

Two new species of the genus *Sitticus* Simon, 1901, from Middle Asia (Aranei: Salticidae)

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Two new species of the genus *Sitticus* Simon, 1901, from Middle Asia (Aranei: Salticidae)

by D. V. Logunov, W. Wesolowska

Abstract: Descriptions of two new species *Sitticus talgarensis* and *Sitticus nenilini* from Kirgizia and Kazakhstan are given.

About a hundred species of the jumping spiders are currently known to occur in Middle Asia (NENILIN, 1984, 1985). However, as the prevailing part of this region is covered by deserts, which still are poorly studied, the real number of species occurring within this region might be much higher than the present knowledge suggests. The studies of new collections from Middle Asia seem to confirm this view.

PRÓSZYŃSKI (1983) in his attempt of reconstruction of the *Sitticus* history, via analysis of distributional pattern of the genus, points to the fact, that in Asia the conditions are especially favourable for speciation arising at the interface of grasslands and deserts. In the light of this opinion, one can predict finding some new species with local distributions within this area. The recording of two new *Sitticus* species, descriptions of which are given here, in this region fits well with this prediction.

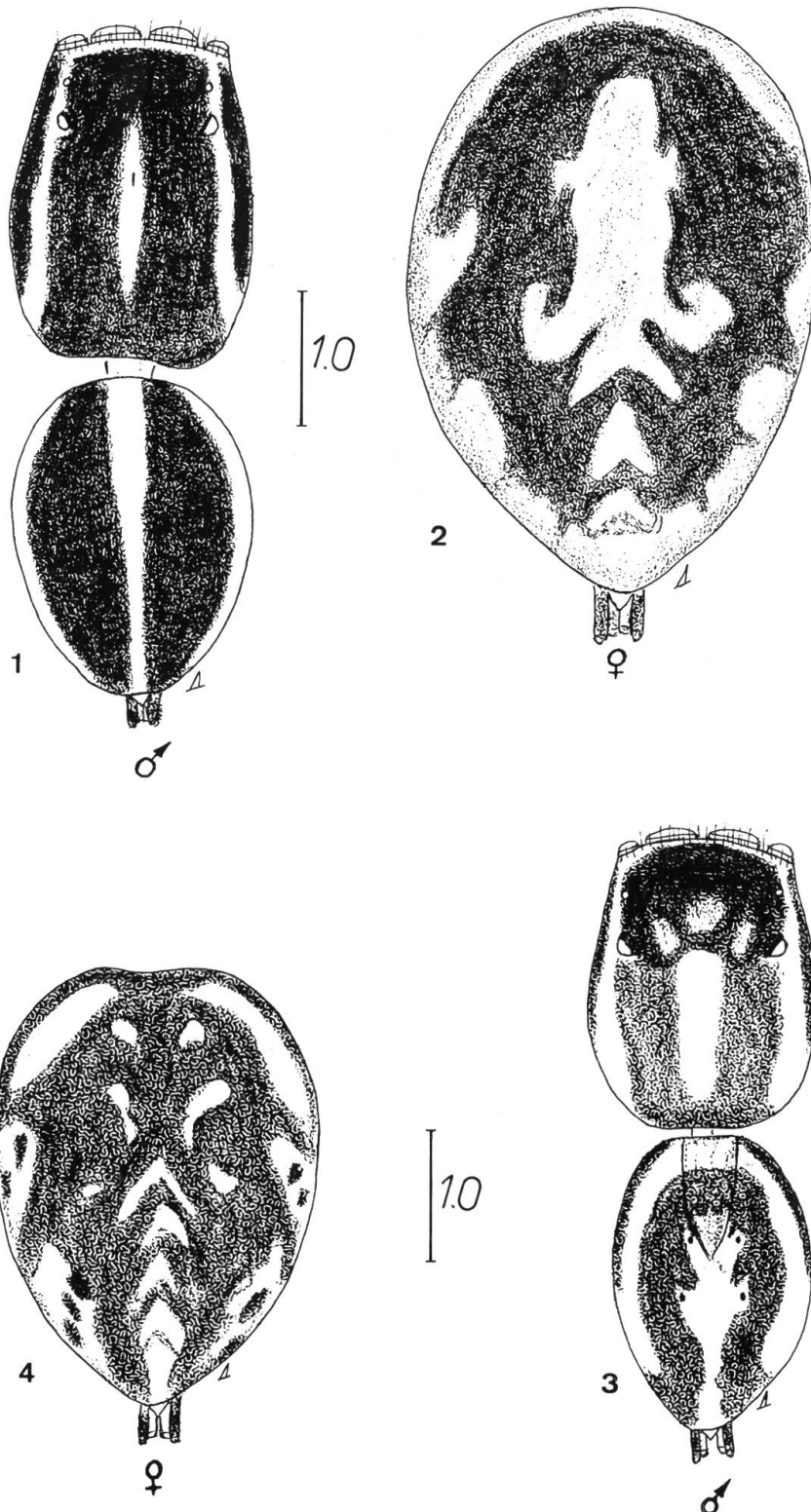
The type material is kept in the collections of Zoological Museum of Moscow University (ZMMU), Zoological Museum of the Institute of Biology, Novosibirsk (BIN), Naturhistorisches Museum, Basel (NHMB) and Museum of Natural History, Wrocław (MNH). All measurements are given in mm.

