

The crab spiders of Middle Asia, USSR (Aranei, Thomisidae). 1. Descriptions and notes on distribution of some species

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ABSTRACT

Faunistical data on 38 species are presented, nine of them being described as new : *Runcinia tarabayevi* sp. n. (♂), *Thomisus zyuzini* sp.n. (♀), *Xysticus bakanas* sp.n. (♂), *X. kuzgi* sp.n. (♂), *X. ovcharenkoi* sp.n. (♂ and ♀), *X. taukumkurt* sp.n. (♂), *X. turlan* sp.n. (♂), *X. ulkan* sp.n. (♂) and *X. urgumchak* sp.n. (♂). Previously unknown females or males are described for *X. concinnus* KRONEBERG, *X. minor* CHARITONO and "*Oxyptila*" *lugubris* (KRONEBERG). Five species (*Diaea suspiciosa* O. P. -CAMBRIDGE, *Monaeses israelensis* LEVY, *Xysticus mongolicus* SCHENKEL, *X. tristrami* (O. P.-CAMBRIDGE), *X. xysticiformis* (CAPORIACCO) are being recorded for the first time in USSR. All poorly known species are illustrated.

INTRODUCTION

One of the difficulties in understanding of the distributional pattern of Holarctic Thomisidae is an incomplete information on fauna of Asia -Central Asia, Siberia, Mongolia, North China. The present paper is a preliminary revision of the Thomisidae from Central Asia and South Kazakhstan, chiefly based on newly collected material from various parts of this area, in particular from South Kazakhstan, Kirghizia, Uzbekistan, Turkmenia and Tadzhikistan. Furthermore, we had possibility to restudy types of the spiders described by KRONEBERG from Central Asia, and both O.P.-CAMBRIDGE'

s and CAPORACCO's collections from Northern India, Pakistan, West China and Karakoram respectively, kept in the Zoological Museum of the Moscow State University (ZMMU), Hope Entomological Collections, Oxford (HDEO) and the Zoological Institute, Florence (ZIF).

According to the unpublished catalog of spiders from the USSR, 72 species of crab spiders have been reported from Kazakhstan and Central Asia (MIKHAILOV, personal information). Altogether, no less 14 species of Thomisidae have emerged, of which 9 have turned out to be new to science.

The preliminary character of this paper does not allow to elaborate the most important conclusion drawn from this research—the general distributional pattern of Central Asian Thomisidae, and it leaves plenty of room for further research.

The descriptions of all species, except for *Thomisus zyuzini* sp.n., are based on males. Females of unknown species are not recorded in the present paper. Without doubt some of them belong to new taxa.

Material. The majority of the material treated below and deriving from all over the Central Asia and South Kazakhstan were collected by Dr. A. A. ZYUZIN (A.Z.), Mr. S. V. OVCHINNIKOV (S.O.), and Mr. S.L. ZONSHEIN (S.Z). Besides, some further sporadic collectings of A.A. ABRAMOV (A.A.), A.A. RAIKHANOV (A.R.), B.P. PAVLYUK (B.P.), B.P. ZAKHAROV (B.Z.), C.K. TARABAYEV (C.T.), D.V. LOGUNOV (D.L.), D.Y. SHCHERBAKOV (D.S.), K. Y. ESKOV (K.E.), O.L. LYAKHOV (A.L.), P.P. VTOROV (P.V.), A.I. DERYUNGIN (S.D.), S.I. IBRAYEV (S.I.), S.L. KALABIN (S.K.), V.V. DUBATOLOV (V.D.), V. GLINSKI (V.G.), V.I. OVTSHARENKO (V.O.), Ye. V. ISHKOV (Y.I.) and Yu. M. MARUSIK (Y.M.) have been incorporated as well.

The material treated here have been shared between the collections of the ZMMU, Senckenberg-Museum, Frankfurt a. Main (SMF), ZIF, Zoological Museum of the Biological Institute, Novosibirsk (BI), Zoological Institute, Leningrad (ZIL), Arachnological Institute of Korea (AIK), and Institute of Biological Problems of the North, Magadan (IBPN).

The following abbreviations have been used in the text : ALE anterior lateral eyes, AME-anterior median eyes, AME-ALE distance between AME and ALE, AME-AME distance between AMEs, 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, PME-PLE distance between PME and PLE, PME-PME distance between PMEs, d. dorsally, p. prolaterally, r. retrolaterally, v. ventrally. All measurements are in mm, if not otherwise indicated ; scale = 0.1mm.

The following list summarize new facts given in this paper.

New species described

Runcinia tarabayevi sp.n. — from Kazakhstan and Kirghizia ;

- Thomisus zyuzini* sp.n. – Kazakhstan ;
Xysticus bakanas sp.n – Kazakhstan ;
Xysticus kuzgi sp.n. – Kazakhstan and Uzbekistan ;
Xysticus ovcharenkoi sp.n. – Tadzhikistan ;
Xysticus taukumkurt sp.n. – Kazakhstan ;
Xysticus ulkan sp.n. – Kirghizia ;
Xysticus urgumchak sp.n. – Kazakhstan.

Unknown ♀♀ described

- Xysticus concinnus* KRONEBERG, 1875 ;
Xysticus minor CHARITONOV, 1946.

Unknown ♂♂ described

- "*Oxyptila*" *lugubris* (KRONEBERG, 1875).

New synonyms and combinations

- Xysticus aromarginatus* TANG et SONG, 1988 = *Xysticus baltistanus* (CAPORIAMCO, 1935).
Xysticus dondalei MARUSIK, 1988 = *Xysticus baltistanus* (CAPORIAMCO, 1935).
Xysticus quadratus TANG et SONG, 1988 =? *Xysticus baltistanus* (CAPORIAMCO, 1935).
Oxyptila baltistana CAPORIAMCO = *Xysticus baltistanus* (CAPORIAMCO) comb. n.
Oxyptila xysticiformis CAPORIAMCO = *Xysticus xysticiformis* (CAPORIAMCO) comb. n.

Species new for the USSR

- Diaea suspiciosa* O.P.-CAMBRIDGE, 1885 ;
Monaesus israilensis LEVY, 1973 ;
Xysticus mongolicus SCHENKEL, 1963 ;
Xysticus tristrami (O.P.-CAMBRIDGE, 1872) ;
Xysticus xysticiformis (CAPORIAMCO, 1935).

DESCRIPTION

Runcinia tarabayevi sp. n.

(Figs. 1–5)

Material examined. *Holotype* 1♂, Kazakhstan, Chimkent Area, Turkestan Distr., Karatau Mt. Ridge, Turlan Pass, 24–VI–1989 (C.T., A.Z., ZMMU) ; paratypes 2♂, same locality, together with holotype (ZMMU) ; paratype 1♂, Chimkent Area, Turkestan Distr., 63km N of Turkestan Town, Karatau Mt. Ridge, 30km up from Bozbutak Vill., 13–VI–1989 (A.Z., C.T., AIK) ; Paratypes 2♂, Ksyl-Orda Area, 10km SE of Djusaly Vill., clay takyr, 19–VI–1989 (A.Z., BI) ; paratype 1♂, Kirghizia, Lailyak River Valley, 1500m, 15–V–1987 (S.Z., BI)

Measurements(mm.)

MALE. Carapace : 1.03 wide ; abdomen : 1.19 long, 1.33 wide. Clypeus 0.14–0.16, MOA-WA 0.24–0.26, MOA-WP 0.26–0.29, MOA-L 0.23, chelicerae 0.30–0.34, AME 0.06, ALE 0.06, PME 0.04, PLE 0.04, AME-AME 0.13–0.16, AME-ALE 0.10–0.11, PME-PME 0.18–0.21, PME-PLE 0.20–0.26.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	3.60–4.35	0.90–1.25	2.55–3.20	2.60–3.10	1.30–1.50
II	3.10–4.00	0.85–1.35	2.10–3.00	2.10–2.90	1.25–1.40
III	1.40–1.55	0.55–0.70	0.90–1.05	0.95–1.05	0.65
IV	1.40–1.60	0.60–0.70	0.90–1.00	1.00–1.15	0.75–0.90

Description

Carapace yellow, eye field white. Sternum, labium, maxilae, chelicerae, palps and spinnerets yellow. Dorsum of abdomen yellow with white spots. Legs yellow, patellae and distal parts of tibia, 3/4 of metatarsi and apical parts of tarsi of the legs I and II red brown. Carapace and abdomen covered with numerous spines (Figs. 1–2), same kind of spines present also on the tibiae. Leg spination : femur I d. 1–1–0, p. 1–1–0–0–0–0, femur II d. 1–1–0, femur III d. 1–1–1–1, femur IV d. 0–1–1–1 or 1–1–1–1. Male palp(Figs. 3–5) with long embolus and two tibial apophyses.

Female unknown.

Diagnosis. Long embolus, relatively short retrolateral tibial apophysis distinguish males of *R. tarabayevi* sp.n. from those of *R. lateralis* (C.L.Koch, 1838)

Derivatio nominis : The species is gladly named after collector Dr. C. K. TARABAYEV, our friend and colleague.

***Thomisus zyuzini* sp. n.**

(Figs. 6–8)

Material examined. *Holotype* 1♀, Kazakhstan, Mangyshlak Area, Yeraliyev Distr., Karynjaryk Desert, 43km S of Akkuduk, 14–V–1989(A.R., S.I., A.Z., ZMMU) ; paratype 1♀, Mangyshlak Area, Ustyurt Plateau, Ustyurt Reserve, E of Kendirli Camp, 20–V–1989(A.Z., AIK).

