

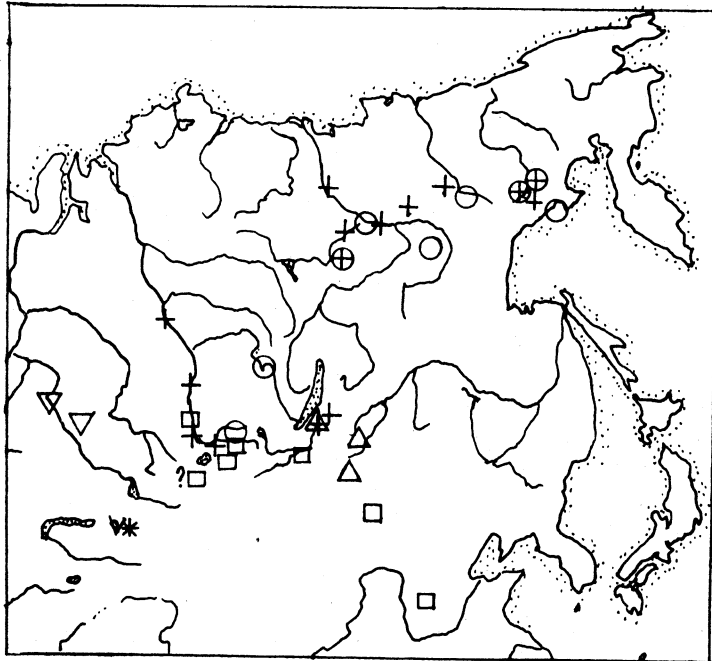
## THE CRAB SPIDERS OF MIDDLE ASIA (Aranei, Thomisidae), 2

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**Abstract:** The crab spider fauna (Aranei, Thomisidae) of middle Asia is investigated in a second part, a checklist of Thomisidae from Middle Asia and Kazakhstan is given. The following species are described for the first time: Synema utotchkini, Xysticus abramov, Xysticus pseudoluctuosus, Xysticus ovadan, Xysticus turcmenicus and Xysticus tyshchenkoi.

Introduction and materials

Since the manuscript of our communication 1 dealing with the thomisids of Middle Asia (MARUSIK, LOGUNOV, 1990) was sent to press, a number of species and specimens were found in different museums



Map.1. Siberia and adjacent areas, showing distribution of Titanoecea zyzuzini sp.n. (triangles), T. asimilis (squares), T. nivalis (circles), T. sibirica (crosses), T. schineri (inverted triangles), T. minuta (V-sign), and T. eca (asterisk).

and was determined. The material treated herein is larger than in the first part, and comes from Zoological Museum of Moscow State University (ZMMU), Zoological Museum of Biological Institute, Novosibirsk (BI) (containing a large collection of Asian arachnids donated recently by A.P.KONONENKO), Institute for biological Problems of the North (IBPN), Magadan, Zoological Department of Pedagogical Institute, Siedlce, Poland (PIS), Paleontological Institute, Moscow, and Zoological Institute of Kazakhstan Academy of Sciences, Alma-Ata (IZA). Some of the type specimens have been examined in the Senckenberg Museum, Frankfurt (SMF), and in the Naturhistoriska Riksmuseet, Stockholm (NRS). Thanks to additional material 6 species new to science, 1 new to USSR, and 4 new to Middle Asia were found, as well as 9 species names were synonymized.

All the materials have been shared, as indicated hereinafter, between the collections of the ZMMU, BI, PIS, Institute for Biological Problems of the North, Magadan (IBPN), SMF, NRS, and the coll. of Jörg WUNDERLICH, Straubenhardt (JW). Geographical names used in this paper follow those used on the map of the USSR published by the National Geographic Society (National Geographic Magazine, March 1990).

The names of collectors are abbreviated in the text: A.S.DANILEVSKI (A.D.), A.A.FYODOROV (A.F.), A.P.KONONENKO (A.K.), A.A.ZYUZIN (A.Z.), Ch.K.TARABAYEV (C.T.), E.M.ANDREYEVA (E.A.), G.T.KUZNETSOV (G.K.), K.Yu.ESKOV (K.E.), Kh.NASREDDINOV (K.N.), M.ZAPRYAGAYEV (M.Z.), N.S.USTINOVA (N.U.), O.V.LYAKHOV (O.L.), P.P.VTOROV (P.V.), S.L.ZONSHTEIN (S.Z.), T.LUKAREVSKAYA (T.L.), V.CHIKATUNOV (V.C.), V.Ya.FET (V.F.), Yu.LEBEDEV (Y.L.).

Abbreviations used in the present paper are the same as in first part. All measurements are in mm; if not otherwise indicated, the scale is 0.1 mm.

The following list summarizes new facts given in this paper:

#### New species described:

Synema utotchkini sp.n. - from Kazakhstan  
Xysticus abramov sp.n. - from Tajikistan;  
Xysticus pseudoluctuosus sp.n. - from Tajikistan;  
Xysticus oবাদan sp.n. - from Turkmenistan;  
Xysticus turkmenicus sp.n. - from Middle Asia;  
Xysticus tyshchenkoi sp.n. - from Middle Asia.

#### Unknown females described:

Xysticus turlan MARUSIK et LOGUNOV, 1990;  
Xysticus xysticiformis (CAPORIAMCO, 1935);  
Xysticus zonshteini MARUSIK, 1989.

#### Unknown males described:

Stiphropus strandi SPASSKY, 1938;  
Thomisus zyuzini MARUSIK et LOGUNOV, 1990.

#### New synonyms:

Heriaeus sareptanus LOERBROKS, 1983 = Heriaeus horridus TYSHCHENKO, 1964;  
Ozyptila clavidorsum ROEWER, 1959 ?= Xysticus loeffleri ROEWER, 1955;  
Xysticus afghanus ROEWER, 1961 = Xysticus loeffleri ROEWER, 1955;  
Xysticus crassus TYSHCHENKO, 1965 = Ozyptila pseudoblitea SIMON, 1880;  
Xysticus furcillifer SCHENKEL, 1936 = Xysticus xysticiformis (CAPORIAMCO, 1935);  
Xysticus kiritschenkoi UTOTCHKIN, 1968 = Xysticus dzhungaricus TYSHCHENKO, 1965;  
Xysticus schenkeli MARUSIK, 1989 = Ozyptila pseudoblitea SIMON, 1880;  
Xysticus turanicus CHARITONOV, 1969 = Xysticus loeffleri ROEWER, 1955.

#### Species new for the USSR:

Xysticus inaequalis KULCZYNSKI.

#### Species new for the Middle Asia:

Ozyptila conostyla HIPPA et al.;  
Ozyptila rauda SIMON;  
Pistius undulatus KARSCH;  
Tmarus horvathi KULCZYNSKI.

#### TAXONOMIC SURVEY OF THE SPECIES

Diaea suspiciosa O.P.-CAMBRIDGE, 1885

Material examined: Kazakhstan: 1♀, East Kazakhstan Area, Saur Mt. Range, Kenderlyk River Basin, Akkolka River Valley, 06.1990 (K.E.) (IBPN). Uzbekistan: 1♀, Dzharkurgan, 13.06.1966 (PIS). Kirghizia: 1♂, 3♀, Yarodar, 10.06.1979 (S.Z.) (ZMMU). Tajikistan: North slope of Alaiski Mt. Range: 1♀, Kirghiz-Ata River Valley, 40 km out of Naukat, 2850 m, 22.06.1970 (A.KOPNOV) (PIS); 1♀, left tributary of Sokh River, Sary-Chilim, 2300 m, 25.06.1970 (M.Z.) (PIS); 1♀, environs of Shakhimardan, Kurbon-Kul' Lake, 1700-1800, 3.10.1970 (PIS); 4♂, 9♀, left tributary of Sokh river, Mazar near Ravuch Kishlak, 26.06.1970 (E.A.) (PIS). 1♀, Ishkashim Distr., Zanudzh Kishlak, 19.08.1971 (N.MIRALIMBEKOV) (PIS); 1♀, Vanch River Valley, canyon near Tekharv Kishlak, 2.06.1970 (E.A.) (PIS); 1♂, Kondara, Kvak,

8-12.06.1967 (PIS); 1♂, 3♀, Petra I Mt. Range, Obi-Khingou, 8 km from Sabzikharv, .06.1968 (V.C.) (PIS); 1♂, Khozratisho Mt. Range, 15-20th km of the Muminabad-Chil'dukhtaron Road, 27.05.1966 (PIS); 1j, Zeravshan Mt. Range, Aman-Kutan, 29.05.1965 (A.D.) (PIS); 1♂, Shugnanski Mt. Range, confluence of Gunta and Shakhdary Rivers, Sangou Canyon, 18.05.1970 (L.ZHARKOVA) (PIS).

Distribution: West China, Tajikistan, Kirghizia, East Uzbekistan and East Kazakhstan. East Kazakhstan Area is the north-easternmost point of distribution, and Dzarkurgan is the westernmost point of distribution.

Heriaeus buffonopsis LOERBROKS, 1983

H.duffonopsis LOERBROKS, 1983: 127, figs. 22, 77-80 (♀ and ♂).  
H.buffonopsis: UTOTCHKIN, 1985: figs. 4, 25-26 (♂).

Material examined: Kazakhstan, 1♂, Dzhambul Area, Moyinkum Distr., Karabugut Vill., 29.06.1989 (A.Z.) (BI). Turkmenistan, 1♂5♀, Badkhyz Reserve, Kepele, Er-Oilan-Duz, 06-07.1977 (V.F.) (ZMMU).

Distribution: From Krasnowodsk, Turkmenistan (LOERBROKS, 1983) northeast to the Dzhambul Area.

