CORYNANDRA CHELIDONII VAR. PALLAI (REDDY AND RAJU) V.S. RAJU; - NEW ADDITION TO THE ANGIOSPERMIC FLORA OF MAHARASHTRA, INDIA.

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ABSTRACT:
Field survey resulted in collection of Corynandra chelidonii var. pallai (Reddy and Raju) V.S. Raju, of family Cleomaceae as a new addition to the flora of Maharashtra State with recent literature of classification system. The paper also envisages brief citation, description, flowering and fruiting time followed by ecological notes.

Keywords: Corynandra chelidonii, diversification, taxonomic literature and Phenology.

INTRODUCTION:
In the recent years there are some new additions were reported to the Flora of Maharashtra State such as Juncus bufonius L. (Lekhak et al., 2011), Premna mollisima Roth. (Paithane and Bhuktar 2013); Hedychium flavescens Carey ex Roscor (Jadhao et al., 2014); Physalis pruinosa L. (Somkuwar et al. 2014); Amomum maximum Roxb. And Zingiber capitatum Roxb. var. elatum (Roxb.) Baker, (Govekar and Sardesai 2015); Opilia amentacea Roxb. (Somkuwar et al. 2014); Amorphophallus longiconnectivus Bogner. And Phyllodium longipes (Craib) Schindl. (Gadpayale et al., 2016) etc.

The genus Cleome was first described by Linnaeus in Species Plantarum, Vol. 2 (1753: 671) of family Cleomaceae is almost universally accepted from the past 140 years (e.g. Hooker and Thomson 1872, Cooke 1903, Sundararaghavan 1993, Reddy and Raju 2001 and Kers 2003) with approximately 250 accepted species (Mabberley 2008 and The Plant List 2018) in the world (Cooke 1903).

In relation to this some worker as Russell L. et. al. (2017) in resolving generic boundaries in Indian-Australasian Cleomaceae: Circumscription of Areocleome, Arivela, and Corynandra as distinct genera and Feodorova, T. A. et al. (2010) provides molecular data for the diversification and the origin of C4 in Cleome (Cleomaceae) which also explore and concrete the opinions of Cochrane and Iltis (2014) which is represented by 18 species in India (Sundararaghavan 1993) and 12 species in Maharasha state (Flora of Maharashtra state by BSI, Vol-I, 2000) including recent discovery of Corynandra elegans Chandore, U.S. Yadav and S.R. Yadav (2016).

In the present work Cleome chelidonii L. f. is now considered as Corynandra chelidonii (L. f) Cochrane and Iltis (L. f) Cochrane and Iltis (Cleome chelidonii L. f) which is re-established with other four combinations as C. felina (L. f) Cochrane and Iltis, C. flava (Banks ex DC.) Cochrane and Iltis, C. viscousa (L.) Cochrane and Iltis and C. viscousa subsp. nagarjunakondensis (Sundararagh.) Cochrane.

Recently available literature of Iltis and Cochrane (2007, 2014) represents the division of Cleome s.l. into a number of segregate genera. According to Cochrane and Iltis (2014), the genus Corynandra Schrad.exSpreng., based on Corynandra chelidonii (L. f) Cochrane and Iltis (Cleome chelidonii L. f)...
and raju) V.S. Raju, ined. [V.S. Raju, per. comm.] (2017).
There is no any information in any regional flora and taxonomic literature about the occurrence of this species in Maharashtra State; hence this article is about the first time reporting of Corynandra chelidonii var. pallai (Reddy and Raju) V.S. Raju for the Angiospermic flora of Maharashtra State, India.

METHOD AND MATERIAL:
Field explorations were made in Eastern region of Maharashtra State, India to collect specimens in different seasons (2015 to 2018) in order to record the actual and essential key characters of specimens in reproductive and vegetative phases. Herbarium specimens were prepared and all relevant data were recorded in a field book along with photographs.


RESULTS AND DISCUSSION
Erect, annual herb, much branched up to 1.5 m high; internodes to 12 cm. Basal leaves 3–5 foliate; leaflets up to 4-7 x 0.3-0.7 cm. lanceolate, cuneate at base, acute or rounded at apex margin crenate to crenate-serrate. Petiole 4- 8 cm, upper leaves 1–3 foliate; leaflets linear, base cuneate or rounded, apex acute, serrate. Petiole 2-4 cm. Flowers showy, pinkish or rosy in lax terminal corymbose racemes. Bracts foliaceous 1.5 mm long. Flower buds ovoid. Sepals elliptic, acuminata 1.5-2 mm. Petals ovate, 1.4- 1.7cm, rosy (pink). Stamens numerous (120–160); filaments 1.5- 1.8 cm, purple tinged. Ovary sessile, 8-10 mm long, glabrous. Capsule linear-cylindrical, narrow at the base, beak 5-10 mm long. Valves striate, parallel nerved, glabrous. Seeds many asymmetrical ovoid, comma shaped, compressed. 1.3–1.8 mm in diam. dark brown, central portion paler and smooth, cleft narrow, slightly coloured, about 0.5- 0.7 mm deep. Testa with scattered scales, bearing waxy coating, elaisome absent.

CONCLUSION:
Habitat: Margins of Lake and Stream.
Distribution: Kondha, Bhuyar, Shahapur, Kardha, and Khapari (Chichal) Dist.- Bhandara (Maharashtra) India.
Phenology: Flowering and fruiting: July–December.
REFERENCE:


Linnaeus C. 1753. Species Plantarum 2: 671.


Paithane Vijay and Bhuktar A. S. 2013. Premnammolissima Roth.-new reports for flora of Maharashtra (India). The Indian Forester, ISSN No. 0019-4816.


FIG. 1- *Corynandra chelidonii* var. *pallai* (Reddy & Raju) V.S. Raju; i- Root view, ii- in habitat, iii- Flowering, iv- single twig with buds, v- flowering mode at node, vi- single flower, vii- fruit.