

Ceratostylis siamensis (Orchidaceae), a new addition to the flora of India

Khyanjeet Gogoi¹ & Koj Rinya²

¹*TOSEHIM, Regional Orchids Germplasm Conservation & Propagation Centre (Assam Circle),

Daisa Bordoloi Nagar, Talap, Tinsukia 786 156, Assam, India

² Divisional Forest Officer, Hapoli Forest Division, Lower Subansiri District, Arunachal Pradesh, India

*Corresponding author: khyanjeetgogoi@gmail.com

Abstract

Ceratostylis siamensis Rolfe ex Downie, Orchidaceae, is added to flora of India. A detailed description and an illustration with photographs of the species are provided in this article.

Résumé

Ceratostylis siamensis Rolfe ex Downie - Orchidaceae - est ajouté à la flore de l'Inde. Une description détaillée et une illustration avec des photographies de l'espèce sont fournies dans cet article.

Keywords: *Ceratostylis*, taxonomy, valley of Arunachal Pradesh, Ziro

Mots clés : *Ceratostylis*, taxinomie, vallée de l'Arunachal Pradesh, Ziro

Introduction

During a field trip under the Orchid translocation project, to the forested area of Ziro valley of lower Subansiri district of Arunachal Pradesh on 15 October, 2019 the first author collected an epiphytic orchid. The orchid was

planted at the orchid trail located in the Tale wildlife Sanctuary, Ziro valley and flowered under observation in March, 2020. On the basis of available literature (King & Pantling 1898; Pradhan 1979; Chowdhery 1998; Pearce & Cribb 2002; Lucksom 2007; Chen *et al.* 2009, Rao 2010; Jian-wu *et al.* 2015; Swami 2017; Gale *et al.* 2018; Gogoi 2019) and critical examination of the flowers, it was identified as *Ceratostylis siamensis* Rolfe ex Downie (1925: 319), that has earlier been known only from China (Yunnan), Thailand, Laos and Vietnam. The genus *Ceratostylis* Blume (1825: 304) counts approximately 153 species, which are found in India, throughout Southeast Asia, the Philippines and the islands of the Pacific Ocean (Govaerts *et al.* 2020). So far, 4 species has been reported from India (Misra, 2019) and 2 species were recognized in Arunachal Pradesh (Hegde *revised*, 2017) namely *Ceratostylis himalaica* Hooker J.D. (1890: 826) and *Ceratostylis subulata* Blume (1825: 306). The discovery of *Ceratostylis siamensis* form a new registration for India and for Arunachal Pradesh. The voucher specimen has been deposited at the Herbarium of the Orchid Research Centre Tippi (OHT), Arunachal Pradesh and at the Herbarium of The Orchid Society of Eastern Himalaya (TOSEHIM), Regional Orchid Germplasm Conservation and Propagation Centre (Assam Circle), Assam. A detailed description, an illustration, information on the habitat and a geographic distribution map of the latter are proposed here.

Taxonomic treatment

Ceratostylis siamensis Rolfe ex Downie

Type: Thailand, Siam, *Kerr* 213 (K !)

Specimen Examined: India, Arunachal Pradesh, forested area of Ziro valley of lower Subansiri district, 10/15/2020, fl. 03/13/2020 in the Tale wildlife Sanctuary, *Gogoi* 00806 (OHT; TOSEHIM).

Description (Fig. 1): plants epiphytic. Stems 1–2 cm long, clustered, pendulous, short, branched, enclosed in scale like sheaths; sheaths 4–6, reddish brown, ovate-lanceolate, 5–10 × 3–4 mm, membranous, acute. Leaf linear, 25–35 × 3–5 mm, fleshy, apex unequally 2-lobed, acute. Inflorescence arising from leaf base, 7 mm long, slightly pubescent, 1 or 2 flowered; peduncle 4 mm long, with 2 sheaths; floral bracts ovate-lanceolate, reddish brown, membranous, acuminate, 4 × 2 mm. Flowers small, white with purplish red spots, lip whitish yellow. Pedicel and ovary 2–3 mm long, pubescent. Dorsal sepal oblong-lanceolate, abaxially pubescent, glabrous

adaxially, acute, 3×2 mm; lateral sepals broadly ovate, acute, 2–3 mm, abaxially pubescent, glabrous adaxially. Petals narrowly oblong, glabrous, $2-3 \times 1$ mm; lip oblong, cymbiform, 2–3 mm, thickened, base deeply saccate, margin entire, apex with a cushion like callus. Column very short, column foot short and warty, anther cap galeated. Pollinia 8; rostellum short. Capsule sub-ellipsoid, $5-6 \times 3-4$ mm.

