



Three new species and one newly recorded species of oonopid spiders (Araneae: Oonopidae) from Hainan, China

YANFENG TONG^{1,2} & SHUQIANG LI³

¹Chemistry and Life Science College, Shenyang Normal University, Shenyang, 110034, China. E-mail: tyf68@hotmail.com

²Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, 110016, China

³Institute of Zoology, Chinese Academy of Sciences, Beijing, 100101, China

Abstract

Three new species and one newly recorded species of the genera *Gamasomorpha* and *Xestaspis* collected from Hainan Island, China, are diagnosed, described and illustrated: *Gamasomorpha comosa* **sp. nov.**, *Gamasomorpha virgulata* **sp. nov.**, *Xestaspis loricata* (L. Koch, 1873) and *Xestaspis rostrata* **sp. nov.** The genus *Xestaspis* is firstly recorded from China. The type specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences (IZCAS).

Key words: Taxonomy, *Gamasomorpha*, *Xestaspis*, new species, China

Introduction

The Oonopidae or goblin spiders are a worldwide family of minute, haplogyne spiders. They can be found in most terrestrial environments but are particularly dominant in leaf litter and humus, especially in the tropics (Harvey & Edward 2007). At present, Oonopidae includes 505 worldwide distributed species of 74 genera (Platnick 2008). Several lines of evidence suggest that the presently known species represent only a small fraction of actual oonopid biodiversity (Saaristo 2001, 2006; Fannes & Jocqué 2008). The Chinese oonopids fauna has been little studied and at present 9 genera and 29 species have been recorded (Tong & Li 2007, 2008).

The genus *Gamasomorpha* is one of the largest genera in the family Oonopidae, with 56 species recorded worldwide (Platnick 2008). Five species of this genus were reported from China previously (Brignoli 1974; Hu 2001; Song *et al.* 1999; Tong & Li 2007), viz. *G. anhuiensis* Song & Xu, *G. barbifera* Tong & Li, *G. cataphracta* Karsch, *G. linzhiensis* Hu and *G. nigrilineata* Xu. The genus *Xestaspis* is a poorly studied group, with 11 species from different part of the world (Ott & Harvey 2008). During surveys on Hainan Island, a province situated at southernmost part of China, some oonopid spiders were collected. We here described three new species and one newly recorded species belonging to *Gamasomorpha* and *Xestaspis*.

Material and methods

Specimens were examined using an Olympus SZX16 stereomicroscope. Further details were studied under an Olympus BX51 compound microscope. All illustrations were made using a drawing tube and inked on ink jet plotter paper. Photos were made with an Olympus E-410 zoom digital camera (10 megapixels) mounted on an Olympus SZX16 dissecting scope. Vulvae of females were cleared in lactic acid. All measurements were measured using an Olympus BX51 compound microscope and given in millimeters. Leg measurements are shown as: total length (femur, patella, tibia, metatarsus, tarsus). Legs segments were measured on their dorsal side.