A new species of the genus Khorata (Araneae: Pholcidae) from Fujian Province, China

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Abstract — A new six-eyed pholcid spider belonging to the genus Khorata is reported from Wuyi Mountain, Fujian Province, China, under the name: Khorata zhuvi sp. nov. The species is diagnosed, described and illustrated.

Key words — Araneae, Pholcidae, Khorata, new species, China

The spider family Pholcidae currently contains 81 genera and 969 species (Platnick 2008). In terms of the described species number, the family is the ninth among Araneae. They are among the common spiders found indoors and outdoors throughout the world. Members of the family vary in habitus, size and life style. Six-eyed pholcids are usually tiny, leaf-litter dwelling spiders. Traditionally, almost any small six-eyed pholcids had been assigned to Spermophora. Huber published some new species and revised or erected some genera in the six-eyes pholcids (Huber 2000, 2001, 2003a, b, 2005a, b, 2007).

Khorata is a small genus of the family Pholcidae, erected by Huber (2005b), and currently consists of 5 species (Huber 2005b, Tong & Li 2008). The species of Khorata are mainly distributed in Southeast Asia and South China. The most distinct characters of Khorata are six eyes in two lateral triads on an elevated ocular area, no anterior median eyes. They generally have a flat, almost round cephalothorax and a nearly globose abdomen. Carapace has shallow but distinct median groove. Each male chelicera is equipped with a sclerotized ledge laterally, a distinctive projection proximally and a distal apophysis. Male palpal coxa is unmodified, trochanter has small retrolateral apophysis, procursus is medium complex, distinct without median hinged process, and bulb usually has only membranous embolus. Epigynum is a simple plate without pockets (Huber 2005b).

In the specimens collected from Wuyi Mountain, a National Nature Reserve located at the border between Fujian and Jiangxi Provinces, South China, we found a six-eyed pholcid spider new to science. Khorata zhuvi sp. nov is described below.

Terminology and taxonomic descriptions followed Huber (2000, 2005b). All measurements given are in millimeters. Carapace length was measured from the anterior margin to the rear margin of the carapace medially, excluding the clypeus. Total length is the sum of carapace and abdomen length, regardless of the petiolar. The measurements of legs are as follow: total length (femur + patella + tibia + metatarsus + tarsus). All specimens are preserved in 75% alcohol and were examined, drawn and measured under a Tech XTL-II stereomicroscope equipped with an Abbe drawing device. Epigyne were removed and cleared in 10% warm solution of potassium hydroxide (KOH), transferred to alcohol and temporarily mounted for drawing. Type specimens of new species are deposited in the Museum of Hebei University (MHBK), Baoding, China.

The following abbreviations are used: ALE, anterior lateral eye; AME, anterior median eye; PLE, posterior lateral eye; PME, posterior median eye.

Khorata Huber, 2005

Khorata zhuvi, new species (Figs. 1–7)


Diagnosis. This species resembles K. diaoluooshanensis Tong & Li 2008 in the shape of the palpal bulb, but can be distinguished from the latter by the shape of the distal element of the procursus (Figs. 6–7), by the forked distal apophyses and the shorter proximal apophyses of the male chelicerae (Figs. 4–5), and by the dorsal view of epigynum (Fig. 2–3).

Etymology. The specific name is a patronym in honor of Prof. Mingsheng Zhu, the collector of the type materials.

Description.

Male (holotype): total length 2.56 (2.64 with clypeus); carapace 0.90 long, 1.02 wide; abdomen 1.66 long, 1.19 wide. Leg 1: 25.29(6.30 + 0.46 + 5.99 + 9.88 + 2.66), tibia 2: 3.81, tibia 3: 2.80, tibia 4: 3.52, tibia 1 length/diameter: 62. Carapace ochre with black margins and dark marks behind ocular area; sternum black. Legs ochre, with slightly darker ring on femora (subdistally) and tibiae (proximally and subdistally). Abdomen grey with large black spots, also ventrally. Ocular area slight elevated and separated from carapace, thoracic furrow shallow but distinct; distance PME-PME 0.15; diameter PME 0.14; distance PME-ALE 0.03; AME absent. Clypeus unmodified. Sternum slightly wider than long (0.73/0.68). Chelicerae as in Figs. 4 and 5, with pair of forked frontal apophyses distally (distance between tips: 0.15), strong proximal apophyses provided with
scales, with lateral ledges, without modified hairs. Palps as in Figs. 6 and 7, trochanter with retrolateral apophysis and small ventral projection, femur with retrolateral apophysis, patella very large, procursus relatively simple except distally, bulb very simple, no projection apart from embolus. Retrolateral trichobothrium of tibia 1 at 8%; legs without spines, vertical hairs, or curved hairs; tarsus 1 with barely visible pseudosegments, but only distally are a few fairly distinct.

Variation. Tibia 1 in other males from type locality: 5.88, 5.84. Distance between tips of distal cheliceral apophyses 0.14, 0.14.

Female: In general very similar to male. Tibia 1: 5.36. Epignum black, with a tongue-shaped margin posteriorly, apparently without pockets. Dorsal view as in figure 3.

Distribution. Known only from type locality.

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References


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