Measurements(mm.)

FEMALE. Carapace : 2.75 long, 2.60 wide ; abdomen 5.03 long, 5.55 wide. Clypeus 0.64, MOA-WA 0.44, MOA-WP 0.60, MOA-L 0.49, chelicerae 1.14, AME 0.07, ALE 0.09, PME 0.05, PLE 0.06, AME-AME 0.33, AME-ALE 0.26, PME-PME 0.50, PME-PLE 0.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	3.10	1.30	2.35	2.30	1.15
II	3.00	1.15	2.25	2.10	1.15
III	1.40	0.85	0.95	1.00	0.65
IV	1.70	0.80	1.05	1.10	0.65

Description

Overall coloration yellow. Carapace medially with pale yellow band. Legs yellow with whitish ventral sides, patellae I and II whitish pro- and retrolaterally. Chelicerae and palps whitish. ALE and PLE on a tubercle. Abdominal projections weak not strong. Leg I spination : tibia v. 1-1-1-2-1-lap., metatarsus v. 2-2-2-2-2-2ap. Epigyne (Figs. 6-8) with two distinct spermatheca openings directed downwards, epigynal plate small.

Male unknown.

Diagnosis. Epigyne unlike that of *T. onustus* WALCKENAER, 1805, having spermatheca openings directed downwards (Figs. 6-8) not apically. Epigynal plate is smaller than in *T. onustus*.

Derivatio nominis : The species is gladly named after its collector Dr. A.A. ZYUZIN, our friend and colleagues.

Thomisus onustus WALCKENAER, 1805

(Fig. 9)

Material examined : 2♂ 1♀, Kazakhstan, Chimkent Area, Turkestan Distr., Karatau Mt. Ridge, Turlan Pass, 24-III-1989(A.Z., C.T., BI) ; 1♂, Alma-Ata Area, Kamenskoye Plateau, 6-III-1985 (S.D., BI) ; 1♀, Vostochno-Kazakhstanskaya (East Kazakhstan) Area, 20 km out of Amanat Town, Zaisan-Kurchum Road, 20-V-1987(C. T., AIK) ; 1♀, Kirghizia, sonkul' Mt. Ridge, Shchilibili Canyon, 9-III-1987 (S.O., DI) ; 1♂, Loilyak River Valley, 1500m, 15-VI-1987 (S.Z., BI) ; 1♀, Tadzhikistan, Pyandzh Distr., 7km S of Zebon Vill., 6-IX-1989 (A.A., AIK) ; 1♀, Turkmenia, West Kopetdagh, Daman, 4-VI-1982 (B.Z., ZMMU) ; 1♀, Firyuza, 20-V-1987 (S. K., AIK).

Diagnosis. Epigyne similar to that of *T. zyuzini* sp. n., but spermatheca openings are directed apically (Fig. 9).

Xysticus bakanas sp. n.

(Figs. 10-11)

Material examined. *Holotype* 1♂, Kazakhstan, Alma-Ata Area, Bakanas Botanical Garden, September 1988 (Y. I., ZMMU).

Measurements(mm.)

MALE. Carapace : 1.90 long, 1.40 wide ; abdomen 2.10 long, 1.80 wide. Clypeus 0.17, MOA-WA 0.37, MOA-WP 0.37, MOA-L 0.37, chelicerae 0.71, AME 0.07, ALE 0.09, PME 0.07, PLE 0.11, AME-AME 0.24, AME-ALE 0.14, PME PME 0.25, PME-PLE 0.23.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.05	0.75	1.50	1.65	0.90
II	1.90	0.75	1.50	1.80	0.90
III	1.40	0.60	0.85	0.80	0.60
IV	1.45	0.60	1.00	1.10	0.60

Description

Carapace pale yellow with pale brownish sides. Abdomen also yellow with cream-coloured venter like also sternum. Legs yellow, distal aparts of tibiae, metatarsi and patellae red brownish. Leg I spination : femur d. 0-2-0 or 0-1-0, p. 1-1-0-1-1, tibia p. 1-1-1-0, v.2-2-2-2ap., metatarsus p. 1-1-1ap., r. 0-1-1, v. 2-2-2. Malp palp (Figs. 10-11) with large and flat embolus, long tegular ridge and flat retrolateral tibial apophysis.

Female unknown.

Diagnosis. The distinctively flattened basal part of the embolus, long tegular ridge, unprominent retrolateral tibial apophysis distinguish of *X. bakanas* sp. n. from other similar species like *X. striatipes* and *X.sabulosus*.

Derivatio nominis : The specific name refers to the type locality.

***Xysticus kuzgi* sp. n.**

(Figs. 12-13)

Material examined. *Holotype* 1 ♂, Uzbekistan, Chatkal' ski Reserve, under stones, 18-IX-1983 (K.E., ZMMU) ; *paratype* 1 ♂, Kirghizia, Osh Area, Suzak Distr., Yangi-Dehkan Vill., 3-XI-1986 (D.L., AIK) ; *paratype* 1 ♂, Osh Area, Tashkumyr Town, Sarykamysh-sai Vill., 13-IX-1985 (D.L., BI) ; 1 ♀ (not *paratype*) in poor condition and without epigyne, same locality.

Measurements(mm.)

MALE. Carapace : 2.35 long, 2.55 wide ; abdomen : 2.90 long, 2.20 wide. Clypeus 0.26, MOA-WA 0.47, MOA-WP 0.47, MOA-L 0.46, chelicerae 0.90, AME 0.07, ALE 0.11, PME 0.07, PLE 0.10, AME-AME 0.33, AME-ALE 0.17, PME-PME 0.33, PME-PME0.36.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	3.05	1.40	2.30	2.55	1.20
II	3.05	1.25	2.20	2.20	1.05
III	2.00	1.30	2.35	1.30	0.75
IV	2.05	1.25	2.35	2.15	0.80

Description

Carapace, abdomen and legs light coloured (whitish), margins of carapace with 2 wide bands of sandy colour. Apical parts of tarsi and metatarsi darker than other segments. Leg I spination : femur d. 0-1-1-1-lap. or 0-1-1-1, p. 0-1-1-1 or 1-1-1-1, tibia p. and r. 1-1-1, v. 2-2-2ap., metatarsus p. 1-1-1-lap., r. 1-0-1-1, v. 2-2-2-0-2-2ap. Male palp (Figs. 12-13), medial part of embolus serrate.

Diagnosis. This species resembles *X. lapidarius* and "*Oxyptila*" *lugubris* (all have serrate embolus), but can be distinguished by the shorter embolus and apical position of the tegular ridge.

Derivatio nominis : The name for this species is derived from the Uzbek word "kuzgi", meaning "autumnal". The name was selected as all type specimens were collected in Autumn.

Xysticus ovcharenkoi sp. n.

(Figs. 14-17)

Material examined. *Holotype* 1♂. Tadzhikistan, Komsomolabad Town, 8-VII-1978 (V.O., ZIL) ; paratypes 1♂ 1♀, same locality (ZIL) : paratype 1♂, Komsomolabad Distr., Lyulya Kharvi Canyon, 1800m, 11-VII-1978 (V.O., AIK) ; paratype 1♀, Varzob Canyon, 1800m, 17-X-1987 (S.O., AIK).

Measurements(mm.)

MALE/FEMALE. Carapace : 1.65-2.00/2.90 wide, 1.75-2.20/3.60 long ; abdomen : 1.75-2.25/3.90 long, 1.40-1.70/3.15 wide. Clypeus 0.16-0.20/0.29, MOA-WA 0.33-0.43/0.60, MOA-WP 0.39-0.44/0.64, MOA-L 0.34-0.44/0.57, chelicerae 0.46-0.60/0.97, AME 0.07/0.09, ALE 0.10-0.14/0.16, PME 0.07-0.09/0.10, PLE 0.10-0.13/0.14, AME-AME 0.23-0.29/0.43, AME-ALE 0.14-0.16/0.23, PME-PME, 0.23-0.26/0.43, PME-PLE 0.26/0.46

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.0-2.7/2.6	0.8-1.1/1.3	1.5-2.0/1.9	1.5-2.1/1.9	0.9/1.0
II	1.9-2.6/2.9	0.8-1.0/1.3	1.5-1.9/2.1	1.4-2.0/2.0	0.8/0.9
III	1.2-1.7/2.0	0.5-0.7/0.9	0.8-1.0/1.5	0.7-1.0/1.3	0.5/0.7
IV	1.2-1.7/2.2	0.5-0.6/1.0	0.9-1.2/1.4	0.8-1.2/1.4	0.6/0.8

Description

MALE. Carapace red brown with yellow spots and yellow V-shaped mark. ALE and PLE tubercles white, margins of carapace blackish, basally with 2 round black spots. Sternum, labium and maxillae yellow with red brown spots. Chelicerae brown yellow. Spinnerets red brown. Dorsum of abdomen grey with black and white spots and stripes.

venter of abdomen with dark dots. Branchial opercula yellow. Abdomen covered by numerous somewhat clavate setae. Legs : femora and patellae I and II dark red brown, distally with white spots, tibia I and II dark red brown, distally with white spots, tibia I and II red brown, distally lighter than proximally, tarsi and metatarsi yellow, femora, patellae and tibia III and IV red brown with white spots, metatarsi III and IV light yellow with dark spots, tarsi III and IV light yellow. Leg I spination : femur d. 0-1-1-0, p. 1-1-1-1-0, tibia v. with 4-5 pairs of spines, metatarsus p. 1-1-1-1ap. or 0-1-1-1, v. 2-2-2-2. Palp (Figs. 14-15) dark red brown, cymbium cream-coloured with spots, tegular ridge absent, tibia with 3 apophyses.

