



Arachnis labrosa var. *zhaoi* (Orchidaceae): A new record for India

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Abstract

Arachnis labrosa var. *zhaoi* (Z. J. Liu, S. C. Chen & S. P. Lei) S.C. Chen & J.J. Wood, hitherto considered endemic to China is reported as new addition to India from Nagaland. A detailed description along with photographs are provided.

Keywords: *A. labrosa* var. *zhaoi*, Orchidaceae, India, Nagaland, new record

Introduction

The genus *Arachnis* Blume, popularly called spider orchid, comprises of 14 species worldwide, distributed from North-Eastern India and mainland Asia to Taiwan, the Ryukyu Islands, Indonesia (west of Sulawesi) and the Philippines (Wood, 2014). This monopodial genus is characterized by long stems, distichously arranged leaves, long and much branched inflorescence bearing very attractive and often strikingly colored flowers giving a spidery image; though sepals and petals are very long and brightly colored, lip is comparatively smaller, 3-lobed and motile attached to the column-foot by a strap of tissue with saccate or spurred base and midlobe has a raised central ridge or callus. This genus was so far represented by four species in India namely, *A. cathcartii* (Lindl.) J.J. Sm., *A. clarkei* (Rchb.f.) J.J. Sm., *A. labrosa* (Lindl. & Paxton) Rchb.f. and *A. senapatiana* (Phukan & A.A. Mao) Kocyan & Schuiteman. During field explorations in the Zunheboto district of Nagaland in 2014, few interesting orchids were collected and identified with the help of relevant taxonomic literature (Hooker, 1890-1894; King & Pantling, 1898; Hynniewta *et al.*, 2000; Pearce & Cribb, 2002; Deb *et al.*, 2003; Misra, 2007; Lucksom, 2007; Deb & Imchen, 2008; Chowdhery, 2009; Chen & Wood, 2009) and authentic specimens housed at the herbarium of Nagaland University. One among the collections proved to be *A. labrosa* var. *zhaoi* (Z. J. Liu, S.C. Chen & S.P. Lei) S.C. Chen & J.J. Wood. This taxon was so far considered endemic to China and it is reported as new record for India from Nagaland. A key to all the taxa in India is provided for easy identification.

1. Sepals and petals broad ovate, fleshy..... 2
1. Sepals and petals narrow, somewhat spatulate, not very fleshy 3
2. Sepals and petals white; lip broadly 4-lobed
..... **A. cathcartii**
2. Sepals and petals yellow; lip 3-lobed ... **A. clarkei**
3. Flowers white with different shades of pink
..... **A. senapatiana**
3. Flowers dirty yellow with or without markings 4
4. Sepals and petals with deep brownish purple cross markings **A. labrosa** var. **labrosa**
4. Sepals and petals uniformly dirty yellow without any marking **A. labrosa** var. **zhaoi**

Arachnis labrosa* var. *zhaoi (Z.J. Liu, S.C. Chen & S.P. Lei) S.C. Chen & J.J. Wood, Fl. China 25: 466. 2009. *Arachnis zhaoi* Z.J. Liu, S. C. Chen & S.P. Lei, Acta Bot. Yunnan. 30: 529. 2008. **Fig. 1**

Stems 30–80 cm long, 0.7–1.5 cm thick, rigid with many nodes with distichous leaves. Leaf blade loriate, leathery, 22–33cm long, 2.1–3.2 cm broad, Apex unequally rounded – bilobed, with amplexicaul sheaths at base, persistent. Inflorescence arising from within leaf sheath, ascending, racemose, 40–90 cm long, 10–23 flowers. Floral bracts reddish brown, broadly ovate, persistent, 5–9 mm long, apex obtuse. Pedicel 1.5–2.4 cm long, yellowish green; Flowers yellowish green; lip with yellow side lobes and yellow-whitish midlobe. Sepals oblong, 1.3–2 cm long, 3–4 mm broad, having dorsally thick midrib,

apex acute and curved backward. Petals narrowly falcate, 1.3–1.7 cm long, 4–5 mm broad with slightly thicker midrib dorsally, apex acute and slightly curved backward; lip fleshy 1.2–1.5 cm long, 3-lobed; side lobes small, *c.* 2mm broad, apex obtuse; midlobe fleshy, ligulate, 6–9 mm long, 3–5 mm broad, apex acute, base concave; spur 2–3 mm long; column 3–6 mm long.

Flowering: July – August.

Habitat & Ecology: Epiphytic on *Lithocarpus* sp. near Tsuyi river side. Only two individuals were spotted.

Specimen examined: INDIA, Nagaland, Zunheboto district, Mukalimi Village, 25°51 '12"N & 94°19'19.4"E, 498 m, 30.07.2014, H.Y. Jakha 54 (NUH).

Distribution: China (Hainan, Changjiang, Qicha, Qichaling Mountain), India (Zunheboto district, Mukalimi Village, Nagaland).

Threat factor: Habitat destruction and forest fire.

Conservation status: Being the first record from the country, conservation status not known.



Fig.1. *Arachnis labrosa* var. *zhai* (Z.J. Liu, S.C. Chen & S.P. Lei) S.C. Chen & J.J. Wood. **a.** Habitat; **b.** Inflorescence; **c.** Flower closer view; **d.** Dissected floral parts.

Excluded Species: Arachnis flos-aeris (L.) Rchb. f.-Panigrahi & Joseph (1966) reported this species from Tirap Frontier Division, NEFA (Arunachal Pradesh) based on a misidentification. Botanists, especially the orchidologists who worked in the area subsequently never came across this species. And it was concluded that this species does not occur in Arunachal Pradesh (Rao, 1992). It is a large plant, not to be over looked easily and its flowers are big and strikingly beautiful; if it were there people would have easily collected it. Moreover, this species has never been reported from the neighboring China, Nepal, Bhutan, and Myanmar though it occurs in Malaysia, Indonesia, Borneo, Thailand and the Philippines.

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