We wish to express our best gratitude to Dr. A. A. Zyuzin (Institute of Zoology, Alma-Ata), Mr. S. V. Ovtchinnikov (Institute of Biology, Frunze) and Dr. K. G. Mikhailov (Zoological Museum of Moscow University) for making their Salticidae collections available for the present study. We are also grateful to Prof. J. Prószyński for his kind advice during the preparation of the paper.

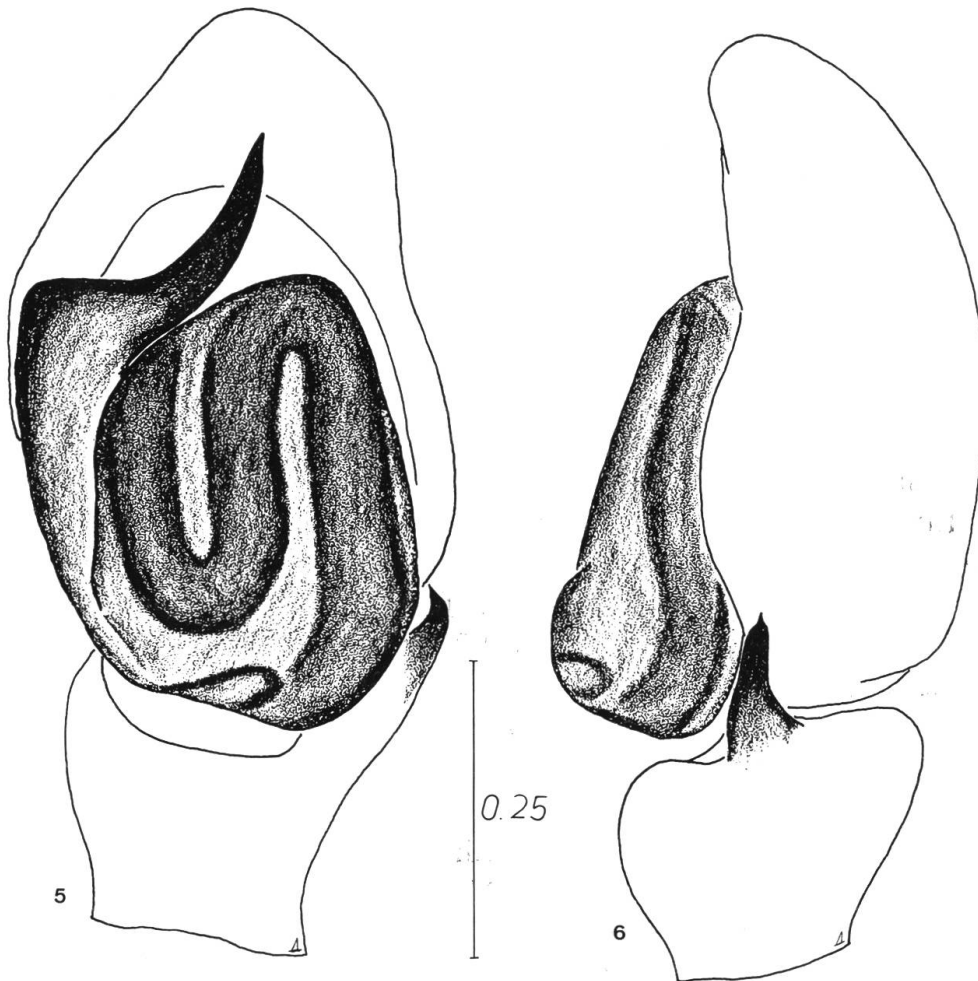
Sitticus talgarensis n.sp.

Figs 1–2, 5–8.

