



## A new species of *Zeuxine* (Cranichidae; Orchidaceae) from Hainan, China

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### Introduction

*Zeuxine* Lindley (1826: 19; Orchidaceae) comprises around 70 species widely distributed in tropical and southern Africa, Madagascar, tropical and subtropical Asia, to New Guinea, northeastern Australia, and the Pacific Islands (Pearce & Cribb 2002, Pridgeon *et al.* 2003). It belongs to subtribe Goodyerinae (Cranichidae; Orchidoideae; Pridgeon *et al.* 2003). The genus is mainly terrestrial but can rarely be found as epiphytic or lithophytic herbs. So far, fourteen species (two endemic) have been recorded in China (Chen *et al.* 2009).

In our recent field investigation in Hainan Province, China, a plant clearly belonging to *Zeuxine* was found. Closer study of more material showed that it is different from any of the species previously described in this genus (Lin 1975, Seidenfaden 1978, Lang 1999, Lucksom 2007, Chen *et al.* 2009, Bhattacharjee & Chowdhery 2010). Consequently, we describe it as a new species, and an illustration is provided.

*Zeuxine ovalifolia* L. Li & S. J. Li, *sp. nov.* (Fig. 1)

Species similar to *Z. agyokuanae* Fukuy but with much smaller ovate leaves, broader and more sparsely ciliate floral bracts, narrower and united dorsal sepal and petals, and a yellow to orange-yellow hypochile of the lip with bi- or trilobed calli.

**Type:**—CHINA. Hainan Province: Wuzhishan Mountain National Nature Reserve, in tropical rainforest, 18° 53' N – 109° 41' E, 1,380–1,400 m, 1 September 2012, *Li 0466* (holotype: IBSC!).

A terrestrial herb with creeping rhizome and ascending leafy stem. Rhizome terrete, 5–6 cm long, rooting at nodes; internodes 1.2–2.0 cm. Roots arising from rhizome nodes, pubescent. Stem 4–5 cm tall, glabrous, enveloped by tubular, leaf-bearing sheaths. Leaves 6–7, cauline, alternate, sheathing petiolate; petiole and sheath 0.5–1.0 cm long; leaf blade ovate, margin entire, base rounded, apex acute, 1.6–2.2 × 0.7–1.0 cm, deep green to green, grayish-green beneath without white markings. Inflorescence terminal, erect, racemose, sparsely pubescent; peduncle ca. 9.5 cm long, with 2 sterile bracts, 4.0–7.0 × 0.5–1.0 mm, pinkish brown; rachis 3.0–3.5 cm long, loosely spaced with 4–6 flowers. Floral bracts shorter than the ovary, tubular, red-brown, apex acuminate, margin sparsely ciliate or fringed, 6.0–6.5 × 1.5–2.0 mm. Pedicel and ovary fusiform, subglabrous, twisted, 7.5–8.0 × 0.8–1.5 mm, dark brown. Flowers about 6.0–6.5 mm across, red-brown with a yellow and white lip. Sepals subglabrous, subsimilar; dorsal sepal 5.2–5.4 × 1.4–1.7 mm, oblong-lanceolate, concave below middle or near base, apex obtuse, red-brown; lateral sepals spreading, narrowly oblong-lanceolate, 4.0–4.2 × 1.0–1.4 mm, acuminate, margin slightly involute, apex obtuse, adaxially olive-green tinged red-brown, abaxially red-brown. Petals glabrous, oblique, slightly falcate, 4.8–5.0 mm long, broad in the middle, narrowing suddenly towards the apex, closely joined or united to the dorsal sepal forming a forward hood over column, white. Lip cymbiform, fleshy, saccate at base, 4.0–4.3 mm long, 1.2–1.5 mm thick at base, with a short mesochile and tripartite, orange-yellow to bright yellow at base, white at apex (epichile); hypochile concave-saccate, ca. 3 mm long, inside bearing a pair of irregularly toothed warts on each side, honey yellow, bipartite or tripartite, somewhat dentate, apex obtuse; mesochile involute, folded inward, dentate to jagged along margin; epichile attenuate, narrower than hypochile, broad ligulate, 1.0–1.2 mm,