



# *Peristylus tentaculatus* (Orchidaceae): A new record for India from the Western Ghats of Kerala

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## Abstract

*Peristylus tentaculatus* (Lindl.) J.J. Sm. (Orchidaceae), an orchid native to China, is reported here for the first time from India. Detailed description, notes on distribution and photographs are provided for accurate identification.

**Keywords:** India, Kerala, New Record, *Peristylus tentaculatus*, Western Ghats

## Introduction

The genus *Peristylus* Blume (Orchidaceae: Orchidoideae) is represented by 103 species in the world and is distributed from Mascarenes, tropical and subtropical Asia to Mongolia and Pacific region (Govaerts *et al.*, 2015). The genus is represented by 29 species in India (Misra, 2007; Karthigeyan *et al.*, 2010; Kumar *et al.*, 2010), of which 7 are reported from the state of Kerala (Kumar & Manilal, 2004; Sasidharan, 2013). The general morphology of this genus is very similar to that of *Habenaria* Willd. and *Pecteilis* Raf. but it can be distinguished from them by having an erect ovary raising close to the rachis, petals that are slightly broader than lateral sepals and much shorter, and often reduced to globular spur.

During the floristic exploration in the high range grasslands of central Kerala, authors have collected an unknown species of *Peristylus* from Shoolamudi hills, Ernakulam district, which is a part of Western Ghats of Kerala. Detailed taxonomic studies with perusal of relevant literature (Hooker, 1890; Fischer, 1928; Seidenfaden & Smitinand, 1959; Seidenfaden, 1977; Abraham & Vatsala, 1981; Joseph, 1987; Kumar & Manilal, 1994, 2004; Bose & Bhattacharjee, 1999; Khanam *et al.*, 2001; Kumar *et al.*, 2001; Kurzweil, 2008, 2010; Chen *et al.*, 2009; Jalal & Jayanthi, 2012; Alappatt, 2015; Govaerts *et al.*, 2015), comparison with the available icons, herbarium specimens and consultation with

experts, its identity has been confirmed as *Peristylus tentaculatus* (Lindl.) J.J. Sm., a species hitherto not reported from India. Therefore, it is reported here as a new record to the flora of India.

***Peristylus tentaculatus*** (Lindl.) J.J. Sm., Orch. Java: 35. 1905; Seidenf., Dansk Bot. Ark. 31: 41. 1977. *Glossula tentaculata* Lindl., Bot. Reg.: 10, t. 862. 1824.

### Fig. 1

Herb, terrestrial, 15–28 cm high; tubers ovoid, c. 2 × 1 cm. Stems covered with laminaless greenish sheaths at the very base. Leaves 3 or 4, sub-radical, lanceolate, 1.5–3 × 0.4–0.8 cm, sheathing at base, entire at margins, shortly acuminate at apex, glabrous, 3-veined from base, parallel. Racemes terminal, 7–10 cm long, 10–18-flowered; peduncles 2–3.5 cm long; sterile bracts 2 or 3 at base, linear-lanceolate, 0.6–0.8 × 0.1–0.25 cm, acuminate at apex; floral bracts 0.3–0.6 cm long, size diminishing towards apex. Flowers 1–1.3 cm long, greenish yellow. Dorsal sepals lanceolate to oblong, 4.3–4.6 × 1.8–2 cm, round at base, obtuse or truncate at apex, 1-veined; lateral sepals oblique (falcate), 4–4.2 × c. 1 mm, acute at apex, 1-veined. Petals elliptic, 4.8–5.1 × 1.8–2 mm, truncate at apex, 1-veined. Lip 3-lobed; lateral lobes 1–1.8 cm long; mid-lobe triangular, 2–2.2 mm long, acute at apex. Spur globose, 2.8–3 mm, slightly 2-lobed at apex. Column c. 1 mm long.

*Flowering & Fruiting:* July–November.



Fig. 1. *Peristylus tentaculatus* (Lindl.) J.J. Sm.: a–c. Habit; d. Icon (Lindley 1825, drawn by Ricardilly); e. Holotype (Parker s.n., K000974213).

*Habitat:* Grows in grasslands in association with *Exacum courtallense* Arn., *Impatiens herbicola* Hook.f., *I. scapiflora* B. Heyne ex Roxb., *Liparis wightiana* Thwaites and *Utricularia polygaloides* Edgew.

*Specimens examined:* INDIA, Kerala, Ernakulam district, Shoolamudi, 1210 m, 26.9.2015, C.N. Sunil & Naveen Kumar 7036 (SNMH), K.M. Prabhukumar 8625 (CMPR).

*Distribution:* Cambodia, China, India (Kerala), Thailand and Vietnam.

*Notes:* This species is restricted to the collection locality with a few individuals. Therefore, it is suggested to explore other possible localities to assess its exact conservation status in India.

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