Holotype 1 ♂ (ZMMU, Ta-4654). Kazakhstan: Alma-Ata area, Almaatinski reserve, Talgar Mt, 1800–2940 m a.s.l., grassland, 29.VIII.1984, S. I. Deryugin; Paratypes 1 ♀ (ZMMU, Ta-4656),



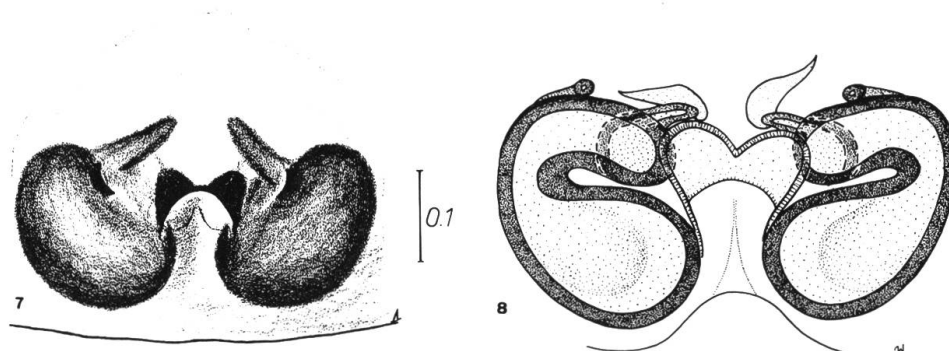
Figs 1–4: Dorsal pattern of: 1–2, *Sitticus talgarensis* n.sp. 3–4, and *Sitticus nenilini* n.sp.



Figs 5–6: *Sitticus talgarensis* n.sp., palpal organ ventral and lateral views.

Kazakhstan: Alma-Ata area, Talgar distr., Soldatskoye canyon, 8. VII. 1986, A. Sheykin; 1 ♂ (MNH, 627), the same locality, 29. V. 1986, A. Sheykin; 1 ♂, 1 ♀ (NHMB), 1 ♂, 1 ♀ (BIN, Bi-119), Kirgizia, Tyan-Shan Mts. Sari-Dzhaz, Ken'su river canyon, 16.VIII.1986, S. V. Ovtchinnikov; 1 ♂, 2 ♀♀ (BIN, Bi-120), Kirgizia, Kirgiz Mts., 30 km S Frunze, Ala-Artcha, 1600 m a.s.l., 28.VI.1983, S. V. Ovtchinnikov; 3 ♂♂, 4 ♀♀, 1 juv. (ZMMU, Ta-4661), Kirgizia, Narynsky Mts, on the bank of Irisu river, 18.VII.1987, S. V. Ovtchinnikov.

Diagnosis. *Sitticus talgarensis* is closely related to the European *Sitticus dzieduszyckii* (L. Koch, 1870), from which it may be separated by the stronger and longer male embolus (fig. 5) and by the coloration of both male and female (figs 1–2). The female can be distinguished by the epigyne structure (fig. 8, compare with figs. in PRÓSZYŃSKI, 1987, p. 96).



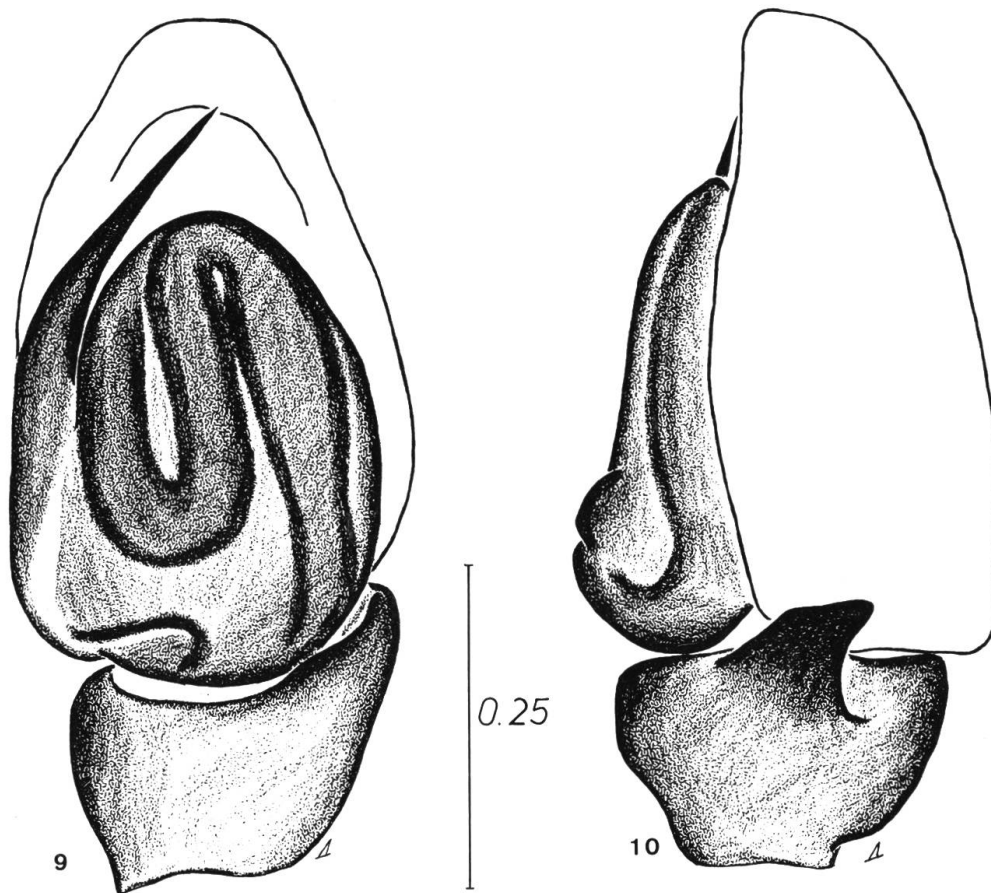
Figs 7–8: *Sitticus talgarensis* n.sp., epigyne and its internal structure.

