

## Leucas angularis Benth. (Lamiaceae): New record to the flora of Maharashtra, India

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### KEYWORDS

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### ABSTRACT

The current research article deals with the new plant species addition to the floristic study of Maharashtra state, India alongside the definite depiction, morphology, and vegetation. During the broad botanical investigation of the northern Western Ghats of Maharashtra, *Leucas angularis* Benth. (Lamiaceae) are gathered. After macroscopic and microscopic perception and a basic survey of the accessible references, these species are found as new records of the flora of Maharashtra, India. *Leucas angularis* Benth. a new addition of the Flora of Maharashtra, India.

### INTRODUCTION

The *Leucas* R. Br. is quite possibly of the largest genera having a place with the family Lamiaceae and subfamily Lamioideae (Naidoo et al., 2021; IPNI, 2024). The *Leucas* R.Br. is represented by 100 taxa disturbed in tropical to southern Africa, Arabia, tropical and subtropical parts of Asia and Australia. In India, it is represented by 41 taxa (Choudhary et al., 2017; Sajna & Sunojkumar, 2018). The *Leucas angularis* Benth. taxa are endemic to the Western Ghats of India (IBP, 2024; RBG, 2024). These studied taxa were identified by using Flora, Herbarium catalog & monographs (Hooker, 1885; Nair & Henry, 1987; RBG, 2024). Investigation and scientific literature survey revealed that this taxa reported from southern Western Ghats of Karnataka, Kerala and Tamil Nadu (Kotresha, 2002; Prasad & Sunojkumar, 2014; R. K. Singh, 2016). It has not been reported in the flora of Maharashtra (Cooke, 1908; N. P. Singh et al., 2001). This is a new record for the Flora of Maharashtra State.

#### Material and Methods

**Study area:** During the floristic investigation living taxa were observed and collected from on the bank of river Godavari of place Karanjagaon, Tal. Niphad, Dist. Nashik, Maharashtra (India) (GPS coordinates N20.022108, E74.074986) (Image 1).

**Taxonomy & Morphology:** Recognizable proof and characterization of *L. angularis* Benth. utilizing different accessible local Floras and other available literature. During field investigation, we concentrated on studied taxa photos, kept herbarium, and distinguished the species utilizing standard floras like Flora of British India and Flora of the Presidency of Bombay (Image 1).

**Herbarium consultation:** The *L. angularis* Benth. was identified by utilizing different deposited Herbarium Catalogue specimen No K000929511, K000929512, K000929513 and K000929514.

#### Results and Discussion

*L. angularis* Benth investigated during the years 2022-2024 records a unique plant taxa belonging to the family Lamiaceae. It is endemic to the Western Ghats of India. The plant was accurately identified utilizing Flora of British India, Flora of Tamil Nadu and authenticated by deposited Herbarium Catalogue specimen No. K000929511, K000929512, K000929513 and K000929514 (Hooker, 1885; Nair & Henry, 1987; RBG, 2024). During the review survey, different floras were examined such as The Bombay Flora, the Flora of the Presidency of Bombay, and the Flora of Maharashtra State there are no any kind of taxonomic records of studied taxa (Dalzell & Gibson, 1861; Cooke, 1908; N. P. Singh et al., 2001). The basic literature review of accessible logical writing contemplated taxa that had

not been added to the Flora of Maharashtra State. It tends to be claimed that these are new records for the Flora of Maharashtra State, India.

**Taxonomic treatment:**

*Leucas angularis* Benth. in Wall., Pl. Asiat. Rar. 1: 62. 1830; Hook. f., Fl. Brit. India 4: 684. 1885; Gamble, Fl. Pres. Madras 1151(805). 1924; Manilal, Fl. Silent Valley 219. 1988; Ramach. & V.J. Nair, Fl. Cannanore Dist. 365. 1988; Babu, Fl. Malappuram Dist. 647. 1990; Sivar. & Mathew, Fl. Nilambur 547. 1997; Sasidh., Fl. Chinnar WLS 249. 1999; V. Singh, Monogr. Indian Leucas 38. 2001; Ratheesh Narayanan, Fl. Stud. Wayanad Dist. 652. 2009.

Prostrate branching herbs, pubescent. Leaves to 3.5 x 1.5 cm, ovate, obtuse, base rounded or truncate, serrate, pubescent; petiole 0.5 cm. Whorls axillary, 4-6 flowered; bracts 3 mm, linear, ciliate; calyx tube 8 mm, 10 toothed, unequal, to 2 mm, ciliate; corolla tube 9 mm, subequal; filaments 5 and 7 mm, pubescent; ovary 1 mm, style 1.3 mm. (Image 2) (Wallich, 1830; Nair & Henry, 1987).

