Spiders of the genus *Utivarachna* from China (Araneae: Corinnidae)

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Abstract

The spiders of the genus *Utivarachna* from China are reviewed. These species belong to the *kinabaluensis* species group. A total of five species are reported including three new species, *Utivarachna arcuata* sp. nov., *Utivarachna fabaria* sp. nov. and *Utivarachna gongshanensis* sp. nov. Descriptions of the new species and the differences between the new species and their related taxa in China are discussed.

Key words: Corinnidae, *Utivarachna*, new species, review, China

Introduction

The spider genus *Utivarachna* was established by Kishida (1940) based on its type species *Utivarachna fukasawana* Kishida, 1940. Thirteen species have been recorded so far, all from South East Asia, including two species, *U. gui* Zhu, Song & Kim, 1998 and *U. taiwanica* Hayashi & Yoshida, 1993, from China. While examining the specimens collected from Gaoligong Mountains, Yunnan Province, China by the Sino-American Expeditions conducted from 1998 to 2008, three new species of the genus *Utivarachna* were identified and are described namely, *U. arcuata* sp. nov., *U. fabaria* sp. nov. and *U. gongshanensis* sp. nov. Descriptions of these new species and diagnoses of the other species known from China are given in the paper.

Materials and methods

Specimens were kept in 75% ethanol, examined and measured using an Olympus SZ-11 and Jiangnan XTB-1B stereo microscope. Digital images were taken with a Nikon DS-Fi1 digital camera mounted on an Olympus SZX16 stereo microscope. Compound focus images were generated using Helicon Focus software. Palpal organ structures are illustrated and described from the left palp. The epigynum was illustrated and described before dissected. The vulva was cleared in lactic acid and examined using an Olympus SZ-11 stereo microscope. Distribution maps were generated using GIS ArcView version 3.2 software (ESRI). Leg measurements are given as: total length (femur, patella + tibia, metatarsus, tarsus). All measurements are given in millimeters (mm). The specimens are deposited in College of Life Sciences, Hunan Normal University (HNU).

Abbreviations used in text are as follows: Ab = anterior bursae, ALE = anterior lateral eyes, AME = anterior median eyes, At = atrium, CAS = California Academy of Sciences, USA, Cnd = connecting duct, Co = copulatory opening, Cd = copulatory duct, Em = embolus, Em B = basal portion of embolus, Em T= terminal portion of embolus, HUN = Hunan Normal University, KIB = Kunming Institute of Botany, Chinese Academy of Science, PLE = posterior lateral eyes, PME = posterior median eyes, Sd = sperm-duct, St = subtegulum.
**Diagnosis.** This species is similar to *U. fabaria* sp. nov. by the epigynum longer than wide, atrium posteriorly located, copulatory opening on the center of epigynum, arch-shaped, copulatory ducts long, almost straight, spermathecae located posteriorly, and anterior bursae above the top of spermathecae, but can be distinguished by having: (1) atrium longer than wide, almost as long as the epigynum (Song, Zhu & Chen, 1999: fig. 256C); (2) connecting ducts separated far away from each other (Song, Zhu & Chen, 1999: fig. 256D); (3) spermathecae spherical (Song, Zhu & Chen, 1999: fig. 256D); (4) copulatory duct with three spirals in *U. taiwanica* (Song, Zhu & Chen, 1999: fig. 256D).

**Distribution.** China (Taiwan).

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**References**


