

New plant species records to flora of Yavatmal district (Maharashtra)

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Abstract

Yavatmal is one of the districts in the Vidarbha region of Maharashtra state. Yavatmal District is quite rich in angiosperm flora with many important plants. Karthikeyan and Anand Kumar studied 'The Flora of Yavatmal district' and others added some species to existing data. While preparing the electronic herbarium and digital database of dicot from Western Vidarbha region of Maharashtra, several field visits were made, during the study period from January 2014 to December 2016, two dicot taxa collected from Yavatmal district which fall under two different families which are new additions to the Flora of Yavatmal District viz. *Salvadora persica* L. (Salvadoraceae), *Turnera ulmifolia* L. (Turneraceae).

Keywords: New addition, digital database, Yavatmal district, Western vidarbha

Introduction

Yavatmal is one of the districts in the Vidarbha region in Maharashtra with great biodiversity of plants. The climate of district is greatly influenced by its geographical position. Its low lying hills and valleys play a pivotal role in shaping its weather characteristic. The climate is hot and sometimes very dry. Yavatmal district lies between 20.24°N 78.06°E. There are previous records of 'The Flora of Yavatmal district' [1] and others added some species to existing data. However, after 23 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 plants in nature. While preparing the electronic herbarium and digital database of dicot from Western Vidarbha region of Maharashtra several field visits were made, during the study period from January 2014 to December 2016, two dicot taxa collected from Yavatmal district which fall under two different families which are new additions to the Flora of Yavatmal District viz. *Salvadora persica* L. (Salvadoraceae), *Turnera ulmifolia* L. (Turneraceae).

Material and Methods

Field visits were undertaken to different localities of Yavatmal district during January 2014 to December 2016 throughout the year (various seasons) for preparation of the electronic herbarium and digital database of dicot from Western Vidarbha and collected the digital photos of plant species. During the study period, two different plant species of two different families were collected, identified and recorded as new additions to Flora of Yavatmal district. Collected plant specimens were identified with the help of different standard floras [2-6].

Result and Discussion

During the preparation of digital database of dicot flora of Yavatmal district, two different plant species were recorded

as new additions to the flora of Yavatmal district. The brief descriptions of new additions along with their status of plant in nature are given as below:

1) Family: Salvadoraceae

Salvadora persica L.

References and Synonyms: var. *wightiana* (Planch. ex. Thw.) Verdc. in Kew Bull. 19: 150. 1964. *S. wightiana* Planch. ex Thw. Enum. Pl. Zeyl. 190. 1860. *S. Persica* sensu Roxb. Fl. Ind. 1:389, 1837 non L. 1753; C.B.Cl. in Hook. f. Fl. Brit. India 3: 619. 1882; Cooke, Fl. Pres. Bombay 2: 182. 1958 (Repr.) 'Khatu', 'Pilu', 'Pivla'.

Small, much branched evergreen tree. Barkis deeply cracked, grayish-white. Branches drooping, numerous. Leaves opposite, entire, succulent, elliptic-lanceolate or ovate, 3-6 x 1.5-3 cm long, obtuse. Flowers are greenish-yellow; in axillary and terminal panicles. Calyx consists of 4 sepals, united, campanulate; petals 4, campanulate, tube short, very thin; stamens 4, shorter than the corolla, exserted; ovary one celled, style very short, stigma broad, truncate. Fruits fleshy, globose, red when ripe.

Flowering and fruiting: November to February

Distribution: Rare, collected from Kolura village of Digras taluka, Yavatmal district, Maharashtra

Status of plant in nature: Rare to Yavatmal district.

2) Family: Turneraceae

Turnera ulmifolia L.

References and Synonyms: Sp. Pl. 271. 1753; Backer in Steenis, Fl. Males. 1. 4(3): 231, f. 2. 1951; Brizicky in J. Arnold Arbor. 42:208. 1961.

Perennial herb with about 1 m high; branchlets glandular pubescent. Leaves 4-15 X 1.5-3.5 cm. chartaceous, lanceolate, 15- nerved, hairy, clustered towards the tips of branches, margins doubly serrate, acute leaf apex and varies from glabrous to pubescent. Flower bisexual, actinomorphic yellow, in axillary cymes; flower subtended by 3 bracts; calyx consist of 5 sepals, fused, green; corolla consist of 5 petals, free, yellow; stamens 5, each fused to the base of a petal; ovary superior with single locule and many seeds. Capsule globose, capsule.

Flowering and fruiting: June - November

Distribution

Collected from Digras, Darwha taluka, Yavatmal district.

Status of plant in nature: Weed in waste lands and along roadsides, cultivated in gardens as an ornamental plant in some taluka of Yavatmal district.z



Fig 1: Habit of *Salvadora persica*



Fig 2: Inflorescence of *Salvadora persica*



Fig 2: Fruit of *Salvadora persica*



Fig 4: Flower of *Turnera ulmifolia*

Conclusion

This study added some rare plants like *Crateva magna* (Lour.) DC. (Capparaceae), *Salvadora persica* L. (Salvadoraceae), *Holoptelea integrifolia* (Roxb.) Planch. (Ulmaceae) to the flora and collected for the first time from this region with mentioning their status. The significance of such field research is the detection of novel additions to a floristic region, which subsequently improve our understanding of plant biogeography, species diversity. The present study is a step ahead to study the flora of Yavatmal district which is one of the biodiversity rich area, this study will help to identify species which needs conservation.

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