**NOTE**

# Some Critical Notes on *Leonotis nepetifolia* (L.) R. Br. var. *africana* (P. Beauv.) J.K. Morton (Lamiaceae)

**M. Venkat Ramana[(1,2)], P.V. Prasanna[(1,3)], P. Venu[(4,5)] and Avishek Bhattacharjee[(4*)]**

*1. Deccan Regional Centre, Botanical Survey of India, Hyderabad-500 048, Andhra Pradesh, India.*
*2. Email: venkat.botany@gmail.com*
*3. Email: prasanna_parigi@yahoo.co.in*
*4. Central National Herbarium, Botanical Survey of India, Acharya Jagadish Chandra Bose Indian Botanic Garden, Howrah–711 103, India.*
*5. Email: pvenu.bsi@gmail.com*
** Corresponding author. Email: avibsi@rediffmail.com*

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ABSTRACT: The much disregarded *Leonotis nepetifolia* (L.) R. Br. var. *africana* (P. Beauv.) J.K. Morton (Lamiaceae), hitherto known only from Africa, is described and illustrated from Greater Hyderabad, Andhra Pradesh, India. The present report extends its distribution to Asia. Some critical notes on diagnostic features are added for greater clarity to discern var. *africana* from the var. proper.

KEY WORDS: *Leonotis*, Lamiaceae, Andhra Pradesh, India.

## INTRODUCTION

*Leonotis* (Pers.) R. Br., with flowering stems bearing dense verticels with orange or infrequently yellowish cream flowers, is a well defined and a striking genus of the family Lamiaceae. It has *ca* 12 species (Iwarsson and Harvey, 2003), widely distributed in Pantropics and is represented by 1 species - *Leonotis nepetifolia* (L.) R. Br. in India with bright orange scarlet flowers (Mukerjee, 1940). One of the authors collected *Leonotis* material bearing yellowish cream flowers growing in wild condition from Osmania University Campus of Greater Hyderabad and a critical study of this material, steered by monograph on *Leonotis* (Iwarsson and Harvey, 2003), led the authors to identify it as *L. nepetifolia* var. *africana*, a new record for India and for the Asian continent.

## TAXONOMIC TREATMENT

***Leonotis nepetifolia*** (L.) R. Br. var. ***africana*** (P. Beauv.) J. K. Morton in J. Linn. Soc. Bot. 58: 275. 1962. *Phlomis africana* P. Beauv., Fl. Oware 2: 82, t. 111. 1819; Iwarsson & Y.B. Harv. in Kew Bull. 58(3): 636. 2003. Fig. 1 E-H

Annual erect herbs, up to 2.5 m high. Stems unbranched at base, branched towards apex; branches deeply grooved, appressed retrose hairy; hairs longer at nodes. Leaves simple, opposite, blade ovate 7-13 × 5-9 cm, truncate-cuneate at base, crenate-serrate at margins, acute to acuminate at apex, sparsely hairy on both sides, densely pubescent on veins; secondary veins 4-5 pairs; petioles 4-10 cm long, appressed retrose hairy. Inflorescence 1-3 verticels per branch, with 6-10 cm internodes; verticels cylindrical, 3.5 × 3 cm; flowers yellowish cream, lateral subsessile, middle pedicellate; pedicels 2-3 mm long, slightly elongate in fruit. Floral leaves narrowly lanceolate, 4 × 1.5 cm, attenuate at base, entire at margins, acute at apex, hairy on both sides; bracteoles linear, 1-2 cm, with pointed teeth. Calyx tubular, 1.5-2.5 cm, slightly enlarged in fruit; tube slightly bent, finely pubescent throughout, 8 toothed; teeth deltoid to narrowly triangular, subequal, apiculate; dorsal teeth *ca* 5 mm; lateral ones *ca* 2 mm; ventral one *ca* 3 mm, united at base, forming a recurved lower lip. Corolla with yellowish cream indumentum; tube *ca* 2 cm long, glabrous below, clothed with short appressed retrorse or antrorse yellowish cream hairs, with two hairy fringes inside near base, widening at mouth; upper lip 10-15 mm; lower lip 3-lobed, 3-4 mm, deflexed on the tube. Stamens 4, inserted at middle of the tube; filaments glabrous, 7-9 mm; anthers 1 mm. Ovary 3 mm, 4-partite, glabrous; disc as long as ovary; style *ca* 1 cm, glabrous, curved at apex; stigma unequally 2-lobed. Nutlets oblong, trigonous, 2-4.5 × 1-1.8 mm, with a deep triangular pit above, tan brown; pit with dense gland tipped white cottony hairs; hairs deciduous.



