

Leucas seabaldiana Sunojk. (Lamiaceae) : a new species from India

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Leucas sebaldiana Sunojk. (Lamiaceae) a new species from India

P. SUNOJKUMAR

ABSTRACT

SUNOJKUMAR, P. (2004). *Leucas sebaldiana* Sunojk. (Lamiaceae), a new species from India. *Candollea* 60: 233-236. In English, English and French abstracts.

Leucas sebaldiana Sunojk. from India is described as a species new to science and illustrated. Its relationship with *Leucas vestita* Benth. is discussed.

RÉSUMÉ

SUNOJKUMAR, P. (2004). *Leucas sebaldiana* Sunojk. (Lamiaceae), une nouvelle espèce décrite d'Inde. *Candollea* 60: 233-236. En anglais, résumés anglais et français.

Leucas sebaldiana Sunojk., nouvelle espèce d'Inde, est décrite et illustrée. Ses affinités avec *Leucas vestita* Benth. sont présentées.

KEW-WORDS: LAMIACEAE – *Leucas* – Chembra peak – Kerala – India

Introduction

The genus *Leucas* R. Br. (Lamiaceae) includes about 98 species, chiefly distributed in Africa and India (SEBALD, 1980). This genus has about 40 species in India of which 21 are Indian endemics. Majority of these are distributed in the Southern part of India. Another new species from this area was described recently by SUNOJKUMAR and MATHEW (2002). While attempting to collect all the hitherto described species from South India for a revisionary study, Dr. A. K. Pradeep, the Curator of Calicut University herbarium informed the author about a population of a potentially new species of *Leucas* growing in the margins of a mountain temperate evergreen (shola) forest in Chembra hills of Wayanad district in Kerala. Fresh specimens were collected and studied. Comparison with all the known Indian species using herbarium specimens deposited in various Indian herbaria (CAL, CALI, MH, KFRI, SKU, TBGT etc.) has confirmed this entry to be a distinct species.

Description

Leucas sebaldiana Sunojk., **spec. nova** (Fig. 1)

Type: INDIA. Kerala: Wayanad Dist., Chembra peak, 11°32.75'N, 076°05.045'E, ca. 1394 m, 7.X.2000 (fl.), P. Sunojkumar CU49630 (holo-: K; iso-: CALI).

Leucas vestita arcte affinis, sed differt inflorescentia constanti ex verticillastro uno ambitu irregulari, bracteolis fere frondosis, calyce longiore bracteolis flexo magnitudine varianti, ore sine ciliis genuinis.