Distribution: Kazakhstan, Kirgizia.

Etymology. The specific name is a noun in apposition, taken from the type-locality.

Description. Measurements (male/female). Cephalothorax: length 2.14–2.48/2.48–2.56, width 1.48–1.76/1.84–1.93, height 0.84–1.00/0.92–1.00. Abdomen: length 1.96–2.44/4.36–4.40, width 1.48–1.76/3.00–3.12. Chelicerae: length 0.72–0.92/0.68–0.80. Clypeus: height 0.10–0.12/0.08. Eye field: length 0.76–0.92/1.04, width of I row of eyes 1.16–1.24/1.31–1.40, width of III row of eyes 1.16–1.24/1.36–1.44. Diameter of anterior median eyes: 0.32/0.34–0.36. Length of segments of legs: I 1.40–2.12/1.24–1.28 + 0.84–1.20/0.80–0.84 + 1.04–1.72/0.76–0.84 + 0.94–1.40/0.68 + 0.56–0.80/0.52–0.56; II 1.00–1.48/1.16–1.20 + 0.54–0.88/0.72 + 0.68–1.04/0.68–0.72 + 0.64–0.88/0.60–0.64 + 0.48/0.48; III 0.92–1.24/1.20 + 0.46–0.60/0.52 + 0.48–0.60/0.64 + 0.64–0.76/0.68–0.72 + 0.36–0.48/0.48–0.52; IV 1.40–1.64/1.80–2.00 + 0.60–0.76/0.76–0.80 + 0.92–1.16/1.20–1.26 + 0.88–1.08/1.12 + 0.48–0.56/0.60–0.64.

Coloration. Male. Dorsal aspect shown in fig. 1. Carapace dark brown with three longitudinal stripes composed of white hairs, at anterior margin of eye field a transversal stripe of similar character. Whole body covered with dark dense adherent hairs, in vicinity of eyes hairs longer. Clypeus low, brown. Chelicerae dark brown, typical for the *Sitticus* (promargin with three teeth, retromargin without teeth). Maxillae, labium and sternum dark brown, white hairs on sternum. Abdomen brown with white longitudinal median stripe and two white stripes on the sides, ventrally greyish. Spinnerets brown. All legs yellowish-brown, their hairs and spines brown. Palp brown with white line on dorsal surface of tibia and cymbium. Embolus very strong. Palpal structure shown in figs 5–6.



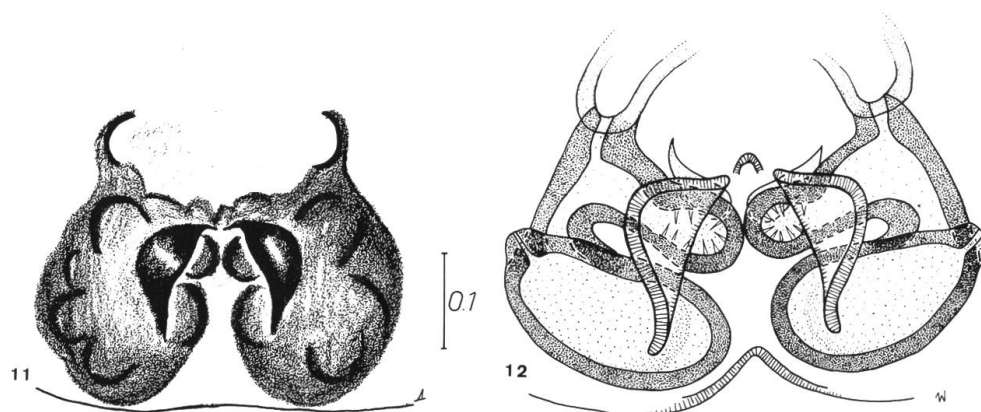
Figs 9–10: *Sitticus nenilini* n.sp., palpal organ ventral and lateral views.

