

A new species of *Mallinella* from China (Araneae, Zodariidae)

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Summary

Four species of the family Zodariidae have been reported from China, including two *Zodarion* species: *Z. chaoyangense* Zhu & Zhu, 1983 and *Z. furcum* Zhu, 1988; one *Asceua* species: *A. japonica* (Bösenberg & Strand, 1906); and one *Mallinella* species: *M. hingstoni* (Brignoli, 1982). In this paper a fifth species is described: *Mallinella maolanensis* sp. n., which was collected from the Maolan National Natural Reserve, Guizhou Province, China. The male genitalia of this new species are similar to those of the species described from the Ryukyu Islands, Japan.

Introduction

A generic revision of the family Zodariidae together with a detailed diagnosis and description of the genus *Mallinella* was published by Jocqué (1991). Bosmans & Van Hove (1986) synonymised the genus *Suffucioides* Van Hove & Bosmans, 1984 with the genus *Langbiana* Hogg, 1922 which itself was shown to be a junior synonym of *Mallinella* by Jocqué (1991). The genus *Mallinella* is widespread from Africa, East Asia and Southeast Asia to Australia.

So far only four species of Zodariidae are known from China: two *Zodarion* species, *Zodarion chaoyangense* Zhu & Zhu, 1983 described from Liaolin Province in northeastern China (Zhu & Zhu, 1983) and *Zodarion furcum* Zhu, 1988 from Hebei Province in northern China (Zhu, 1988); one *Asceua* species, *Asceua japonica* (Bösenberg & Strand, 1906), described from Taiwan (Yaginuma, 1977; Zhu, 1983); and one *Mallinella* species, *Mallinella hingstoni* (Brignoli, 1982), from Tibet (Brignoli, 1982; Song, 1987). A fifth species: *Mallinella maolanensis* sp. n., collected from Guizhou Province, southern China, is described in this paper. This new species is closely related to the species *Mallinella hoosi* (Kishida, 1935), *M. fulvipes* (Ono & Tanikawa, 1990), and *M. shimojanai* (Ono & Tanikawa, 1990), collected from the Ryukyu Islands, Japan.

Methods

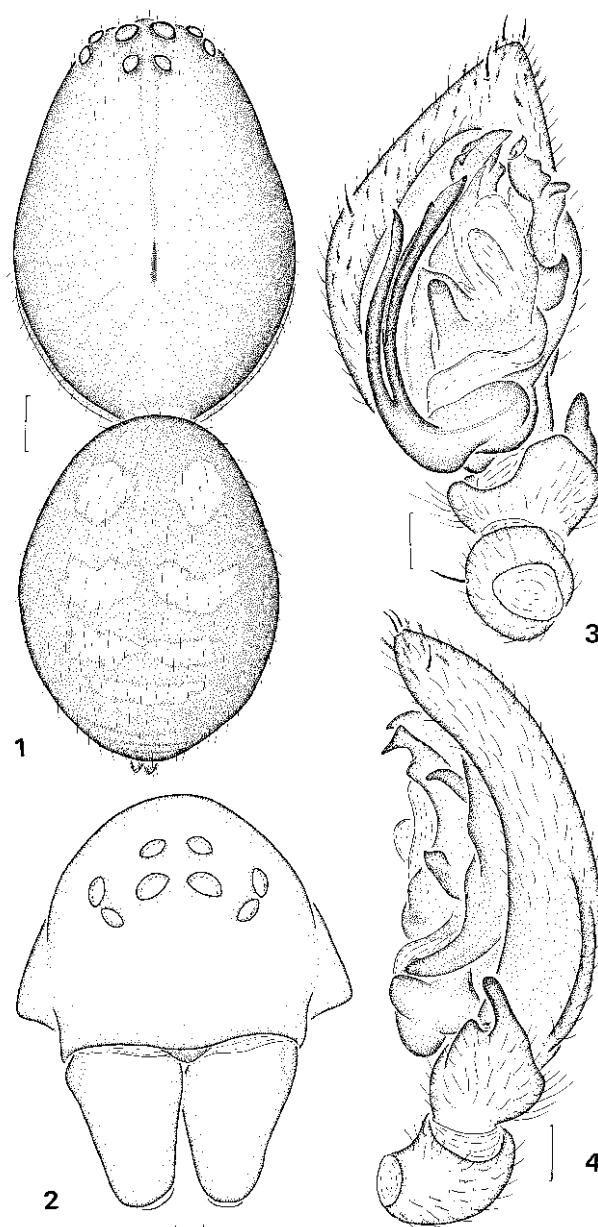
The male genitalia of *Mallinella* are relatively complex and various terms have been used in previous papers to describe their morphology. The terms used in this paper are mostly based on Jocqué (1991, 1995) and Ono &

