medifixed symmetrically 2-branched trichomes. Stipules narrowly triangular, $0.19 \ge 0.11$. 0.4 cm. Leaves 5-10 cm, 11-15 foliolate; petiole 1.5 cm; leaflet blades oblong to oblanceolate 1-4 ≥ 0.5 -1.5 cm, base broadly cuneate to rounded, apex acute. Inflorescence racemes 7-10

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cm, densely flowered; peduncle very short or absent; bracts linear, 0.2 cm, caducous, abaxially with appressed medifixed trichomes. Flowers pinkish, pedicel reflexed in fruit. Legume deflexed and upwardly falcate, 1-1.5 cm, long, hairy. Seeds 6-8, brown, shortly cylindric, both ends truncate. **Fl.**-Aug.- Sept. & **Fr.**-Sept.-Oct. **Voucher specimen No**.-AKM 1911

Locality- Aya Nagar, Rajokri (Southern Ridge) of Delhi.

Distribution- India, Burma, china, Philippines, Tropical America & West indies.

4. Ipomoea triloba Linnaeus, Sp. Pl. 1: 161. 1753. (Convolvulaceae)

Twining herbs, glabrous or sparsely hairy. Leaves $3.0-5.0 \ge 2.6 \text{ cm}$, broadly ovate, orbicular, entire, coarsely dentate to deeply 3 –lobed, base cordate, slightly villous on both surface; petiole 3-15 cm long. Inflorescence cymes 1 to several flowered, flowers aggregated pink or pale purple; peduncle 1-10 cm long; pedicel 0.2-0.8 cm long; bracts minute, lanceolate-oblong; pink in color. Caspule 0.5 cm subglobose, pilose.

Fl.-Aug.- Sept. & Fr.-Sept.-Oct. Voucher specimen No.- AKM 1968

Locality- Behind Buddha park (Central Ridge) & Aya Nagar (Southern Ridge) of Delhi.

Distribution- China, Indonesia, Japan Malaysia, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam, North America, West indies, Pacific Islands.

5. Pogostemon benghalensis (Burm. f.) O. Kuntze Rev. Gen. et Sp. 529. 1891. (Lamiaceae)

Aromatic shrub, erect, ca. 0.8-1.5 m tall. Leaves broadly ovate or ovate- lanceolate, ca. 6-10 x 3-7 cm. base cuneate, double serrate ,acuminate, glabrous, petiole 2-8 cm long. Flower in dense bracteates, white or tinged with pink, crowded, 5-10 cm long, spicate racemes; bracts imbricate, ovate-lanceolate, acute; 0.2 cm. Nutlets ellipsoid, shining, dark brown.

Fl.- Sept.-Oct. & Fr.-Oct.-Nov. Voucher specimen No.- AKM 2141

Locality- Riverine zone of Yamuna river bank (Palla-Delhi)

Distribution- India, Bangladesh, Nepal, Sri Lanka, Myanmar, Thailand.

6. Saussurea heteromalla (D.Don) Hand.-Mazz., SYmb. Sin.7:1152.1936. (Asteraceae)

A annual herb, 0.8-1.5 m long. Leaves radical, in rosettes, obovate-oblong, lyrate-pinnatified, ca. 5-12x 3-5.0 cm, dentate, basel portion decurrent into petioles; white tomentose beneath; cauline leaves oblonglanceolate entire or dentate. Heads purple 2.0 -3.5 cm across, on 10-20 cm. long peduncles, in corymbose panicles. Achenes 0.3 cm long, 4-5 angular, muricate. Pappus hairs white, slender 10-12 cm long, plumose, basally united into a ring.

Fl.- Feb.- Mar. & Fr.- Mar. – Apr. Voucher specimen No.- AKM 2184

Locality-Yamuna river bank (Palla-Delhi)

Distribution- Afghanistan, Bhutan, India, Pakistan, Tibet, Nepal and South west china.

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