



## Taxonomic studies on *Zingiber* (Zingiberaceae) in China II: *Zingiber tenuifolium*, a new species from Yunnan, China

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### Abstract

*Zingiber tenuifolium* (Zingibereae, Zingiberaceae), a new species from Yunnan, China, is described and illustrated here. It is compared to the three most similar species from the sect. *Cryptanthium*, namely *Zingiber shuanglongense* and *Z. kawagooi*, two endemics from Taiwan, China and *Z. lingyunense* from Guangxi, China. The original specific epithet ‘*shuanglongensis*’ is corrected here to ‘*shuanglongense*’, to agree grammatically with the generic name.

**Key words:** revision, sect. *Cryptanthium*, Taiwan, *Zingiber kawagooi*, *Z. lingyunense*, *Z. shuanglongense*

### Introduction

The general introduction to the genus *Zingiber* Miller (1754: unpagged) with focus on *Zingiber* in China, as well as materials and methods, was given in the first paper of this series (Bai *et al.* 2015) and is therefore not repeated here. Of the four sections currently recognized in the genus *Zingiber*, the sect. *Cryptanthium* Horaninow (1862: 27) is the most diverse and complicated section with ca. 34 species known from China so far, of which 27 are endemics.

The revision of the genus *Zingiber* in China is in progress since 2011. During recent explorations of central part of Yunnan Province, China, the first author encountered an unidentified species of sect. *Cryptanthium* with narrowly-ovate, almost grass-like leaf blades, procumbent peduncles, ovate spikes composed of loosely arranged bracts and flowers with bright purple labellum and lateral staminodes. Review of protologues, type specimens and also comparative studies based on newly collected material from across China suggest that this taxon does not match any other species in the sect. *Cryptanthium* and is therefore described and illustrated below. The comparison to the three closest allies, *Zingiber shuanglongense* C.L. Yeh & S.W. Chung (2012: 163) and *Z. kawagooi* Hayata (1921: 35), two endemics from Taiwan, China and *Z. lingyunense* D. Fang (1989: 226) from Guangxi, China is also given.

### Taxonomy

*Zingiber tenuifolium* L. Bai, Škorničk. & N.H. Xia, *sp. nov.* (Figs. 1–3)

Similar to *Zingiber shuanglongense* in loosely arranged bracts, violet labellum and lateral staminodes, and short ligules, but differs by leafy shoots composed of 13–23 leaves, smooth, linear to narrowly ovate laminae, 18–23 × 1.5–3 cm (average length: width ratio ca. 10), and floral tube extending only 2 mm beyond the bract (compared to leafy shoots with 5–12 leaves, weakly plicate, oblong or ovate laminae, 12–20 × 3–6 cm (average length: width ratio ca. 4), and floral tube extending at least 15 mm beyond the bract in *Z. shuanglongense*).

**Type:**—CHINA. Yunnan Province: Xinping Xian, Pingdian Xiang, Qingrengu scenic spot, elevation 500–700 m, 27 August 2013, L. Bai 13082701 (holotype IBSC (inclusive inflorescences preserved in alcohol in a jar); isotypes E, KUN, SING, US).