



New Plant Records to the Flora of Nagpur District (M.S.), India.

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Abstract:-

During the field survey of Nagpur District, the authors collected some uncommon taxa from the different locations and habitats of the study region, which were not reported so far in the florists documentation. The present paper deals with the records of five new plant species to the flora of Nagpur district. Some plant species have very small population range and occupancy. The plant specimens were collected, identified with the reference of different floras and recent literature for their authentication. This paper records them with updated nomenclature, descriptions and note on phenology and images for its easy identity.

Key Words: New Plant Records, Flora of Nagpur District, Maharashtra.

Introduction:-

Nagpur district lies in between the latitudes 20° 35' and 21° 44' north and longitudes 78° 15' and 79° 40' east and has an area of 9930 square kilometers, having biodiversity rich zones i.e. Pench National Park, Umred-Karhandla Wildlife Sanctuary, Gorewada and Satnavri forest. It has 14 Talukas viz. Bhiwapur, Hingna, Kalmeshwar, Kamptee, Katol, Kuhi, Mouda, Nagpur, Nagpur Rural, Narkhed, Parseoni, Ramtek, Saoner and Umred. The previous documentation on a floristic exploration of this area was done by Ugemuge (1986). According to Flora of Nagpur district (Ugemuge 1986) there are 1136 plant species which fall under 669 genera and 142 families. Botanically rich Nagpur district is now well explored by various research workers and documented many further additions to the Flora of Nagpur District, viz. Bhuskute (1989, 1990), Thakre and Srinivasu (2012a, 2012b), Kamble *et al.*, (2013a, 2013b, 2014, 2015) and Gadpayale *et al.* (2014).

Materials and Methods:-

Several visits were made in the district for the floristic survey during the last few years in different seasons. The identification and authentication of collected plant samples have been done with the relevant literature viz. Flora of Nagpur District (Ugemuge 1986), Flora of Maharashtra State Vol. I (Singh and Karthikeyan 2000), Flora of Maharashtra State Vol. II (Singh *et al.* 2001), The Flora of Maharashtra (Almeida 1998), Flora of Marathwada (Naik 1998) and research papers and reports. The voucher specimens of the collection has been deposited at the

Herbarium, Department of Botany, Dr. Ambedkar College, Deekshabhoomi, Nagpur.

Result and Discussion:-

The authors collected five different plant specimens belonging to families Rubiaceae, Nyctaginaceae, Asclepiadaceae, Amaryllidaceae and Dioscoreaceae. After critical morphological and microscopic observations, the plant specimens were identified with the help of various floras which have been cited earlier in the methodology. It was found that these plant species are a new addition to the Flora of Nagpur district. The family Amaryllidaceae with reference to *Crinum viviparum* (Lam.) R. Ansari & V. J. Nair is first time reported while the genus *Commicarpus chinensis* (L.) Heimerl; first time reported for Nyctaginaceae family for the flora of Nagpur district. Since these plant species are the new record for the flora of Nagpur district a brief description supported by photograph is given for identification. The flowering and fruiting seasons, habitats, status, localities, etc. have been mentioned in the description.

1. Family :- Rubiaceae

Tamilnadia uliginosa (Retz.)

Triveng. & Sastre in Mauritius Inst. Bull. 8 (4): 85. 1979. *Gardenia uliginosa* Retz. Obs. Bot. 2: 14. 1781. *Randia uliginosa* (Retz.) DC. Prodr. 4: 386. 1830; Hook. F. Fl. Brit. India 3: 110. 1880; Cook, Fl. Pres. Bombay 2: 27. 1958 (Repr.). *Xeromphis uliginosa* (Retz.) Mahesh. in Bull. Bot. Surv. India 3: 92. (1961) 1962; Tirveng. in Bull. Mus. Natn. Hist. nat. Paris, 3e, 521, Bot. 35: 19. 1978. *Catunaregam*

uliginosa (Retz.) Sivar. in Manilal & Sivar. Fl. Calicut 132. 1982.

Shrubs or small trees, 5-10 m tall; bark reddish- brown; spines short, branches 4- angled. Leaves c 12x 7 cm, elliptic or oblanceolate, apex obtuse. Flowers white, 3-4 cm across, solitary, fragrant; calyx- lobes fleshy, green; corolla lobes broadly orbicular. Berries ovoid, 2-3 cm across, yellowish brown. Seeds compressed, closely packed in pulp.

Flowering & Fruiting: March - April

Ecology: Marshy area in the forest.

Location: Kolarmet forest, Kuhi.

Status: Frequent.

