



Three new species of the genus *Mallinela* (Zodariidae: Araneae) from Yunnan Province, China

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Abstract

Three new Zodariid spiders of the genus *Mallinela* Strand, 1906 are described under the names: *Mallinela bifurcata* **sp. nov.**, *Mallinela kunmingensis* **sp. nov.** and *Mallinela biumbonalia* **sp. nov.**. Distributional data and illustrations of body and genital organs are provided. All type specimens were collected from Yunnan Province, China.

Key words: Taxonomy, Zodariidae, *Mallinela*, Gaoligong Mountains

Introduction

Zodariids are small to medium-sized vagrant and burrowing spiders, terrestrial and often associated with soil debris and leaf litter or found underneath stones or decaying logs (Barrion, A. T. & J. A. Litsinger, 1992). Up to now, a total of 844 species belonging to 74 genera have been reported mainly from centers in Africa and Australia, but only 14 species in 4 genera (*Asceus*, *Cydrela*, *Mallinella*, *Zodariellum*) have been reported from China (Platnick, 2008).

The *Mallinella* differs from the other zodariids by: the sternum with triangular extensions fitting in coxal concavities; the presence of a row of short spines in front of the tracheal spiracle and a well-developed conductor which is a terminal excrescence of the tegulum besides the tegular apophysis which is of similar size (Jocqué, 1991). The genus *Mallinella* Strand, 1906 was defined by Jocqué, 1991. Subgenus *Suffucioides* Jézéquel, 1964 was elevated to separate genus *Suffucioides* (Hove, M. Van & R. Bosmans, 1984), but synonymized with *Langbiana* Hogg (Bosmans, R. & M. Van Hove., 1986), while *Langbiana* was a junior synonym of *Mallinella* Strand, 1906 (Jocqué, 1991). Up to now, 65 species of *Mallinella* have been reported worldwide including 40 species from Asia (mainly from Myanmar (Thorell 1887, 1895), Nepal (Ono 1983), Indonesia (Bosmans & Hillyard 1990), Philippines (Bosmans & Litsinger 1995), Japan (Ono & Tanikawa 1990), Vietnam (Ono 2003, 2004)). In China, a total of 7 *Mallinella* species have been reported (*M. dinghu* Song & Kim, 1997, *M. gongi* Bao & Yin, 2002, *M. hainan* Song & Kim, 1997, *M. hingstoni* Brignoli, 1982, *M. labialis* Song & Kim, 1997, *M. liuyang* Yin & Yan, 2001, *M. maolanensis* Wang, Ran & Chen, 1999).

The Gaoligong Mountains of Yunnan Province lie in the southwest of China. This region is a world-renowned biodiversity hotspot (Conservation International 2007). While examining Zodariidae specimens from the Sino-American joint biodiversity survey of the Gaoligong Mountains conducted by the California Academy of Sciences (CAS) and Hunan Normal University (HNU) from 1998 to 2007, 3 new species of Zodariidae were identified and described in this paper.