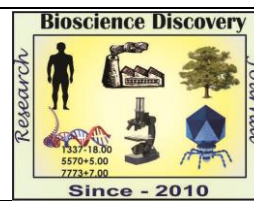


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Research Article



***Aeginetia indica* L. and *Conyza bonariensis* (L.) Cronq. are new distributional records in Satpuda range of Khandesh region, Maharashtra**

Tanveer A. Khan¹ and Javed V. Khan²

¹Department of Botany, H. J. Thim College of Arts and Science, Mehrun, Jalgaon, Maharashtra, India.

²Department of Biotechnology, PGCSTR, Jalgaon, Maharashtra, India.

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Abstract

Satpuda range of Khandesh region with great diversity of plants. The present paper deals with addition of two new flowering plants records from different parts of the Satpuda ranges of Khandesh region of Maharashtra are new distributional records for the first time. These species are *Aeginetia indica* L. (Orobanchaceae) and *Conyza bonariensis* (L.) Cronq. (Asteraceae) are reported for the first time for Satpuda ranges of Khandesh region of Maharashtra. The study provides a detailed taxonomic description, photographs and relevant information based on fresh collections.

INTRODUCTION

Vegetational and floristic studies have been gained increased importance and relevance in recent years in view of the present need for a thorough, up to date assessment of the natural resources of our vast country. The need for conservation and balanced exploitation of the nation's plant wealth has also been keenly felt. In this context, intensive exploration of limited areas for obtaining an inventory of the floristic elements present and identification of the potential sources of economic importance have become imperative.

Khandesh consist of three districts Jalgaon, Dhule and Nandurbar. Khandesh lies at the Northwestern corner of the Deccan plateau, in the valley of the Tapti river, and is bound to the north by the Satpuda ranges, to the east by the Berar (Vidarbha) region, to the south by the hills of Ajanta, belonging to the Marathwada region of Maharashtra, and to the west by the Northern most ranges of the Western Ghats, and beyond that the coastal plain of Gujarat. Khandesh includes varied topographical features and landscape. It lies between 20° 8' and 22° 7' North latitude and 73° 42'

and 76° 28' East longitude. Khandesh covers a total area of 26,703.36 sq. km. The forest of the Khandesh region is of dry deciduous type. The vegetation varies with the changes in altitude, aspect and rainfall. While working on floristic of Khandesh region of Maharashtra we undertook frequent collection tours in every season to study plants.

Khandesh region though botanically rich in biodiversity have not been explored extensively except a few sporadic reports on floristic of Karnik 1959; Salunkhe 1995; Yadav 2003; Valvi 2006; Khan 2014 and Khan 2015.

MATERIALS AND METHODS

Satpuda ranges, which is one of the major hotspot of plants in Khandesh region of Maharashtra. During botanical exploration of Khandesh region in Maharashtra two interesting species are *Aeginetia indica* L. (Orobanchaceae) and *Conyza bonariensis* (L.) Cronq. (Asteraceae) was collected from hill slopes, open grassy filed, margins of water courses and in moist shady places in forest at high elevations.

The species was identified with the help of pertinent literature (Verma *et al.*, 1993; Mudgal *et al.*, 1997 and Singh *et al.*, 2001) and the taxa were confirmed by Dr. Milind Sardesai, Department of Botany, Savitribai Phule Pune University, Pune and by consulting the BSI western Circle, Pune, herbarium as well. The voucher specimens have been deposited in the herbarium of Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon, Maharashtra.

RESULTS AND DISCUSSION

The genus *Aeginetia* L. about 3 species; Indo-Malesia, E. Asia and Japan and only one species is found in Maharashtra. *Aeginetia indica* L. is new distributional records for Satpuda range of Khandesh region. Detailed description of the specimens is given below:

Aeginetia indica L., Sp. Pl. 632. 1753: Hook. f, Fl. Brit. India 4: 320.1884; Cooke, Fl. Pres. Bombay 2: 384.1958 (Repr.); Mudgal *et al.*, in Fl. M. P. 2: 247. 1997; Singh *et al.* Fl. Maharashtra St. Dicot. 2: 558. 2001. Gulab-dani. Plate-I.