Heriaeus horridus TYSHCHENKO, 1965 Figs. 1-3

H.horridus TYSHCHENKO, 1965: 698-699, figs. 4a-c (♀ and ♂), lectotype male (designated here) and paratype ♀ from Kokshetau and Tengiz Lake, in ZIL, examined.

Heriaeus sareptanus LOERBROKS, 1983: 128-130, figs. 23, 81-84 (♀ and ♂), holotype ♂ and paratypes 3♀ from Sarepta, in Zoological Museum of Humboldt University, Berlin, not examined. Syn.n.

Heriaeus horridus: LOERBROKS, 1983: figs. 88-89 (copies from TYSHCHENKO, 1965).

Heriaeus sareptanus: MARUSIK, LOGUNOV, 1990: figs. 57-58 (♂).

Material examined: Kazakhstan: 2♂, Ural'sk Area, environs of Dzhan'ybek, 5.08.1986 (K.G.MIKHAILOV) (BI); 1♀, Pavlodar area, 15-20 km SE of Pavlodar, 1.07.1990 (O.L.) (BI); 1♂, 25 km SW of Pavlodar Town, 30.06.1990 (O.L.) (BI); East Kazakhstan Area: 1l, Saur Mt. Range, Kenderlyk River basin, Akkolka River Valley, 06.1990 (K.E.) (IBPN); 2♂, environs of Zaisan Town, Djeminey Canyon, 2-4.06.1990 (K.E.) (IBPN).

#### Measurements (mm).

Male/Female. Carapace: 1.70/2.33 long, 1.53/2.50 wide, clypeus 0.20/0.21, MOA-WA 0.34/0.50, MOA-WP 0.30/0.46, MOA-L 0.40/0.58, chelicerae 0.56/0.71, AME 0.06/0.07, ALE 0.08/0.09, PME 0.06/0.06, PLE 0.07/0.07, AME-AME 0.23/0.40, AME-ALE 0.11/0.16, PME-PME 0.20/0.36, PME-PLE 0.20/0.31.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	3.13/2.60	0.75/1.28	2.70/2.18	3.33/2.35	1.10/0.98
II	2.63/2.25	0.75/1.08	2.08/1.68	2.55/1.93	0.95/0.83
III	1.68/1.45	0.58/0.75	1.10/1.00	1.18/1.08	0.60/0.63
IV	1.90/1.78	0.55/0.65	1.28/1.20	1.43/1.25	0.68/0.75

Description. Male. Light cream-coloured, carapace with two red brown longitudinal bands. Carapace and abdomen covered with dense and long (ca. 0.50 mm) black, erect, strong setae. All leg segments covered with dense, long hairs. Legs lacking spines. Palp as in the Figs. 1-2, lateral tibial apophysis long but not sharp apically, shape of it variable.  
Female. Colouration as in male, carapace and abdomen lacking strong setae (spines); all of the body and legs covered with dense, whitish, long, curved hairs. Abdomen with the same pattern as in Fig. 4a (TYSHCHENKO, 1965). Leg I spination: femur p. 1-1-1, v. 2-2-2, tibia p. 1-1-1, v. 2-2-2-1-2-2-1-2-2ap., metatarsus p. 1-1-1, ap., r. 1-1, v. 2-2-2-2-2-2-2-2. Epigyne as in fig. 3, weakly sclerotized, with wide scape.

Diagnosis. Males of H.horridus can be separated from all other representatives of Heriaeus by the characteristic shape of both lateral tibial apophysis and embolus. Females can be distinguished from other Heriaeus species by the shape of the epigynal scape (apical margin of epigynal fovea).

Distribution: North Kazakhstan from Uralsk Area east to Saur Mt. Range.

Heriaeus spinipalpus LOERBROK, 1983

H.spinipalpus LOERBROKS, 1983: 122-123, figs. 20, 65-68, 95 (♀ and ♂).

Material examined: Turkmenistan, 1♂, 1♀, West Kopetdagh, Aidere, 3.07.1979 (V.F.) (ZMMU).

Distribution: South-west Turkmenistan only.

Misumenops tricuspidatus (FABRICIUS, 1775)

M.tricuspidatus: ONO, 1988: 162-168, figs. 169-174 (♀ and ♂).

M. tricuspidatus: ONO, et al., 1990: 42-44 (♀ and ♂).

Material examined: Kazakhstan, Pavlodar Area: 3♀, Environs of Pavlodar, 07-08.1989 (O.L.) (1♀ BI, 2♀ JW); 1♀, 25 km N of Pavlodar, 19.06.1990 (O.L.) (JW); 5♂, Maisky Distr., Kirovski Sovkhoz, Irtysh River Valley, 20.08.1989 (O.L.) (BI); 1♂, environs of Imishevo, Irtysh River Valley, 31.08.1989 (O.L.) (BI). Kirghizia, 1♀, Yarodar, 10.06.1979 (S.Z.) (ZMMU).

Distribution: Transpalearctic range, from West Europe east to Japan (ONO, 1988).

Ozyptila atomaria (PANZER, 1801)

Material examined: Kirghizia: 1♀, Yarodar, 10.06.1979 (S.Z.) (ZMMU); 3♀, Terskey-Alatau, Pokrovka Vill., Chon-Kyzyl-Su, 3000 m, 28.09.1969 (A.K.) (JW); 1♀, Karagoi Research Station near Naukat, 2400 m, 5.10.1970 (E.A.) (PIS). Tajikistan, North slope of Alaiki Mt. Range: 1♂, Shakhimardan, Kurban-Kul' Lake, 1600-1800 m, 2.10.1970 (E.A.) (PIS); 1♂, 10-15 km off Naukat, 4.10.1970 (L.ZHARKOVA) (PIS).

Distribution: Transpalearctic range.

Ozyptila conostyla HIPPA, KOPONEN et OKSALA, 1986 Figs. 4-7

O. conostyla HIPPA et al., 1986: 327, figs. 1 d & k (♂), in Zoological Museum of Turku University.

Material examined: Turkmenistan, 3♂, SW Kopetdagh, Syunt Mt., 1200 m, 2-15.04.1985 (T.L.) (2♂ ZMMU, 1m JW).

Distribution: Turkey (Hippa et al., 1986), East Caucasus (MARUSIK, 1989b) and South-West Turkmenistan.

Ozyptila lugubris (KRONEBERG, 1875)

Material examined: Kazakhstan: 8♀, Mangistaus (Mangyshlak) Area, Yeraliev Distr., Ustyurt Plateau, Ustyurt Reserve, 21.05.1989 (A.Z.) (BI); East Kazakhstan Area: 1♀, 4j., Saur Mt. Range, Kenderlyk River Basin, Akkolka River Valley, .06.1990 (K.E.) (IBPN); 1♂, environs of Glubokoye Vill., 2-9.09.1990 (V.K.ZINCHENKO) (BI). 1♀, Pavlodar Area, environs of Zarya Sovkhoz, 8.05.1990 (O.L.) (BI); 2♀, Dzhambul Area, Sarysuy Distr., 75 km NE of Ulanbel', Betpak-Dala Desert, 5.06.1990 (A.F., A.Z.) (BI); 2♂, Alma-Ata Area, NE bank of Kaptchagay Water Reservoir, 9.09.1989 (A.Z., A.F.) (BI). Kirghizia: ♂♂, ♀♀, Kungey-Alatau Mt. Range, Toru-Aigyr, 2000m, 1969-1970 (A.K., KUZNETSOV) (BI, JW); 2♂, 1♀, Bos-Barmak, 24.08.

1969 (A.K.) (BI); 1♀, Osh Area, Charvak Vill., Kara-Unkyur River., 13.09.1985 (L.A.NESOV) (BI). Turkmenistan: 1♂, Krasnovodsk Area, Chil'mamedkum Sands, 10.1985 (E.KHASHNIKOV) (ZMMU); 1♂, 1♀, NW Turkmenia, Kafigshem Mt. Range, 55 00'E, 41 00'N, 5.11.1982 (V.F.) (ZMMU); 1♂, Ashkhabad/ Berzengi Vill., 11.1979 (V.F.) (ZMMU); 1♂, same locality, 25.11.-1.12.1980 (G.K.) (ZMMU). Tajikistan: 1♂, Shugnanski Mt. Range, environs of Khorog, Sangou-dara, 3600-3860 m, 15.10.1970 (PIS); 2♀, Shaarbutz, Tchili-Tchor-Tchemana, 23.04.1979 (A.K.) (BI).

Distribution: Widespread in Middle Asia, from NW Kazakhstan, north-east to East Kazakhstan Area, south to Tajikistan and Afganistan. SCHENKEL's (1936) record from China was based on a juvenile specimen, which can belongs to Xysticus inaqualis or another species.

Ozyptila praticola (C.L.KOCH, 1873)

Material examined: Kazakhstan: 1♀, Environs of Pavlodar, 25.05.1989 (O.L.) (BI); 2f, East Kazakhstan Area, Saur Mt. Range, Kenderlyk River basin, Akkolka River Valley, .06.1990 (K.E.) (IBPN). Kirghizia, 3f, Osh Distr., Tashkumyr, environs of Sarykamysay, 13.09.1985 (D.V.LOGUNOV) (BI).

Distribution: Europe, Middle Asia and coastal parts of North America (DONDALE, REDNER, 1975).

Ozyptila pseudoblitea SIMON, 1880

Xysticus crassus TYSHCHENKO, 1965: 699-701, figs. 5a,b, in ZIL, but recently in PSU. Syn.n. et comb.n.