FEMALE. Carapace red brown basally with yellow spot and anteriorly with pair of yellow stripes, margins with dark red brown bands. Sternum, maxillae and chelicerae yellow with red brown spots. Labium red brown. Dorsum of abdomen grey brown with white and dark red brown spots. Spinnerets yellow, distally brown, venter of abdomen grey. Legs variegated, distal parts of tibiae and patellae dark red brown. Leg I spination : femur p. 1-1-2-1, tibia v. 1-2-2-2-2-2, metatarsus p. 1-1-0-1, v. 2-2-2-2-2-2, r. 1-0-0, Epigyne (Figs. 16-17) without lateral "pockets" of the fovea, medial septum narrow and bifid.

Diagnosis. Closely related to *X. turlan* sp. n., and *X. caperatoides* LEVY. In general appearance the palpal structures of *X. ovcharenkoi* sp.n. are rather similar to those of *X. turlan* sp.n., *X. caperatoides*, *X. baltistanus* and *X. turanicus*. Males of new species differ from those of similar species in having a long and sharp tegular apophysis. Ventral tibial apophysis of the male palp is thinner than in *X. turlan* sp.n., but wider than in *X. caperatoides*. Female epigyne is similar to that of *X. turanicus* and *X. tristrami* and differ from them by the shape of medial septum and having no lateral "pockets" of the epigyne fovea.

Derivatio nominis : This species is gladly named after its collector, Dr. V. I. OVTSHARENKO.

Xysticus turlan sp. n.

(Figs. 18-19)

Material examined. *Holotype*. 1♂, Kazakhstan, Chimkent Area, Turkestan Distr., Karatau Mt. Ridge, northern part of Turlan Pass, 24-VI-1989 (C.T., A.Z., ZMMU).

Measurements(mm.)

MALE. Carapace : 1.90 long, 2.05 wide ; abdomn : 2.50 long, 2.00 wide, Clypeus 0.19, MOA-WA 0.43, MOA-WP 0.49, MOA-L 0.44, chelicerae 0.69, AME 0.07, ALE 0.15, PME 0.10, PLE 0.11, AME-AME 0.30, AME-ALE 0.17, PME-PME 0.30, PME-PLE 0.29.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.55	1.05	2.05	2.00	0.90
II	2.55	0.95	1.90	1.80	0.85
III	1.50	0.70	1.10	0.90	0.60
IV	1.75	0.60	1.10	1.00	0.70

Description

Carapace dark red brown. Sternum, coxae and maxillae variegated (with red brown and yellow spots). Labium dark red brown. Apical parts of labium and maxillae yellow. Spinnerets dark red brown, branchial opercula yellow. Dorsum of abdomen with numerous sticking setae. Legs I and II dark red brown, legs III and IV variegated, metatarsi and tarsi of all legs cream coloured. Leg I spination : femur d. 0-1-0, p. 1-1-1-0, tibia v. 2-2-2-2ap., metatarsus p. 0-1-0, v. 0-2-2-2ap. Male palp (Figs. 18-19) with 3 tibial apophyses, tegulum with single apophysis, tegular ridge absent.

Female unknown.

Diagnosis. *X. turlan* sp. n. is closely related to *X. ovcharenkoi* sp. n. from Tadzhikistan and to *X. caperatooides* from Israel, but can be easily separated from them by the shape of tegular apophysis as well as by the shape of tibial apophyses.

Derivatio nominis : The specific name is a noun in apposition after the type locality.

Xysticus taukumkurt sp. n.

(Figs. 20-21)

Material examined. *Holotype* 1♂, Kazakhstan, Alma-Ata Area, kurty Distr., Taukum Desert, 22-IV-1988 (V.L., ZMMU).

Measurements(mm.)

MALE. Carapace : 1.50 long, 1.50 wide : abdomen : 1.50 long, 1.25 wide. Clypeus 0.11, MOA-WA 0.37, MOA-WP 0.36, MOA-L 0.30, chelicerae 0.40, AME 0.07, ALE 0.10, PME 0.06, PLE 0.09, AME-AME 0.24, AME-ALE 0.10, PME-PME 0.24, PME-PLE 0.26.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.45	0.70	1.05	1.00	0.75
II	1.45	0.60	1.00	0.95	0.65
III	1.00	0.50	0.60	0.55	0.50
IV	1.00	0.40	0.70	0.65	0.50

Description.

Carapace dark red brown, basally with triangular yellowish spot. Sternum yellow brown with darker margins. Maxillae, labium and chelicerae dark red brown. Spinn-

erets red brown. Abdomen dark grey, with white anterior margin, dorsum with white spot and transverse stripes. Branchial opercula white. Legs I and II dark red brown, but tarsi cream-coloured with darker proximal part. Legs III and IV brownish with white and red brown spots, metatarsi and tarsi cream-coloured. Leg I spination: femur d. 0-1-1-1, p. 1-1-1, tibia v. 2-2-2ap., metatarsus v. 0-2-2-2ap. Male palp (Figs. 20-21) with very small tegular apophysis.

Diagnosis. This peculiar species is easily recognized by the very small tegular apophysis and tegular ridge situated near tibial apophyses. Its relationships to other species remain obscure.

Derivatio nominis: The name of this species is derived from the name of the desert and Kazakh word "kurt" (= spider), meaning "spider from the Taukum Desert".

***Xysticus ulkan* sp. n.**

(Figs. 22-23)

Material examined. *Holotype* 1♂, Kirghizia, Sonkul' Mt. Ridge, Shchyl' bili Canyon, 9-VI-1987 (S.O., ZMMU).

Measurements(mm.)

MALE. Carapace: 3.10 long, 3.10 wide; abdomen 3.45 long, 2.85 wide. Clypeus 0.21, MOA-WA 0.64, MOA-WP 0.71, MOA-L 0.54, chelicerae 1.03, AME 0.09, ALE 0.14, PME 0.09, AME-AME 0.36, AME-ALE 0.26, PME-PME 0.54, PME-PLE 0.40.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	3.10	1.55	2.35	2.35	1.10
II	3.00	1.40	2.15	2.25	1.10
III	2.15	1.00	1.25	1.20	0.75
IV	2.05	0.90	1.30	1.35	0.85

Description

Carapace dark red brown with light medial band and black medial spot, eye tubercles yellow. Sternum yellow with brown dots. Maxillae and labium red brownish, apical parts white. Coxae brownish, ventrally with white oval ring. Dorsum of abdomen grey brown with white stripes on sides and anteriorly, venter of abdomen yellow brown. Spinnerets red brown with yellow apical parts. Branchial opercula yellow. Legs I and II dark red brown with yellow dots prolaterally, dorsally femora, patellae and tibia with red brown stripe, metatarsi and tarsi with yellow stripe. Legs III and IV variegated yellow brown, dorsally with white stripe. Leg I spination: femur p. 1-1-1-1 or 2-1-1-1, d. 0-0-1, tibia p. and r. 0-1-1, v. 2-2-2-2ap., metatarsus p. 1-0-1ap., r. 1ap., v. 2-1-2-2ap. Male palp (Figs. 22-23) with 2 tibial apophyses, ventral one double pointed, tegular ridge directed upwards.

Female unknown.

Diagnosis. This large species seems to be closest to *X. baltistanus*, but can be distinguished from it by having tegular ridge and tegular apophysis directed apically. Also the shape of tibial apophyses is characteristic.

Derivatio nominis : The name for this species is derived from the Uzbek word "ulkan", which means "large" or "great".

Xysticus urgumchak sp. n.

(Figs. 24–26)

Material examined. *Holotype* 1♂, Kazakhstan, Mangyshlak Area, Ust'yurt Reserve, Ust'yurt Plateau, near Baskargan Camp, 25-V-1989 (A.R., S.I., ZMMU) ; paratype 1♀, same locality and time (ZMMU) ; 1♂, Taldy-Kurgan Area, Panfilov Distr., 40km SW of Panfilov Town, Kumkala Desert, 8-X-1989 (S.I., A.Z., AIK).

Measurements(mm.)

MALE/FEMALE. Carapace : 2.25/2.80 long, 2.35/2.60 wide ; abdomen : 2.90/3.60 long, 2.80/3.00 wide. Clypeus 0.26/0.27, MOA-WA 0.50/0.56, MOA-WP 0.49/0.56, MOA-L 0.44/0.70, chelicerae 0.71/0.91, AME 0.09/0.09, ALE 0.17/0.17, PME 0.07/0.07, PLE 0.10/0.10, AME-AME 0.36/0.40, AME-ALE 0.13/0.21, PME-PME 0.34/0.41, PME-PLE 0.31/0.44.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.70/2.45	1.10/1.25	1.90/1.85	1.85/1.65	0.85/0.95
II	2.35/2.45	1.00/1.20	1.70/1.85	1.65/1.70	0.80/0.90
III	1.60/1.60	0.70/1.00	1.00/1.10	1.00/1.00	0.70/0.60
IV	1.75/1.75	0.70/0.90	1.05/1.25	1.20/1.15	0.70/0.70

Description

MALE (holotype). Carapace rugose, coloration yellowish with brown pattern : medial part with red brown stripe, on sides with 2 elongated spots, basally with triangular red brown spot. Carapace sparsely covered by clavate setae. Sternum yellow with red brown dots. Maxillae and labium dark red brown basally. Abdomen white, dorsally with dark grey transverse pattern. Branchial opercula red yellow. Legs yellow with red brownish spots, femora, patellae, and tibiae I and II with a pair of dark stripes dorsally. Patellae, tibiae, metatarsi and tarsi I and II with white hairs ventrally. Paratype male differs in coloration, being more variegated. Leg I spination : femur d. 0-1-0, p. 1-0-0 or 1-1-0, tibia v. 2-1-2-2ap., metatarsus p. and r. 0-1-1-1ap., v. 0-2-2-2-2ap. Male palp (Figs. 24–25) with two tibial apophyses and thin unserrate embolus.

