RESEARCH ARTICLE

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Corynandra chelidonii (L.f.) Cochrane & Iltis (Cleomaceae): A new distributional plant record to Chandrapur district (MS), India.

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ABSTRACT

The present paper reports the *Corynandra chelidonii* (L.f.) Cochrane & Iltis[7] new distributional plant records of macrophytic plant species from Sakaherwahi Lake of Chandrapur Taluka, Chandrapur District of Maharashtra state. A detailed taxonomic description, phenology, distribution and photographs along with its medicinal uses are provided for further study of the taxa.

Keywords: Corynandra chelidonii, new report, Sakharwahi Lake, Chandrapur

INTRODUCTION

The *Cleome* [1](Cleomaceae), a pantropical genus comprises ca.250–280 species [2-3], distributed from warmer and tropical regions of the world [4]. The major diversity of *Cleome* L. is restricted to tropical regions, where approximately 150 species have been recorded.

Cleome L. recently segregated into number of genera [5,6] and the genus Corynandra Schrad. ex Spreng., based on Corynandra chelidonii (L.f.) Cochrane & Iltis [Cleome chelidonii L. f.] should be re-established. Corynandra Schrad. ex Spreng is characterized by the closed aestivation of the flowers (the petals enclosing the stamens in bud until close to anthesis); high number of stamens (about10 to100 plus, sometimes fewer in Australian species), the adaxial (if not all) filaments of which are more or less apophysate; sessile, typically erect capsules with persistent valves that dehisce from the apex; and open seed cleft.

The solitary flowers borne in the axils of upper leaves and an obsolete disk are additional associated features [6].

In India, it is represented by 15 species and 2 varieties [7],12 are reported in Maharashtra [9] and 3 species reported from Chandrpur district *Cleome gynandra* L. and *Cleome viscosa* L.[10], *Cleome rutidosperma* DC [11].

METHODOLOGY

During the macrophyte explorations in Chandrapur district of Maharashtra state, a small population of a Corynandra Schrad. ex Spreng. species was observed the margins of Sakahrwahi Lake Chandrapur Taluka, Chandrapur district, and a few specimens were collected from the existing population by second author for study. Specimens were brought to the laboratory and processed for herbarium specimens with standard procedure given by Survase and Dhabe [17]. Scrutiny of floristic literature indentified as Corynandra chelidonii (L.f.) Cochrane & Iltis [9,12,13,14]. Corynandra chelidonii has not been reported from Chandrapur district [10,11,15]. Hence, the present collection is the first plant species records to Chandrapur district of Maharashtra state .The herbarium specimens UBD-119 are deposited in the Janata Mahavidyalaya Herbarium, (JMV), Chandrapur.

RESULTS AND DISCUSSION

Collected plant specimen photographs given below along with flowering and fruiting seasons, distribution, habitats and locality,, Habitat ,Common name ,Marathi name of the plant cited in the text. Total 32 aquatic macrophytes reported from Sakharwahi Lake [16] .Present report of *Corynandra chelidonii* (L.f.) Cochrane & Iltis, is new distributional plant records to the flora of Chandrapur district.

Taxonomic Treatment of *Corynandra chelidonii* (L.f.) Cochrane & Iltis

Corynandra chelidonii (L.f.) Cochrane & Iltis in NOVON 23:21–26. 8 April,2014. Cleome chelidonii L. f. Suppl. Pl. 300. 1781; Polanisia chelidonii (L.f.) DC., Prodr.1: 242.1824,non, Corynandra pulchella Schradr ex Spr., Syst. 4:204, 1827. Graham, Cat. Bombay Pl. 7, 1839;

Cleome chelidonii Bojer, Ann.Sci.Nat.,Bot. Ser.2,20:56.1843.[=Cleome strigosa (Bojer) Oliv.]; Dalz. & Gibs., Bombay Fl. 8, 1861; Hook. f. & Thoms. In Hook. f. Fl. Brit. India 1: 170. 1872; Woodrow in JBNHS 11: 123, 1897;Cooke, Fl. Pres. Bombay 1: 42[4]. 1958 (Repr.); Jacobs in Steenis Fl. Males 1, 6: 102. 1960; Santapau, Fl. Khandala ed. 3,8,1967; Cherian & Pataskar, BOBSI 11: 383, 1969; Ugemuge, Fl. Nagpur 54, 1986; Kamble & Pradhan, Fl. Akola 16, 1988; Almeida, Fl. Savantwadi 42, 1990; Raghavan in Sharma et al. Fl. India 2: 306, f. 58. 1993. Yadav & Sardesai, Fl. Kolhapur Dist. 44, 2002. (Photo Plate .1)

Description - Annual, erect, much-branched, 30-90 cm high; stem and branches striate, glabrous except for a few scattered hairs from glandular bases. Leaves 3-7 (the number of leaflets diminishing upwards), passing into simple, linear bracts above; leaflets up to 6 cm long, oblong-obovate, or the upper narrow-linear, appressedly pubescent; reaching 10 cm long, glabrous except for a few glandular hairs. Flowers rosy, in terminal and axillary racemes, becoming corymbose; pedicels 2.5-4 cm long. Sepals small, ovate, acute. Petals 10- 12 mm long, obovate, mucronate. Stamens indefinite. Capsules 5-10 cm long, slender, cylindric, tapering at both ends, finely striate. Gynophore 0. Seeds yellowish-brown, echinate.

Phenology: July-November.

Distribution: Native in the tropical. Throughout northern Western Ghats, water loving and along the water bodies.

Local Name- Pan Tilwan . **Common Name –** Calandine Spider Flower

Habitat- Along the margins of freshwater swamps palce and water bodies, rice fileld.

Specimens examined: India: Maharashtra, Chandrapur District, along the margins of Sakahrwahi Lake of Chandrapur Taluka, Chandrapur, by U.B.Deshmukh on dated 09.09.2018, 20°012′85″ N, 79°14′97″E, 194 meters above sea level. (UBD-119).

Medicinal uses: Used often in rubefacient and counter irritant preparations[14] Leaf extract used for earache by local tribal peoples.

Other Economical Uses- Not known.

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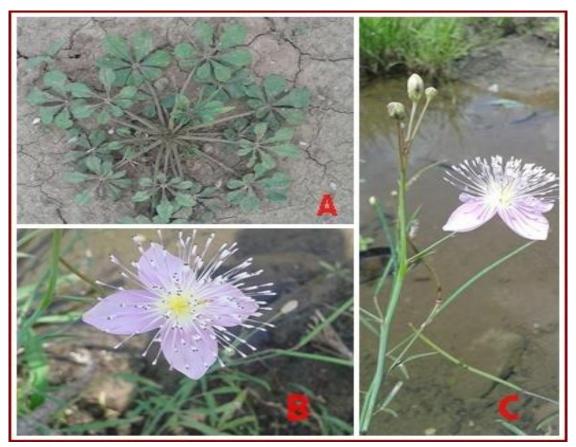


Photo Plate 1. *Corynandra chelidonii* (L.f.) Cochrane & Iltis. A. Seedling Stage ,B.Flower,C. Flowering branch showing flower buds, flower and fruits.

CONCLUSION

Corynandra chelidonii (L.f.) Cochrane & Iltis reported as new distributional plant records to the flora of Chandrapur district and new aquatic macrophyte plant species records to the diversity of macrophytes.

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Conflicts of interest: The authors stated that no conflicts of interest.

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