X. schenkeli MARUSIK, 1989: MARUSIK, 1989a: 144 (nom.n. pro X. bonneti SCHENKEL, 1963). Syn.n.

O. pseudoblitea: SONG, 1987: 258-260, figs. 124 a-d.

Material examined: Kazakhstan, 1♀, East Kazakhstan Area, Saur Mt. Range, Saikan Pass, 1880 m, 7.06.1990 (K.E.) (IBPN).

Distribution: From North-East Kazakhstan east to Beijing.

Ozyptila rauda SIMON, 1875

O. rauda: HIPPA et al., 1986: 324-325, figs. 1a,e,f, 2a,c, 3c (♀ and ♂).

Material examined: Kazakhstan: Pavlodar Area: 1♀, Yermak Distr., environs of Maly Kalkaman Lake, 11.04.1990 (O.L.) (BI); 1♀, Maisky Distr., Akzysu River, 6.05.1990 (O.L.) (JW). 2♀, East Kazakhstan Area, Saur Mt. Range, Saikan Pass, 1880 m, 7.06.1990 (K.E.)

(IBPN).

Distribution: European - West Siberian disjunctive range. North Kazakhstan is southernmost point of distribution. SCHENKEL's (1936) record from China was based on a misidentified specimen of O. utotchkini MARUSIK, 1990 (specimen in NRS, examined).

Ozyptila tricoloripes STRAND, 1913 Fig. 8

O. tricoloripes: LEVY, 1975: 167-168, figs. 22-23 (♂).

O. pickardi LEVY, 1975: 165-167, figs. 19-21 (♀).

O. tricoloripes: DUNIN, 1984: fig. 7 (♂).

Material examined: Turkmenistan: 8♀, SW Kopetdagh, Syunt-Khasardagh Reserve, 1982 (N.U.) (7♀ BI, 1♀ JW); 3♀, SW Kopetdagh, Palvanzav, 800 m, 12.08.1985 (V.F.) (ZMMU); 5♂, 1♀, W.Kopetdagh, 11-16.10.1984 (T.A.SORGINA) (1♂ JW; 1♂ BI; 3♂, 1♀ ZMMU).

Distribution: Israel (LEVY, 1975), Azerbaijan (DUNIN, 1984) and South-West Turkmenistan (FET, 1982).

Pistius undulatus KARSCH, 1879

P. undulatus: ONO, 1985: 20-23, figs. 1-4 (♀ and ♂); ONO et al., 1990: figs. 48-50 (♀ and ♂); LOGUNOV, 1990: fig. 5a.

Material examined: Kazakhstan, East Kazakhstan Area: 1♀, Saur Mt. Range, Kenderlyk River basin, Akkolka River Valley, 06.1990 (K.E.); 1♂, environs of Zaisan Town, Djeminey Canyon, 2-4.06.1990 (K.E.).

Distribution: South Siberian - Manchurian distribution, from Kurgan Area (LOGUNOV, 1990) at the north-west, south-east to Japan, Korea, and China (ONO, 1988).

Runcinia lateralis (C.L.KOCH, 1838)

R. lateralis: LEVY, 1973: 132-134, figs. 53-56 (♀ and ♂).

Material examined: Turkmenistan, 1♂, Ashhabad, Transcaspia, 24.04.1902 (?) (BI). Tajikistan: 1j, Takob, 12.07.1965 (A.D.) (PIS); 1♂, Khozratisho, 8-15 km from Muminabad, 15.06.1966 (PIS).

Distribution: West Palearctic: Mediterranean, Middle Asia and China (?) (SCHENKEL, 1963).

Runcinia tarabayevi MARUSIK et LOGUNOV, 1990

Material examined: Kazakhstan: 2♂, Aktyubinsk Area, Baichanin. Distr., North Ustyurt, pasture of Diyar Sovkhoz, .07.1989 (A.Z., L.V.PAVLOVA); Dzhambul Area: 1♂, Moyinkum Distr., Karabugut Vill., 29.06.1989 (A.Z.) (BI); 2♂, Krasnogorsk Distr., 17 km NW Kenen Vill., Chu-Ili Mt. Range, 14-15.06.1990 (A.F., A.Z.) (JW). Tajikistan, 1♂, Beshkent River Valley, Chiluchor-Chashma, 20-22.06.1967 (PIS); 1♂, Bakharden Distr., Zhdanova Kolkhoz, 15.06.1977 (ZMMU); 1♂, Yazgulem River Valley, 5.06.1970 (PIS); 1♂, 1♀, environs of Gandzhyno, Aruk-Tau Mt. Range, 13.07.1969 (T.DOMRACHOVA) (PIS).

Distribution: East Middle Asia: Kazakhstan, Kirghizia and Tajikistan.

Stiphropus strandi SPASSKY, 1938 Figs. 9-11

S. strandi: ONO, 1980: 61, f.1-3 (♀).

Material examined: Turkmenistan: 2j, SW Kopetdagh, Dzhouli, 300 m, 10.05.1984 (S.ZABELIN) (ZMMU); ♂♂♀♀, Central Kopet-Dagh, Firyuza, 1970 and 1978 (G.K.) (ZMMU, 1♂ 1♀ JW). Tajikistan, 5m, Aktau Mt Range, environs of Garavuti, Vakhsh River Valley, 27.04.1973 (A.K.) (BI). Specimens (2♀) from Afganistan, in SMF, examined.

Measurements (mm).

Male/Female. Carapace: 1.71-1.96 long, 1.47-1.60 wide, clypeus 0.14-0.16/0.11, MOA-WA 0.23/0.26, MOA-WP 0.29-0.30/0.36, MOA-L 0.20/0.20, chelicerae 0.77-0.86/0.79, AME 0.07/0.07, ALE 0.12/0.14, PME 0.03/0.03, PLE 0.09/0.13, AME-AME 0.07-0.09/0.10, AME-ALE 0.29-0.33/0.33, PME-PME 0.24-0.27/0.30, PME-PLA 0.40-0.41/0.40.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.1-1.2 1.09	0.6-0.7 0.64	0.82 0.77	0.67 0.63	0.9-1.0 1.00
II	1.0-1.2 1.09	0.5-0.6 0.59	0.8-0.9 0.80	0.64 0.64	0.9-1.0 1.07
III	0.9-1.1 1.00	0.50 0.51	0.6-0.7 0.69	0.42 0.43	0.5-0.6 0.59
IV	0.8-1.1 1.14	0.5-0.6 0.53	0.7-0.8 0.76	0.49 0.54	0.5-0.6 0.60

Description.

Male. Carapace and chelicerae red-brownish. Sternum, maxillae and labium yellow. Abdomen yellow with dorsal pattern: grey rings and basally with grey dots, dorsally covered with scutum. Branchial opercula and spinnerets yellow. Legs yellow or 3 apical segments light red-brown. Legs lacking spines, but covered with numerous dentate scales. Male palp as in the Figs. 9-10.

Female. Colouration as in male, but abdomen grey with rows of yellow dots. Muscle dots strongly chitinized and red-brown. Scutum lacking. Epigyne as in Fig. 11.

**Diagnosis:** *S. strandi* can be easily identified by the shape of epigyne and male palp. Long lateral tibial apophysis and shape of embolus are quite different from those in other congeners.

**Distribution:** South Turkmenistan, South-West Tajikistan and Afghanistan.

*Synema utotchkini* MARUSIK et LOGUNOV, sp.n. Figs. 12-15

*S. plorator* [non O.P.-CAMBRIDGE, 1872]: SPASSKY, SHNITNIKOV, 1937: 283-284, figs. 5-6 (♀ and ♂).

*S. plorator* [non O.P.-CAMBRIDGE, 1872]: UTOTCHKIN, 1960a: 379, figs. 3, 4a,b, 5 a,b (♀ and ♂).

*S. plorator* [non O.P.-CAMBRIDGE, 1872]: MARUSIK, LOGUNOV, 1990: 50.

**Material examined:** Kazakhstan: Holotype: 1♂, East Kazakhstan Area, Zaisan Distr., Sarybulak River, 7.06.1990 (K.E.) (ZMMU). Paratypes: 1♀, Semipalatinsk Area, Abaisk Distr., 30 km S of Sarzhak, (V.TISHCHENKO) (BI); 1♀, Chimkent Distr., Suzak Distr., 20 km E of Suzak, 26.06.1989 (A.Z.) (BI); 1♀, Dzhambul Area, Moyinkum Distr., Karabughet Vill., 29.06.1989 (A.Z.) (BI). Alma-Ata Area: 1♀, Chilik Distr., 19th km Chilik-Chundzha Road, 29.05.1988 (M.ZARKO) (ZMMU); 3♀, Kurty Distr., Taukum Sands (Desert), Aidarly Vill., 20.06.1986 (V.G.LINSKI) (JW). Kirghizia: 1♀, Ferganski Mt. Range, Ak-Terek, 10-16.06.1984 (S.Z.) (BI); 2♀, south slope of Talasski Mt. Range, Itagar, 2.06.1987 (S.Z.) (BI).

**Derivatio nominis:** The new species is named in honour of the well known Soviet arachnologist, Alexander S. UTOTCHKIN, who has revised many groups of thomisid spiders from the USSR.

