## 兰科带唇兰属一新异名

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**摘要:** 经过对标本馆馆藏标本的研究,确认原四川特有的峨眉带唇兰[*Tainia emeiensis* (K. Y. Lang) Z. H. Tsi]与大花带唇兰(*T. macrantha* Hook. f.)为同种植物,因此予以归并。

关键词: 峨眉带唇兰; 大花带唇兰; 带唇兰属; 新异名; 兰科

doi: 10.11926/j.issn.1005-3395.2015.05.002

## A New Synonym of Tainia (Orchidaceae)

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**Abstract:** Morphological comparisons indicate that *Tainia emeiensis* (K. Y. Lang) Z. H. Tsi, previously recorded as endemic to Sichuan, China is conspecific with *T. macrantha* Hook. f. and reduced as a heterotypic synonym. **Key words:** New synonym; Orchidaceae; *Tainia*; *Tainia emeiensis*; *Tainia macrantha* 

Tainia Blume is an orchid genus in the subfamily Epidendroideae, tribe Collabieae<sup>[1]</sup>. There are about 30 species, distributed from India, Sri Lanka and the Himalayan region, north to China, Japan, south from SE Asia to New Guinea and the Pacific islands<sup>[2]</sup>. In his revised monograph, Turner<sup>[3]</sup> regarded *Ania* Lindl. and *Mischobulbum* Schltr. distinct from *Tainia* based on morphology. Despite that, most of these species have long been treated under Tainia s.l. including *Ania*, and sometimes also including *Mischobulbum*<sup>[1–2,4–5]</sup>. In the most recent classification based on molecular phylogeny<sup>[6–9]</sup>, *Ania* was separated from *Tainia* s.l. and re-established. Currently only 22 of these were previously recognized species, the rest being proposed as species of *Ania*.

Whilst examining herbarium collections of this genus for a revision of *Tainia* and its allies, the types of *T. emeiensis* (K. Y. Lang) Z. H. Tsi and *T. macrantha* Hook. f. were found morphologically very similar (Fig. 1). Lang<sup>[10]</sup> reported *Mischobulbum emeiense* based solely on type specimens collected from Emei Shan (Mount Emei) in central Sichuan Province, China. Then Tsi<sup>[5]</sup> transferred *M. emeiense* to *Tainia*. In the original description, the author specified it differs from *T. macrantha* in having rounded leaf base, bigger sterile bract, less and smaller flowers, and scarcely or slightly lobed lip. These characters, however, are not sufficient to recognize *T. emeiensis* as a species distinct from *T. macranthe*. It should be noted that the holotype of *T. emeiensis* was collected while the flowers were still in

**Received:** 2015–04–23 **Accepted:** 2015–05–29

This work was supported by the National Natural Science Foundation of China (31100149) and Science and Technology Basic Work, Project of the Ministry of Science and Technology, China (2013FY112100).

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bud. After dissecting fresh flowers of *T. macrantha*, we confirmed that the shorter inflorescence, larger sterile bracts, smaller flowers, and not conspicuous lateral lobes of lip are all coincident with those of flowers of *T. macrantha* in bud.

Other than the type specimens, no additional specimen of this species has ever been collected until recently it was found in Gulin Xian, Sichuan Province. Not surprisingly, the species differs from the original description in its larger flowers and



Fig. 1 Holotypes of  $\it Mischobulbum\ emeiense\ (A,B)\ (PE)$  and  $\it Tainia\ macrantha\ (C,D)\ (K)$ 

conspicuous lateral lobes of lip. Moreover, based on further investigations of herbarium specimens, we concluded that the shape of the leaf base, as well as the floral characteristics of *T. emeiensis* falls well within the variation range of *T. macrantha*, e.g., some individuals are subrounded in their leaf base, while some others are cuneate or truncate; inflorescence 3-flowered, also 6-flowered. It becomes evident that the two species are conspecific and *T. emeiensis* is therefore treated as a synonym of *T. macrantha*.

*Tainia macrantha* Hook. f., Hooker's Icon. Pl. **19**: t. 1860. 1889; Schltr. in Fedde Repert. Sp. Nov. Beih. **4**: 181. 1919; H. Turner in Orch. Monogr. **6**: 82. fig. 46. 1992. — *Mischobulbum macrathum* (Hook. f.) Rolfe in Orch. Rev. **20**: 127. 1912. **Type**: China: Guangdong, Ford 153 (holotype K! Fig. 1: C–D).

Tainia emeiensis (K. Y. Lang) Z. H. Tsi. in Fl. Reip. Pop. Sin. 18: 236. 1999. — Mischobulbum emeiense K. Y. Lang in Acta Phytotax. Sin. 20(2): 185. fig. 4. 1982. 'emeiensis'; H. Turner in Orch. Monog. 6: 73. 1992, syn. nov. Type: China: Guangdong, Lang, Gao & Yang 023 (holotype PE! Fig. 1: A–B).

**Ecology.** Understory plant occurs in wooded slopes or near streams and in moist areas, along valleys under broad-leaved forests, altitude from 700–1200 m.

**Distribution.** China (Guandong, Guangxi, Sichuan), Vietnam (Lao Cai).

Specimens examined. CHINA. Guangdong (广东): Xinyi (信宜), S. P. Ko (高锡朋) 51680 (IBSC, KUN), R. K. Huang (黄荣焜) 31142 (IBSC, PE, KUN); Mt. Luofushan (Lofaushan) (罗浮山), C. Ford 153 (K), Merrill 11011 (US), N. K. Chun (陈念劬) 41531 (IBSC); Ruyuan (乳源), L. Li (李琳) 093 (IBSC); precise locality not known, N. K. Chun (陈念劬) 31142 (IBK, IBSC, PE, KUN); Guangxi (广西): Rongshui (融水), Damiaoshan (大苗山), L. H. Chun (陈少卿) 14901 (IBSC, IBK, PE, KUN), L. H. Chun (陈少卿) 14765 (IBSC, IBK, PE, KUN, HITBC), Hexian (贺县), H. C. Chun (陈亨春) et al. 500292 (IBSC, IBK), Luocheng (罗城), Beijing Team (北京队) 895581; Longsheng (龙胜), Longsheng

Collection Team (龙胜采集队) 50204 (IBK); Jinxiu (金秀), Yaoshan (Dayao Shan Mtns.) (大瑶山), S. S. Sin (辛树帜) 22349, 23659 (IBSC); **Sichuan** (四川): Mt. Emeishan (峨眉山), K. Y. Lang (郎楷永), B. C. Gao (高宝莼) et al. 023 (PE); Gulin Xian (古蔺县), Huangjing (黄荆), X. J. He (何兴金), Q. S. Zhao (赵清盛) 189057 (SZ).

Acknowledgments The authors would like to thank the staffs of herbaria K, P, US, PE, KUN, IBSC, IBK, HITBC and SZ for permission to examine the specimens. We are grateful to Prof. Kai-yong LANG for providing us with detailed collection information and Engineer Ce-hong LI for his assistance in the field.

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