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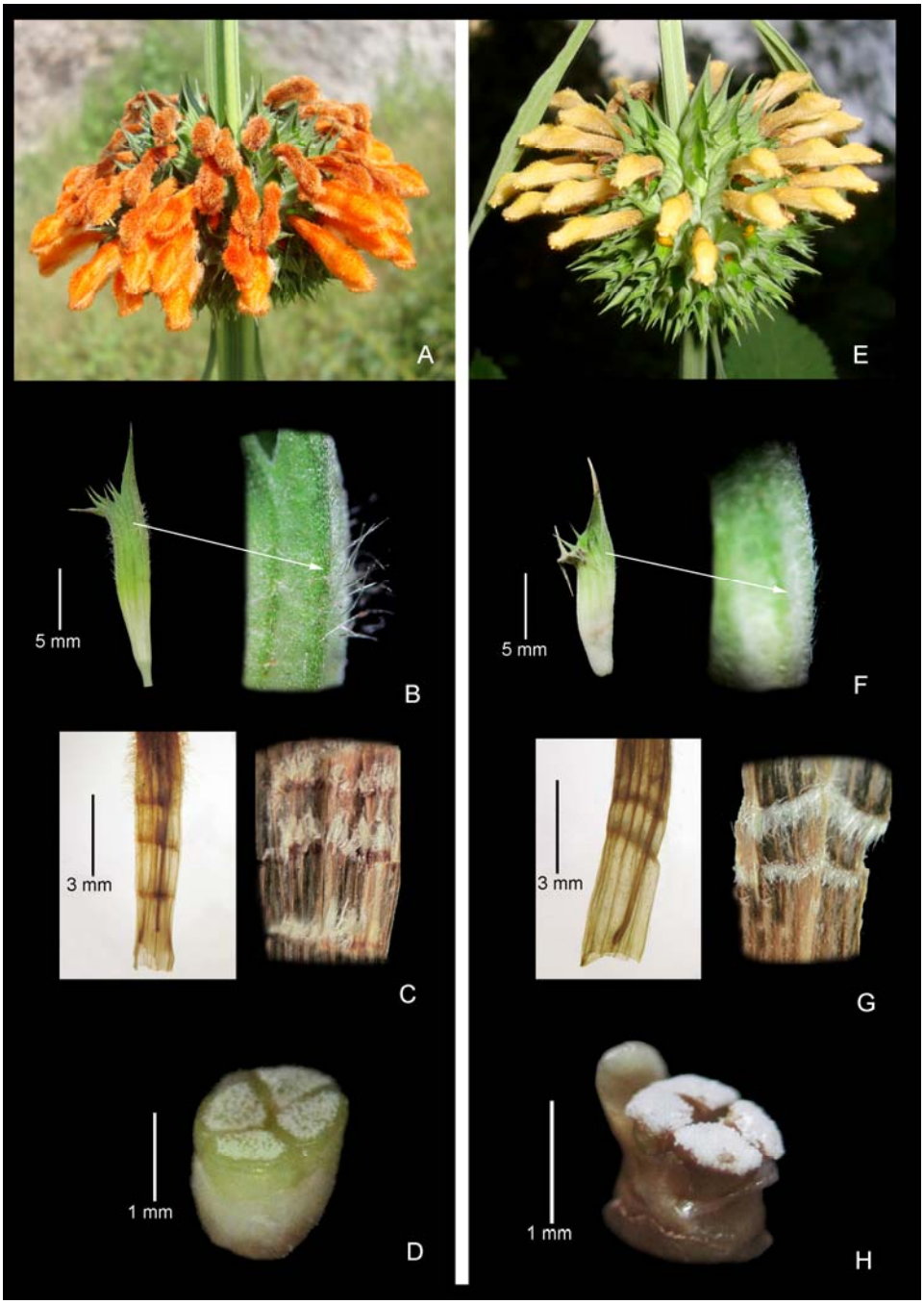