FEMALE (possible belongs to other species). Coloration light. Carapace with wide white band, sides of carapace brown yellow with white stripes, basal part with 2 red brown triangular spots. Other parts of body snady-coloured. Sides of abdomen white. Carapace

and abdomen covered with numerous setae. Legs sandy-coloured with white dorsal stripes and red brown spots. Leg I spination : femur p. 1-1-1, tibia v. 1-2-2-2 ap., metatarsus p. 1-0-1-1ap., r. 0-1-0, v. 2-2-1-2-2ap. Epigyne (Fig. 26).

Diagnosis. The male palp is distinguished by the shape of the embolus base, shape of tegular ridge and unserrate embolus. This species is related to *X. kuzgi* sp. n., *X. lapidarius* and to "*Oxyptila*" *lugubris*.

Derivatio nominis : The name of this species is derived from Uzbek word "urgumchak", which means "spider".

Xysticus kaznakovi UTOCHKIN, 1968

(Figs. 27-28)

Material examined. 1♂, Turkmenia, West Kopetdagh, Syunt-Khasardagh Reserve, Parhai Camp, 26-IV-1987 (T.P., ZMMU).

Measurements(mm.)

MALE. Carapace : 1.70 long, 1.75 wide ; abdomen 2.00 long, 1.70 wide. Clypeus 0.17, MOA-WA 0.40, MOA-WP 0.43, MOA-L 0.34, chelicerae 0.60, AME 0.06, ALE 0.11, PME 0.06, AME-AME 0.27, AME-ALE 0.16, PEM-PME 0.30.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.90	0.80	1.50	1.50	0.85
II	1.80	0.80	1.30	1.30	0.75
III	1.25	0.50	0.80	0.75	0.50
IV	1.25	0.45	0.85	0.80	0.55

Description

Carapace dark red brown, eye tubercles yellow. Sternum yellow with brown dots. Maxillae, labium and coxae greysh yellow. Chelicerae light brown. Dorsum of abdomen brown yellow with white stripes laterally and anteriorly, venter of abdomen whitish grey. Spinnerets red brown, book lungs yellow, Femora, patellae, and proximal parts of tibia I and II dark red brown, other parts yellow. Femora and patellae III and IV greysh white, tibiae, metatarsi and tarsi whitish. Leg I spination : femur d. 1-1-1, p. 1-2-2-1-1, tibia p. 1-1-0, r. 1-1-1, v. 2-1-2-2ap., metatarsus v. 2-2-2ap. Male palp (Figs. 27-28) with apically curved and sharply pointed retro-lateral tibial apophysis.

Female unknown.

Diagnosis. The shape of embolus and tibial apophyses are diagnostic.

Xysticus kiritschenko UTOCHKIN, 1968

(Figs. 29-31)

Material examined. 1♂, Kazakhstan, Alma-Ata Area, Soldatskoye Vill., 4-VI-1986 (C.T., ZMMU); same 1♀, same locality, 28-V-1986 (C.T., AIK); 3♂ 2♀, Kirghizia, Ferganski Mt. Ridge, Ak-Terek, 10-VI-1984(S.Z., BI); 1♂, Naryn-Too Mt. Ridge, Irisu Canyon, 19-VI-1987(S.O., ZMMU); 1♀, Sonkul' Mt. Ridge, Shchilibili Canyon, 9-VI-1987(S.Z., AIK); 1♂ 1♀, Kirghizki Mt. Ridge, Chon-Kurchak Valley, 2700 m, 20-VI-1987. (S.O., AIK); 1♀, Sary-Chelek Natural Reserve, 30-IV-1983(ZMMU).

Measurements(mm.)

MALE/FEMALE. Carapace : 2.35-2.55/3.05 long, 2.35-2.50/3.00 wide; abdomen : 2.55-2.85/3.40 long, 2.20-2.50/3.00 wide. Clypeus 0.29/0.33, MOA-WA 0.44-0.51/0.59, MOA-WP 0.47-0.51/0.59, MOA-L 0.49-0.51/0.57, chelicerae 0.87-0.93/1.06, AME 0.09/0.70, ALE 0.13-0.14/0.14, PME 0.09/0.10 PLE 0.10/0.11. AME-AME 0.30-0.36/0.43, AME-ALE 0.14-0.20/0.23, PME-PME 0.30-0.36/0.40, PME-PLE 0.36/0.39/0.46.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.6-2.8/2.8	0.9-1.1/1.3	2.0-2.2/1.9	2.1-2.2/1.9	1.1-1.2/1.1
II	2.6-2.8/2.8	1.1/1.3	2.0-2.2/2.1	2.1-2.2/1.9	1.0-1.1/0.9
III	1.9-2.0/2.1	0.8/0.95	1.3-1.4/1.3	1.1-1.3/1.1	0.7/0.85
IV	1.9-2.1/2.3	0.8-0.9/0.9	1.45/1.5	1.2-1.4/1.4	0.8/0.85

Description

MALE. Carapace light brown with white yellow band in basal part. Cephalic part covered with long setae. Eye tubercles yellow. Sternum yellow with numerous hairs and brown dots, maxillae and labium brownish. Abdomen light brown with white lateral stripes, dorsum covered with long setae. Branchial opercula yellow, spinnerets brown. Legs variegated (with brownish and white spots), tarsi and metatarsi cream-coloured. Leg I spination : femur d. 0-2-1 or 0-1-1-1, p. 1-1-1-1 or 1-1-1-2, tibia p. 1-1-1-1, r. 0-1-1, v. 2-2-2-2ap., metatarsus p. 1-1-0-1ap., r. 1-1-1ap., v. 2-2-2ap. Male palp (Figs. 29-30) with two tibial apophyses and tegular apophysis directed prolaterally.

FEMALE. Coloration like in male, but paler and more variegated. Abdomen with triangular transverse spots, venter of abdomen red brownish. Spinnerets red brown. Whole body covered by long setae. Leg I spination : femur p. 1-1-1, tibia v. 2-2-2-2-2ap., metatarsus p. and r. 1-1-1 or 0-1-1, v. 2-2-2-2-2ap. Female epigyne (Fig. 31) with two lobes.

Diagnosis. This species is closely related to the Far East species *X. lepnevae* УТОТЧКИН, 1968. Males of two species can be separated by the shape and direction of the tegular ridge. In *X. kiritschenkoi* tegular apophysis is directed prolaterally, and in *X. lepnevae* it is directed downwards.

Epigyne of *X. kiritschenkoi* has two distinct lobes which are lacking in Far East species.

Xysticus minor CHARITONOV, 1946

(Figs. 32-36)

Xysticus minor CHARITONOV, 1946. Izv. Yest.-Nauchn. Inst. Molotov Gos. Univ., 12(3) : 28, F.47 (male only)

Xysticus minor : CHARITONOV, 1969. Uch.Zap. PGU, 179 : 120-121 (redescription of the male).

Material examined. 2♀, Kazakhstan, Alma-Ata Area, Kapchagai Town, 27-XI-1988 (A.Z., ZMMU) ; 1♂ 1♀, Alma-Ata Area, NE bank of Kapchagai water-reservoir, 28-X-1988 (A.Z., AIK) ; 1♀, Chimkent Area, Arys' Town, 27-V-1987 (D.L., ZMMU) ; 4♀, same locality, 25-IV~7-V-1988 (D.L., ZMMU) ; 1♂, Kirghizia, Talas Area, 1968 (A.Z., BI) ; 1♂ 2♀, Turkmenia, Chardjou Area, Repeter Reserve, 3~4-IV-1989 (O.L., BI).

Measurements(mm.)

MALE/FEMALE. Carapace : 1.50/1.75 long, 1.35/1.85 wide ; abdomen 1.75/2.70 long, 1.30/2.20 wide. Clypeus 0.14/0.23, MOA-WA 0.34/0.43, MOA-WP 0.35/0.44, MOA-L 0.33/0.42, chelicerae 0.44/0.64, AME 0.07/0.07, ALE 0.10/0.11, PME 0.06/0.06, PLE 0.09/0.09, AME-AME 0.21/0.30, ALE-ALE 0.13/0.17, PME-PME 0.26/0.33, PME-PLE 0.24/0.34.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.3-1.5/1.6	0.6 /0.8	1.05/1.2	0.9-1.1/1.0	0.7/0.6
II	1.3-1.5/1.7	0.65/0.75	0.9-1.0/1.2	0.9-1.1/1.0	0.6-0.7/0.7
III	0.9-1.1/1.3	0.4-0.5/0.6	0.5-0.7/1.1	0.5-0.7/0.7	0.4-0.5/0.5
IV	0.9-1.1/1.3	0.5 /0.6	0.6-0.7/0.9	0.6-0.7/0.8	0.55/0.55

Description

MALE. Carapace dark red brown with light red brown V. Sternum yellow brown. Maxillae, labium and chelicerae red brown. Dorsum of abdomen light with transverse red brown bands, venter of abdomen yellow brown. Spinnerets and book lungs yellow brown. Coloration variable from deep brown-black to light red brown. Legs I and II dark red brown, legs III and IV variegated dorsally and red brown ventrally. Metatarsi and tarsi of all legs yellow. Leg I spination : femur d. 0-1-0, p. 1-1-1-0, tibia p. and r. 1-1-1, v. 2-2-2ap., metatarsus p. 0-1-1ap., r. 0-1-0, v. 2-2-2ap. Male palp (Figs. 32-33) without tegular apophyses and curved embolus.

