



Editorial

Orchid diversity in China: Recent discoveries



Orchidaceae are among the largest plant families of angiosperms, with approximately 750 genera and 28,500 species around the world (Chase et al., 2015). The orchids have been considered a flagship of conservation biology (Zhang et al., 2015; Fay, 2018; Liu et al., 2020), and all species have been included in CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) Appendix I or II. Over the last two decades, there has been major progress in the classification of Orchidaceae. An updated classification with five subfamilies and 22 tribes (including three new tribes) has been proposed (Chase et al., 2015). Generic classifications in Collabieae, Epidendreae, Malaxideae, Neottieae, Orchideae, Podochileae and Vandeeae have been discussed (Xiang et al., 2012a, 2012b, 2013, 2014; Jin et al., 2014; Kocyan and Schuiteman, 2014; Zhai et al., 2014; Tang et al., 2015; Raskoti et al., 2016; Simo-Droissart et al., 2018; Yan Peng et al., 2018). The generic delimitation of Orchidaceae in China has been discussed (Jin et al., 2015).

The project, Orchid Diversity Survey in China, has been initiated by the Department of Wildlife Conservation of National Forestry and Grassland Administration (DWC-NFGA) from 2018 to 2022 with aims of understanding orchid biodiversity, distribution, conservation status, and richness in China. During botanical investigation, approximately 30 new species and 10 newly recorded species have been discovered, most of which are described and illustrated in this special issue of *Plant Diversity* entitled “Orchid Diversity in China”, which includes nine papers mainly focusing on these discoveries. In total, 23 new species were described, including the *Bulbophyllum* Thouars (Malaxideae) with four new species (Ya et al., 2021b); the *Liparis* Rich. (Malaxideae) with three new species (Ya et al., 2021a); the *Cheirostylis* Blume (Cranichideae) (Ya et al., 2021b), *Gastrochilus* D. Don (Vandeeae) (Li et al., 2021), and *Myrmecichis* (Lindl.) Blume (Cranichideae) (Ya et al., 2021b) with two new species; the *Corallorhiza* Gagnebin (Epidendreae) (Yang et al., 2021), *Gastrodia* R. Br. (Gastrodieae) (Liu et al., 2021), *Herminium* L. (Orchideae) (Lin et al., 2021), *Luisia* Gaudich. (Vandeeae) (Li et al., 2021), *Neottia* Guett. (Neottieae) (Chen and Jin, 2021), *Peristylus* Blume (Orchideae) (Lin et al., 2021), *Platanthera* Rich. (Orchideae) (Lin et al., 2021), *Ponerorchis* Rchb. f. (Orchideae) (Lin et al., 2021), *Taeniophyllum* Blume (Vandeeae) (Li et al., 2021), and *Tuberolabium* Yamam. (Vandeeae) (Li et al., 2021) with one new species, respectively. In addition, six orchid species (*Bulbophyllum frostii* Summerh., *B. raskotii* J.J. Verm., Schuit. & de Vogel, *B. nematocaulon* Ridl., *Cleisostoma tricornutum* Aver., *Luisia inconspicua* (Hook.f.) King & Pantl., and *Peristylus tenuicallus* Ormerod) are recorded in China for the first time.

As one of the most beautiful, diverse and fragile plant taxa in the world, orchid species are often considered good indicators of healthy ecosystems. The scientific information collected during this ambitious botanical survey will provide important support to nature conservation activities in China.

Declaration of competing interest

Authors have no conflict of interest to declare.

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