

Redescription of *Xysticus kaznakovi* Utochkin, 1968 (Araneae: Thomisidae), with a Description of Unknown Female

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Abstract: The poorly known crab spider *Xysticus kaznakovi* Utochkin, 1968 (Araneae, Thomisidae) was originally described on the basis of a male specimen from Central Asia. The species is redescribed here using new specimens collected from Turkey. The previously unknown female of this species is described for the first time.

Keywords: Araneae, Thomisidae, *Xysticus kaznakovi*, Turkey

Introduction

Xysticus C. L. Koch, 1835 is the largest genus of the family Thomisidae, with 360 species listed in the latest version (Version 16) of the World Spider Catalogue (PLATNICK 2015). *Xysticus kaznakovi* Utochkin, 1968 was described on the basis of a male specimen from Central Asia; the exact locality of this species is unknown (UTOCHKIN 1968). In this paper, the species is redescribed on the basis of 19 specimens of both sexes that were collected from the central part of Anatolia, Turkey.

Materials and Methods

Specimens were collected from the central part of Turkey by hand collecting. All illustrations were made with a Nikon SMZ-U stereomicroscope with drawing tube. All measurements are in millimetres. Abbreviations used in the text and in the figures are as follow: ALE, anterior lateral eyes; AME, anterior median eyes; ap, apical; d, dorsal; MOA, median ocular area; MOA-L, length of MOA; MOA-WA, anterior width of MOA; MOA-WP, posterior width of MOA; PLE, posterior lateral eyes; PME, posterior median eyes; VTA, ventral tibial apophysis; pr, prolateral; rt, retrolateral; v, ventral; fm, femur; pt, patella; tb, tibia; mt, metatarsus, tr, tarsus; NUAM, Arachnology Museum of the Niğde University, Niğde, Turkey. The terminology of genitalia and leg spination follow ONO (1988).

Results

Thomisidae Sundevall, 1833

Xysticus C. L. Koch, 1835

Xysticus kaznakovi Utochkin, 1968

Material Examined: 1♂1♀ (NUAM), Niğde province, Ulukışla, Kolsuz pass, (37°40'N 34°52'E), 1700 m, 14.05.1996; 1♂2♀♀ (NUAM), Murtazad dam, (38°08'N 34°34'E), 1895 m, 24.05.2012; 1♂3♀♀ (NUAM), Çiftlik, (38°09'N 34°28'E), 1560 m, 25.05.2012; 3♂♂2♀♀ (NUAM), Güresentepe, (38°06'N 34°37'E), 2157 m, 03.06.2012; 3♀♀ (NUAM), Altunhisar, (38°00'N 34°21'E), 1252 m, 07.06.2012; 2♀♀ (NUAM), Bor, Balcı plateau, (37°58'N, 34°27'E), 1600 m, 07.06.2012.

Male: Measurements (n=2). Carapace: 1.52–1.63 long, 1.40–1.45 wide. Abdomen: 3.00–3.10 long, 3.05–3.15 wide. Clypeus 0.20–0.33 long, chelicera 0.50–0.52 long. Eye sizes and inter distances: AME 0.08–0.10, ALE 0.10–0.11, PME 0.06–0.07, PLE 0.08–0.10, MOA-WA 0.20–0.24, MOA-WP 0.30–0.32, MOA-L 0.25–0.28, AME-AME 0.20–0.22, AME-ALE 0.10–0.12, PME-PME 0.30–0.33, PME-PLE 0.23–0.25. Leg measurements as presented in Table 1.

Carapace dark red brown. ALE and PLE tubercles yellow-coloured. Sternum, labium, maxillae and chelicerae brown. Legs; femora, patellae and tibiae I and II dark brown, metatarsi I and II light brown, tarsi I and II yellow. Femora III and IV dark brown, patellae, tibiae and metatarsi light brown,

tarsi III and IV yellow. Leg I spination as presented in Table 2.

Dorsum of abdomen brown, with white marginal band apically and laterally; folium yellowish-coloured; venter of abdomen light brown. Spinnerets and branchial opercula brown.

Palps: (Figs. 3-4). Tibia with ventral, intermediate and retrolateral apophyses. Ventral apophysis strong, inclined sideways; the intermediate apophysis simple and short. Retrolateral apophysis long, apically curved and sharply pointed. Tutaculum cup-like. Tegulum large and longer than wide, without distinct apophysis. Embolus bends slightly to tutacular edge; upper part of embolus thick and spike-like of cattail, apically curved and hook-like.

