

## RESEARCH ARTICLE

# Some New Additions of Tree Species to the Flora of Nagpur District (Maharashtra)

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## ABSTRACT

Several field visits were made for the preparation of digital database of dicot flora of Nagpur district. During the study period, 4 tree species belongs to 3 different families were collected, identified and recorded as new additions to the existing Flora of Nagpur district. These species are *Caesalpinia coriaria* (Jacq.) Willd. (Caesalpiniaceae), *Acacia campbellii* Arn. (Mimosaceae), *Ficus virens* Ait. var. *virens* and *Morus macroura* Miq. (Moraceae). All these species have some medicinal and economic value and some are rare to the district which needs conservation.

**Keywords:** Tree species, New additions, Digital database, Nagpur district.

## INTRODUCTION

Nagpur District is quite rich in angiosperm flora with many important plants having medicinal as well as economic value. It is an important region of Vidarbha and the former capital of the Central Provinces and Berar. Floristic collections are essential for expanding the holdings from those under-represented areas, so it is important to update the flora of the district which was initially studied by Ugemuge in 1986. However, after 25 years there are many changes (additions as well as deletions of some plants) in this area so it is important to know the status of these plants in nature in conservation point of view. Those had resulted in the compilation of a number of checklists viz. New records for Nagpur district (Maharashtra) I-II by Bhuskute (1989, 1990), 'New (Fabaceae members) records to Nagpur district' by Thakre *et al.* (2012a), 'New plant species records to flora of Nagpur district' by Thakre *et al.* (2012b), 'Diversity of medicinal and economically important plants of Nagpur district' by Thakre *et al.* (2012c), 'New Plant Species records to Flora of Nagpur district (Maharashtra)' by Thakre *et al.* (2013), 'Some noteworthy addition to the Flora of Nagpur district (M.S.), India' by Gadpayale *et al.* (2014), New additions to the Flora of Nagpur District, Maharashtra by Kamble *et al.* (2013a); New Record of Some Rare Plants to the Flora of Nagpur District, Maharashtra. by Kamble *et al.* (2013b); Some new plant reports to the Flora of Nagpur District, Maharashtra – III, by Kamble *et al.* (2013c); New additions to the Flora of Nagpur District, Maharashtra – IV, by Kamble *et al.* (2014); New additions to the Flora of Nagpur District, Maharashtra – V, by Kamble *et al.* (2015), 'Some New Plant Records to Flora of Nagpur District (Maharashtra, India)' by Thakre *et al.* (2015).

## MATERIALS AND METHODS

Several field visits were made during 2011-2015 for the preparation of Digital database of dicot flora of Nagpur district. During the study period, 4 tree species of 3 different families were collected, identified and recorded as new additions to Flora of Nagpur district. Collected plant specimens were identified with the help of different standard floras viz. Flora of Maharashtra State: Dicotyledons Volume 1 & 2 (Singh *et al.*, 2000, 2001); Flora of Marathwada Volume I & II (Naik, 1998); The Flora of The Presidency of Bombay (Cooke, 1958) and Flora of Maharashtra (Almeida, 1998, 2003).

## RESULT AND DISCUSSION

During the preparation of digital database of dicot flora of Nagpur district, 4 tree species were recorded as new additions to the flora of Nagpur district. The brief descriptions of new additions along with their uses and status of plant in nature are given as below:

### 1. Family: Caesalpiniaceae

#### *Caesalpinia coriaria* (Jacq.) Willd.

**References & Synonyms:** *Sp. Pl.* 2: 532, 1800; Almeida, *Fl. Maharashtra* 2: 172, 1998; Singh & Karthikeyan, *Fl. Maharashtra State* (Dicot.) 1: 796, 2000. *Poinciana coriaria* Jacq. *Select Am.* 123, t. 175, f. 36. 1763; *Libidia coriaria* Schlecht. in *Linnaceae* 5: 192, 1830.