Leafless herbs, erect, 10-30 cm high, root parasites, purplish green; rhizome tuberous, stolons subterranean, giving out succulent, fibrous roots terminating in haustoria. Scapes purple-brown or violet, slender, embraced by short scales at base. Calyx mauve to purple, 1.5-3 cm long, posteriorly ending in a beak. Corolla dark purple, tubular, curved, 2-4 cm long, obscurely bilabiate; lobes unequal *ca* 0.6 cm long, obtuse, entire to finally crenate. Capsules ovoid-globose, 1.5-2 x 1 cm. Seeds reticulate.

Flowering and Fruiting: July-September

GPS Reading: N 21° 21' 28.12" E 75° 31' 34.36" (Elevation 486m)

Distribution: Occasional. In satpuda ranges grow on sloping forest floor covered with decayed leaves in slopes. In Maharashtra reported from Chandrapur, Kolhapur, Pune, Raigad, Ratnagiri and Sindhudurg.

Specimens examined: Jalgaon Dist., Devjiri forest, TAK 2314; Vaijapur forest TAK 2973; Langdha Aamba, TAK 3397.

The genus *Conyza* Less. about 60 species, mostly in temperate and subtropical and 6 species are found in Maharashtra only from Kolhapur, Pune, Aurangabad and Nagpur. Out of six one is new distributional records for Satpuda range of

Khandesh region. Detailed description of the specimens is given below:

Conyza bonariensis (L.) Cronq. in Bull. Torrey Bot. Cl. 70: 632. 1943; Verma *et al.*, in Fl. M.P.1: 577.1993; Singh *et al.* Fl. Maharashtra St. Dicot. 2: 200. 2001. *Erigeron bonariensis* L. Sp. Pl. 863. 1753. *E. linifolius* Willd. Sp. Pl. 3: 1955. 1803; Hook.f. Fl. Brit. India 3: 254. 1881. Fleabane, hairy horseweed. Plate-I.

Annual, erect, viscid-pubescent herbs, 30-150 cm high. Leaves narrowly oblong-lanceolate, cuneate at base, acute at apex, coarsely serrate-dentate at margins, 1.5-8.5 x 0.3-1.6 cm, pubescent on both surfaces; upper leaves linear-lanceolate with entire margins. Heads in terminal, white or yellow, 4-4.5 mm in diameter, in long leafy panicles; involucre bracts many seriate 3-4 mm long linear, densely pubescent. Ray florets 3-4 mm long, ligulate; disc florets 2-3 mm long, tubular, 5-lobed. Achenes 1-1.5 mm long, sub-globose; pappus 3-4 mm long brownish.

Flowering and Fruiting: January-April.

GPS Reading: N 21° 19' 21.55" E 75° 35' 31.50" (Elevation 672m)

Distribution: Rare. In Satpuda ranges at open grassy field. In Maharashtra reported from Kolhapur, Pune, Aurangabad and Nagpur.

Specimens examined: Jalgaon Dist., Devjiri forest, TAK 2732; Langdha Aamba, TAK 2948; Waghjira forest TAK 3157.

CONCLUSION

We have gone through all pertinent literature (Kshirsagar 2008, Patil 2003) and by consulting the BSI Herbarium Pune. To find out the occurrence, distribution and habitat of these species. We found that, these species were not reported in any flora of the Satpuda range of Khandesh region in Maharashtra. This clearly reveals that, these species are rare to flora of Maharashtra State, even India as a whole. These species are new record to the flora of Satpuda range of Khandesh region of Maharashtra State. The voucher specimens are deposited in the herbarium of Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon. On close examination of herbarium specimens and detailed scrutiny of literature published till today on these taxa, it can be claimed that these are new records for Satpuda range of Khandesh region of Maharashtra State.

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***Conyza bonariensis* (L.) Cronq.**



***Aeginetia indica* L.**

Plate-I

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