



# **Article**

# Ant-like sac spiders from Jinyun Mountain Natural Reserve of Chongqing, China (Araneae: Corinnidae)

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## **Abstract**

Eight corinnid species were collected from the Jinyun Mountain Natural Reserve: *Corinnomma severum* (Thorell, 1877) (male, female), *Otacilia komurai* (Yaginuma, 1952) (male, female), *O. longituba* **sp. nov.** (male, female), *O. taiwanica* (Hayashi & Yoshida, 1993) (male, female), *Phrurolithus hamatus* **sp. nov.** (male, female), *P. zongxu* **sp. nov.** (male, female), *Trachelas japonicus* Bösenberg & Strand, 1906 (male, female) and *T. sinensis* Chen, Peng & Zhao, 1995 (female). Morphological illustrations and photos of all species and descriptions of new species are given.

Key words: new species, taxonomy, morphology, photo, illustration

#### Introduction

The Jinyun Mountain Natural Reserve is located in the Chongqing Municipality of China, the subtropical monsoon humid climate area, and the middle and upper reaches of the Yangtze River, varying from 29°40.69′ to 29° 51.53′ N and 106°16.97′ to 106°24.42′ E. More than 1,700 species of vascular plants are known from the Jinyun Mountain area and are divided into six natural terrestrial vegetation types: broad-leaved evergreen forests, evergreen coniferous-broad mixed forests, evergreen coniferous forest, bamboo, forests, bushwood and shrub-grasses (Xiong 2005). The diverse vegetation offers an adaptive habitat for a large number of animals.

Spiders are one of the most diverse and abundant invertebrate predators in terrestrial ecosystems (Wise 1993). From the end of 2007, a survey on the spiders of Jinyun Mountain has been conducted. Up to now, nearly 400 species have been discovered. The preliminary spider catalog of Jinyun Mountain involved 219 species, belonging to 112 genera of 27 families (Wang *et al.* 2010). There are still many undescribed species awaiting discovery and description.

The spider family Corinnidae is one of the largest spider groups, with 87 genera, 1016 species worldwide, and 12 genera and 54 species from China (Platnick 2012; Li *et al.* 2011). Though several studies published recently (Yang *et al.* 2009; Zhang *et al.* 2009; Fu *et al.* 2010a, 2010b; Marusik & Kovblyuk 2010), our collections confirmed that the taxonomy of this group is far from clear. Here, eight corinnid spiders from Jinyun Mountain Natural Reserve are reported, of which three are new, belonging to the genera *Otacilia* or *Phrurolithus*. The generic status of the new species was confirmed on the basis of their nearest species. Illustrations and photographs of the new species are provided, as well as photographs of the previously known species.

### Material and methods

Photos were taken by Canon EOS 7D with EF 100mm F2.8L Lens. All specimens are preserved in 75% ethanol and were examined, illustrated, photographed and measured using a Leica M205C stereomicroscope equipped with

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