FEMALE. Coloration lighter than in male. Carapace red brown with yellowish spots, with yellow V, eye field yellow. Sternum and venter of abdomen cream-coloured. Branchial opercula, epigynal area and spinnerets red brownish. Dorsum of abdomen cream-coloured. Carapace, abdomen, and legs dorsally covered with numerous flat hairs. Leg I spination : femur p. 0-1-1-1-0, tibia v. 2-1-2-2ap. or 2-2-2ap., metatarsus

Xysticus minor CHARITONOV, 1946

(Figs. 32-36)

Xysticus minor CHARITONOV, 1946. Izv. Yest.-Nauchn. Inst. Molotov Gos. Univ., 12(3) : 28, F.47(male only)

Xysticus minor : CHARITONOV, 1969. Uch.Zap. PGU, 179 : 120-121 (redescription of the male).

Material examined. 2♀, Kazakhstan, Alma-Ata Area, Kapchagai Town, 27-XI-1988 (A.Z., ZMMU) ; 1♂ 1♀, Alma-Ata Area, NE bank of Kapchagai water-reservoir, 28-X-1988 (A.Z., AIK) ; 1♀, Chimkent Area, Arys' Town, 27-V-1987 (D.L., ZMMU) ; 4♀, same locality, 25-IV~7-V-1988(D.L., ZMMU) ; 1♂, Kirghizia, Talas Area, 1968(A.Z., BI) ; 1♂ 2♀, Turkmenia, Chardjou Area, Repeter Reserve, 3-4-IV-1989 (O.L., BI).

Measurements(mm.)

MALE/FEMALE. Carapace : 1.50/1.75 long, 1.35/1.85 wide ; abdomen 1.75/2.70 long, 1.30/2.20 wide. Clypeus 0.14/0.23, MOA-WA 0.34/0.43, MOA-WP 0.35/0.44, MOA-L 0.33/0.42, chelicerae 0.44/0.64, AME 0.07/0.07, ALE 0.10/0.11, PME 0.06/0.06, PLE 0.09/0.09, AME-AME 0.21/0.30, ALE-ALE 0.13/0.17, PME-PME 0.26/0.33, PME-PLE 0.24/0.34.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.3-1.5/1.6	0.6 /0.8	1.05/1.2	0.9-1.1/1.0	0.7/0.6
II	1.3-1.5/1.7	0.65/0.75	0.9-1.0/1.2	0.9-1.1/1.0	0.6-0.7/0.7
III	0.9-1.1/1.3	0.4-0.5/0.6	0.5-0.7/1.1	0.5-0.7/0.7	0.4-0.5/0.5
IV	0.9-1.1/1.3	0.5 /0.6	0.6-0.7/0.9	0.6-0.7/0.8	0.55/0.55

Description

MALE. Carapace dark red brown with light red brown V. Sternum yellow brown. Maxillae, labium and chelicerae red brown. Dorsum of abdomen light with transverse red brown bands, venter of abdomen yellow brown. Spinnerts and book lungs yellow brown. Coloration variable from deep brown-black to light red brown. Legs I and II dark red brown, legs III and IV variegated dorsally and red brown ventrally. Metatarsi and tarsi of all legs yellow. Leg I spination : femur d. 0-1-0, p. 1-1-1-0, tibia p. and r. 1-1-1, v. 2-2-2ap., metatarsus p. 0-1-1ap., r. 0-1-0, v. 2-2-2ap. Male palp (Figs. 32-33) without tegular apophyses and curved embolus.

FEMALE. Coloration lighter than in male. Carapace red brown with yellowish spots, with yellow V, eye field yellow. Sternum and venter of abdomen cream-coloured. Branchial opercula, epigynal area and spinnerets red brownish. Dorsum of abdomen cream-coloured. Carapace, abdomen, and legs dorsally covered with numerous flat hairs. Leg I spination : femur p. 0-1-1-1-0, tibia v. 2-1-2-2ap. or 2-2-2ap., metatarsus

p. and r. 0-1-1ap., v. 2-2-2 ap. Epigyne (Figs. 34-36) with single oval or pear-shaped fovea.

Diagnosis. The male of *X. minor* resembles that of *X. nepalhimalaicus* ONO, 1978 (Figs. 37-38) by the shape of embolus and tibial apophyses, but it can be distinguished by the more curved embolus and far separated tibial apophyses. Epigynal forvea is diagnostic.

Comparative material examined : *X. nepalhimalaicus* : *Holotype* 1 ♂, O-Nepal, Thodung bei Jiri, Rhododendron-Abies-Tsuga-Wald, 3100-3200 m, 4-6-X-1970 (J. Martens, SMF) : 1 ♂ (labeled as *X. maculosus* O.P.-CAMBRIDGE), Karakoram Mt. Ridge, Pashwari, prati, 2900 m, 3-IX-1929 (ZIF).

Xysticus turanicus GHARITONOV, 1969

(Figs 39-41)

Material examined. 1 ♀, Kazakhstan, Mangyshlak Area, Kuibyshevo Vill., 23-V-1985 (S.D., BI) : 1 ♀, Mangyshlak Area, Tushchibek Vill., 23-V-1985 (S.D., ZMMU) : 1 ♀, Chimkent Area, Suzak Distr., 25km WWS Chulakkurgan Vill. (10km out of Abai Vill.), Karatau Mt. Ridge, 25-VI-1989(C.T., A.Z., ZMMU) : 1 ♀, Kazakh Vill., Mussalinski Distr., clay slopes, 29-V-1981 (A.Z., AIK) : 1 ♂, Kirghizia, Osh Area, Tashkumyr Town, environments of Sary-Kamysh-Sai Vill., 13-IX-1985 (D.L., BI) : 1 ♀ 3 ♂, Osh Area, Suzak Distr., Yangi-Dekhkan Vill., 3-XI-1986 (D.L., ZMMU) : 2 ♂, Khozra-tisho Mt. Ridge, Sangdora, 1800m, 16-X-1987(S.O., ZMMU) : 8 ♂ 1 ♀, West Tien-Shang, Ferganski Mt. Ridge, Arslanbob Vill., 1400m, 12-X-1983 (S.Z., BI) : 1 ♂, same locality, 22-25-X-1986(S.Z., ZMMU) : 1 ♀, Uzbekistan, Surkhandarya Area, Baskuk Mt. Ridge, Khatak Kishlak, Baglydare Canyon, 1500-1800m, 28-IV-1986(BI) : 2 ♀, Turkmenia, West Kopetdagh, Syunt-Khasardagh Reserve, Parkhai Camp, 26-IV-1987 (T.P., AIK) : 2 ♀, Kizyl-Atrek Distr., Sharlauk Vill., 12-IV-1988 (A.A., AIK) : 1 ♀, Bakharden Distr., Desht Vill., 17-IV-1988(A.A., BI) : 1 ♂ 1 ♀, Tadzhikistan, Ghissar Mt. Ridge, Yakkabagh Distr., Kaltakol', 3-X-1987 (S.O., BI) : 3 ♀, Kurgan-Tyube Area, Aktau Mt. Ridge, Gandzhino Vill., 13-15-IV-1986(S.Z., AIK) : 2 ♀, same locality, 21-IV-1986 (S.Z., A.Z., ZMMU) : 4 ♂ 2 ♀, Khovaling, 11-X-1987(S.O., AIK) : 1 ♂ 1 ♀, Ghissar Mt. Ridge, Ramit Vill., Charmin River Valley, 1400m, 3-X-1986 (S.Z., ZMMU) : 1 ♀, Ramit Reserve, 2-7-V-1986(S.Z., ZMMU) : 2 ♀, Karatau Mt. Ridge, Chimai River Valley, 17-18-VI-1986 (S.Z., AIK) : 1 ♂, Ghissar Mt. Ridge, Varsob Canyon, 1800m, 17-X-1987 (S.O., ZMMU)

Measurements(mm.)

MALE/FEMALE. Carapace : 2.10/2.60 long, 2.25/2.65 wide ; abdomen 3.05/3.60 long, 2.35/2.90 wide. Clypeus 0.21/0.26, MOA-WA 0.40/0.49, MOA-WP 0.41/0.49, MOA-L 0.40/0.46, chelicerae 0.77/0.79, AME 0.09/0.09, ALE 0.17/0.19, PME 0.09/0.09, PLE

0.13/0.11, AME-AME 0.26/0.34, AME-ALE 0.13/0.21, PME-PME 0.26/0.31, PME-
PLE 0.31/0.39.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.55/2.75	1.05/1.10	2.95/2.90	2.95/2.75	1.00/0.90
II	2.25/2.60	1.00/1.20	1.90/1.90	1.60/1.70	1.00/1.00
III	1.65/1.60	0.70/0.75	1.30/1.40	1.05/1.10	0.70/0.75
IV	1.70/2.05	0.70/0.90	1.20/1.40	1.25/1.25	0.75/0.70

Description

MALE. Carapace and sternum red brown with yellow stripes, white band between eyes. Maxillae, labium and coxae yellow brown. Abdomen cream-coloured, dorsum of abdomen with 4 wide transverse spots. Chelicerae coloured as sternum. Femur and tibia of legs red brown. Tibia light red brown. Metatarsus and tarsus cream-coloured. Leg I spination: femur d. 1-1-2-1-1, tibia p. 1-1-0, or 0-1-0, r. 1-1-0, v. 2-2-2-2, metatarsus p. and r. 0-1-0, v. 1-2-2-2, Male palp (Figs. 39-40) with 3 tibial apophyses, and small tegular one.

