



## Species of the genus *Mallinella* Strand, 1906 (Araneae: Zodariidae) from Hainan Island, China

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### Abstract

Four species of the spider genus *Mallinella* are reported from Hainan Island, China, including one already described species: *M. hainan* Song & Kim, 1997, and three new species: *M. digitata* **sp. nov.** (male, female), *M. rectangulata* **sp. nov.** (male, female) and *M. obtusa* **sp. nov.** (male).

**Key words:** taxonomy, *Mallinella*, new species, China

### Introduction

Members of the spider family Zodariidae are small to medium-size. It contains 77 genera and 942 known species (Platnick 2011), of which 28 species from the 5 genera, *Asceua* Thorell, *Cydrela* Thorell, *Mallinella* Strand, *Stenomomorpha* Simon and *Zodariellum* Andreeva & Tyschchenko (Jocqué 1991; Song, Zhu & Chen 1999; Li & Wang 2011) have been reported from China.

The genus *Mallinella* was established by Strand (1906) for two African species. Jocqué (1991) redefined the genus with the putative snapomorphies: the sternum with triangular extensions fitting in coxal concavities, the presence of a row of short spines in front of the tracheal spiracle. To date, 82 species of the genus *Mallinella* have been recorded from Africa, East Asia and Southeast Asia to Australia (Bosmans & Hillyard 1990; Ono & Tanikawa 1990; Jocqué 1991; Ono 2003, 2004a, 2004b; Tanikawa 2005; Dankittipakul & Schwendinger 2009; Dankittipakul et al. 2010; Logunov 2010). 13 *Mallinella* species have been recorded from China, and one species is known from Hainan Island (Song & Kim 1997; Song, Zhu & Chen 1999; Wang, Ran & Chen 1999; Yin & Yan 2001; Bao & Yin 2002; Zhang & Zhu 2009; Wang, Yin & Peng 2009; Wang et al. 2009).

Our recent survey from Hainan Island, China, revealed four *Mallinella* species of which three species are new: *M. digitata* **sp. nov.**, *M. rectangulata* **sp. nov.** and *M. obtusa* **sp. nov.** which are described here.

### Material and methods

All specimens were kept in 75% ethanol and examined, drawn and measured under a Tech XTL-II stereomicroscope equipped with an Abbe drawing device. Carapace length was measured from the anterior margin to the rear margin of the carapace medially. Eye sizes were measured as the maximum diameter of the lens in dorsal or frontal view. The measurements of legs are shown as total length (femur, patella, tibia, metatarsus, tarsus). The epigynum was cleared in a warm solution of potassium hydroxide (KOH), transferred to 75% ethanol for drawing. All measurements are in millimeters. All specimens studied are deposited in the Museum of Hebei University (MHBUS), Baoding, China.

The following abbreviations are used: AER, anterior eye row; ALE, anterior lateral eyes; AME, anterior median eyes; C, conductor; CD, copulatory ducts; E, embolus; EP, epigynal plate; MA, median apophysis; MOA,