2. Family:- Nyctaginaceae

Commicarpus chinensis (L.) Heimerl. in Engl. & Prantl Nat. Pflanzenf. ed. 2, 16c: 117. 1934; Meikle in Notes Roy. Bot. Gard. Edinburg 36: 243. 1978. *Valeriana chinensis* L. Sp. Pl. 33.1753. *Boerhavia repanda* Willd. Sp. PL. 1:22. 1797; Hook. F. Fl. Brit. India 4: 709. 1885; Cook, Fl. Pres. Bombay 2: 564. 1958 (Repr.). *Boerhavia chinensis* (L.) Aschers & Schweinf. in Schweinf. Beitr. Fl. Aeth. 1:167. 1867; Stemmerik in Steenis, Fl. Males. Ser. 1,6(3):455. 1964.

Herbs diffuse, subsucculent. Leaves 3.5-7.0x 3.5 cm, deltoid-ovate, apex acute or acuminate, base cordate or truncate, repand-sinuate, glabrous above, pubescent beneath. Flower pink in 3-8 flowered umbels on 2.0-5.5 cm long slender peduncles. Anthocarps c 0.6 cm long, clavate, faintly ribbed, rough with glandular knobs.

Flowering & Fruiting: October - February

Ecology: Along the Canals.

Location: Mohgaon, Mangli, Kini, Hingna.

Status: Rare

3. Family:- Asclepiadaceae

Gymnema sylvestris (Retz.) R. Br. ex Schultes in R. & S. Syst. Veg. 6: 57. 1819; Hook. F. Fl. Brit. India 4: 29. 1883; Cook, Fl. Pres. Bombay 2: 224. 1958 (Repr.); Sant. & Irani in Univ. Bombay Bot. Mem. no. 4: 47. 1962; Jagtap et N. P. Singh in Fasc. Fl. India 24: 89. 1999. *Periploca sylvestris* Retz. Obs. 2: 154. 1781.

Twining shrubs; stems much branched, cylindrical, young branches densely pubescent. Leaves petiolate, 3-6x 2.5- 3.5 cm, ovate or elliptic- lanceolate or oblong, pubescent below, puberulous above, apex acute, base rounded. Flowers minute, in lateral, corymbose cymes; peduncles, pedicels and calyx pubescent; corolla campanulate, c 3.5 mm across, tube c 1.5 mm long, glabrous without, pubescent within, lobes 5, deltoid;

corona of 5, fleshy processes, inserted on throat of corolla tube, alternating with lobes, produced downwards on tube as double villous ridges; gynostegium c 1.5 mm long.

Flowering: April- July

Fruiting: September- January.

Ecology: Forest areas.

Location: Ambhora forest.

Status: Frequent.

4. Family:- Amaryllidaceae

Crinum viviparum (Lam.) R. Ansari & V. J. Nair in J. Econ. Tax. Bot. 11: 205. (1987) 1988. *Amaryllis vivipara* Lam. Encycl. 1: 123. 1783. *Crinum deflexum* Ker- Gawl. In J. Sci. Arts London 3: 105. 1817; Hook. F. Fl. Brit. India 6: 281. 1892; Cook, Fl. Pres. Bombay 3: 257. 1958 (Repr. ed).

Bulbs 5.0-7.5 cm in diam., ovoid; neck 5-15 cm long, cylindrical. Leaves 60-90x 2.0-2.5 cm, linear, coraceous, scaberulous. Scapes 45-75 cm long, cylindric. Flowers white, in 6-12 flowered umbels; perianth tube 7-8 cm long, green; filaments purple. Capsules 2.5-3.7 cm in diam., subglobose, beaked by perianth tube. Seeds rugose.

Flowering & Fruiting: June- October

Ecology: along the bunds of paddy field.

Location: Mouda, Ramtek, Nagpur.

Status: Rare.

5. Family:- Dioscoreaceae

Dioscoria wallichii Hook. F. Fl. Brit. India 6: 295. 1892; Sant. in J. Bombay Nat. Hist. Soc. 49: 633, t. 1. 1951.

Tubers 1m or more long; stem stout, prickly towards base. Leaves alternate, simple, cordate, acuminate, 10-15x 7-15 cm, 7-nerved. Flowers white or brown; male flowers in spikes on short leafless branches; female flowers in decurved slender spikes. Capsules 2.5-3.0 cm long; wings truncate above and below, rounded along margins. Seeds orbicular with brown wing all round.

Flowering & Fruiting: October- February.

Ecology: Forest

Location: Marupar Forest, Bhiwapur.

Status: Very rare.

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Plate 1.