Medium sized tree; stem woody, terete, blackish brown, fissured, lenticillate. Leaves alternate, bipinnately compound, 10-15 cm long; pinnae 5-7 pairs +1, subopposite-opposite, 4-7 cm long; leaflets small, subsessile, numerous, opposite, linear-oblong, apex emarginate, base suboblique, margin entire, 0.6-1 cm long, 0.2-0.3 cm broad, glabrous on both surfaces. Inflorescence short dense racemose panicle; flowers axillary, white with yellow tinge on abaxial side, pedicillate, 0.8-1 cm long, 0.7-0.8 cm across; calyx campanulate, lobes 5, oblong, puberulent; corolla lobes 5, clawed, orbicular, hairy at the base; stamens 10, filament pinkish in the middle portion, hairy, anthers brown, extrorse; ovary and style bright pinkish red. Pods flat, oblong, apiculate, twisted, crumpled, brown black or rusty brown, glabrous, 2.5-5 cm long. Seeds brown, oblong.

**Common names:** The American Sumach, Divi-divi, Libi-dibi.

**Flowering & fruiting period:** September-December.

**Distribution:** Ambazari lake area, Saoner, Ambazari garden.

**Uses:** Medicinally important, Dye-yielding tree used in tanning industries.

**Exsiccata:** MTT 406

### 2. Family: Mimosaceae

#### *Acacia campbellii* Arn.

**References:** Arn. in *Nov. Act. Nat. Cur.* 17: 333, 1836; Almeida, *Fl. Maharashtra* 2: 200, 1998; Singh & Karthikeyan, *Fl. Maharashtra State* (Dicot.) 1: 807, 2000.

Small trees; stem armed with straight stipular spines. Leaves alternate, bipinnately compound; pinnae 4-6 pairs; leaflets sessile, 6-12 pairs, linear-oblong, apex acute, base sub obtuse or truncate, margin entire, 0.2-0.4 cm long, 0.2 cm broad; pubescent beneath. Inflorescence globose head, 2-6 form a fascicle at the axil of leaf; peduncle 2.5-3 cm long; flower buds blood red, sessile, fragrant; calyx lobes linear-lanceolate, acute, blood red; corolla tubular, 4 toothed, yellow; stamens many, yellow. Pods linear-oblong, 6-10 cm long, constricted, glabrous.

**Flowering & fruiting period:** January-March.

**Distribution:** University campus, Pandharbodi.

**Uses:** Medicinally important, gum and resin yielding.

**Status of plant in nature:** Rare to Nagpur district.

**Exsiccata:** MTT 585

### 3. Family: Moraceae

#### *Ficus virens* Ait. var. *virens*

**References & Synonyms:** Hort. Kew. 3: 451, 1789; Hook f. *Fl. Brit. India* 5: 515, 1888; Almeida, *Fl. Maharashtra* 4: 178, 2003; Singh *et al.* *Fl. Maharashtra State* (Dicot.) 2: 943, 2001. *F. infectoria* Roxb. *Fl. Ind.* 3: 551, 1832 non Willd. 1806.

Large deciduous tree; stem glabrous, bark grey, smooth. Leaves ovate-lanceolate, apex acuminate, base rounded-truncate, margin undulate, 12-16 cm long, 4-7 cm broad, glabrous on both surfaces. Inflorescence hypanthodium (receptacle), cauliflorous, in pairs, globose, pedunculate; hypanthodium monoecious contains male, female and gall flowers; tepels 3, white, united valvate enclosing one stamen; ovary bicarpellary, out of two carpels only one develops, ovary smooth thin transparent, globose with short

type and stigma dilated; neuter flower pedicellate. Fruit is receptacle globular, slightly depressed at top, 1-2 cm long and broad.

**Common names:** Pipli, Amba payer, Amba piper, Amchar, Bassari, Payer.

**Flowering & fruiting period:** October-May.

**Distribution:** Dhantoli, Bajargaon, Linga.

**Uses:** Medicinally important.

**Exsiccata:** MTT 969

### ***Morus macrourea* Miq.**

**References & Synonyms:** Pl. Jungh. 42, 1851; Hook. f. *Fl. Brit. India* 5: 492, 1888; Almeida, *Fl. Maharashtra* 4: 381, 2003; Singh *et al. Fl. Maharashtra State* (Dicot.) 2: 948, 2001. *M. laevigata* Wall. ex Brandis, *For Fl. N. W. India* 409, 1874.

