

***Achyranthes coynei* Sant. and *Pleocaulus ritchiei* (Cl.) Bremek. are new distributional records to the Khandesh region of Maharashtra**

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Abstract

Two species of flowering plants, *Achyranthes coynei* Sant. (Amaranthaceae) and *Pleocaulus ritchiei* (Cl.) Bremek. (Acanthaceae) have been reported first time in the Khandesh region from the Satpuda range of Maharashtra. The study provides a detailed taxonomic description, photographs and relevant information based on fresh collections.

INTRODUCTION

Regional floristic studies are very significant for getting information about vegetational diversity. It can be achieved by intensive exploration of smaller areas. It updates the data of regional area. Khandesh region consist of three districts Jalgaon, Dhule and Nandurbar. 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 Khandesh region by Patil 2003; Kshirsagar 2008; Khan 2016; Khan 2017 and Khan 2019.

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 four interesting species are *Achyranthes coynei* Sant. (Amaranthaceae) and *Pleocaulus ritchiei* (Cl.) Bremek. (Acanthaceae) was collected from 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 Singh *et al.*, (2001), Nayar and Sastry (1988), Cooke (1958) and Hooker (1884), 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 *Achyranthes* L. about 02 species are found in Maharashtra. *Achyranthes coynei* Sant. is new distributional records for Satpuda range of Khandesh region of Maharashtra. Detailed description of the specimens is given below: *Achyranthes coynei* Sant. in Kew Bull. 1948: 488. 1949 et in Rec. Bot. Surv. India 16 (1), Fl. Khandala 224. 1967 (3rd Rev. ed.); Sharma & Kulkarni in Nayar & Sastry (eds.),

Red Data Book Indian Pl 2: 8, f. 1988; Singh *et al.* Fl. Maharashtra St. Dicot. 2:779. 2001.Fig.1.

Shrubs, perennial, much branched, erect, 3-3.5 m tall; stems terete, woody, young parts pubescent. Leaves many, deciduous; lower 20 x 9 cm or more, decreasing upwards in size, elliptic or lanceolate, acute or cuneate at base, acute or acuminate at apex, glabrous above and pubescent beneath, 10-12-nerved; petioles up to 3 cm long, pubescent. Flowers initially erect, then deflexed. Inflorescence 5-6 cm long, densely pubescent; bracts ovate, persistent. Perianth ca 1 cm long, green, margins scarious; stamens 5, staminode fimbriate, rose colored. Capsules 5 mm long with persistent style and perianth. Seeds solitary, brown.

Flowering and Fruiting: October-December

GPS Reading: N 21° 41' 1" E 74° 1' 25.10" (Elevation 863 m)

Distribution: Rare. In Maharashtra reported from Raigad, Sindhudurg and Thane.

Specimens examined: India, Maharashtra, Nandurbar District: TAK 5047 (CAL), Date: 08.10.2023, Amlibari forest; TAK 5101 (CAL), Date: 29.10.2023, Dab; TAK 5137 (CAL), Date: 12.11.2023, Toranmal forest. In Satpuda ranges grow along the ghats in gravelly soil.

The genus *Pleocaulus* Bremek. only single species was found in Maharashtra. *Pleocaulus ritchiei* (Cl.) Bremek. is new distributional records for Satpuda range of Khandesh region. Detailed description of the specimens is given below:

Pleocaulus ritchiei (C.B.Cl.) Bremek. in Verh. Nederl. Akad. Wet 2, 40: 185. 1944; Sant. in Univ. Bombay Bot. Mem. 2:45. 1952; Singh *et al.* Fl. Maharashtra St. Dicot. 2: 661.2001. *Strobilanthes sessilis* Nees var. *ritchiei* C.B.Cl. in Hook. f. Fl. Brit. India 4:452. 1884; Cooke, Fl. Pres. Bombay 2:443. 1958 (Repr.). Fig.1.

Undershrubs; stems erect, quadrangular, usually hairy. Leaves sessile or nearly so, 2-3 cm long, nearly as broad as long, ovate, lineolate and hairy above, nearly glabrous except on the nerves which are bristly beneath, apex acute, base rounded or often cordate. Flowers purple in strobiliform, axillary and terminal, pedunculate or subsessile, 2-8 cm long spikes, often 3 together at tops of branches. Capsules c 1 cm long, linear, oblong, acute,

glabrous or with a few, minute, glandular hairs at top. Seeds c 0.25 cm across, suborbicular, hygroscopically brown hairy all over.