**Measurements** (mm).

Male/Female. Carapace: 2.30/2.10-2.63 long, 2.18/2.15-2.60 wide, clypeus 0.23/0.23-0.26, MOA-WA 0.48/0.49-54, MOA-WP 0.65/0.64-0.74, MOA-L 0.43/0.46-0.54, chelicerae 0.73/0.89-0.93, AME 0.09/0.09, ALE 0.13/0.13-0.15, PME 0.07/0.07-0.09, PLE 0.13/0.09-0.11, AME-AME 0.33/0.33-0.36, AME-ALE 0.28/0.30-0.34, PME-PME 0.50/0.51-0.56, PME-PLE 0.38/0.40-0.46.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.2/1.5-2.3	1.0/0.7-1.2	1.6/1.1-1.8	1.6/1.1-1.6	1.1/0.9-1.0
II	2.3/1.7-2.5	1.0/0.8-1.1	1.7/1.1-1.8	1.6/1.1-1.6	1.1/0.9-1.1
III	1.7/1.6-1.8	0.8/0.7-0.8	1.0/1.0-1.2	0.9/0.9-1.1	0.8/0.7-0.9
IV	1.6/1.8-1.9	0.6/0.7-0.9	1.1/1.1-1.3	0.9/1.0-1.1	0.8/0.8

**Description:**

Male. Carapace dark red-brown, with yellowish area around the eyes. Abdomen dorsally with yellow transverse bands (fig. 14).

Branchial opercula red. Legs dark red-brown, tarsi and metatarsi reddish, basal parts of all segments yellowish. Leg I spination: Male: femur d. 1-1-1-1, p. 1-2-0-0 or 1-2-1-1, tibia p. & r. 1-1-1, v. 2-2-2ap., metatarsus p. & r. 1-1-2ap., v. 1-2-2. Palp as in Figs. 12-13, with two-pointed lateral tibial apophysis and wide tip of embolus.

Female. Colouration as in male, abdominal pattern yellow or orange or absent. Leg I spination: femur d. 1-1-1, p. 1-2-1-1, tibia v. 2-2-2ap., metatarsus p. & r. 0-1-1ap., v. 0-2-2-2ap. Epigyne as in Fig. 15.

**Diagnosis.** *S. utotchkini* sp.n. is closely related to *S. ornatum* THORELL (sensu UTOTCHKIN, 1960a) and can be easily distinguished from the latter by the shape of the embolic tip and shape of the lateral tibial apophysis which has two tips (Fig. 13). *S. utotchkini* sp.n. was confused with *S. plorator* by SPASSKY & SHNITNIKOV (1937) and latter by UTOTCHKIN, 1960a and other authors owing to the similar shape of lateral tibial apophysis. Males of the new species can be separated from those of *S. plorator* in having a wide tip of embolus and greater body and palps size and females by the shape of receptacula and ducts (figs. 15 & 16) and also by larger size of epigyne and carapace.

**Distribution:** Kirghizia and East Kazakhstan.

*Synema plorator* O.P.-CAMBRIDGE, 1872 Fig. 16

*S. plorator*: LEVY, 1975: 159-161, figs. 8-11 (♀ and ♂).

*S. richteri* UTOTCHKIN, 1960: UTOTCHKIN, 1960b: 1022-1023, figs. 3 (1-5) (♀ and ♂), probably junior synonym of *S. plorator* (LEVY, 1975).

**Material examined:** Turkmenistan, 1♀, SW Kopetdagh, Damdam, 800 m, 8.07.1984 (V.F.) (ZMMU).

**Distribution:** Israel (LEVY, 1975), Armenia? ((LEVY, 1975) mentioned that *S. richteri*, UTOTCHKIN, 1960 described from Armenia, is probably *S. plorator*), and South-West Turkmenistan.

*Thomisus onustus* WALCKENAER, 1805 Figs. 17-18

**Material examined:** Kazakhstan: 1♂, 3♀, Aktyubinsk Area, Baichanin Distr., North Ustyurt, pasture of Diyar Sovkhoz, 07.1989 (A.Z., L.V.PAVLOVA) (IZA); Pavlodar Area: 1♀, 25 km N Pavlodar, 12.07.1989 ((O.L.) (ZMMU); 4♀, Maisky Distr., Kirovski Sovkhoz, Irtysh River Valley, 20.08.1989 (O.L.) (ZMMU); 1♂, 1♀, Environs of Pavlodar, 12.08.1989 (O.L.) (1♀ BI; 1♂ JW); 4♂, 20 km E of Pavlodar, 1.07.1990 (O.L.) (BI); 1♀, Lebyazh'ye Distr., 3km NW of Shoktal Vill., 5.07.1990 (O.L.) (JW); 1♂, 3♀, Yermak Distr., 8 km SE Kyzylzhar Vill., 14.07.1990 (O.L.) (BI). 1♀, Semipalatinsk Area, Abaisk Distr., 30 km S of Sarzhak, (V.TISHCHENKO) (BI); 1♂, East

Kazakhstan Area, Saur Mt. Range, Kenderlyk River Basin, Akkolka River Valley, 06.1990 (K.E.) (IBPN); Chimkent Area: 1♂, Arys' Town, 1.05.1988 (D.V.LOGUNOV) (BI); 1♀, Suzak Distr., 20 km E of Suzak, 26.06.1989 (A.Z.) (ZMMU); 1♀, Tul'kubas Distr., Aksu-Dzhab-agly Reserve, 10.07.1989 (ABDIBEKOV) (JW). Dzhabul Area: 2♀, Krasnogorsk Distr., 17 km NW Kenen Vill., Chu-Ili Mt. Range, 14-15.06.1990 (A.F., A.Z.) (JW); 1♂, Krasnogorsk Distr., 37km NE of Georgievka, environs of Kurdal Pass, 06.1990 (A.F., A.Z.) (JW); 1♀, Dzhabul Area, Moyinkum Distr., 17 km E Khantau Vill., Khantau Mt. foothills of Sunkar Mt., 12.06.1990 (A.F., A.Z.) (BI). 1♀, Alma-Ata Area, environs of Aidarly Vill., 07.1989 (A.Z., L.V.PAVLOVA) (IZA). Uzbekistan, 1♀, 65 km NE of Tashkent, Khodzhikent, 24.05.1988 (KURBATOV) (BI). Kirghizia: 1♂, Yarodar, 10.06.1979 (S.Z.) (ZMMU). Turkmenistan: 1♂, W Kopetdagh, Aidere, Miradzhy, 15.08.1983 (A.ZVANTSOV) (ZMMU); 2♂, SW Kopetdagh, foothills of Damdam Mt. Range, 17.05.1982 (B.P.ZAKHAROV) (BI). Tajikistan: 2♀, Shugnanski Mt. Range, environs of Khorog Botanical Garden, Sangoudara, 2400 m, 7.06.1970 (M.Z.) (PIS); 1♀, Environs of Khorog, botanical garden, 15.06.1970 (PIS); 1♀, Petra I Mt. Range, Obi-Khingou, 8 km from Sabzikharv, 7.1968 (V.C.) (PIS); 1♂, 1j, 15 km from Muminabad, Khozratisho, 12.06.1966 (PIS); 2♂, 3♀, Khozratisho Mt. Range, Surkhak River Valley, 15-16.06.1966 (BI); 3♂, 3♀, Ramit, 1-7.07.1967 (PIS); 1♀, Alaiki Mt. Range, 108th km of the Osh-Khorog Road, 24.06.1965 (V.C.) (PIS); 1♀, Beshkent Area, Chiluchor-Chashma, 26-29.06.1967 (PIS), 1♂, Pyandzh River Valley, Obi-Rangou Canyon between Nul'vand and Khostou Kishlaks, 28.05.1970 (E.A.) (PIS); 1♂, Pyandzh River Valley, .06.1970 (E.A.) (PIS); 1♂, Vanch, Say from Chikhokh Kishlak, 3.06.1970 (PIS); 1♂, Kashbadan Sands, 27.05.1969 (V.C.) (PIS); 1♀, 1j, Viskharv Canyon, near Ubachy Kishlak, 3000 m, 29.05.1970 (E.A.) (PIS); 1♂, Barzhandg River Valley, environs of Sinandzh Kishlak, 2200-2600 m, 7.06.1970 (E.A.) (PIS); 2♀, Yavan Vill., 22.05.1973 (A.K.) (BI); 2♂, same locality, 21.09.1971 (UMAROV) (1♂ BI; 1♂ ZMMU); 1♀, Ghissar Mt. Range, Shurkhak Kishlak, 23.05.1974 (K.N.) (BI).

Distribution: Transpalearctic (?) (earlier was recorded from Europe, Middle Asia, and from Korean Peninsula (KIM, 1991).

Thomisus zyuzini MARUSIK et LOGUNOV, 1990

Thomisus onustus [non WALCKENAER]: DIPPENAAR-SCHOEMAN, 1989, 24, figs. 3a-b (♂ and ♀).

Material examined: Uzbekistan, 1♀, Dal'verzin, 29.06.1980 (A.B. NENILIN) (ZMMU). Turkmenistan: 1♂, 4♀, SE Karakumy Desert, Repe-tek Reserve, 05.1982 (KRIVOKHATSKI) (1♂ JW; 2♀ ZMMU; 2♀ BI); 1♀, same locality, 29.04.1976 (A.K.) (BI); 2♂, Transcaspia, Ashabad, 24.04.1902 (BI); 2♂, Chardzhou Area, Farab Distr., Nargyz Isl., 17.09.1982 (S.Yu.KUZNETSOV, S.K.ALEKSEYEV) (ZMMU); 1♂, W Kopetdagh, Aidere, Miradzhy, 15.08.1983 (A.ZVANTSOV) (ZMMU). Tajikistan: 2♀, Tigrovaya Balka Reserve, sands, 27.07.1968 (T.DOMRACHEVA) (PIS); 2♀, same locality, Vakhsh River Valley, 20.06.1973 (A.K.) (BI); 1♀, Yavan Distr., Sovkhoz, 2.10.1971 (UMAROV) (BI);

1♀, Yangiabad, 12.06.1974 (A.K.) (BI); 1♀, environs of Garavuti, 18.05.1978 (CHERNENKO) (JW); 3♀, same locality, 28.07.1974 (A.K.) (1♀ ZMMU; 1♀ BI; 1♀ JW); 1, Teshik-Tash, 29.08.1978 (A.K.) (BI).