Straggling herb, perennial from basal stem and root stock, 1-1.5 m long, basal stem 1-1.5 cm thick, woody; branches long, roughly obtusangular and grooved, often appear as terete, hispid with 1-1.5 mm long golden brown hairs, tender stem densely hirsute; internodes 5-27 cm long. Leaves opposite, decussate, ovate to lanceolate, 3-8 cm long and 3-5.5 cm broad, almost two times longer than broad, subacute, sometimes obtuse, base rounded to obtuse, margin serrated with 15-19 teeth, secondary veins 5-7, prominent beneath, lower surface hirsute, especially on the veins, upper glandular punctuate, rugose on fresh specimen, hispid, hairs 1-1.7 mm long; petiole 1-2 cm long, hispid. Inflorescence a terminal solitary verticillaster subtended by a pair of leaves, 2.5-3.5 cm across, sub-globose with uneven margin due to the varied length and divergent nature of the flowers, dense many-flowered. Bracteoles 12-17 mm long, 3-3.5 mm broad, recurved, imbricately arranged and forming an involucre below the flowers, foliaceous with a distinct midrib and 3-4 lateral veins, smaller than calyx, acute to acuminate tip, densely hispid with silvery hairs outside, margin ciliate. Flowers 15-25, pedicel ± 1 mm long. Calyx tubular, size varying, 1.5-2 cm long, narrowed and glabrous towards the base, slightly bulged and dense long hispid in the middle, upper half tubular, forwardly bent, short hispid, reticulate and longitudinally ribbed, inside the tube densely villous at the upper half, hairs projecting outside the mouth giving a ciliate appearance, veins forming a thick annulus at the mouth; teeth 10, straight, subequal, 3-4 mm long, long subulate with triangular base and acuminate tip, outside and margin of the teeth hispid with spinulose hairs; fruiting calyx more bulged in the middle. Corolla 22-24 mm long, tube 10-11 mm long, slightly bent and fully included in the calyx, annulate around the middle inside with a ring of fleshy hairs; lower lip white, 10-13 mm long, middle lobe fan shaped and 8-9 mm broad, side lobes small, 2 mm wide at the free end, margins slightly revolute, tips asymmetrically notched; upper lip yellowish brown, 5-6 mm long, rounded and concave with hairs in all directions. Stamens fully included and as long as the upper lip of corolla, upper pair shorter; filaments hairy; anthers reddish coloured, 1.5 mm long and 0.4 mm broad with confluent thecae. Disc cup shaped and equally four-lobed. Carpel locules ± 1 mm high, above moderately rounded. Style 15-16 mm long, slender and upper portion bending forwards; stigma lobes unequal; lower lobe 0.6 mm long; upper 0.15 mm long. Nutlets 2.9-3 mm long and 1.7 mm broad at middle, black, oblong, obtusely triangular in middle cross section, top rounded and glabrous.

Etymology. – The species is named after Dr. Oskar Sebald, Staatliches Museum für Naturkunde, Stuttgart, Germany in appreciation of his contribution to *Lamiaceae* systematics, especially on the genus *Leucas* R. Br.

Flowering and fruiting. – September-February.

Ecology. – Extremely rare, found in semi shady places at the margins of grasslands in temperate evergreen (shola) forest.

Distribution. – A small population is known from a single locality in the Chembra hills (Southern Peninsular India) at an altitude of ± 1394 m.

Notes. – *Leucas sebaliana* is included in *Leucas* sect. *Astrodon*, together with its close relative *Leucas vestita* Benth. It can be distinguished from *Leucas vestita* by the characters shown in Table 1.

Leucas vestita consists of five varieties in South India (HOOKER, 1885; SHETTY & VIVEKANANDAN, 1968), which are distinguished mainly based on the leaf shape, colour and comparative size of mouth cilia. This new species is distinct from all the known varieties of *Leucas vestita*.

Table 1. – Comparison between *Leucas sebaldiana* Sunojk. and *Leucas vestita* Benth.

Character	<i>Leucas sebaldiana</i>	<i>Leucas vestita</i>
1. Branches	100-150 cm long, appear as terete	60-80 cm long, obtusely quadrangular and grooved
2. Inflorescence size margin	terminal, solitary 3-3.5 cm diameter uneven due to varied length of calyx	upper 2-3 nodes 2-2.5 cm diameter regular with uniform calyx
3. Bracteoles	3-3.5 mm broad, foliaceous with midrib and lateral veins	1-1.5 mm broad at base, linear- lanceolate, not foliaceous
4. Calyx tube size mouth teeth inside	upper half bent, divergent from the main axis 15-20 mm long not ciliate erect upper half densely villous	straight, compactly arranged 8-10 mm long densely ciliate, hairs sometimes longer than teeth, forming an inverted cone over mouth spreading glabrous or pubescent
5. Corolla	22-24 mm long	15-16 mm long