Flowering and Fruiting: September-December

GPS Reading: N 21° 21' 26.40" E 74° 36' 35.70" (Elevation 587 m)

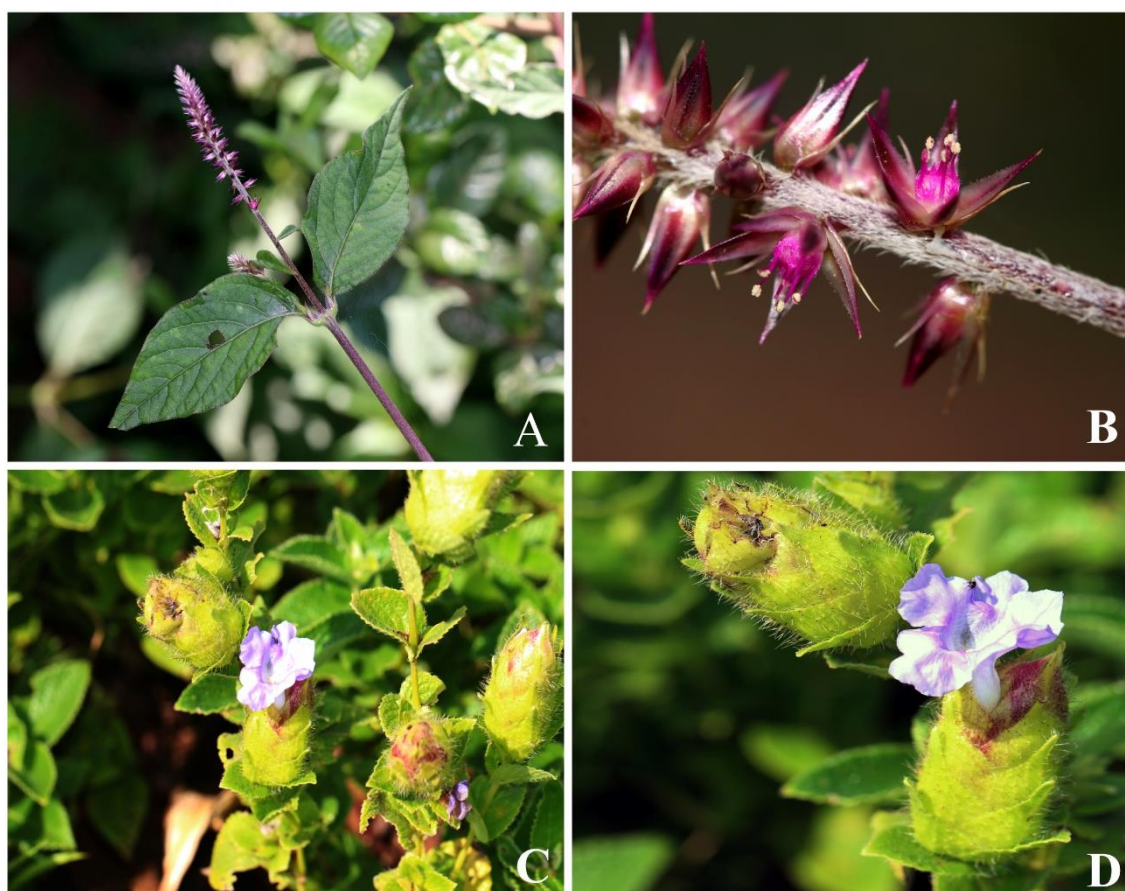
Distribution: Rare. In Maharashtra reported from Kolhapur, Ratnagiri and Sindhudurg.

Specimens examined: India, Maharashtra, Nandurbar District: TAK 5061 (CAL), Date: 08.10.2023, Amlibari forest; TAK 5128 (CAL), Date: 29.10.2023, Dab; TAK 5163 (CAL), Date: 12.11.2023, Toranmal forest. In Satpuda ranges grow along the hill lopes.

We have gone through all pertinent literature (Kshirsagar 2008, Patil 2003, Khan 2016, Khan 2017 and Khan 2019) 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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**Fig.1. *Achyranthes coynei* Sant. A. Habit; B. Flower
Pleocaulus ritchiei (Cl.) Bremek. A. Habit; B. Flower**

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