Two New Additions of Peristylus BL. to the Orchid Flora of Manipur, India

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Abstract- Two species of Peristylus viz. P. parishii Rchb. f. and P. richardianus Wt. reported as new additions to the orchid flora of Manipur.

I. INTRODUCTION

The genus Peristylus Bl. (Orchidaceae) comprises of ca. 110 species distributed widely in South East Asia (Govaerts et al. 2013). The genus is characterised by small to medium terrestrial or rarely epiphytic herbs having 1 or 2 underground tubers, thin, linear to broadly elliptic leaves; terminal, racemose, laxly to densely few to many flowered inflorescence; simple to 3 lobed lip, connate at base with the margins of the column; short, pouched shaped spur and two shortly clavate pollinia.

The genus Peristylus is represented by ca. 29 species and 4 varieties in India (Misra 2007), of which ca. 6 species are reported so far from Manipur (Sathish Kumar & Suresh Kumar 2005).

During the field exploration in various parts of Manipur, two species of Peristylus were collected in vegetative condition from Hengbung of Senapati District and maintained in the orchidarium of Centre for Orchid Gene Conservation for Eastern Himalayan Region, (COGCEHR), Hengbung, where they flowered during June and August 2013. Based on the available literature (King & Pantl. 1898; Nageswara Rao 1995, 2010; Joseph & Nageswara Rao 1980; Pearce & Cribb 2002; Manilal & Sathish Kumar 2004; Lucksom 2007; Govaerts et al. 2013), the taxa were identified as Peristylus parishii Rchb. f. and P. richardianus Wight. The species are enumerated below with description and colour illustration.


Plant erect, ca. 55 cm tall. Tubers 2, unequal, ellipsoid, 3.5-4.5 × 1.5-2.2 cm. Stem 21-30 cm tall. Leaves 2 - 3, 7 - 9 × 2.9 - 3.6 cm, ovate-elliptic, acute, clustered on the middle of the stem, undulate at margin, sheathing at base; petiole 0.5-1.5 cm long, channelled. Inflorescence 7-19 cm long, laxly many flowered; floral bracts 10 -12 × 2.5 mm, lanceolate, acuminate, green. Pedicellate ovary 5-7 mm long. Flower ca. 1 cm across, green, Sepals sub-equal, green; dorsal sepal 5 - 6 × 1.6 - 1.8 mm, oblong-lanceolate, obtuse, apiculate, 1-veined; lateral sepals 6 - 7 × 1.6 - 1.8 mm, narrowly-oblong to lanceolate, acute, curved inside at margins. Petal 6 - 7 × 2 mm, oblong, obtuse, curved outside. Lip 6 - 7 × 2.3 - 2.5 cm, 3-lobed, spurred, broadly clawed at base, lateral lobes ca. 2 × 0.5 mm, shorter than midlobe, oblong, obtuse; mid lobe ca. 3.5 × 1.5 mm, triangular-oblong, sub-acute, longer than side lobes. Column 0.6 - 0.7 mm long, green. Pollinia 2, sectile, pyriform, with short caudill.

Flowering: June.
Locality: Hengbung.

Specimen examined: Manipur, Senapati district, Hengbung 1298m, 25° 13.71' N and 94° 00.12' E, Chowlu-00957.

Habitat Ecology: Found on sun exposed grassy hill slopes in humid climate of sub tropical zone at 1298 m elevation in association with Anthogonium gracile and unidentified grasses.


Plant height 45 cm long, erect. Tubers 2, unequal, 1.5-3.3 cm long, ovoid- globular. Leaves 3 - 4, 5 - 14 × 1 - 1.5 cm, oblong-lanceolate, acute-acuminate, alternate, sheathing at base, down the stem. Inflorescence 10 - 15 cm long, laxly many flowered, erect; floral bract 6 - 7 × 2-2.5 mm, lanceolate, acute, green, shorter than ovary; pedicellate ovary 8 - 10 mm long. Flower 3-4 mm across, green, sessile. Sepals sub-equal, oblong-lanceolate, obtuse, green; dorsal sepal 4.0 - 4.5 × 1.5 - 1.6 mm, lateral sepals 4.0 - 4.5 × 1.4 - 1.5 mm, apiculate, falcate. Petals 4.5-5.0 × 2 mm, oblanceolate, acute, pale green. Lip 3 lobed, lateral lobes 6 mm long, filiform, curved in horn shape; mid lobe 3 mm long, conical, obtuse, reflexed, spur ca. 3 mm long, clavate green. Column 0.5 - 0.7 mm long, green. Pollinia 2, ca. 0.4 mm long.

Flowering: August-September.
Locality: Hengbung.

Specimen examined: Manipur, Senapati district, Hengbung 1168m, 25° 13.82' N & 94° 00.21' E, Chowlu-00954.
Distribution: India (Arunachal Pradesh, Meghalaya, Kerala, Tamil Nadu), China, Myanmar and Thailand.

Habitat Ecology: Rarely found growing on sun exposed grasslands in humid climate of sub tropical forest at 1168 m altitude.

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Fig. 1. *Peristylus parishii* Rchb. f. A. Habit. B. Bract. CA. Flower. D. Dissected parts. E. Lip with the column. F. Lip. G. Pollinia