Measurements (mm).

Male. Carapace: 1.1-1.3 long, 1.1-1.4 wide, clypeus 0.19-0.26, MOA-WA 0.23-0.29, MOA-WP 0.29-0.33, MOA-L 0.24-0.29, chelicerae 0.29-0.41, AME 0.05-0.06, ALE 0.05-0.06, PME 0.03-0.04, PLE 0.03-0.04, AME-AME 0.14-0.18, AME-ALE 0.13-0.17, PME-PME 0.23-0.29, PME-PLE 0.17-0.23.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.3-1.7	0.4-0.6	1.0-1.3	0.9-1.3	0.5-0.8
II	1.2-1.7	0.5-0.6	1.0-1.3	0.9-1.2	0.5-0.6
III	0.6-0.8	0.3-0.4	0.3-0.5	0.3-0.5	0.3-0.4
IV	0.6-0.9	0.2-0.3	0.4-0.6	0.4-0.6	0.3-0.4

Description. Carapace light-brown, ocular area yellow, clypeus light brown, margins of carapace with small denticles. Abdomen very light. Carapace and abdomen covered with erect, chitinized denticles. Palps (Figs. 19-20) red-brownish. Legs I and II light red-brown with yellow tarsi, legs III and IV yellow, leg spines absent.

Diagnosis. Males of T.zyuzini can be distinguished easily from the closely related species T.onustus by the shape of the palp. T.zyuzini has shorter ventral and lateral tibial apophyses, different shape of lateral apophysis, and different position and arrangement of tibial denticles (Figs. 18 & 20). Males of the two species can be distinguished by the leg and carapace coloration as well:

	<u>T.onustus</u>	<u>T.zyuzini</u>
femora and patellae I and II	yellow	red brown
carapace	yellow	red brown

Distribution: South and West Middle Asia and Saudi Arabia (DIPPENAAR-SCHOEMAN, 1989 as T.onustus).

Tmarus horvathi KULCZYNSKI, 1895

T.hanrasanensis: ONO, 1977: 80-81, figs. 13-14, 18, 21 (♀).  
T.hanrasanensis: ONO, 1986: 169-170, figs. 2-4 (♂).

Material examined: Turkmenistan, 1♀, SW Kopetdagh, El'dere, 10.06.1985 (T.L.) (BI).

Comments: T.hanrasanensis was synonymized with T.horvathi by LOGUNOV & MARUSIK, 1990.

Distribution: East Mediterranean - Far East disjunctive range:

Caucasus, Turkmenistan and Manchurian region.

Xysticus abramovi MARUSIK et LOGUNOV, sp. n. Figs. 21-23

Material examined: Holotype ♂, Tajikistan Pyandzh Distr., 7 km S of Zebon, 14.09.1989 (A.V.ABRAMOV) (BI).

Measurements (mm).

Carapace: 2.05 long, 1.93 wide, clypeus 0.17, MOA-WA 0.43, MOA-WP 0.49, MOA-L 0.39, chelicerae 0.46, AME 0.08, ALE 0.13, PME 0.06, PLE 0.11, AME-AME 0.31, AME-ALE 0.16, PME-PME 0.36, PME-PLE 0.34.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.70	0.75	1.13	1.18	0.69
II	1.73	0.75	1.15	1.15	0.75
III	1.23	0.55	0.70	0.78	0.45
IV	1.20	0.60	0.83	0.88	0.50

Description. Carapace dark red-brown with V-shaped yellow median band and short stripes on sides. Ocular area yellow. Sternum light-brown with yellow margins. Maxillae and labium red-brown. Chelicerae dark red-brown with yellowish spot prolaterally. Abdomen yellow-brown with 3 pairs of brown spots and white marginal band apically and laterally, ventrally cream-coloured with numerous short white stripes. Branchial opercula greyish. Legs I and II: femora, patellae and tibiae from dark red-brown to black, tarsi and metatarsi yellow, junctions of segments yellow. Legs III and IV red-brown with numerous white spots. Leg I spination: femur d. 0-1-1, p. 0-1-1-1-0, tibia p. and r. 1-1-1, v. 2-2-1-1-lap., metatarsus p. 0-1-lap., r. lap., v. 2-2-2-2ap. Palp as in Figs. 21-23, with two tibial apophyses and without distinct tegular ridge, base of embolus elevated.

Female unknown.

Diagnosis: Male X.abramovi sp.n. is similar to that of X.nini THORELL (sensu UTOTCHKIN, 1968) from which it can be easily distinguished by the shape of apical part of tegulum and embolus. The new species is also similar to X.simplicipalpatus ONO, 1978 (Nepal). Two related species can be separated by the more apical position of the tegular ridge in X.simplicipalpatus and characteristic elevation of the embolic base in X.abramovi sp.n.

Distribution: Type locality only.

Xysticus ovadan MARUSIK et LOGUNOV, sp. n. Figs. 24-25

Xysticus caperatus [non SIMON, 1875]: OVTSHARENKO, FET, 1980: 444.

Material examined: Holotype ♂, Turkmenistan, Badkhyz, Kepela, 14.05.1977 (V.F.) (ZMMU); paratype ♂, environs of Bakharden, 18.07.1979 (ZMMU).

Derivatio nominis: The name for this species is derived from Turkmen word "ovadan", meaning "nice".

Measurements (mm).

Carapace: 2.75 long, 2.55 wide, clypeus 0.36, MOA-WA 0.56, MOA-WP 0.63, MOA-L 0.53, chelicerae 0.90, AME 0.11, ALE 0.19, PME 0.10, PLE 0.14, AME-AME 0.39, AME-ALE 0.23, PME-PME 0.43, PME-PLE 0.39.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.55	1.10	1.90	1.80	0.95
II	2.30	1.10	1.75	1.65	1.00
III	1.75	0.90	1.20	1.05	0.70
IV	1.80	0.80	1.25	1.15	0.80

Description. Carapace reddish to redbrown, eyes with yellow rings. Whole carapace covered with yellow and black spots. Sternum yellow with red-brown spot. Abdomen variegated, grey with numerous white and black spots. Muscle dots reddish and highly sclerotized. Abdomen covered with dense strong macrosetae. Branchial opercula yellow-grey. Legs dark red-brown with white and yellow dots. Leg I spination: femur d. 0-0-1-1-1, p. 1-1-2-1, tibia v. 1-1-2-2ap., metatarsus p. lap., r. 1-lap., v. 1-2-1-1-2ap. Palp as in Figs. 24-25, with, distinct tegular apophysis and bifid tibial apophysis.

Female unknown.

Diagnosis. The male of X.ovadan sp.n. resembles that of X.caperatus SIMON, 1875 (see figs. 18-19 in LEVY, 1976) by the shape and position of ventral tibial apophysis and the shape of tegular apophysis, but it can be distinguished by the smaller size of tegular apophysis, thinner lateral tibial apophysis, and smaller lateral division of ventral tibial apophysis.

Distribution: South Turkmenistan only.

Xysticus pseudoluctuosus MARUSIK et LOGUNOV, sp. n. Figs. 26-27

Material examined: Holotype 1♂, Tajikistan, Karateginski Mt. Range, Sarby-Komarou Rivers, environs of Shinglig Kishlak, (A.K.) (BI).

Derivatio nominis: The name of this species is derived from the name of the closely related species X.luctuosus, and Latin word "pseudo" meaning false.

Measurements (mm).

Carapace: 2.13 long, 2.35 wide, clypeus 0.20, MOA-WA 0.46, MOA-WP 0.46, MOA-L 0.40, chelicerae 0.57, AME 0.06, ALE 0.09, PME 0.06,



PLE 0.08, AME-AME 0.36, AME-ALE 0.21, PME-PME 0.34, PME-PLE 0.39.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.40	1.10	1.75	1.63	1.00
II	2.30	1.10	1.75	1.63	0.98
III	1.63	0.75	0.93	0.85	0.68
IV	1.48	0.70	1.05	0.93	0.73

**Description:** Carapace orange with X-shaped white spot, ocular area white. Sternum yellowish-white. Maxillae and labium pale-orange, chelicerae orange. Abdomen white with cream-coloured pattern. Carapace and abdomen covered with sparse erect setae. Branchial opercula cream-coloured, spinnerets orange. All legs orange with indistinct whitish spots. Leg I spination: femur d. 0-0-1-1-1, p. 1-1-2-2-2, patella v. 1, tibia p. and r. 1-1-1, v. 2-2-2-2ap., metatarsus p. and r. 1ap., v. 0-2-2. Palp as in figs. 26-27, with bifid ventral tibial apophysis, lateral tibial apophysis curved apically and small tegular ridge. Female unknown.

**Diagnosis:** The new species is closely related to *X. luctuosus* and to *X. xerodermus* STRAND, 1913 (see figs. 49-50 in LEVY, 1976). *X. pseudoluctuosus* sp.n. can be distinguished from both species by the shape of lateral tibial apophysis, position and shape of tegular ridge, position of tutaculum and shape of embolus.

**Distribution:** Type locality only. Ranges of the closely related species *X. pseudoluctuosus* sp.n. and *X. luctuosus* are not overlapping.

*Xysticus turkmenicus* MARUSIK et LOGUNOV, sp. n. Figs. 30-33

*X. albomaculatus* [non KULCZYNSKI, 1891]: UTOTCHKIN, 1968: 18 & 22, figs. 102-103 (♂).