**Family:** Lamiaceae

**Synonym:** *Leucas pubescens* Thwaites (WFO, 2023).

**Flowering and fruiting:** January- March

**Habitat:** Along the bank of the Godavari river

**CONCLUSION**

During the floristic investigation of the northern Western Ghats, we explored the *L. angularis* Benth. Angiosperm plant taxa reported for the first time in the Flora of Maharashtra State. *L. angularis* Benth. is a new addition to the Flora of Maharashtra State.

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**Conflict of Interest:** None

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### Study sites

Type localities 

New distribution locality 

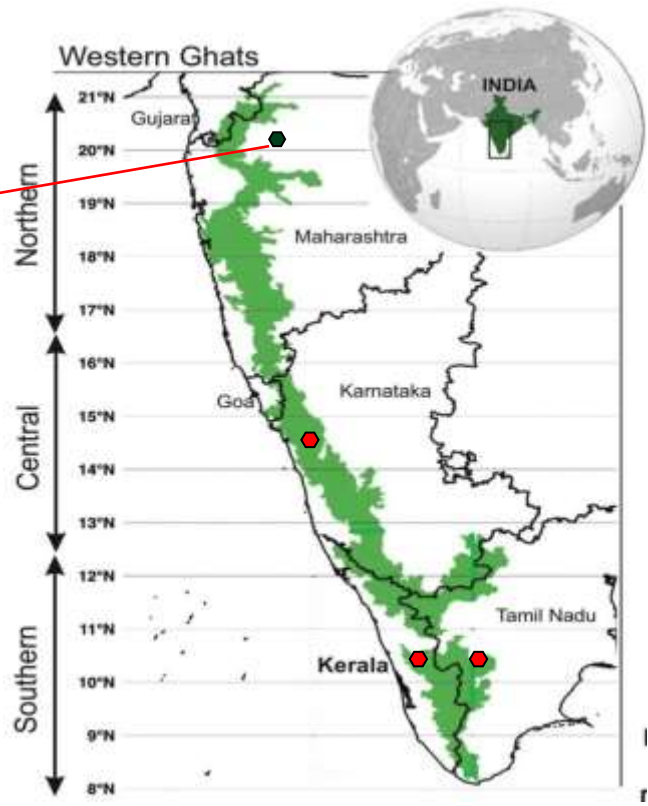
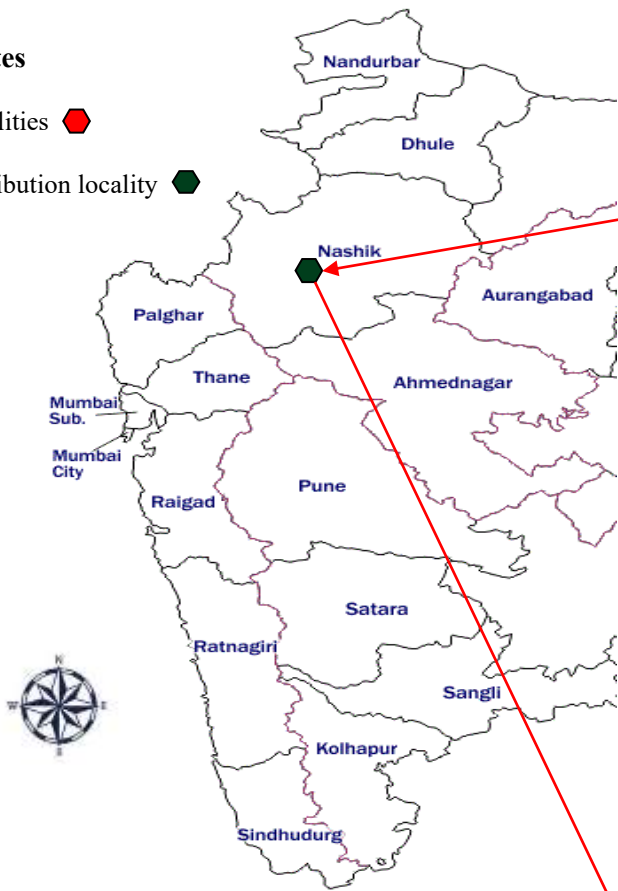
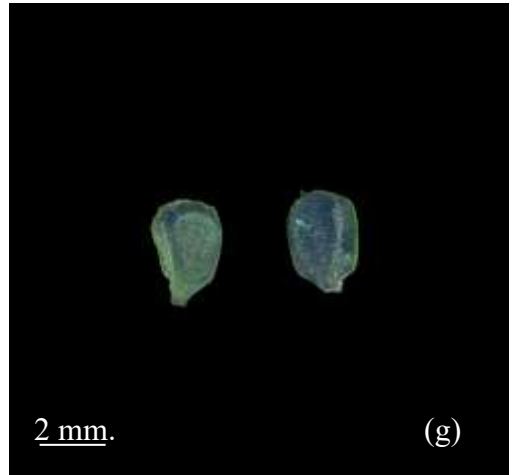
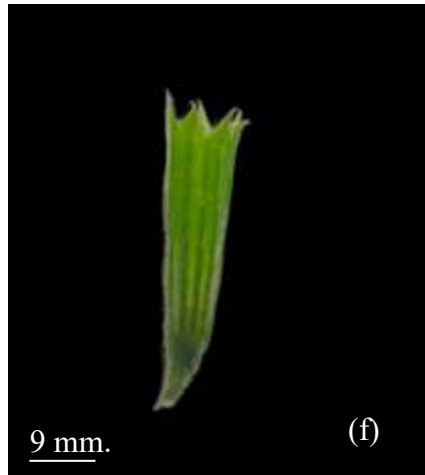
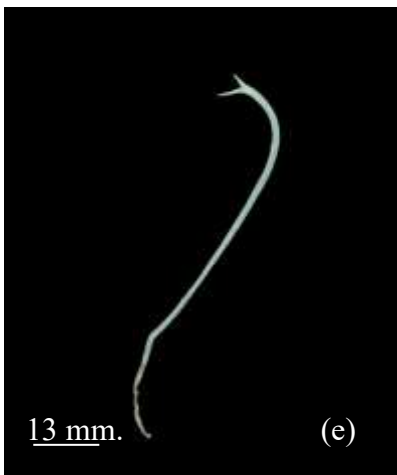
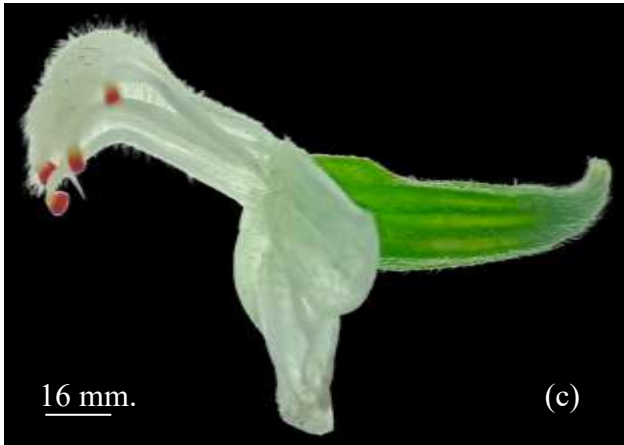
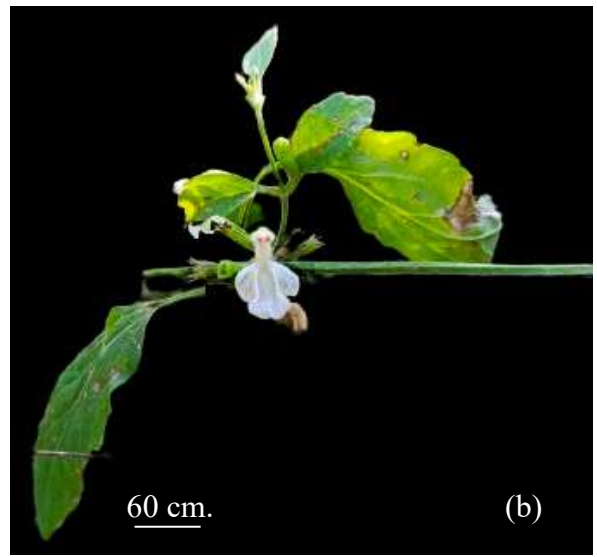


Image 1. Locations of existing populations of *Leucas angularis* Benth.



**Image 2.** *Leucas angularis* Benth.: a- habit | b- flowering twig | c- flower | d- anther | e- gynoecium showing bifid stigma and style | f- calyx tube | g- seeds. © B S Kale