



Two new species of the genus *Khorata* (Araneae: Pholcidae) from China

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Abstract

Two new species of *Khorata* are described from China: *K. ningyuan* sp. nov. and *K. sancai* sp. nov. Both species were collected in caves.

Key words: taxonomy, spiders, caves, Hunan, Guangxi

Introduction

The pholcid spider genus *Khorata* Huber (2005) currently includes 27 species from China, Laos and Thailand (Platnick 2013; Yao & Li 2013). *Khorata* can be distinguished from other genera by 1) the sclerotized ledges on the anterolateral surface of the male chelicerae; 2) the sclerotized proximal cheliceral apophyses; 3) the apophysis retrolaterally on the male palpal femur; 4) the relatively small male palpal tibia and a membranous embolus; 5) the shallow thoracic furrow; 6) the absence of posterior pockets on the female opisthosoma (Huber 2005b).

A total of 21 *Khorata* species have been described from China (Tong & Li 2008; Zhang & Zhang 2008; Chen *et al.* 2009; Zhang & Zhu 2009; Yao & Li 2010). Seventeen of these species were reported from caves (Chen *et al.* 2009; Yao & Li 2010). What is more interesting is all these cave-dwelling *Khorata* species were collected from Guangxi except *Khorata xingyi* Chen, Zhang & Zhu, 2009 from Guizhou. Guangxi has typical karst landforms. Many other counties in China have also typical karst landforms, e.g., Guizhou, Hunan and Yunnan. If we assume that *Khorata* species have a preference for the limestone caves, *Khorata* species diversity in Guizhou should also be high. However, that is not the case. At least 300 caves in Guizhou have been investigated by the research group led by Dr S. Li during the last few years. Only one *Khorata* species, *K. xingyi* was reported from Guizhou. Why is there is so much *Khorata* species diversity in Guangxi? Maybe the center of origin of the genus *Khorata* is just in Guangxi, but this still needs to be confirmed by future collecting and further research.

During a recent expedition to Hunan and Guangxi, two new cave-dwelling *Khorata* species were discovered. These are here described as *K. ningyuan* sp. nov. and *K. sancai* sp. nov.

Material and methods

Specimens were examined with an Olympus SZX16 stereomicroscope and an Olympus BX61 compound microscope. All illustrations were made using an Olympus drawing tube mounted on each microscope. Photos were made with an Olympus C7070 digital camera mounted on an Olympus BX61 compound microscope. Type specimen photos are available on-line (Li & Wang 2013). All specimens examined in this study are deposited in the College of Life Sciences, Hunan Normal University (HNU). Terminology and taxonomic descriptions follow Huber (2000, 2005b).

All measurements were obtained using the stereomicroscope and are given in millimeters. Eye diameters are taken at the widest point. Total body length is the sum of carapace and abdomen length, regardless of the pedicel. Leg measurements are shown as: total length (femur + patella + tibia + metatarsus + tarsus). Leg segments were measured on their dorsal side. The following abbreviations are used in the text and illustrations: ALE, anterior

Variation. Tibia I length in other males (n=2): 3.76–4.81 (mean: 4.38).

Female. Similar to male, habitus as in Figs 5C–D. Leg I lost in all female specimens. Epigynum brown (Figs 5A and 6D), without pockets. Vulva (Figs 5B and 6E) with two nearly triangular lateral pore plates.

Distribution. The species is known only from the type locality (Fig. 7).

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