Tanikawa (1990). All measurements are in mm. Leg measurements are shown as: total length (femur, patella+tibia, metatarsus, tarsus). The specimens described in this paper are deposited in the American Museum of Natural History, New York, USA (AMNH) and in the Research Department of the Maolan National Natural Reserve, Guizhou, China (MNNR).

Mallinella maolanensis, sp. n. (Figs. 1–4)

Type: Male holotype from Shanchahe, Maolan National Natural Reserve (107°52'–108°05'E, 25°09'–25°20'N), Libo County, Guizhou Province, China (15 June 1996; J. C. Ran and H. M. Chen), deposited in AMNH.

Etymology: The specific name refers to the type locality.



Figs. 1–4: *Mallinella maolanensis*, sp. n. **1** Male holotype, dorsal view; **2** Face; **3** Male palp, ventral view; **4** Male palp, retrolateral view. Scale lines=0.5 mm (1), 0.2 mm (2–4).

Diagnosis: This new species is similar to the species reported from the Ryukyu Islands, Japan. It differs from *Mallinella hoosi* and *M. fulvipes* by the part of the embolus carrying the duct being longer than the accompanying prong (Fig. 3); and from *M. shimojanai* by the long, slender retrolateral tibial apophysis (Fig. 4). The shape of the median apophysis and conductor, and the dorsal pattern of the abdomen (Fig. 1) also differ from all other similar East Asian and Oriental species.

Male: Total length 6.31. Carapace 3.38 long, 2.40 wide. Abdomen 2.93 long, 2.19 wide. Eye sizes and interdistances: AME 0.23, ALE 0.19, PME 0.17, PLE 0.20; AME-AME 0.10, AME-ALE 0.15, PME-PME 0.14, PME-PLE 0.30, ALE-PLE 0.03, AME-PME 0.15. Both eye rows strongly procurved (Fig. 2). Carapace reddish brown, with no apparent markings. Chilum single, small, and hairless. Dorsum of abdomen dark brown with four pairs of spots, last two pairs fused (Fig. 1). Venter with row of approximately 20 small spines in front of spinnerets. Leg measurements: I: 10.1 (2.63, 3.24, 2.46, 1.76); II: 9.38 (2.55, 2.99, 2.39, 1.44); III: 9.30 (2.48, 2.85, 2.52, 1.43); IV: 12.0 (2.97, 3.60, 3.57, 1.83). Palpal retrolateral tibial apophysis relatively long, slender, curved downwards, with blunt tip; lateral cymbial fold (cymbial ridge of Van Hove & Bosmans, 1984; Bosmans & Van Hove, 1986; and Bosmans & Hillyard, 1990) short, about half of segment; tegulum with both a membranous and a sclerotised apophysis on its ventral side; median apophysis (suprategular apophysis of Bosmans & Hillyard, 1990; tegular apophysis of Van Hove & Bosmans, 1984 and Bosmans & Van Hove, 1986) with a strong basal tooth, an apparent and long medial apophysis, a subterminal ridge, and a sharp coiled terminal apophysis; conductor broad, with a blunt dorsal apophysis and a small ventral apophysis; base of embolus transverse, bifid from one quarter of its length onwards, prong carrying duct with small tooth near extremity, slightly long than accompanying prong (Figs. 3–4).

Other material examined: China: Guizhou Province, Libo County, Maolan National Natural Reserve, Weng-Ang, 9 October 1997, 1 juvenile female (J. C. Ran, MNNR).

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