Female: *Measurements* (n=2). Carapace: 1.90-2.02 long, 2.00-2.14 wide. Abdomen: 5.00-5.15 long, 4.70-4.90 wide. Clypeus 0.20-0.24 long, chelicera 0.70-0.74 long. Eye sizes and inter distances: AME 0.10-0.12, ALE 0.12-0.14, PME 1.0, PLE 0.10-0.12, MOA-WA 0.30-0.32, MOA-WP 0.40-0.43, MOA-L 0.32-0.34, AME-AME 0.40-0.42, AME-ALE 0.20-0.22, PME-PME 0.45-0.46,

PME-PLE 0.30-0.31. Leg measurements as presented in Table 3.

Carapace brown with laterally dark brown bands and yellow V-shaped mark. Eyes tubercles white. Sternum, labium and maxillae yellow. Chelicerae yellowish to light brown. Legs light brown with dark brown spots. Carapace and abdomen dorsally covered with numerous thick hairs. Leg I spination as presented in Table 4.

Dorsum of abdomen light brown with brown spots and cream-coloured marginal band laterally, folium yellowish-coloured; venter of abdomen light brown with dark brown spots. Spinnerets brownish, branchial opercula yellow.

Epigyne: (Figs. 5-8). Epigynum with median septum wide, vestibulum oval, vestibular sclerite present. Spermathecae furrowed, reniform and long. Spermathecal structures show no variation.

Discussion

The males of *Xysticus kaznakovi* are similar to *X. bicolor* L. Koch, 1867 (cf. Wunderlich 1995: Figs

Table 1. Leg measurements of males of *Xysticus kaznakovi* Utochkin, 1968 from Central Anatolia, Turkey

	Fm	Pt	Tb	Mt	Tr	Total
I	1.20/1.25	0.50/0.52	0.90/0.92	0.70/0.75	0.50/0.53	3.80/3.97
II	1.00/1.08	0.50/0.52	0.90/0.92	0.60/0.65	0.40/0.45	3.40/3.62
III	0.60/0.65	0.40/0.42	0.50/0.52	0.40/0.42	0.30/0.33	2.20/2.34
IV	0.60/0.65	0.40/0.42	0.50/0.52	0.40/0.42	0.30/0.53	2.20/2.34

Table 2. Leg spination of males of *Xysticus kaznakovi* Utochkin, 1968 from Central Anatolia, Turkey

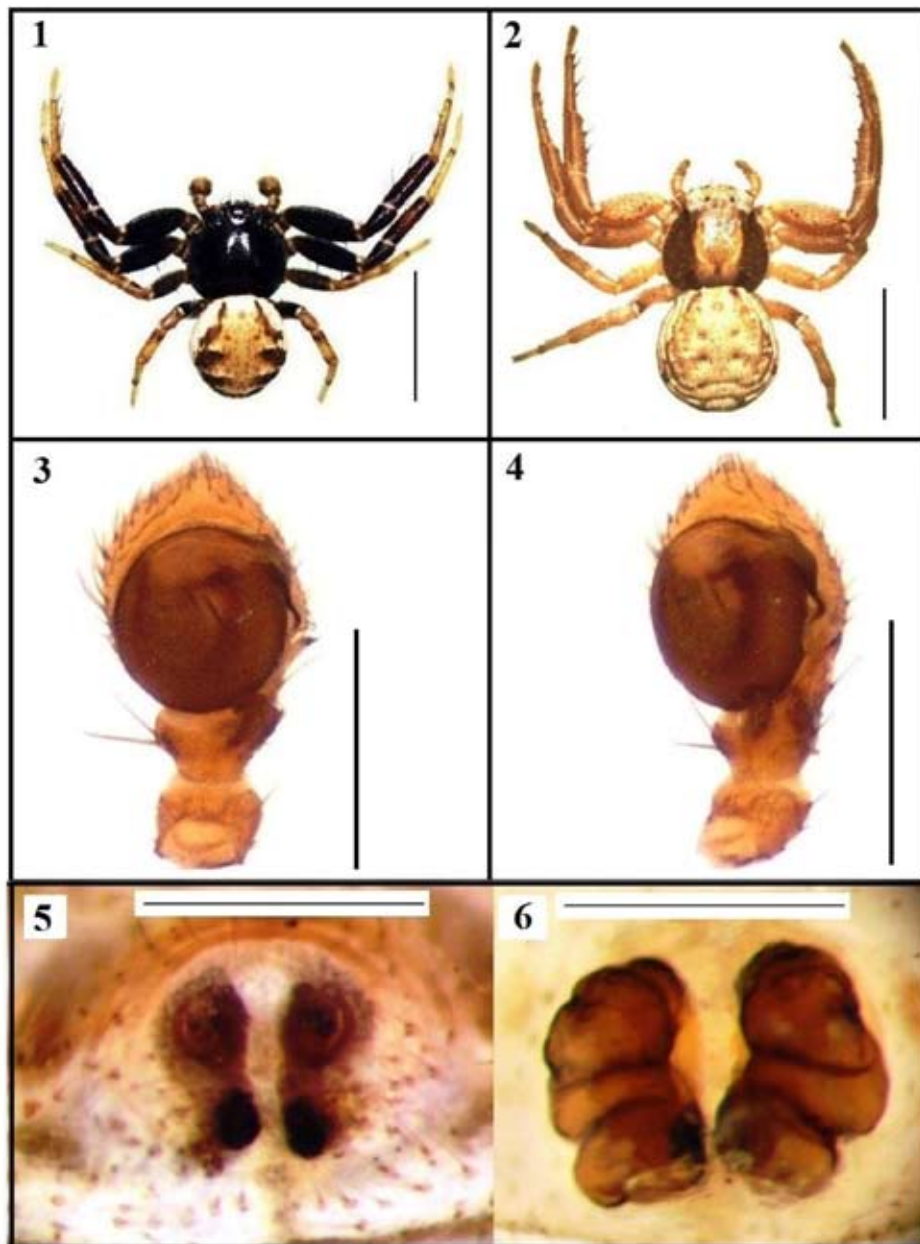
	d	r	v	p	r
Fm	0-1-1-1-1	1-1-2-2-0	-	-	-
Tb	-	-	2-2-2-2ap	1-0-1	1-1-1
Mt	-	-	0-2-2-2ap	0-1-0-2ap	0-1-1