**Material examined:** Holotype ♂, and paratypes 2♂ and 1♀, Turkmenistan, South Ust'yurt Plateau, Kaplankyr Reserve, 9.10.1985 (L.MIT-ROSHINA) (ZMMU). Paratypes: Kazakhstan: Chimkent Area: 1♀, Tulku-bas Distr., Karatau Mt. Range, canyon near Tauken Vill., 23.04.1989 (C.T., BI); 1♀, 63 km N of Turkestan Town, Karatau Mt. Range, 30 km from Bosbutak Vill., 13.06.1989 (C.T., A.Z., BI); 1♀, Algasbas Distr., Karatau Mt. range, environs of Tauken Vill., 23.04.1989 (IZA). Kirghizia: 1♀, Turkestan Mt. Range, Loylyak Distr., 40 km S of Isfara, Madygen Vill., 1300 m, (Yu.A. POPOV, A.G. PONOMARENKO) (JW); 1♀, Chilisay Canyon, 30.06.1985 (A.Z.) (BI). Turkmenistan: 1♀, same locality as holotype, 28.09.1981 (ZMMU); 1♂, Sarykamysh Lake, 7.10.1985 (BI), 1♂, same locality, 3.10.1982 (O. SOYUNOV) (JW); 1♂, NW Turkmenistan, Kafigshem Mt. Range, 55x00'E, 41x00'N, 5.11.1982 (V.F.) (ZMMU). Tajikistan: 1♀, Petra I Mt. Range, Dorosh-Nazarok, near Tajikabad Vill., 23.06.1974 (SHCHYOTKIN) (JW).

**Derivatio nominis:** The specific name refers to the distribution

the species.

**Measurements (mm).**

Male/Female. Carapace: 2.1-2.3/2.7-3.0 long, 2.0-2.1/2.8-2.9 wide, clypeus 0.19-0.21/0.26-0.30, MOA-WA 0.36-0.41/0.57-0.64, MOA-WP 0.39-0.41/0.56-0.66, MOA-L 0.41-0.44/0.52-0.60, chelicerae 0.61-0.64/0.86-0.97, AME 0.07-0.08/0.09, ALE 0.11-0.13/0.13-0.15, PME 0.06-0.07/0.08, PLE 0.08-0.10/0.10-0.11, AME-AME 0.26-0.29/0.43-0.47, AME-ALE 0.15/0.21-0.26, PME-PME 0.26-0.27/0.28-0.49, PME-PLE 0.31-0.34/0.47-0.51.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.2-2.3	0.9-1.0	1.5-1.7	1.6-1.8	0.9-1.0
	2.6-2.8	1.3-1.5	1.9-2.0	1.8-1.9	0.9-1.1
II	2.2-2.3	0.93	1.58	1.4-1.7	0.8-1.0
	2.7-2.8	1.3-1.5	1.9-2.1	1.7-1.9	0.9-1.0
III	1.4-1.5	0.59	0.9-1.0	0.86	0.6-0.7
	1.8-1.9	0.9-1.0	1.2-1.3	1.0-1.1	0.7-0.8
IV	1.5-1.6	0.60	1.02	1.05	0.6-0.8
	1.9-2.1	0.8-0.9	1.33	1.3-1.4	0.77

**Description.** Male. Carapace sandy-coloured with red-brown and cream-coloured spots, and 2 deep red-brown triangle spots basally. Sternum and chelicerae cream-coloured with red-brown dots. Abdomen sandy-coloured dorsally with cream-colored spots and bands and 2 pairs of distinct large red-brown spots. Legs variegated sandy-coloured with numerous cream-colored and red-brown spots. Leg I spination: femur d. 0-1-1-1, p. 0-1-1-1-0, tibia p. and r. 1-1-1, v. 2-2-2-2ap., metatarsus p. 1-0-1-lap., r. 1-1, v. 2-2-2-2ap. Palp as in Figs. 30-31, with bifid lateral tibial apophysis, distinct tegular ridge, and thick embolic base. Female. General coloration lighter than in male. Carapace with wide median cream-coloured band. Sternum cream-coloured. Abdomen sandy coloured with cream-coloured spots. Metatarsi and tarsi I and II yellow-redish apically. Leg I spination: femur p. 0-1-1-1-0, tibia v. 2-2-2-2ap., metatarsus p. 1-1-lap., r. 1-1, v. 2-2-2-2ap. Epigyne as in figs. 32-33, with two semicircular fovea on the elevation.

**Diagnosis.** *X. turkmenicus* sp.n. is related to *X. kuzgi* and *X. bakanas* (each has a serrated embolus), but males can be easily distinguished by bifid lateral tibial apophysis, position and shape of tegular ridge, and by the shape of embolic base. From similar european species *X. albomaculatus* males of new one can be distinguished by the smaller spur on the lateral tibial apophysis, larger embolus and different position of tegular ridge. Females of new species is somewhat similar to that of *X. soderbomi* SCHENKEL, 1936 (China) (see figs. 65-67), but two species can be separated by the shape of fovea and seminal ducts.

**Distribution:** South Middle Asia.

*Xysticus tyshchenkoi* MARUSIK et LOGUNOV, sp. n. Figs. 34-39

*X. sabulosus* [non HAHN, 1831]: UTOTCHKIN, 1968: 19 & 21, figs. 110-112 (♀ and ♂).

*X. sabulosus* [non HAHN, 1831]: MARUSIK, LOGUNOV, 1990: 49.

**Material examined:** Holotype ♂, and paratypes 3♂, 5♀, Kazakhstan, Dzhambul Area, Krasnogorsk Distr., 37 km NE of Georgievka, environs of Kurday Pass, 13.06.1990 (A.F., A.Z.) (BI). Paratypes: Kazakhstan: 2♀, Pavlodar Area, Yermakoskoye Distr., Environs of Aksu, 26.06.1990 (O.L.) (JW); 9♂, 12♀, Dzhambul Area, Krasnogorsk Distr., 19 km NW of Keken Vill., Chu-Ili Mt. Range, 15.06.1990 (A.F., A.Z.) (ZMMU). Chimkent Area: 2♀, Aksu-Djabagly, 10.07.1989 (ABDIBEKOV) (BI); 3♂, 2♀, Suzak Distr., 25 km W of Chulak-Kurgan Vill., 10 km from Abay Vill., Karatau Mt. Range, 25.06.1989 (C.T., A.Z.) (JW); 1♀, 63 km N of Turkestan Town, Karatau Mt. Range (30 km up from Bosbutak Vill.), 13.06.1989 (C.T., A.Z.) (BI). 1♂, Kzyl-Orda Area, Yanykurgan Distr., 35 km NNE of Yanykurgan Town, Karatau Mt. Range, 15.06.1989 (C.T., A.Z.) (BI). Kirghizia, 1♂, Osh Area, Ak-Bureya Canyon, 1500 m, 25.06.1985 (A.Z.) (BI); 4♂, Chilisay Canyon, 2500m, 30.06.1985 (A.Z.) (ZMMU). Turkmenistan, 1♀, West Kopet-Dagh, Kara-Kala, 4.07.1974 (V.GORBATOVSKI) (ZMMU). Tajikistan: 7♂, 6♀, Turkestan Mt. Range, Kusavli-Say, 06.1975 (Y.L.) (JW); 1♂, 2♀, Petra I Mt. Range, Dorosh-Nazarok, environs of Tadjikabad, 23.06.1974 (A.K.) (ZMMU); 22♂6♀, Shakhristan Distr., Turkestan Distr., 20.06.-1.07.1974 (Y.L.) (BI); 2♂, Komsomolabad Distr., Lyulya-Kharvi Valley, 12.07.1978 (V.I.OVTSHARENKO) (ZMMU); 1♂, same locality 1800 m, 23.08.1978 (V.I.OVTSHARENKO) (BI).

**Other material examined:**

8♀, Turkestan Mt. Range, Kusavli-Say, 2350-2450 m, 28.06.1970 (NA-ZIMKHANOV) (PIS); 1♀, environs of Khorog, Botanical Garden, 2200 m, 19.08.1970 (L.ZHARKOVA) (PIS); 1♂, 2♀, Vesdara (River ?), tributary of Shakhdary, 9.07.1970 (PIS).

**Derivatio nominis:** This species is named after our late Teacher, prominent entomologist and arachnologist, passed away at an age of 50, Prof. Viktor P. TYSHCHENKO.

**Measurements (mm):**

Male/Female. Carapace: 1.98-3.07/2.40-2.90 long, 1.85-2.78/2.18-2.78 wide, clypeus 0.11-0.29/0.27-0.29, MOA-WA 0.45-0.61/0.50-1.10, MOA-WP 0.49-0.66/0.71-1.23, MOA-L 0.43-0.57/0.49-1.03, chelicerae 0.79-1.07/0.73-1.19, AME 0.08-0.10/0.06-0.15, ALE 0.13-0.16/0.10-0.17, PME 0.07-0.09/0.07-0.09, PLE 0.10-0.14/0.09-0.12, AME-AME 0.30-0.44/0.38-0.80, AME-ALE 0.18-0.26/0.27-0.51, PME-PME 0.34-0.50/0.44-0.53, PME-PLE 0.37-4.7/0.41-0.51.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.1-2.8 2.1-2.4	0.8-1.2 1.1-1.3	1.5-2.1 1.5-1.9	1.6-2.2 1.4-1.8	1.0-1.2 0.8-0.9
II	2.1-2.8 2.1-2.3	0.8-1.1 1.0-1.3	1.5-2.0 1.4-1.8	1.6-2.1 1.4-1.7	0.8-1.2 0.8-0.9
III	1.5-2.1	0.6-0.9	0.9-1.4	1.1-1.5	0.6-0.8

	1.5-1.7	0.8-0.9	1.0-1.3	0.9-1.1	0.8
IV	1.5-2.2	0.5-0.8	1.1-1.5	1.2-1.8	0.7-1.0
	1.8-1.9	0.7-0.9	1.1-1.4	1.2-1.5	0.7-0.9

**Description.** Male. Colouration variable. Carapace from orange to dark red-brown, always with Y-shape yellow band. Ocular area yellow. Sternum yellow or yellow with red-brown hue. Maxillae, labium and chelicerae yellow or red-brown. Abdomen dorsally white with 2 red-brown wide bands laterally, ventrally white or red-brownish. Branchial opercula yellow or yellow with red-brown hue. Legs I and II: femora and patellae orange or bark red-brown, tibiae, metatarsi and tarsi yellow. Legs III and IV yellow with whitish spots and stripes or with prolaterally red-brown, tarsi and metatarsi III and IV always yellow. Leg I spination: femur d. 0-0-1-1-1-1, p. 1-1-3-1-2-2- or 1-1-1-2-2-1-2-1, tibia p. 1-1-1, r. 1-1-lap., v. 2-2-2-2ap., metatarsus p. and r. 1-1-lap., v. 2-2-2-2ap. Palp as in figs. 34-36, with embolus somewhat curved, wide in apical view and with a small tegular ridge.