**Fig. 1. Comparison between *Leonotis nepetifolia* var. *nepetifolia* and *Leonotis nepetifolia* var. *africana*. A-D: *L. nepetifolia* var. *nepetifolia*. A: Verticels. B: Calyx. C: Corolla with three bands of hairs. D: Nutlets (immature). E-H: *L. nepetifolia* var. *africana*. E: Verticels. F: Calyx. G: Corolla with two bands of hairs. H: Nutlets (slightly immature).**

Flowering and fruiting: August-November.

Habitat: Occasionally found in open fallow lands and along road sides.

Specimen examined: India: Andhra Pradesh, Greater Hyderabad, Osmania University Campus (17º25'02.4" N, 78º31'58.1" E), 540 m, 26.09.2010, *M. V. Ramana* 2078 (CAL & BSID).

Distribution: India and West Africa to NE tropical Africa (Iwarsson and Harvey, 2003).

Notes: The authors found no material similar to var. *africana* from any of Indian states in CAL. Further in major Indian floras this taxon was reported to be



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possessing bright orange scarlet corolla inferring it to be invariably var. *nepetifolia* and not var. *africana.* Hence var. *africana* with yellowish cream color, reported here, was considered as new report for India. The other diagnostic features of this taxon include much short hairs in calyx, two hairy fringes inside near the base of corolla and dense gland tipped cottony white hairs in nutlet pits. These are in contrast to relatively long hairs in calyx near to mouth, three hairy fringes inside near the base of corolla and with more scattered gland tipped white hairs in nutlet pits in var. *nepetifolia* (Fig. 1). The attribution of three hairy fringes for var. *africana* (Iwarsson and Harvey, *l.c.*) requires verification/ correction.

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## LITERATURE CITED

**Iwarsson, M and Y**. **Harvey**. 2003. Monograph of the Genus *Leonotis* (Pers.) R. Br. Kew Bull. **58:** 597-645.

**Mukerjee, S. K.** 1940. A Revision of the Labiatae of Indian Empire. Rec. Bot. Surv. India. **14:** 1-228.

# 非洲海膽花（*Leonotis nepetifolia* var. *Africana,* 唇形科）的記要

**M. Venkat Ramana[(1,2)], P.V. Prasanna[(1,3)], P. Venu[(4,5)] and Avishek Bhattacharjee[(4*)]**

*1. Deccan Regional Centre, Botanical Survey of India, Hyderabad-500 048, Andhra Pradesh, India.*
*2. Email: venkat.botany@gmail.com*
*3. Email: prasanna_parigi@yahoo.co.in*
*4. Central National Herbarium, Botanical Survey of India, Acharya Jagadish Chandra Bose Indian Botanic Garden, Howrah–711 103, India.*
*5. Email: pvenu.bsi@gmail.com*
* 通信作者。*Email: avibsi@rediffmail.com*

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摘要：備受忽視的非洲海膽花（*Leonotis nepetifolia* var. *africana*，唇形科）迄今僅知分布於非洲。本文描述並繪圖說明自印度安得拉邦的 Greater Hyderabad 所發現之該物種；並將該種的分布範圍擴展至亞洲。此變種與其正種的主要的特徵也於本文中描述以利更清楚地辨別兩者。

關鍵詞：*Leonotis*、唇形科、印度、安得拉邦。



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