FEMALE. Coloration lighter than in male. Carapace red brown with yellow stripes, covered with thick setae, which are more numerous in eye field. Sternum, maxillae, labium, chelicerae and legs light yellow. Dorsum of abdomen grey with transverse dark and white stripes, venter of abdomen cream coloured. Leg I spination: femur d. 1-1-1-1-0 or 1-1-1-0-0, tibia v. 2-2-2-2, metatarsus p. 1-1-1, r. 0-1-0, v. 2-2-2-2ap. Epigyne (Fig. 41).

Diagnosis. *X. turanicus* is closely related to *X. tristrami* and can be distinguished by the wider ventral tibial apophysis and by the shape of the epigyne.

Xysticus lapidarius UTOTCHKIN, 1968

(Figs. 42-43)

Material examined. 2♂, Kazakhstan, Taldy-Kurgan Area, Panfilov Distr., clay heath, Kumkala Desert, 7-X-1989(A.Z., BI); 1♂, Alma-Ata Area, Bakanas Vill., Botanical garden, September 1988(Y.I., AIK); 1♂, Alma-Ata Area, Balkhash Distr., desert near Ili botanical garden N of Bakanas Vill., 15-IX-1989(S.I., A.Z., ZMMU).

X. lapidarius was described from Turkmenia (Iolatan').

Female unknown.

Diagnosis. This distinctive species can be recognized by long and serrate embolus, position of tegular ridge and by the shape of tibial apophyses. It is related to *X. kuzgi* sp. n and to "*Oxyptila*" *lugubris*.

Xysticus concinnus KRONEBERG, 1875

(Figs. 44–47)

Material examined. *Syntypes* ♂♂ from ZMMU ; 1♀, Kazakhstan, Chimkent Area, Arys' Town, steppe, 3–V–1988(D.L., BI) ; 1♂, Kirghizia, South slope of Talasski Mt. Ridge, Itagar, 2–VI–1987 (S.Z., BI) ; 1♂, Loilysk River Valley, 1500m, 15–VI–1987 (S.Z., AIK) ; 3♂ 2♀, Ferganski Mt. Ridge, Ak-Terek, 10–10–VI–1984 (S.Z., AIK) ; 1♂ 1♀, Tadzhikistan, Kurgan-Tyube Area, Ilyichovsk Distr., Aktau Mt. Ridge, Gandzhino Vill., 800m, 19–IV–V–1986 (A.Z., S.Z., ZMMU) ; 1♀, Kurgan-Tyube Area, Djilikul' Distr., Garavuti Vill., 23–IV–1986 (A.Z., S.Z., ZMMU).

Diagnosis. The shape of embolus, position of tegular ridge, shape of tibial apophyses, two foveae in epigyne and wide medial septum are diagnostic. Its relationship to other species remains obscure.

Xysticus mongolicus SCHENKEL, 1963

(Figs. 48–49)

Material examined. 4♂ (1♂ AIK, 1♂ ZMMU, 2♂ BI), Kazakhstan, Alma-Ata Area, Bakanas Vill., Botanical garden, September 1988(Y.I.)

Diagnosis. Specimens of *X. mongolicus* can be distinguished from those of other species of *Xysticus* by the shape of apical part of embolus and by shape of tibial apophyses.

Xysticus baltistanus (CAPORACCO, 1935) comb. n.

Oxyptila baltistana CAPORACCO, 1935. Mem. Soc. Ent. Italiana, 13 : 186–188, Tav. IV, F. 7a, b, c. *Syntypes* 1♂ 1♀ from ZIF examined.

Xysticus albomarginatus TANG et SONG, 1988. Acta Zoot. Sinica, 13(3) : 250–251, F. 18–20(♂). Syn. n.

Xysticus quadratus TANG et SONG, 1988. Acta Zoot. Sinica, 13(3) : 252–253, F. 25–27 (♀). Probably Syn. n.

Xysticus dondalei MARUSIK, 1988. Zool. Zh., 67(10) : 1480–1482, F.7(1–7). Syn. n.

Material examined. *Syntypes of Oxyptila baltistana* : 1♂, Urdukas, prati, 4000m, May 1929 ; 1♀, Urdukas morena, ? ai Baltoro, 3950m, VII–1929(ZIF). Paratypes of *X. dondalei* (from Central Asia only) : 1♀, Kirghiz Mt. Ridge, Tyuya-Ashu Pass, 3000–3200m, 6–8–VII–1984 (S.Z., ZMMU) ; 1♀, Zaalaisky Mt. Ridge, Mt. Pike of Lenin, 3200m, 18–VIII–1985(S.Z., ZMMU) ; 1♂, Osh Area, Kirghiz-Ata Canyon, Karagoy River Valley, 18–VI–1985(A.Z., ZMMU). Central Asia specimens : 1♀, Kirghizia, Koyandy River Valley, near mouth of Aktash River, 14–IX–1961(P.V., BI)

: 1 ♀, At-Bashy Mt. Ridge, Bosoga River Valley, 22-Ⅷ-1987(S.O., BI) ; 2 ♀, South slope of Talassky Mt. Ridge, Itagar Mt. Ridge, 2-Ⅵ-1987(S.Z., AIK) ; 1 ♂, Sary-Djaz River Canyon, 16-Ⅷ-1986(S.O., AIK) ; 1 ♀, Sonkul' Mt. Ridge, Shchilibili Canyon, 9-Ⅷ-1987 (S.O., ZMMU).

Xysticus cristatus (CLERCK, 1757)

Material examined. 6 ♂ 4 ♀, Kazakhstan, Chimkent Area, Arys' Town, Arys' River Valley, 25-Ⅳ~2-V-1988 (D.L., BI) ; 1 ♀, same locality, 31-V-1987(D.L., BI) ; 1 ♂, Chimkent Area, Suzak Distr., Upper flow of Kokbulak River, Karatau Mt. Ridge, 22-Ⅵ-1988 (C.T., AIK) ; 1 ♀, Alma-Ata Area, 10km N of Otar Town, 10-V-1988 (C.T., BI) ; 1 ♀, Kirghizia, Osh Area, Suzak Distr., Yangi-Dehkan Vill., 3-XI-1986(D. L., BI) ; 1 ♂, Osh Area, Betken Distr., Sokh Canyon, 1800m, 4-V-1986(A.Z., ZMMU) ; 1 ♂, Chop-Kurchak River Valley, 2700m, 20-Ⅵ-1987 (S.O., BI) ; 4 ♂ 1 ♀, Ferganski Mt. Ridge, Ak-Terek, 10~16-Ⅵ-1984 (S.Z., AIK) ; 1 ♂, Naryntoo Mt. Ridge, upper flow of Irisu River, 18-Ⅷ-1987 (S.O., ZMMU) ; 1 ♂, South slope of Talassky Mt. Ridge, Itagar, 2-Ⅵ-1986(S.Z., ZMMU) ; 1 ♂ 2 ♀, Tadzhikistan, Karatau Mt. Ridge, Chimai River Valley, 17~18-Ⅵ-1986 (S.Z., AIK) ; 1 ♀, Gandzhyno Vill., 13~15-Ⅳ-1986 (S.Z., AIK) ; 1 ♂, Road across the Pamir from Sirikol to Panjah and back, 22-Ⅳ~7-V-1974 (F. Stoliczka, HEDO).

Specimens from Central Asia are quite different from those from Israel (see drawings in LEVY, 1976), but agree with specimens from Europe and West Siberia.

Xysticus ephippiatus SIMON, 1880

Xysticus transsibiricus UTOCHKIN, 1968. Ed. Univ. Perm : 26-29, F. 45-49. Firstly synonymised by ONO, 1988. Material examined (from Central Asia only) : 1 ♂, Kirghizia, Susapyrski Mt. Ridge, near mouth of Kabuksu River, kokomeren River, 7-Ⅷ-1987(S. O., ZMMU).

Xysticus ninni THORELL, 1872

Material examined. 1 ♂, Turkmenia, West Kopetdagh, Syunt-Khasardagh Reserve, 4-Ⅵ-1982(B.S., BI).

Xysticus obesus THORELL, 1875 (sensu CHARITONOV, 1969)

Material examined. 1 ♀, Tadzhikistan, Komsomolabad Distr., Lyulya Kharvi Canyon, Sangvar, 1800m, 13-Ⅷ-1978 (V.O., BI).

Xysticus sabulosus (Hahn, 1831)

Material examined. 3♂ 2♀, Kazakhstan, Chimkent Area, Suzak Distr., 25km WWS Chulakkurgan Vill. (10km out of Abai Vill.), Karatau Mt. Ridge, 25-VI-1989(A.Z., C. T., IBPN); 1♀, Chimkent Area, Turkestan Distr., 63km N of Turkestan Town, Karatau Mt. Ridge, 30km up from Bosbutak Vill., 13-VI-1989(A.Z., C.T., BI); 1♂, Ksyl-Orda Area, Yanykurgan Distr., Karatau Mt. Ridge, 35km NNE of Yanykurgan Town, 13-VI-1989(A.Z., C.T., BI); 1♂, Kirghizia, Osh Area, Naukat Distr., Kirghiz-Ata Canyon, Kara-Goi River Valley, June 1986 (A.Z., BI); 1♂, Osh Area, Phruzenski Distr., Peshkaut Canyon, 28-VI-1985(A.Z., AIK); 1♂, Osh Area, Ak-Burein Canyon, gravelly desert, 1500m, 25-VI-1985(A.Z., BI); 4♂, Chilisai Canyon, 30-VI-1985(A.Z., IBPN); 2♂, Issyk-Kul' Area, Chon-Uryukty Vill 17-VII-1982(S. O., BI); 2♂ (ZIL) and 1♂(BI), Tadzhikistan, Komsomolabad Distr., Lyulya-Kharvi River Valley, 1800m, 07-VII-1978(V.O.)