Female. Newly molted females cream-coloured with red to brownish sides. Legs light-coloured, femora sometimes with red-brown spots apically. Leg I spination: femur p. 0-1-1-1-0, tibia v. 2-2-2-2ap. or 1-2-1-2-2ap., metatarsus p. 1-1-1-lap., r. 1-1-lap., v. 2-2-2-2ap. Epigyne as in figs. 37-39, without distinct fovea, shape of fovea somewhat variable.

**Diagnosis.** The new species is closely related to *X. secedens* (L. KOCH, 1876) (endemic of Alps ? THALER, 1981) (see figs. 50-51, 53 & 58 (THALER, 1981), from which can be distinguished by the shape of embolus and tegular ridge, and also by the shape of receptacula.

**Distribution:** Widespread in Middle Asia. All records of *X. sabulosus* from Middle Asia belong to *X. tyshchenkoi* sp.n.

*Xysticus acerbus* THORELL, 1872.

**Material examined:** Turkmenistan, SW Kopetdagh: 18♂, 1♀, Syunt Mt., 1200 m, 2-15.04.1985 (T.L.) (11♂, 1♀ ZMMU; 4m BI; 3m JW); 1♀, Kizil-Arvat, 800 m, 20.06.1985 (V.F.) (ZMMU).

**Distribution:** Europe and South-West Turkmenistan.

*Xysticus audax* (SCHRANK, 1803)

**Material examined:** Kazakhstan: 1♂, East Kazakhstan Area, Saur Mt. Range, Saikan Pass, 1880 m, 7.06.1990 (K.E.) (IBPN). Kirghizia: 1♀, Terskey-Ala-Tau, Chon-Kysyl-Su River basin, 2800 m, 26.06.1966 (P.V.) (PIS). Tajikistan, 1♀, North slope of Alaiski Mt. Range, left tributary of Sokh River, Sary-Chilim, 2300 m, 25.06.1970 (M.Z.) (PIS).

Distribution: Transpalaeartic.

Xysticus baltistanus (CAPORIACCO, 1935)

Material examined: Kazakhstan, 1♀, East-Kazakhstan, Saur Mt. Range, 20 km S of Zaisan Town, E of Churgutsu, 21.06.1989 (I.KABAK) (BI). Tajikistan: 2♂, 2♀, Shugnanski Mt. Range, environs of Khorog Botanical Garden, Sangoudara, 2400-3800 m, 1970 (M.Z.) (PIS); 1♀, Turkestan Mt. Range, Kusavli-Say, Kusavli River, 3000-3200 m, 29.06.1970 (PIS); 1♀, Badakhshan, 1970 (E.A.) (PIS); 1♀, North Slope of Ghissar Mt. Range., 3000m, 18.08.1969 (PIS); 3♀, same area, Kavnok River, 32000 m, 17.08.1969 (PIS).

Distribution: North India, China, Mongolia, Middle Asia and NE Siberia. From Karakoram Mt. Range at the south, north-east to Magadan Area (Upper Kolyma, MARUSIK, 1988).

Xysticus bifasciatus (C.L.KOCH, 1837)

Material examined: Kazakhstan, 1♂, East Kazakhstan Area, Saur Mt. Range, Saikan Pass, 1880 m, 7.06.1990 (K.E.) (IBPN). Kirghizia, 1♀, Terskey-Ala-Tau Mt. Range, Chon-Kyzyl-Su River basin, 2800 m, 26.06.1965 (P.V.) (PIS).

Distribution: European - Middle Siberian range.

Xysticus concinnus KRONEBERG, 1875

Material examined: Kazakhstan, ♀f, Chimkent Area, environs of Arys', 7.05.1988 (D.V.LOGUNOV) (JW). Uzbekistan, 1♂, Zeravshan Mt. Range, Aman-Kutan Pass, 29.05.1965 (A.D.) (PIS). Tajikistan: 1♀, Vanch River Valley, canyon near Tekharv Kishlak, 2.06.1970 (E.A.) (PIS); 1♂, Vanch Mt. Range, near Chikhokh Kishlak, 2200-2600 m, 2.06.1970 (E.A.) (PIS); 3♂, 2♀, Khozratisho Mt. Range, 15-20 from Muminabad to Chil'dukhtaron, 25-27.05.1966 (PIS); 5♂, 10♀, Kondara, 8.06.1967 (PIS; 5f BI); 1♂, 1♀, Varzob, Medvezhya Balka Canyon, Takob, 16-17.08.1967 (PIS); 2♂, Varzob, 3.05.1967 (V.KHRISTOV) (PIS); 1♀, Baisun Mt. Range, Sairab Kishlak, 7.06.1964 (PIS); 1♂, Upper flow of Karatag River, Paironskoye Lake, 2.05.1967 (PIS); 1♂, Zeravshan Mt. Range, Kshtut River, 23.05.1967 (I.N.LOPATIN, V.C.) (PIS); 1♀, Petra I Mt. Range, Obi-Khingou, 8 km from Sabzikhav, 04.1968 (V.C.) (PIS); 2♂, Environs of Dushanbe, 11.05.1967 (E.MARTYNOVA) (PIS); 1♂, 1♀, Gandzhyno, 12.05.1967 (PIS); 1♀, Aktau Mt. Range, Gandzhino Vill., 5.05.1973 (K.N.) (BI); 3♂, 3♀, Aktau Mt. Range, environs of Garavuti, 1973 (A.K.) (1♂ ZMMU; 3♂, 2♀ BI); 1♀, environs of Gandzhyno, Aruk-Tau Mt. Range, Barsovoye Canyon, 8.06.1069 (T.DOMRACHOVA) (PIS); 1♂, Viskharv Canyon, near Ubaga Kishlak, 3000 m, 31.05.1970 (E.A.) (PIS); 1♂, Kelif, 21.06.1976 (A.K.) (BI); 1♂, Karatau Mt. Range,

Ak-Kutal' Pass, 23.04.1974 (K.N.) (JW); 1♂, 1♀, Turkestan Mt. Range, Kusavli-Say, 06.1975 (Y.L.) (JW); 1♀, Anzob, 16.07.1967 (Ye.SEREDINA) (ZMMU); 1♂, Shakhristan Distr., Turkestan Mt. Range, 20.06-01.07.1974 (Y.L.) (BI); 1♀, environs of Khorog, Shugnanski Mt. Range, Shakhdary River valley, 21.06.1970 (L.ZHARKOVA) (PIS); 1♂, 1♀, North slope of Alay Mt. Range, Sary-Chashma Canyon, upper flow of Sokh River, 24.06.1970 (L.ZHYLTSOVA) (PIS).

Distribution: East Middle Asia.

Xysticus cristatus (CLERCK, 1757)

Material examined: Kazakhstan: 2♀, Pavlodar Area, Yermak Distr., environs of Aksu, 26.06.1990 (O.L.) (ZMMU); 1♂, Pavlodar, 2.05.1990 (KONDRASHOV) (BI); 1♂, 3♀, 50 km S of Pavlodar, Irtysh River Valley, 20.06.1989 (O.L.) (JW); 2♂, 1♀, Chimkent Area, Arys'Town, 05.1988 (D.V.LOGUNOV) (BI); 1♂, East Kazakhstan Area, Saur Mt. Range, Kenderlyk River Bassin, Akkolka River Valley, .06.1990 (K.E.) (IBPN); 1♀, Alma-Ata, botanical garden, 5.04.1990 (O.L.) (JW); 2♂, same locality, 22.04.1981 (A.Z.) (IZA); 1♀, Alma-Ata Area, Syugaty Mt. Range, Yablonevaya Shchel', 22.04.1990 (IZA). Kirghizia: 3♀, Terskey-Ala-Tau Mt. Range, 2800 m, 7.08.1964 (P.V.) (PIS); 1♂, Yarodar, 10.06.1979 (S.Z.) (ZMMU). Tajikistan: 2♂, Vakhanski Mt. Range, 110th km from Ishkashim to Lyangar, Dershch Kishlak, 3500 m, 26.07.1970 (L.ZHARKOVA) (PIS); 3♀, Regar Distr., Chereshepa Kishlak, .04.1971 (L.ZHARKOVA) (PIS); 2♀, Environs of Khorog, botanical garden, 2300 m, 1-3.06.1969 (E.A.) (PIS); 1♀, Kuraminski Mt. Range, Palgau Kishlak, 20-25.05.1969 (V.C.) (PIS); 1♀, Artuch Kishlak, near Kuli-Kalon Lake, 27.05.1967 (I.N.Lopatin, V.CHIKAT INOV) (PIS); 1♀, Vanch River Valley, 1.06.1967 (E.A.) (PIS); 1♂, Pyandzh River Valley, 06.1970 (E.A.) (PIS); 1♂, Viskharv Canyon, near Ubaga Kishlak, 3000 m, 1.06.1970 (E.A.) (PIS); 1♀, Kurgovat Kishlak, 1.06.1970 (E.A.) (PIS); 3♂, 1♀, Karatau Mt. Range, Ak-Kutal' Pass, 23.04.1974 (K.N.) (BI); 2♂, Karateginski Mt. Range, Sorbog-Komarou Rivers, Shinglig Kishlak, 22.04.1978 (BI); 1♂, 5♀, Shakhristan Distr., Turkestan Mt. Range, 20.06-rons of Garavuti, 4-23.04.1974 (A.K.) (1♀ JW; 3♀ ZMMU; 2♀ BI); 1♂, same locality, .07.1975 (A.K.) (BI); 2♀, Garavuti, 8-16.04.1973 (Ye.SEREDINA) (BI); 1♀, N slope of Turkestan Mt. Range, Kusavli-Say, 06.1975 (Y.L.) (ZMMU); 2♂, 1♀, Alay Mt. Range, left tributary of Sokh River, Mazar near Ravuch Kishlak, 2200 m, 26.06.1970 (E.A.) (PIS).

