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Preface: Diversity of Yintiaoling Nature Reserve, II

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Located in the eastern part of Wuxi County, at the northeastern tip of Chongqing Municipality, China, and adjacent to the famous Shennongjia Scenic Area in western Hubei Province, Yintiaoling serves as the core area of the Dabashan region, Qinling-Daba Mountains, and the western extension of the Shennongjia forest area. The Yintiaoling Nature Reserve was established in 2001 as a provincial-level nature reserve and was upgraded to a national-level status in 2012. Despite being a relatively new protected area, its geological origins can be traced back to the Neoproterozoic Sinian Period. During the Caledonian orogeny 400–500 million years ago, it became the sole Caledonian fold structure spanning North China, Central China, and the Yangtze River Basin (*s. str.*). Characterized by steep terrain and distinctive vertical landscapes, the Nature Reserve features a typical deep-incised mid-mountain topography encompassing both sheer cliffs and high-altitude flat basins. Its highest point, Yintiaoling Peak, rises to 2,798.6 meters, while the lowest elevation at Lanying River Valley measures 450.2 meters.

As a subtropical humid region, the reserve primarily protects forest ecosystems and biodiversity, including key protected species and rare endangered wildlife. It serves as the core area of the Dabashan Biodiversity Conservation Priority Zone and is a vital component of the Qinling-Daba Mountains and the greater Shennongjia Key Biodiversity Region.

Previous biodiversity surveys in the reserve documented 3,595 vascular plant species and 319 terrestrial vertebrate species, whereas invertebrate data remained notably incomplete, documenting only 830 insect species (Deng 2018). Since 2022, with support from the Chongqing Municipal Forestry Bureau and Yintiaoling National Nature Reserve Management Center, we collaborated with taxonomic research teams across various invertebrate taxa to conducted comprehensive surveys, resulting in remarkable discoveries. In 2023, the first special volume on Yintiaoling invertebrate biodiversity was published in *Zootaxa*, containing 12 papers with descriptions of 36 new species from the reserve (Zhang & Zhang 2023). Among these, the groundbreaking discovery of *Scorpiops zhui*—the first scorpion species recorded from Chongqing—transformed the understanding of regional biodiversity and exposed a significant prior underestimation of its richness (Lv *et al.* 2023).

Based on the achievements resulting from continuous collaboration among invertebrate taxonomists, we are compiling the second *Zootaxa* special issue on the diversity of Yintiaoling Nature Reserve to comprehensively showcase research outcomes. Co-edited by Professor Xingyue Liu (Subject Editor for *Zootaxa*'s Megaloptera, Neuroptera and Raphidioptera, China Agricultural University) and myself, this issue comprises 18 papers covering eight arthropod groups: Acari, Araneae, Coleoptera, Diptera, Ephemeroptera, Hymenoptera, Protura, and Trichoptera. It documents 39 new species, 36 of which originate from Yintiaoling. Particularly noteworthy is the description of seven new Cicurinidae spider species in a single study, highlighting the reserve's extraordinary invertebrate diversity.

With the publication of this volume, more than 80 new species have been described from Yintiaoling Nature Reserve. It is projected that over 100 new species will be identified upon completion of all invertebrate specimens from Yintiaoling, solidifying its status as China's most endemic species-rich nature reserve. This will firmly establish the Dabashan area, Qinling-Daba Mountains and the greater Shennongjia region as one of China's biodiversity hotspots and conservation priority zones.

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