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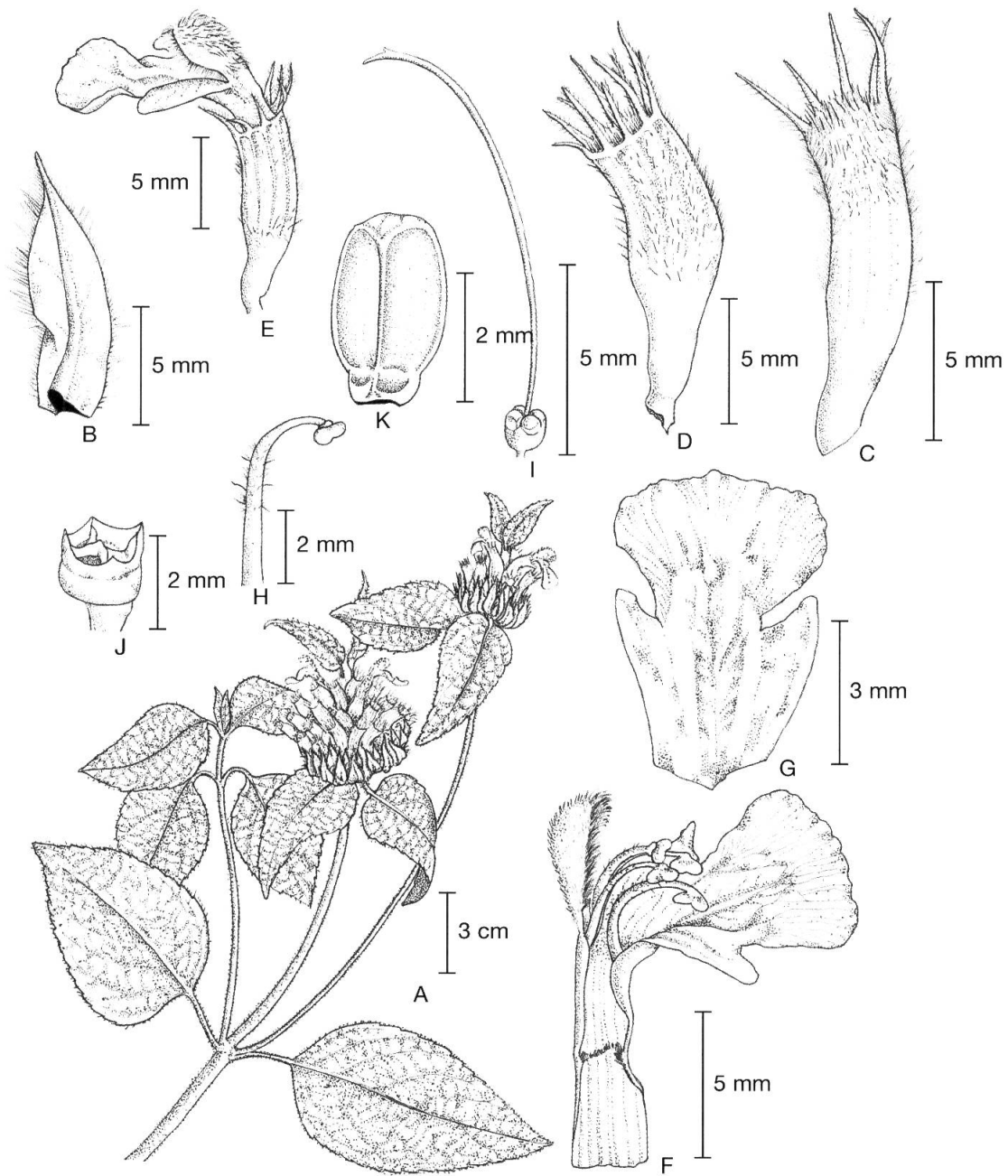


Fig. 1. – *Leucas sebaldiana* Sunojk. **A.** A flowering twig; **B.** Bracteoles; **C.** Calyx - split open; **D.** Calyx; **E.** Flower; **F.** Corolla - split open; **G.** Lower lip of corolla; **H.** Stamen; **I.** Pistil; **J.** Basal disc.

[Sunojkumar CU49630, K]. (Drawn by V. B. Sajeev).