

A New Species of the Genus *Xysticus* (Araneae: Thomisidae) from China

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A new species, *Xysticus jiangi* n. sp. is described based on the specimens collected in Hunan province, China. *X. jiangi* is similar to *X. chui*, but distinguished by smaller spermathecae, distinct copulatory canals, and Y-shaped median apophysis. In addition, basal apophysis of tegulum is well developed, compared to that of the latter.

In China, *Xysticus* spiders are somewhat rare, as only 39 species have been reported. (Song, 1993, Song and Zhu, 1997). Hitherto, 155 species of the Genus *Xysticus* are known in the world (Platnick, 1997). These spiders, with relatively long legs, are somewhat crab-like in general appearance and run rapidly both forwards and backwards. All species habituate low vegetation and are usually collected by beating and/or sweeping. The type specimens are deposited in the Department of Biology, Hunan Normal University, Chagsha, Hunan, China.

Materials and Methods

The specimens were fixed in 75% ethanol immediately after they were collected.

The measurement in millimeter of the holotype (♀)/a paratype (♂) is given. The leg segments measured are : total length(femur, tibia, metatarsus, tarsus).

Abbreviations used in this paper are: AER=anterior eye row, AL=abdomen length, ALE=anterior lateral eye, ALE-PLE=length between ALE and PLE, AME=anterior median eye, AME-AME=length between AMEs, AW=abdomen width, CL=carapace length, CLYH=height of clypeus, CW=carapace width measured at the widest position, L=length, MOQ=median ocular quadrate, PER=posterior eye row, PME=posterior median eye, PME-PME=length between PMEs, PME-PLE=length between PME and PLE, TL=total length, W=width.

Result

Family Thomisidae Sundevall, 1833
Genus *Xysticus* C.L. Koch, 1835

Xysticus jiangi sp. nov.
(Figs. 1A-E)

Type: Female (holotype), Changde City, Hunan, 16 Dec. 1999, Leg. Jiang Song-Bo. Male (allotype), paratypes (1♂, 3♀), Changde City, Hunan, 7 Dec. 1999, Leg. Jiang Song-Bo.

Measurements: TL 7.2 (♀)/5.2 (♂). CL 3.1/2.6, CW 3.0/2.4, AL 4.1/2.7, AW 3.8/2.2, CLYH 0.23/0.23, Legs I 8.6/9.6 (2.7/2.6, 3.2/3.2, 1.7/2.0, 1.0/1.8); II 8.4/8.5 (2.7/2.6, 3.0/3.1, 1.7/1.8, 1.0/1.0); III 6.0/6.0 (2.0/2.0, 2.2/2.0, 1.0/1.2, 0.8/0.8); IV 6.3/6.2 (2.0/2.0, 2.2/2.1, 1.2/1.2, 0.9/0.9); formula 1,2,4,3/1,2,4,3. Eye size and length of interval: AME 0.09/0.09, ALE 0.18/0.17, PME 0.1/0.1, PLE 0.13/0.13, AME-AME 0.48/0.37, AME-ALE 0.23/0.23, PME-PME 0.43/0.37, PME-PLE 0.5/0.4, MOQ: L 0.6/0.57; W 0.64/0.53 (front), 0.63/0.57 (back).

Description

Female: Carapace light brown; setae black, long or short; margin yellowish brown, a circle of short black setae; lateral longitudinal bands and submarginal ones wide and black; two longitudinal black lines originated from PME and extended to fovea; fovea, cervical and radial grooves indistinct. Sternum elongated cordiforms, yellowish white with many black pigmentations, setae black brown. Clypeus yellowish white with black setae, anterior margin with a row of 10 long setae. Chelicerae light brown with white and dark brown markings; setae black, strong or weak. Labium and endites distinctly longer than wide, basal portion grayish black, terminal one light yellow, median one reddish brown; setae black. Legs with dense spines and setae; light yellow with white and black pigmentations; coxa with two longitudinal brown bands; trochanter with a circle of black setae; ventral surface of tibia I with 6 prolateral

