

***Ipomoea clarkei* Hook.f. : A New Record to Nandurbar and Dhule District Flora of Maharashtra**

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Abstract

Current work deals with the growing growth of Nandurbar and Dhule district flora from a Convolvulaceae family member. *Ipomoea clarkei* Hook.f. is recorded during a botanical tour of the Akkkuwa Tahsil Mountain belongs to Nandurbar district, which is at satpuda areas in northern Maharashtra. Detailed floristic research, geographic locations and plant photos were collected and recorded with a comparative literature review on *Ipomoea clarkei*.

KEYWORDS: Convolvulaceae, *Ipomoea clarkei*, New Record, North Maharashtra, Dhule and Nandurbar District.

Introduction

Ipomoea L. is one of the largest genera of Convolvulaceae, represented by c. 650 species and largely spread to tropical and warm temperate regions in the world (Mabberley 2008). In India, the genus is represented by c. 65 species (Shimpale *et al.*, 2012; Shimpale *et al.*, 2014; Sarvalingam *et al.*, 2014), of which three species and one variety, i.e. *Ipomoea clarkei* hook. f. (Maharashtra), *Ipomoea laxiflora* H.J. Chowdhery & Debt (Western Himalaya, Uttarakhand), *Ipomoea salsettensis* Santapau & Patel (Maharashtra) and *Ipomoea deccana* Austin var. *lobata* (C.B. Clarke) Johari (Karnataka, Kerala and Maharashtra) are endemic to India (Singh *et al.*, 2015).

North Maharashtra region of Khandesh is rich in biodiversity of plant and various species if Convolvulaceae were recorded and explored extensively by Patil (2003), Yadhav (2003), Kshirsagar and Patil (2008), Tanveer and Chaudhari (2014) and M. B. Patil and P. A. Khan (2017). In addition to all these the present paper is deals with addition of new species records to Convolvulaceae in Nandurbar district area of north Maharashtra.

Study area: Mountain area of Akkalkuwa Tahsil in Nandurbar district, covers the Satpuda hilly regions of North Maharashtra with peculiar plant diversity (M. B. Patil and P. A. Khan 2015). During the botanical excretion in July, August and September 2018, *Ipomoea clarkei* Hook.f. (Convolvulaceae) was recorded in flowering condition (Photo plate no. 1) on GPS locations 21°38'25.93"N 75°01'11.59"E (Elevation 412m) and its all nearby surrounding.

Materials and Methods

During this botanical exploration of Nandurbar district in Maharashtra a new species of *Ipomoea* were observed and that never be seen or recorded do not form this

area nor be mentioned in Dhule and Nandurbar District Flora of Dr. D. A. Patil. Systematic enumeration of plants conformed that the plant species is *Ipomoea clarkei* Hook.f. (Convolvulaceae) collected from slop of hill of Dab area of Akkalkuwa tahasil of Nandurbar Dist.

Results and Discussion

***Details description of Ipomoea clarkei* Hook.f. is given below:**

Hook.f., Fl. Brit. India 4: 734 1885; Cooke, Fl. Bombay 2: 245.1908; P. Lakshiminaras. & Sharma, Fl. Nasik Dist. 327. 1991; Almeida, Fl. Maharashtra 3B: 323. 2001; Venkanna & Das, Fl. Maharashtra (Dicot.) 2: 460. 2001. (Clarke, C.B. (1885) & Cooke, T. (1908)).

Annual slender twining herb. Stem slender, hairy, c. 1.2mm in diam. Leaves 2.5–6 x 1.2–4 cm, ovate, deeply cordate with rounded 0.8–1 cm lobes at base, entire along margins, long acuminate at apex; acumen c. 1cm long, bulbous based hairy on both surfaces, 5-nerved at base; petioles up to 3cm long, slender, sparsely hairy. Inflorescence axillary solitary, 1-flowered cyme. Peduncle slender 7–12 mm long, sparsely hairy; bract c. 2mm long, subulate; bracteole 1-2, c. 1mm long. Pedicel 8-15 mm long, slender, hairy, slightly thickened towards the apex in fruiting stage. Flowers yellow, 3–4 cm long. Calyx 7–8 mm long, 5 lobed; lobes slightly connate at base, unequal, ovate-lanceolate, entire along margin, acute-acuminate at apex, bulbous based hairy on upper surface, glabrous on inner surface. Corolla 3–4 cm long, infundibuliform, tube 2.5–3.2 cm long, limb c. 1.5cm in diam., glabrous. Stamens 5, unequal, 1.2–1.5 cm long, epipetalous; filaments 0.9–1.2 cm long, slightly dilated and hairy at base, glabrous and narrow towards apex; anthers ovate c. 3 x 0.5 mm long. Gynoecium up to 2.2cm long, inserted; ovary ovate, c. 1.8 x 1.1 mm long; style c. 2cm long; stigma globose, 0.5mm in diam. Capsule globose or sub orbicular, c. 1 x 0.9 cm, beaked, glabrous, 4-seeded; seeds c. 5 x 4 mm long, oblong, puberulous, dark brown.



Photo plate 1: *Ipomoea clarkei* Hook.f.

Flowering and Fruiting: September–December.

Distribution: Endangered. In satpuda ranges. On gravelly, rocky substrat or on rocks along hill slopes. This species is reported only from few locilites of maharastra that is Pune (Junnar), Thane (Bhitola, Kasara) and Jalgaon (Ammaba Pani). Endemic to western peninsular

Specimen examined: Nandurbar Dist. Akkalkuwa (Dab-Molgi forest PAK 2877).

Habitat: Rare in mixed dry deciduous forests.

GPS Reading: 21°38'25.93"N 75°01'11.59"E (Elevation 412m)

Conclusion

Nandurbar area of Maharashtra covers a mountainous part of the Satpuda forests; it has a wide variety of plant species that belong to several groups. Many taxonomists wrote new plant species in the past decade and mentioned their work as a complement to local flora. Based on all the taxonomic research and literature review, it was demonstrated and decided that *Ipomoea clarkei* Hook.f. (Convolvulaceae) in a new record on the vegetation of Dhule and Nandurbar districts flora by Dr. D.A. Patil which can helps taxonomists and researchers to farther studying.

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