Table 3. Leg measurements of females of *Xysticus kaznakovi* Utochkin, 1968 from Central Anatolia, Turkey

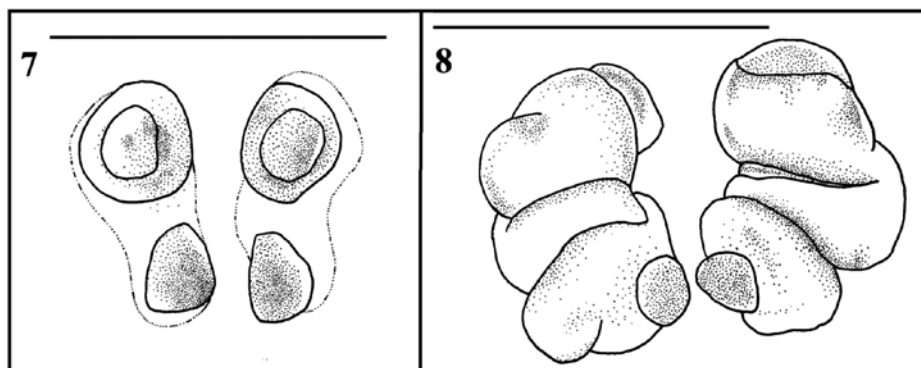
	Fm	Pt	Tb	Mt	Tr	Total
I	1.50/1.54	1.00/1.05	1.10/1.15	0.90/0.93	0.70/0.72	5.20/5.39
II	1.50/1.54	0.90/0.95	1.10/1.13	0.85/0.89	0.60/0.62	4.95/5.13
III	0.90/0.92	0.40/0.41	0.70/0.73	0.50/0.52	0.50/0.52	3.00/3.10
IV	0.90/0.92	0.40/0.41	0.65/0.67	0.50/0.52	0.40/0.41	2.85/2.93

Table 4. Leg spination of females of *Xysticus kaznakovi* Utochkin, 1968 from Central Anatolia, Turkey

	d	r	v	p	r
Fm	1-1-1	-	-	-	-
Tb	-	-	1-2-2-2ap	-	-
Mt	-	-	2-2-2-2ap	0-1-2ap	0-1-1ap



Figs. 1-6. *Xysticus kaznakovi* Utochkin, 1968. 1-2. general habitus. 1. male. 2. female. 3-4. left male palp. 3. ventral view. 4. retrolateral view. 5. epigyne ventral view. 6. vulva dorsal view (scale bar = 1-2: 2 mm, 3-6: 0.5 mm)



Figs. 7-8. *Xysticus kaznakovi* Utochkin, 1968. 7. epigyne ventral view. 8. vulva dorsal view (scale bar = 7-8: 0.5 mm)

41 and 42), but can be separated from it by the thick and spikelike of cattail of the upper part embolus and the shape of the tibial apophyses. The females resemble *X. soberbomi* Schenkel, 1936 (cf. Marusik & Logunov 1995: Figs 65-67), but can be separated from this and all other species by the shape of its spermathecae (Figs. 3-8).

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Habitat: Found under stones and on the ground, in grass or low vegetation.

Distribution: Greece to Central Asia (MARUSIK, LOGUNOV 1995, DEMİR *et al.* 2009, PLATNICK 2015).

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