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Three new species of the genus *Otacilia* Thorell (Araneae: Phrurolithidae) from China

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Abstract

Three new species of the spider genus *Otacilia* are diagnosed, described and illustrated from China: *Otacilia fujiana* sp. nov. (male, female), *O. pseudostella* sp. nov. (male, female) and *O. zhangii* sp. nov. (male).

Key words: spider, taxonomy, China

Introduction

Phrurolithidae Banks, 1892 was elevated to family status and delimited by Ramírez (2014), and now includes 14 genera and 182 species worldwide (Platnick 2014). Of these, four genera and 40 species are recorded from China (Li & Wang 2014). The Phrurolithidae are hunting spiders living on the ground, and are usually found in leaf litter, woody debris or on the forest floor.

The genus *Otacilia* was established by Thorell in 1897 based on a single female specimen from Burma (today: Myanmar), *Otacilia armatissima* (Thorell, 1897). Till now, 32 *Otacilia* species have been reported in the world, mainly from Southeast Asia (Platnick 2014). Among them, 15 species are reported from China, including five species that were transferred from *Phrurolithus* C.L. Koch, 1839 (Hu & Zhang 2011). Apart from these species, Zhang *et al.* (2009) also described *O. yangi* from Yunnan Province; Fu *et al.* (2010) described *O. bawangling*, *O. jianfengling* and *O. limushan* from Hainan Island; Hu & Zhang (2011) described *O. liupan* from the Ningxia Hui Autonomous Region; Wang *et al.* (2012) described *O. longituba* from Chongqing Municipality; Jäger & Wunderlich (2012) described *O. paracymbium* from Sichuan Province; Zhou *et al.* (2013) described *O. simianshan* from Chongqing Municipality, and Yang *et al.* (2013) described *O. forcipata* and *O. mingsheng* from Yunnan Province.

The genus *Otacilia* resembles *Phrurolithus* morphologically. For example, both genera have a narrow cephalic part that widens abruptly in the thoracic part, all patellae and legs III–IV lack bristles or bear a single dorsal femoral bristle, the tarsal claws are smooth, and claw tufts are present. However, Kamura (2004) differentiated them by the arrangement of the femoral spines (femora I–II each have several spines on the prolateral side in *Otacilia*, while femur I usually has one spine and femur II has no spine on the prolateral side in *Phrurolithus*). Jäger & Wunderlich (2012) also listed several detailed differences between the two genera, and described the limits of *Otacilia*.

While examining the *Otacilia* specimens collected from China, we found three species that do not belong to any of the previously described species. We therefore described them as new to science under the names *O. fujiana* sp. nov., *O. pseudostella* sp. nov. and *O. zhangii* sp. nov..

yellow. Measurements of legs: leg I 5.17 (1.34, 0.48, 1.54, 1.15, 0.66), II 4.60 (1.20, 0.44, 1.22, 1.05, 0.69), III 4.11 (1.05, 0.47, 0.85, 1.07, 0.67), IV 5.91 (1.51, 0.48, 1.36, 1.69, 0.87). Leg formula: 4123. Femora I–IV basally with one dorsal spine, femur I with three prolateral spines; tibiae I and II with six pairs of ventral spines; metatarsus I with four pairs of ventral spines, metatarsus II with four proventral spines and three retroventral spines. Abdomen oval, anterior half with a wide dorsal scutum, posterior half dark brown and with several chevron-like stripes dorsally.

Palp (Figs 5B–F). Femur distally with an apophysis and concavity on retroventral side. Single long RTA extending distally, base broad and tip pointed. Cymbium ventrally with tufted hairs around the embolus tip. Tegulum convex. embolus long, apically pointed.

Distribution. Known only from the type locality in central China (Fig. 6).

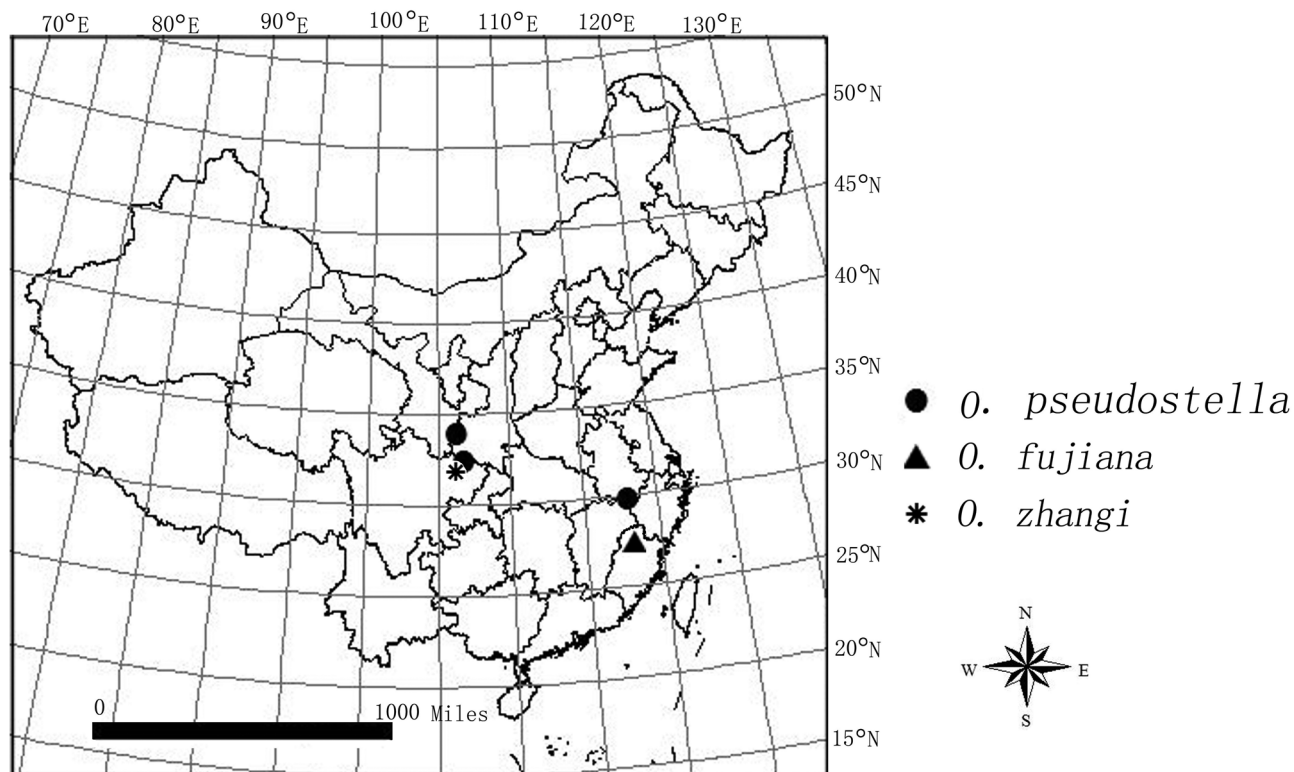


FIGURE 6. Distribution of *O. fujiana* sp. nov., *O. pseudostella* sp. nov. and *O. zhangii* sp. nov.

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