Xysticus striatipes L.Koch, 1870

Material examined. 1♂, Kazakhstan, Pavlodar Area, Maiskoye Distr., 15-VII-1989 L., BI)

Xysticus tristrami (O.P.-Cambridge, 1872)

Material examined. 1♂ 1♀, Kazakhstan, Mangyshlak Area, Beineu Distr., Sam Desert, Turli Vill. (East of Beineu), 11-V-1985(S.D., BI); 1♂ 1♀, Mangistan Distr., Tushchi-Bek Vill., Shepte, 22-V-1985(S.D., AIK); 2♂, Aral Sea, Barsakelmes Isl., 30-IV-1983(T.P., ZMMU); 1♂, Djezkazgan Area, Balkhash Distr., Betkauta, Konurkul' dza Mt., Khaskhobe Vill., 6-IV-1988(O.I., AIK); 5♀, Alma-Ata Area, Ili Distr., Kapchagai Town, 18~27-V-1988 (A.Z., C.T., ZMMU); 1♀, Kirghizia, Osh Area, Batken(?) (Beiken) Distr., Sokh Canyon, 1800m, 4-V-1986(A.Z., ZMMU); 2♂, Uzbekistan, Surkhan-Darya Area, Sherabad Town, bank of the river, 25-IV-1986(A.Z., BI).

Xysticus ulmi (Hahn, 1831)

Material examined. 1♂ 1♀, Kirghizia, Issyk Kul' Lake, Chon-Uryukty, June, 1986 (S. Z., AIK).

Xysticus viduus Kulczynski, 1898

Material examined. 1♀, Kazakhstan, Pavlodar Area, 20-VII-1989(O.L., AIK.).

Xysticus xysticiformis (CAPORACCO, 1935) **comb. n.**

Oxyptila xysticiformis CAPORACCO, 1935. Mem. Soc. Ent. Italiana, 13 : 188-190, Tav. IV, F. 8a, b. Syntypes males and females from ZIF examined.

Material examined. *Syntypes* : 1 ♂ 1 ♀, Lopsang Bransa, prati, 4500m, 7-VI-1929 : 1 ♀, Panjo, vallone conalberti, 3500m, 4-IV-1929 : 2 ♀, Askole, steppa, 3100m, V-1929 : 1 juv., same locality, oasi, 10-VII-1929 : 3 juv., Shigar, oasi, 2200m, 25-VII-1929 : 1 juv., Korophon, steppa, 31m, 9-VII-1929. USSR : 3 ♀, Kirghizia, Naryntoo Mt. Ridge, Irisu Canyon, 3300m, 18-VI-1987(S.Z., BI) : 2 ♂, Central Tian-Shang, near meteorological station "Tien-Shang", 3700-3900m, syrts, 15~25-VI-1983 (B.P., IBPN) : 1 ♀, Osh Area, Naukat Distr., Kirghiz-Ata Canyon, Kara-Goi Valley, June 1986 (A.Z., IBPN) : 3 ♀, Tadzhikistan, Zaallaiski Mt. Ridge, South slope, basin of Sauk-Sai River, Sasyn-Teke River, 3650-4000m, 25-VII~10-IX-1987 (D.S., BI).

Redescription of *X. xysticiformis* will be published in a separate paper. This species belongs to "*labradorensis*" subgroup and group *sensu* MARUSIK, 1989.

Xysticus zonshteini MARUSIK, 1989

Xysticus zonshteini MARUSIK, 1989. Zool. Zh., 68(4) : 141-143, F. 2(1-4) (♂).

Material Examined : *Holotype* 1 ♂ and *paratype* 1 ♂, Kirghizia, Kirghizki Mt. Ridge, Tyuya-Ashu Pass, 3000-3200m, 6~8-VI-1984(S.Z., ZMMU). 3 ♀, Kirghizia, Moldotoo Mt. Ridge, Moldo Pass, Picea Forest, 14 VII-1987 (S.O., BI) : 2 ♀, Atbashinski Mt. Ridge, Bosoga River Valley, 22-VI-1987(S.O., AIK) : 1 ♂, Chon-Kurchak, 2-VII-1986 (S.O., BI) : 1 ♀, Chatyrkul' Lake, 3600m, 21-VII-1987(S.O., BI) : 1 ♂, Talasski Mt. Ridge, Besh-Tash Pass, 16-VII-1986(AIK) : 1 ♀, Osh Area, Naukat Distr., Kirghiz-Ata Canyon, Kara-Goi River Valley, June 1986(A.Z., IBPN).

The description of the female will be given in a separate paper.

Synema plorator (O.P.-CAMBRIDGE, 1872)

Material examined : 2 ♀, Kazakhstan, Alma-Ata Area, Ili Distr., Kapchagai Town, 27-V-1988 (C.T., A.Z., AIK) : 1 ♀, Kirghizia, Ferganski Mt. Ridge, Ak-Terek, 10~16-VI-1984(A.Z., BI) : 2 ♀, South slope of Talasski Mt. Ridge, Itagar, 2-VI-1987 (S.Z., BI).

Misumenops tricuspis (FABRICIUS, 1775)

Material examined : 1 ♂, Kazakhstan, Pavlodar Area, Kirov State Farm, 15-VII-1989 (O.L., BI).

Oxyptila atomaria (PANZER, 1801)

Material examined : 1 ♀, Kirghizia, Ferganski Mt. Ridge, Ak-Terek, 10-16-VI-1984 (S.Z., AIK).

"Oxyptila" lugubris KRONEBERG, 1875

(Figs. 50-56)

Material examined. 1 ♂ 1 ♀, Kazakhstan, Mangyshlak Area, Yeraliyev Distr., Novyi Uzen' Town, 11-V-1989(A.R., S.I., A.Z., BI) ; 9 ♂ 2 ♀, Yeraliyev Distr., Ust' yurt Plateau, Ust'yurt Reserve, Baskargan Camp., 25-V-1989(A.R., S.I., BI) ; 2 ♀, Yeraliyev Distr., 43km S of Akkuduk, Karynjaryk Desert, 17-V-1989 (A.R., S.I., A.Z., AIK) ; 2 ♂, Djambul Area, environs of Furmarovka Vill., 16-IX-1983 (C.T., Y.M., BI) ; 2 ♂, Alma-Ata Area, Balkhash Distr., North of Bakanas Vill., 15-IX-1989 (S.I., BI) ; 1 ♀, Alma-Ata Area, Kapchagai Town, 18-V-1986(A.Z., AIK) ; 2 ♂, Taldy-Kurgan Area, Panfilov Distr., 40km SW of Panfilov Town, Kumkala Desert, 8-X-1989(S.I., A.Z., BI) ; 5 ♂ 5 ♀ (BI), 1 ♂ 1 ♀ (AIK), Panfilov Distr., Kumkala Clay Desert, 7-X-1989(A.Z.) ; 1 ♀ Kirghizia, Osh Area, Suzak Distr., Yangi-Dehkan Vill., 3-XI-1986(D.L., BI) ; 1 ♀, Turkmenia Central Kopet-Dagh, 13km W of Firyuza, Dushak Mt., 9-V-1987(V.D., AIK) ; 1 ♀, 6km NE of Kara-Kala Vill., Naars Vill., 15-III-1988(A.A., BI).

Measurements(mm.)

MALE/FEMALE. Carapace : 2.00/2.50 long, 1.90/2.35 wide ; abdomen : 2.15/2.90 long, 2.00/2.80 wide. Clypeus 0.20/0.36, MOA-WA 0.37/?, MOA WP 0.37/0.44, MOA-L 0.47/0.44, chelicerae 0.61/0.86, AMF 0.06/0.06, ALE 0.09/0.10, PME 0.06/0.04, PLE 0.09/0.09, AME-AME 0.27/0.37, AME-ALE 0.13/0.19, PME-PME 0.16/0.37, PME-PL 0.30/0.36.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.20/2.20	0.85/1.05	1.70/1.70	1.95/1.75	1.06/0.95
II	2.15/2.15	0.80/0.90	1.60/1.55	1.75/1.55	0.95/0.95
III	1.40/1.40	0.55/0.60	0.90/0.90	1.00/0.95	0.65/0.70
IV	1.55/1.75	0.60/0.65	0.95/1.05	1.20/1.15	0.85/0.70

Description

MALE. Coloration variable. Carapace dark red brown or brown. Eye field white or red brown with white eye tubercles, cephalic part higher than thoracic one. Sternum, labium and maxillae dark red brown or cream-coloured with red brown spots. Dorsum of abdomen white with red brownish triangular spot, venter of abdomen white or red brown. Branchial opercula brown. Spinnerets red brown or white. Femora and patellae I red brown with white spots dorsally. Femora I-IV with red brown rings in proximal

and distal parts. Tarsi and metatarsi cream-coloured, distally red brownish. Femora III and IV red brown or variegated. Patellae III and IV red brown ventrally, and white dorsally. Leg I spination: femur like the whole body covered with short setae, long setae: d. 0-2-0 or absent, p. 1-1-0, tibia v. 2-2-2ap., metatarsus v. 2-2-2-2ap. or 2-2-1-2ap., Male palp (Figs. 50-53) with serrate embolus.