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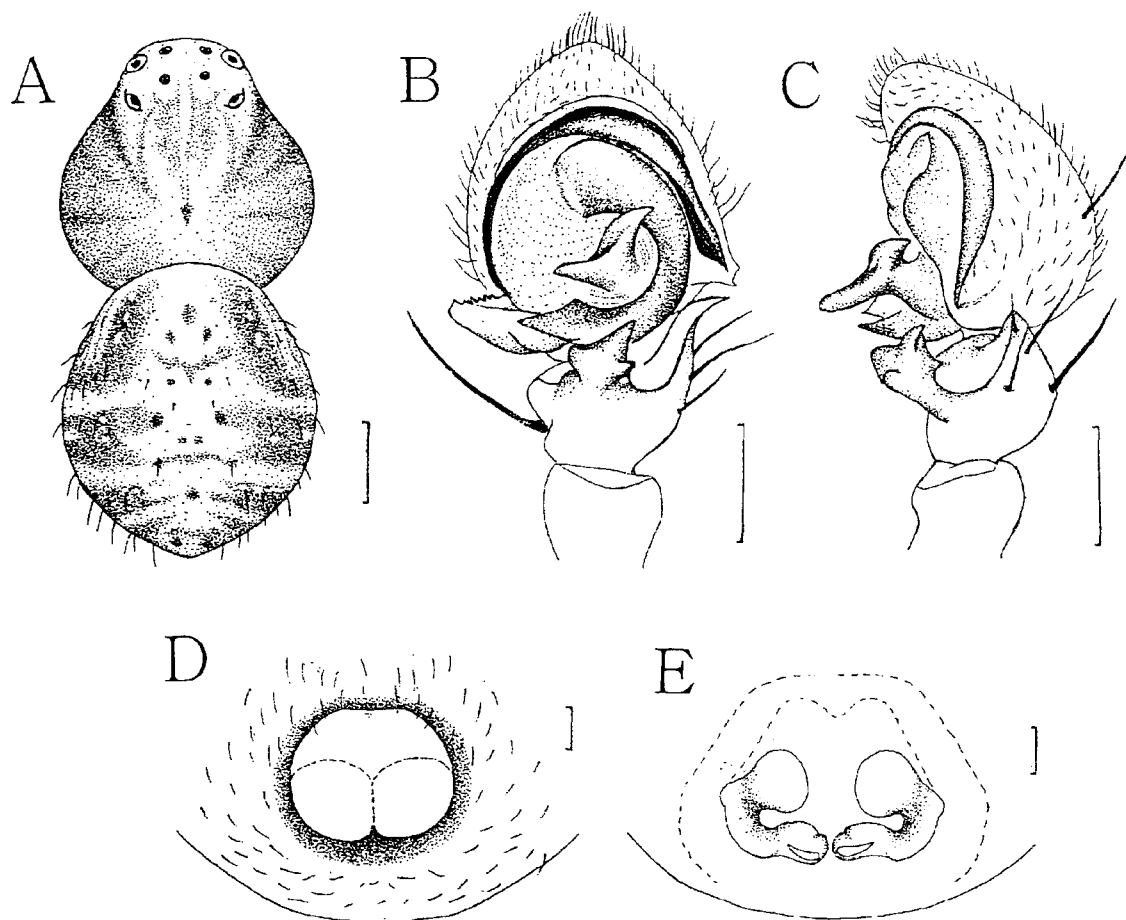


Fig. 1. *Xysticus jiangi* sp. nov. A, Body (♂). B, Palpal organ. C, Ditto, retrolateral. D, Epigynum. E, Vulva, ventral. Scale bars=0.1 mm (A, B), 0.5 mm (D, E), and 1.0 mm (C).

and 5 retrolateral spines; metatarsi I with 6 pairs of ventral spines, tibia II with 4 pairs and metatarsi II with 5 pairs. Abdomen oval, slightly wider posteriorly; dorsum with a large grayish black folium on median area, 5 muscular depressions dark gray; lateral area with grayish brown inclined striae; ventral surface white, median area brown with two lines of dark brown dots; lateral areas with inclined wrinkles. Spinnerets yellowish brown with large grayish black marking on median area.

Male: Markings similar to those of female, but darker, almost black. Carapace black, ocular area and median area light yellowish brown, between PME and fovea are two wide and two thin longitudinal bands. Tibial I and II with 4 pairs of ventral spines, metatarsi II with 3 pairs; ventral surface of metatarsi I with 4 prolateral and 3 retrolateral spines.

Distribution: China (Hunan).

Etymology: The specific name is a patronym in honour of Jiang Song-Bo, who collected the type specimens.

Remarks: The new species is allied to *Xysticus chui* Ono, 1992, but differs in: (1) spermathecae smaller, and copulatory canals distinct, whereas spermathecae much bigger, and copulatory canals invisible in the latter species, (2) median apophysis Y-shaped, not hook-shaped, (3) apical apophysis of tegulum with crenate anterior margin, not found in the latter, and (4) basal apophysis of tegulum well developed, surrounds half bulb. Male of the new species also resembles *X. dolpoensis* Ono, 1978, but can be diagnosed by: median apophysis with a deeper depression in anterior margin and apical apophysis of tegulum with crenate anterior margin.

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