



Two new species of *Solenysa* Simon, 1894 (Araneae: Linyphiidae) from Japan

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Abstract

Two new species of *Solenysa* Simon, 1894 from Japan are described, *i. e.* *Solenysa reflexilis* **sp. nov.** and *Solenysa partibilis* **sp. nov.** The differences of the genitalic structures between both new species and related species are studied.

Key words: Taxonomy, genitalia, morphology, variation

Introduction

Eugene Simon (1894) erected the linyphiid genus *Solenysa* to accommodate the Japanese species *Solenysa melloteei* Simon, 1894. Platnick's (2006) catalogue currently lists six species in *Solenysa*. In addition to the Japanese species (*S. melloteei*), there are *Solenysa* species recorded from China (*S. longqiensis* Li & Song, 1992, *S. wulingensis* Li & Song, 1992, *S. circularis* Gao, Zhu & Sha, 1993, *S. protrudens* Gao, Zhu & Sha, 1993) and Korea (*S. geumoensis* Seo, 1996).

Solenysa species (Tu & Li, 2006b: figs. 21–23) can be distinguished from all other linyphiid genera by a unique combination of rather unusual characters: the cephalic region is raised like a turret; they have many impressed, round pits scattered on the surface of prosoma; the posterior part of prosoma is elongated and forming a tubular-shaped petiole; there are four pairs of lateral lobes distributed near the coxae; and the legs lack macrosetae. All these characters have little variation between sexes or across species.

In contrast with the rather uniform appearance of the somatic characters of *Solenysa* species, the genital structures vary considerably across species (Tu & Li, 2006b). Although there are some genitalic characters that are shared across all species (such as the “*Solenysa* tegular triangle” and the female membranous solenoid connecting the epigynum to the abdomen), differences in genitalic morphology across species are conspicuous.

We have recently studied the *Solenysa* collections deposited in the Department of Zoology, National Science Museum, Tokyo, Japan (NSMT) and have discovered two new species. In the current paper, we describe and illustrate the new species and discuss the similarities and differences with other species in the genus.

Materials and methods

Specimens were examined and measured using a SZ11-Olympus stereomicroscope. Further details were studied under an Olympus BX51 compound microscope. All illustrations were made using a drawing tube. Left