FEMALE. Body sandy-grey. Legs with red brownish hue. Carapace and abdomen covered by numerous clavate setae, legs covered with numerous semi-transparent thick setae. Body covered with grits. Leg I spination: femur d. 0-1-0, p. 1-0-0, tibia v. 2-2-2ap., metatarsus v. 2-2-2-2ap. Epigyne (Figs. 54-56).

Diagnosis. Shape of tegular apophysis, serrate embolus and bulging median septum (epigynal lobe) of epigyne are diagnostic.

Comments. The species named here as "*O.*" *lugubris* consist of two different kinds of males. Some males have curved embolus tip (Figs. 50), while others have straight embolus. We don't know taxonomical importance of this character. Probably there are two separate species involved. We need more material to solve this problem.

The generic name is placed in quotes here because this species belongs neither to *Oxyptila*, nor to *Xysticus*.

Oxyptila praticola (C.L. Koch, 1837)

Material examined. 1♀, Kirghizia, Ferganski Mt. Ridge, Ak-Terek, 10~16-VI-1984 (S.Z., ZMMU); 1♂ 1♀, Ferganski Mt. Ridge, Arslanbob Town, 22~25-X-1986 Z., AIK); 1♀, Tadzhikistan, Ghissar Mt. Ridge, Ramit Vill., Charmin River Valley, 1500 m, 2-X-1986 (S.Z., AIK).

Monaeses israilensis LEVY, 1973

Material examined. 1♂ 1♀, Kazakhstan, Mangyshlak Area, Ust'yurt Plateau and Reserve, SW out of Baskargan Camp, 25-V-1989 (A.R., S.I., ZMMU); 1♀, Mangyshlak Area, Yeraliyev Distr., 43km S of Akkuduk Vill., Karynzhyryk Desert, 5km E of Saksorkuyu Winter Camp, 17-V-1989 (A.Z., A.R., S.I., BI); 1♂, Kirghizia, Issyk-Kul' Area, Chon-Uryukty Vill., 17-VI-1982 (S.O., BI); 1♂, Turkmenia, West Kopetdagh, Syunt-Khasardagh Reserve, 11~25-IV-1987 (T.P., AIK).

Hariaeus sareptanus LOERBROKS, 1983

(Figs. 57-58)

Material examined. 1♂, Kazakhstan, 20km out of Mangyshlak, Karagiya Hollow, 27-V-1986 (S.D., BI); 1♂, Kirghizia, Boonski Canyon, near Semyonovski Bridge, Chu River, 5-VI-1985 (S.Z., BI).

***Diaea suspiciosa* O.P.-CAMBRIDGE, 1885**

Diaea suspiciosa O.P.-CAMBRIDGE, 1885. Calcutta, 64–65.

Diaea dorsata [NON FABRICIUS] : TARABAYEV, 1979. Entomol. Obozr., 58 : 200–210, F. 1 (1–14), 2a, b, 3a, b, 5.

Diaea xinjiangensis SONG et HU, 1986. Acta. Zoot. Sinica, 32(4) : 350–352, F. 1–4.

Diaea suspiciosa : MARUSIK, Entomol. Obozr., in press (redescription of the holotype and synonymie)

Material examined. 1 ♂ 1 ♀, Kazakhstan, Alma-Ata Area, Talgar Distr., Soldatskoye Vill., 4–VI–1981 (C.T., BI) ; 2 ♂, same locality, 30~31–V–1988(C.T., BI) ; 2 ♀ juv., Kirghizia, Osh Area, Suzak Distr., Kadu Vill., Urtak Leskhoz, 2–XI–1986 (D.L., BI) ; 1 ♂, Kirghiz Mt. Ridge, Chon-Kurchak River Valley, 2700m, 20–VI–1987 (S.O., BI).

Diagnosis, drawings and synonymie of *D. suspiciosa* are in press (MARUSIK, 1991).

***Stiphropus strandi* SPASSKY, 1938**

Material examined. 1 ♀, Tadzhikistan, Tigrovaya Balka Reserve, Ala-Kul' Lake, 11–V–1986(ZMMU)

REFERENCES

- LEVY G., 1976. The spider genus *Xysticus*(Araneae : Thomisidae) in Israel. *Isr. J. Zool.*, **25** : 1–37, figs. 1–64.
- MARUSIK, YU. M., 1989. Two new species of the spider genus *Xysticus* and synonymy of crab spiders (Aranei, Thomisidae, Philodromidae) from Siberia. *Zool. Zh.*, **68**(4) : 140–144, figs. 1–2 .(In Russian)
- MARUSIK, YU. M., 1991. Redescriptions of the spiders of the families Heteropodidae and Thomisidae (Aranei) described by O.P.-CAMBRIDGE on the materials of the Second Yarkand Mission. *Ent. Obozr.*, (in press). (In Russian)
- ONO, H., 1978. Thomisidae aus dem Nepal–Himalaya. 1. Das Genus *Xysticus* C.L. KOCH 1835. *Senckenbergiana biol.*, **59**(3/4) : 267–288, figs. 1–81.
- ONO, H., 1988. A revisional study of the spider family Thomisidae (Arachnida, Araneae) of Japan. National Science Museum, Tokyo, pp. 1–252, figs. 1–225.

ACKNOWLEDGEMENTS

We are very grateful to all the above mentioned persons who kindly loaned/donated to us their collections, first of all to Mr. S.V. OVCHINNIKOV, Drs. S.L. ZONSHTEIN, A.A. ZYUZIN, C. K. TARABAYEV and K.G. MIKHAILOV Besides, we wish to thank particularly Dr. K. G. MIKHAILOV for information about Central Asian spiders, Dr. S. MASHERINI (ZIF), Dr. I. LANSBURY (HDEO), Dr. M. GRASSHOFF (SMF), and Dr. K.G. MIKHAILOV for the opportunity to restudy some types, as well as Dr. M. SAARISTO for checking the English of the final manuscript.

LEGEND TO THE FIGURES

Figs. 1–5. *Runcinia tarabayevi* sp. n.

1. Male, dorsal view.
2. Carapace, frontal view.
3. Male palp, ventral view.
4. Male palp, retrolateral view.
5. Tibial apophysis.

Figs. 6–8. *Thomisus zyuzini* sp. n.

6. Epigyne, ventral view (Kendirli).
7. Epigyne, ventral view (holotype).
8. Epigyne, dorsal view.

Figs. 9. *Thomisus onustus* WALCKENAER.

9. Epigyne, ventral view.

Figs. 10–11. *Xysticus bakanas* sp. n.

10. Male palp, ventral view.
11. Male palp, retrolateral view.

Figs. 12–13. *Xysticus kuzgi* sp. n.

12. Male palp, ventral view.
13. Male palp, retrolateral view.

Figs. 14–17. *Xysticus ovtsharenkoi* sp. n.

14. Male palp, ventral view.
15. Male palp, retrolateral view.
16. Epigyne, ventral view.
17. Epigyne, dorsal view.

Figs. 18–19. *Xysticus turlan* sp. n.

18. Male palp, ventral view.

19. Male palp, retrolateral view.

Figs. 20–21. *Xysticus taikumkurt* sp. n.

20. Male palp, ventral view.

21. Male palp, retrolateral view.

Figs. 22–23. *Xysticus ulkan* sp. n.

22. Male palp, ventral view.

23. Male palp, retrolateral view.

Figs. 24–26. *Xysticus urgumchak* sp. n.

24. Male palp, ventral view.

25. Male palp, retrolateral view.

26. Epigyne, ventral view.

Figs. 27–28. *Xysticus kaznakovi* UTOCHKIN

27. Male palp, ventral view.

28. Male palp, retrolateral view.

Figs. 29–31. *Xysticus kiritschenkoi* UTOCHKIN

29. Male palp, ventral view.

30. Male palp, retrolateral view.

31. Epigyne, ventral view.

Figs. 32–36. *Xysticus minor* CHARITONOV

32. Male palp, ventral view.

33. Tibia of the male palp, retrolateral view.

34. Epigyne, ventral view (Arys').

35. Epigyne, ventral view (Arys').

36. Epigyne, dorsal view.

Figs. 37–38. *Xysticus nepalhymalaicus* ONO (Holotype)

37. Male palp, ventral view.

38. Tibia of the male palp, retrolateral view.

Figs. 39–41. *Xysticus turanicus* CHARITONOV

39. Male palp, ventral view.

40. Male palp, retrolateral view.

41. Epigyne, ventral view.

Figs. 42–43. *Xysticus lapidarius* UTOCHKIN

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43. Tibia of the male palp, retrolateral view.

Figs. 44–47. *Xysticus concinnus* KRONEBERG

44. Male palp, ventral view.

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46. Epigyne, ventral view (Gandzhyno).

47. Epigyne, dorsal view.

Figs. 48–49. *Xysticus mongolicus* SCHENKEL

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Figs. 50–56. "*Oxyptila*" *lugubris* (KRONEBERG)

50. Male palp, ventral view (Ust' yurt).

51. Male palp, retrolateral view (Ust' yurt).

52. Male palp, ventral view (Dzhambul Area).

53. Tibia of the male palp, retrolateral view (Dzhambul Area).

54. Epigyne, ventral view (Ust' yurt).

55. Epigyne, ventral view (Panfilov Distr.).

56. Epigyne, ventral view (Panfilov Distr.).

Figs. 57–58. *Heriaeus sareptanus* LOERBROKS

57. Male palp, ventral view.

58. Male palp, retrolateral view.











