INTRODUCTION

This new perennial herb or undershrub was discovered during a plant collecting trip to Phu Langka National Park, Ban Phaeng District, Nakhon Phanom Province, in the North-Eastern part of Thailand in October 2013. The plants are normally found on sandstone cliffs in dry evergreen forest.

Plectranthus L’Hér. is a genus of annual or perennial herbs or undershrubs. It belongs to the tribe Ocimeae, subtribe Plectranthinae. An account for continental South-East Asia was completed by Suddee et al. (2004), in which 14 species were recognized. The fruiting calyx of Plectranthus phulangkaensis is also similar to the fruiting calyx of Anisochilus Wall. ex Benth., but the inflorescence is very different. Anisochilus members have inflorescences with adjacent verticils arranged close together and forming a dense tetragonal or cylindrical spike-like inflorescence whereas this new taxon has adjacent verticils distant. An overall treatment of Anisochilus was recently published by Suddee & Paton (2009) with 16 species recognized. Although this new species has fruiting calyx similar to members of Anisochilus it does not match any of the known species in that genus. It should be noted that Anisochilus nests within the ‘Coleus’ clade of Plectranthus (Paton et al. 2004). Thus it may be appropriate to merge Anisochilus into Plectranthus or Coleus, depending on the details of how best to divide the Plectranthinae into monophyletic groups. It is placed in Plectranthus here as it keys out as this genus, due to the inflorescence character, in the most recent recent generic level key to the family (Harley et al. 2004). It is thus described and illustrated here.

DESCRIPTION

Plectranthus phulangkaensis Suddee, Suphuntee & Saengrit sp. nov.

Differs from the other Plectranthus species in Thailand and neighbouring countries by the perennial or undershrub habit, the sessile flowers and the obliquely 4-toothed anterior lip of the fruiting calyx, and from species currently placed in Anisochilus by the lax inflorescence. Type: Thailand. Nakhon Phanom, Ban Phaeng District, Phu Langka National Park, 9 Oct. 2013, Suddee, Puudjaa, Rueangruea, Kiewbang, Hemrat & Pansamrong 4588 (holotype BKF; isotypes BKF). Figs. 1 & 2.

Perennial herbs or undershrubs, up to 1.5 m tall. Stems green, rounded, branched, glabrous below, pubescent above. Leaves oblong to oblong-lanceolate, 3–10 by 1–3.5 cm, apex acute or obtuse, base cuneate, margin serrate-crenate, scabrous on both surfaces, veins prominent beneath; petioles 0.8–2 cm long, puberulous. Inflorescence terminal, up to 40 cm long, often with several lateral long
Figure 1. *Plectranthus phulangkaensis* Suddee, Suphuntee & Saengrit. A. flowering branch; B. longitudinal section of flower; C. longitudinal section of calyx; D. bract, adaxial and abaxial surfaces; E. young fruiting branch; F. young fruiting calyces; G. nutlets, left and right: nutlets when wet; middle: normal nutlet; H. fruiting calyces. All from *Suddee et al. 4588* (BKF); Drawn by O. Kerdkaew.
Figure 2. *Plectranthus phulangkaensis* Suddee, Suphuntee & Saengrit, A. habit; B–C. flowers; D. fruiting branch. All photographed by S. Rueangrua.
Plectranthus Phulangkaensis (Lamiaceae) a new species from Thailand (S. Suddee, N. Suphuntee & S. Saengrit)

Branches; axis puberulous to pubescent; verticils 0.5–2.5 cm apart; cymes sessile, 3–several-flowered; bracts sessile, caducous, ovate, 2.5–4 mm long, acute to acuminate, pubescent; pedicels sessile both at anthesis and in fruit. Calyx ovoid to subtubular, 2–2.5 mm long at anthesis, 3.5–5 mm long in fruit; posterior lip 1-lobed, ovate-lobicular, glabrous inside, pubescent outside; anterior lip obliquely 4-toothed, ovate, shorter than posterior lip, lateral; tube slightly constricted at throat, glabrous inside, pubescent outside, gibbous at anterior base. Corolla purple, 0.8–1.1 cm long; posterior lip 4-lobed, ovate-lobicular, rounded or obtuse at apex, lateral lobes smaller than median lobes; anterior lip 1-lobed, obovate-oblong, 2.5–4 mm long, flattened, pubescent outside; tube 6–8 mm long, gradually dilated towards throat, pubescent outside. Stamens 4, didynamous, declare, glabrous, anterior pair longer; posterior and anterior pairs attached close together just below the base of anterior corolla lip. Style shortly bifid with subequal branches. Disc with anterior side well developed. Nutlets black, ellipsoid, c. 1 mm long, producing mucilage when wet.


Distribution.—Endemic (known only from Phu Langka National Park).

Phenology.—Flowering: September–November.

Ecology.—Dry evergreen forest on sandstone cliffs; 190–400 m alt.

Vernacular.—Som phu langka (สมผุล่างก้า).

Etymology.—The epithet ‘phulangkaensis’ refers to the collecting locality.

Conservation.—This species is known only from Phu Langka National Park with the estimated area of occupancy around 2 km². Locally over collected as a medicinal plant by nearby villagers, and this might affect the species survival chances and is assessed here as Critically Endangered, CR B1+2 ab(i,ii,iii), following IUCN (2001).

Notes.—Plectranthus phulangkaensis is similar to P. helferi from the Tenasserim Range in having sessile cymes and adjacent verticils distant but differs in having perennial or undershrub habit and the obliquely 4-toothed anterior lip of the fruiting calyx. The sterile plants with leaves can be confused with Anisochilus harmandii Doan ex Suddee & A.J.Paton which also occurs in the area.

ACKNOWLEDGEMENTS

We would like to thank Sukid Rueangruae, Pachok Puudjaa, Chandee Hemrat, Wittawat Kiewbang, Pongsiri Pansamrong, and the staff of Phu Langka National Park for their assistances in the field. Special thanks go to Orathai Kerdkaew for the line drawings, Sukid Rueangrua for the photographs, and Bob Harwood for useful comments.

REFERENCES