Female. Carapace dark brown, white stripes poorly noticeable. Clypeus covered with dense white hairs. Chelicerae, labium, maxillae and sternum dark brown. Abdomen brown with whitish pattern (fig. 2), in some specimens abdomen uniformly brownish, ventrally grey. Spinnerets brownish. Legs yellow-brownish with darker rings at distal ends of their segments. Epigyne oval with median groove in its posterior part (fig. 7). The groove with pockets at its anterior margin. Internal structure of epigyne shown in fig. 8.

***Sitticus nenilini* n.sp.**

Figs 3–4, 9–12.

Holotype 1♂ (ZMMU, Ta-4655): Kazakhstan: Mangistaus area, Ustyurt plateau, Ustyurtski reserve, Kendirli spring, 21.V.1989, A. A. Zyuzin; Paratypes 2♂♂, 1♀ (NHMB), 1♀ (MNH, 628), together with holotype; 1♂, 1♀ (BIN, Bi-121), 1♂, 1♀ (ZMMU, Ta-4657), Kirgizia, near Frunze, 5.VII.1983, S. V. Ovtchinnikov.



Figs 11–12: *Sitticus nenilini* n.sp., epigyne and its internal structure.

Diagnosis. Easily separated from other species of *Sitticus* by the unusual short palpal tibial apophysis in male (fig. 10) and by the epigyne structure (fig. 12).

Distribution: Kazakhstan, Kirgizia.

Etymology. Species named in honour of Mr. A. B. Nenilin, who has contributed much to knowledge of the Salticidae of the USSR.

Description. Measurements (male/female). Cephalothorax: length 1.80–2.30/2.30, width 1.30–1.60/1.65, height 0.80–1.05/0.95. Abdomen: length 1.50–2.05/3.10, width 0.90–1.45/2.30. Chelicerae: length 0.55–0.85/0.65. Clypeus: height 0.08–0.10/0.15. Eye field: length 0.75–0.93/0.90, width of I row of eyes 1.13–1.40/1.38, width of III row of eyes 1.15–1.38/1.40. Diameter of anterior median eyes: 0.33–0.40/0.40. Length of segments of legs: I 1.00–1.45/1.10 + 0.55–0.90/0.70 + 0.73–1.20/0.75 + 0.55–0.95/0.55 + 0.45–0.60/0.40; II 0.65–1.20/1.05 + 0.53–0.75/0.63 + 0.55–0.80/0.65 + 0.45–0.70/0.55 + 0.45/0.40; III 0.85–1.10/1.10 + 0.45–0.50/0.50 + 0.50–0.63/0.60 + 0.50–0.65/0.70 + 0.40–0.50/0.43; IV 1.35–1.70/1.80 + 0.55–0.70/0.70 + 0.90–1.15/1.25 + 0.50–0.90/1.05 + 0.55–0.75/0.60.

Coloration. Male. Dorsal aspect shown in fig. 3. Carapace coloured like in *Sitticus talgarensis*, but somewhat lighter, pale brown, eye field a little darker, eyes of III row rounded by black. Clypeus low, clothed with dense white hairs. Chelicerae dark brown with typical for the *Sitticus* dentition. Maxillae, labium and sternum brownish-yellow, white hairs on sternum. Abdomen brown with white pattern, ventrally grey. Spinnerets greyish-brown. Legs yellow with numerous brown spots and narrow longitudinal dorsal line.

Spines brown, hairs on legs brown and pale yellow. Palp brown, on cymbium diagonal white stripe composed of white hairs. Tibial apophysis short. Palpal structure shown in figs. 9–10.

Female. Carapace coloured as in male. On carapace dispersed brown and white hairs. Clypeus with white hairs. Chelicerae and labium brown, maxillae and sternum yellowish. Abdomen brownish with white pattern composed of numerous spots (fig. 4), ventrally light with large grey longitudinal band. Spinnerets of first pair yellow, of third pair brown. Legs as in male. Epigyne oval with large groove extending from centre to epigastric furrow. Lateral margins of the groove create big deep pockets (fig. 11). Internal structure of epigyne shown in fig. 12.

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