Medium sized tree. Leaves alternate-cyclic, simple and also 3-lobed, ovate, apex acuminate, base rounded and cordate, margin serrate membranous, pubescent on nerves beneath; stipules lanceolate, pubescent. Inflorescence catkins, drooping; flowers unisexual monoecious, green, sessile; male catkin elongated, densely hairy; female catkins cylindric, 5-12 cm long; flowers with 4 purple tepels fleshy united, valvate, ovary superior, 1 celled, with biparted style. Fruit sorosis, cylindrical, more than 5 cm long, fleshy.

**Flowering & fruiting period:** March-May.

**Distribution:** Telankheri Botanical garden, Umari.

**Uses:** Fruits edible, also grown in gardens.

**Status of plant in nature:** Rare to Nagpur district.

**Exsiccata:** MTT 966

### **CONCLUSION**

The present study is a step ahead in the revision of the flora of Nagpur district which is one of the biodiversity rich regions for medicinal and economically important plants and also some rare, plants, this study will help to identify species which needs conservation.

### **REFERENCES**

- Almeida MR (1998) *Flora of Maharashtra*. Vol. II, Orient Press, Mumbai.
- Almeida MR (2003) *Flora of Maharashtra*. Vol. IV, Orient Press, Mumbai.
- Bhuskute SM (1989) New Records for Nagpur District (Maharashtra). *Ind. Bot. Repr.* 8(1): 39-42.
- Bhuskute SM (1990) New Records for Nagpur District (Maharashtra)-II. *Ind. Bot. Repr.* 9(2): 61-65.

Cooke T (1958) *The Flora of the Presidency of Bombay*. Vol. I-II, Taylor Francis, London; reprinted edition, BSI, Calcutta.

Gadpayale JV, Somkuwar SR and Chaturvedi A (2014) Some noteworthy addition to the Flora of Nagpur district (M.S.), India, *Int. J. of Life Science*, Special issue, A2: 35-38.

Kamble RB, Hate S and Chaturvedi A (2013-a) New additions to the Flora of Nagpur District, Maharashtra. *J. New Biol. Rep.* 2(1): 09-13.

Kamble RB, Hate S, Mungole A and Chaturvedi A (2013-b) New Record of Some Rare Plants to the Flora of Nagpur District, Maharashtra. *J. New Biol. Rep.*, 2(2): 103-107.

Kamble RB, Hate S and Chaturvedi A (2013-c) Some new plant reports to the Flora of Nagpur District, Maharashtra - III. *Sci. Res. Rept.*, 3(2): 124-128.

Kamble RB and Chaturvedi A (2014) New additions to the Flora of Nagpur District, Maharashtra - IV, *Bioscience Discovery*, 5(2):160-162.

Kamble RB, Somkuwar S, Chaturvedi A and Ugemuge NR (2015) New additions to the Flora of Nagpur District, Maharashtra - V. *Journal of Global Biosciences*, 4(5): 2343-2347.

Thakre MT and Srinivasu T (2012a) New (Fabaceae Members) Records to Nagpur District. *MFP News, Dehradun (India)*, Vol. XXII, pp. 4-5.

Thakre MT and Srinivasu T (2012b) New Plant Species Records to Flora of Nagpur District. *MFP News, Dehradun (India)*, Vol. XXII, pp. 6-10.

Thakre MT and Srinivasu T (2013) New Plant Species Records to Flora of Nagpur District (Maharashtra). *Journal of Global Biosciences*, 2(6), pp. 202-205.

Thakre MT and Srinivasu T (2015). Some New Plant Records to Flora of Nagpur District (Maharashtra, India). *Biodiversity of India* Vol. 8: 333-340.

Naik VN (1998) *Flora of Marathwada*. Vol. I & II, Amrut Prakashan, Aurangabad.

Singh NP and Karthikeyan S (2000) *Flora of Maharashtra State: Dicotyledons*. Vol. 1. BSI, Calcutta.

Singh NP, Lakshminarasimhan P, Karthikeyan S and Prasanna PV (2001) *Flora of Maharashtra State: Dicotyledons*. Vol. 2, BSI, Calcutta.

Ugemuge NR (1986) *Flora of Nagpur District*. Shree Prakashan, Nagpur.