



## Notes on the Identity and distribution of *Plectranthus subincisus* (Lamiaceae)—a poorly known species recollected after 150 years in southern India

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### Abstract

Taxonomic identity and distribution of *Plectranthus subincisus*, a poorly known species recollected recently after 150 years from southern India is discussed. A detailed description, illustration, photographs, distribution map and key to the southern Indian species of the genus are provided.

**Key words:** Alappuzha, Kerala, Sri Lanka, threatened species

### Introduction

The genus *Plectranthus* L'Héritier (1785: 84) belonging to the family Lamiaceae with more than 300 species is found in tropical Africa, Asia and Australia (Harley *et al.* 2004, Lukhoba *et al.* 2006). In India, this genus has not been revised recently. Mukerjee (1940), treated *Plectranthus* and *Coleus* Loureiro (1790: 372) as distinct genera and reported 40 species under these names. Of these, only 14 species are now identified as belong to *Plectranthus* and most others are transferred to *Isodon* (Schrader ex Bentham 1832: 40) Spach (1840: 162). *Plectranthus* is unique from the rest of Lamiaceae in having campanulate, conspicuously 2 lipped calyx with broad upper lip decurrent on the tube, solitary tooth of upper lip larger than four narrow teeth in the lower lip and boat-shaped lower corolla lip (Li 1988).

The authors while working for revision of southern Indian Lamiaceae, came across a population of an interesting species of *Plectranthus* in coastal plains of Alappuzha district of Kerala state. After examining the original description and the digital photographs of type specimens available at the Kew Herbarium (K), its identity was confirmed as *Plectranthus subincisus* Bentham (1831: 16), a species reported only from southern India and Sri Lanka (formerly Ceylon). Perusal of literature reveals this to be a poorly known taxon in India and confusion exists on its identity and distribution.

Prior to the present collection, Sunil and Sivadasan (2009) had collected this species from a different locality in the same district but the specimens were wrongly identified as *Plectranthus mollis* (Aiton 1789: 322) Sprengel (1825: 690). In contrast, the report of this species (Manilal 1988) as occurring in Silent Valley National Park in Palakkad district, on examination of the herbarium, appears to be a mistaken identity for an *Isodon* species. Hence this paper intends to clarify doubts regarding the identity and distribution of this species, which is recollected after a time span of 150 years in southern India.

### Taxonomic history

*Plectranthus subincisus* was first described by Bentham (1831) based on the specimen (Wall. Cat. No. 2737, K) collected in 1829 from Courtallum, Tamil Nadu. In the subsequent works, Bentham (1832, 1848) mentioned two southern Indian specimens, one from Courtallum collected by Klein and another from Dindigul by Wight, and a third specimen from Ceylon attributed to Macrae. But, Thwaites (1864) expressed doubt on the identity of Macrae's specimen and remarked that it was a poor specimen with an imprecise locality. He also mentioned that he could not observe any live specimen from Ceylon. Trimen (1895) also had the same opinion regarding this Ceylonese specimen.

## Key to the species of *Plectranthus* in southern India.

1. Calyx throat with hairs inside forming a ring .....2
- Calyx glabrous inside .....3
2. Leaves obovate; 2–3.5 × 1.5–3 cm; inflorescence nodes closely adjacent and flowers arranged compactly .....  
..... *P. caninus*
- Leaves ovate-lanceolate; 6–9 × 2.5–3.5 cm; inflorescence nodes distant, 5–25 mm apart and flowers arranged loosely in distinct  
verticils.....*P. barbatus*
3. Inflorescence unbranched (flowers attached directly to floral axes without a peduncle).....4
- Inflorescence branched (flowers in panicles with conspicuous lateral branches).....10
4. Corolla tube 10–15 mm long .....*P. malabaricus*
- Corolla tube 4–5 mm long .....5
5. Anterior lip of calyx teeth similar in shape (lateral teeth and median teeth similar) .....6
- Anterior lip of calyx teeth not similar (2 lateral teeth much wider than 2 median ones) .....8
6. Upper lip of calyx continuous with tube; stamens exerted beyond lower lip of coroll ..... *P. amboinicus*
- Upper lip of calyx sub-decurrent on tube; stamens included in lower lip of corolla .....7
7. Fruiting calyx 6–9 × 3–5 mm; lower lip of corolla glabrous within; mericarps 2 mm long, smooth with black spots ..... *P. mollis*
- Fruiting calyx 5–7 × 2–3 mm; lower lip of corolla hairy within; mericarps 1 mm long, rugose without black spots ... *P. subincisus*
8. Stem obscurely quadrangular; plants strongly aromatic.....*P. hadiensis*
- Stem acutely quadrangular; plants non aromatic .....9
9. Cymes stalked, usually with obvious lateral cincinni; leaves variegated; root not producing tubers ..... *P. scutellarioides*
- Cymes sessile, lacking obvious lateral cincinni; leaves not variegated; root producing tubers ..... *P. rotundifolius*
10. Plants usually herbs; fruiting calyx about 5 mm long.....11
- Plants more or less fleshy under shrubs; fruiting calyx less than 5 mm long.....12
11. Leaves rounded at base, acuminate, deeply lobulate, the lobules crenate, glabrous, up to 14 cm in diam.; petioles fleshy.....  
..... *P. beddomei*
- Leaves cordate, acute, crenate, pubescent, up to 10 cm in diam.; petioles not fleshy... ..... *P. glabratus*
12. Leaves more than 8 cm long, broadly ovate, cordate or rounded at base; flowers close in racemes ..... *P. deccanicus*
- Leaves less than 8 cm long, ovate, slightly cuneate at base; flowers in terminal thyrsoid panicles. ....13
13. Leaves sub orbicular, 2.5–6 × 2–4 cm, obtuse, slightly cuneate at base, densely yellow tomentose; petiole thick 5–15 cm long;  
inflorescence up to 12 cm long, flowers closely arranged in racemes .....*P. bourneae*
- Leaves ovate, 4–8 × 2–6 cm, sub-acute, rounded or slightly cuneate at base, purplish below; petiole slightly thick, 2–4 cm long;  
inflorescence up to 25 cm long, the flowers distant in racemes ..... *P. bishopianus*

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