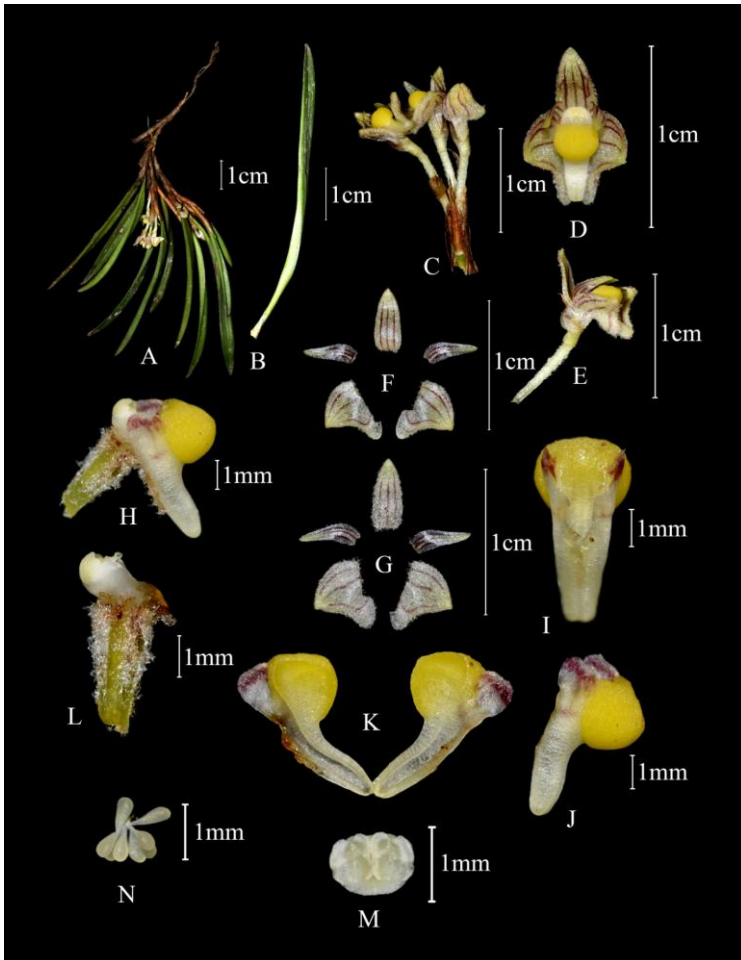


Fig. 1. *Ceratostylis siamensis*

A. habit; B. leaf; C. inflorescence; D, E. different views of flower; F. perianth seen from the front; G. perianth seen from the back; H. lip with ovary & column; I, J. different views of lip; K longitudinal section of lip; L. ovary & column; M. anther cap; N. pollinia.

Flowering and Fruiting (in India): March-June.

Habitat: Epiphytic on tree trunks in moist shady places.

General distribution [Fig. 2]: India (Ziro, Arunachal Pradesh), China (Yunnan), Thailand, Laos and Vietnam.

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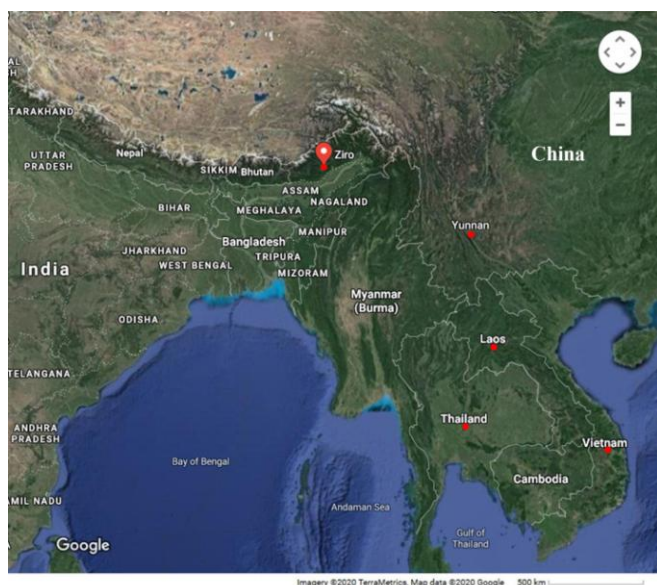


Fig. 2. Distribution map of *Ceratostylis siamensis*

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