Distribution: European - Middle-Asian - Middle-Siberian range.

Xysticus dzhungaricus TYSHCHENKO, 1965

X.dzhungaricus TYSHCHENKO, 1965: 700, figs. 6 (a and b), ♀ and ♂, from Dzhungar Alatau, Kazakhstan in ZIL according to author, but recently in Perm State University.

X.kiritschenkoi UTOTCHKIN, 1968: 24-25, figs. 2-6, ♀ and ♂, from

Middle Asia, in Perm State University. Syn.n.  
X.kiritschenkoi: MARUSIK, LOGUNOV, 1990: 42-43, figs. 29-31 (♀ and ♂).

Material examined: Kazakhstan: 1♂, Pavlodar Area, Kyzyl-Tau Reserve, 15.08.1989 (O.L.) (BI); East Kazakhstan Area: 4♂, 1♀, Saur Mt. Range, nderlyk River Basin, Akkolka River Valley, 06.1990 (K.E.) (IBPN); 1♂, 1♀, aur Mt. Range, Kendirlik River Basin, Karaungur River Valley, 19.06.1990 K.E.) (IBPN). Kirghizia, 1♂, Terskey-Ala-Tau Mt. Range, Chon-Kysyl-Su River basin, 2800 m, 26.06.1966 (P.V.) (PIS). Tajikistan: 1♀, Shugnanski Mt. Range, Coinfluence of Chunta and Shakhdary Rivers, Sangou Canyon, 18.05.1970 PIS); 2♂, 1♀, Turkestan Mt. Range, Kusavli-Say, 06.1975 (Y.L.) (JW); 1♀, same area, upper flow of Kusavli-Say River, 3000-3200 ♂, 29.06.1970 (PIS); 1♀, Alay Mt. range, left tributary of Sokh River, Mazar near Ravuch Kishlak, 2200 m, 26.06.1970 (E.A.) (PIS).

Distribution: East Middle Asia.

Xysticus embriki KOLOSVARY, 1935 Figs. 40-41

Xysticus marmoratus [non THORELL, 1875 ?]: UTOTCHKIN, 1968, 19, figs. 113-114 (♂).

Material examined: Kazakhstan, 2♂, East-Kazakhstan Area, environs of Glubokoye Vill., 2-9.09.1990 (V.K.ZINCHENKO) (BI); 1♀, East Kazakhstan Area, environs of Zaisan Town, Djeminey Canyon, 2-4.06.1990 (K.E.) (IBPN). Turkmenistan, 1♂, SW Kopetdagh, 13.11.1981 (N.M.YERMAKOV) (ZMMU).

Measurements (mm).

Male. Carapace: 2.00-2.10 long, 1.85-1.98 wide, clypeus 0.14-0.20, MOA-WA 0.40-0.44, MOA-WP 0.44-0.47, MOA-L 0.39-0.43, chelicerae 0.53-0.77, AME 0.08, ALE 0.11, PME 0.06, PLE 0.09, AME-AME 0.29-0.31, AME-ALE 0.18-0.19, PME-PME 0.32-0.35, PME-PLE 0.31-0.34.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	2.00-2.15	0.90-0.93	1.35-1.50	1.43-1.58	0.80-0.83
II	2.05-2.13	0.88-0.90	1.38-1.48	1.38-1.53	0.78-0.83
III	1.28-1.40	0.60-0.65	0.75-0.90	0.75-0.88	0.53-0.63
IV	1.30-1.35	0.60-0.63	0.83-1.00	0.93-0.95	0.60-0.70

Description. Carapace: laterally with yellow stripes, medially with yellow wide band covered with red-brownish spots, ocular area with white trasverse stripe. Sternum cream-coloured with red-brown dots. Maxillae, labium and chelicerae light-brown. Abdomen variegated, with white, grey, red-brownish and black spots, ventrally cream-coloured. Branchial opercula yellow. Legs variegated, cream-coloured with red-brown stripes and spots. Leg I spination: femur d. 0-0-1-1-1, p. 0-1-1-1-0, tibia p. & r. 1-1-1,

v. 2-2-2-2ap., metatarsus p. 1-1-1ap., r. 1-1, v. 2-2-2-2ap. Palp as in figs. 40-41.

Diagnosis: X.embriki is related to X.minor and X.nepalhimalaicus from which can be easily distinguished by the shape of embolus. It is probably conspecific with X.marmoratus THORELL (male unknown).

Note: East Kazakhstan Area is north-easternmost point of distribution.

Xysticus inaequalis KULCZYNSKI, 1901 Figs. 42-48

Oxyptila inaequalis: SCHENKEL, 1963: 199-203, figs. 114a-f (♀ and ♂).

Material examined: Kazakhstan: 1♀, Chimkent Area, Suzak Distr., upper flow of Kokbulak River, Karatau Canyon, 22.04.1988 (C.T.) (IBPN); Alma-Ata Area: 1♀, Ili Distr., Kapchagay Town, 27.05.1988 (A.Z.) (IBPN); 1♀, Kurty Distr., Aidarly Vill., 28.05.1986 (V.G.LINSKI) (IBPN).

Distribution: From East Kazakhstan to East China.

Xysticus cf. inaequalis KULCZYNSKI, 1901 Figs. 49-51

Material examined: 1♀, Kazakhstan, Semipalatinsk Area, Kokpekty Distr., Kokpekty Vill., 7.08.1988 (A.Z.) (IBPN).

Xysticus kaznakovi UTOTSHKIN, 1968

Material examined: Turkmenistan: 2♂, Kurkulab, 20-27.05.1977 (G.K.) (JW); 3♂, Environs of Ashkhabad, Bezengi, 04.1980 (G.K.) (ZMMU). Tajikistan, 2♂, Nuratau Mt. Range, 14.05.1976 (A.K.) (BI).

Distributio: South Middle Asia, from West Turkmenistan on the west to Tajikistan on the east.

Xysticus kempeleni THORELL, 1872

X.kempeleni: UTOTCHKIN, 1968: figs. 95-97 (♀ and ♂).  
X.kempeleni: LEVY, 1976: 25-27, figs. 45-48 (♀ and ♂).

Material examined: Turkmenistan, 1♀, SW Kopetdagh, foothills of Damdam Mt. Range, 17.05.1982 (B.P.ZAKHAROV) (BI).

Distribution: Europe, Israel (LEVY, 1976) and South-West Turkmeni-

stan.

Xysticus kochi THORELL, 1872

Material examined: Turkmenistan, 3♀, SW Kopetdagh, Syunt-Khasardagh Reserve, 1982 (N.U.) (1♀ ZMMU; 1♀ BI; 1♀ JW).

Distribution: Europe, Mediterranean, Caucasus, Syria, Israel (LEVY, 1976) and West Turkmenistan.

Xysticus lapidarius UTOTCHKIN, 1968

Material examined: Kazakhstan: 1♂, Taldy-Kurgan Area, Panfilov Distr., 65 km from Nizhni Pidzhim, Moynkum Sands, 6.10.1989 (IZA); 1♂, Dzhambul Area, Moynkumski Distr., 28 km N of Furmanovka, 20.10.1989 (A.Z.) (IZA). Tajikistan, 1♂, Tigrovaya Balka Reserve, 11.08.1968 (S.ISAKOV) (PIS).

Distribution: Middle Asia.

Xysticus loeffleri ROEWER, 1955

X. loeffleri ROEWER, 1955: 777, fig. 25, holotype ♀ (RII/11455) from Lahidschan (Lahijan) Iran, in Senckenberg Museum (SMF), examined.

Ozyptila clavidorsum ROEWER, 1959: 29, fig. 4 (♀), paratype ♀ (RII/11943) from Anatolien, Turkey, in SMF, examined. Probably syn.n.

X. afghanus ROEWER, 1961: 18, figs. 99-100 (♀), paratype ♀ (RII/13684) from Afghanistan, in SMF, examined. Syn.n.

X. cribratus [non SIMON]: UTOTCHKIN, 1968, fig. 134 (♀).

X. (Proxysticus) turanicus CHARITONOV, 1969: 119-120, figs. 11-12 (♀ and ♂) from Yakkabag, Uzbekistan, in Perm State University. Syn.n.

X. turanicus: MARUSIK, LOGUNOV, 1990: 45-46, figs. 39-41 (♀ and ♂).

Material examined: Kazakhstan: 2♀, Dzhambul Area, Moynkumski Distr., Karabughet, 29.06.1989 (A.Z.) (ZMMU); 1♀, same district, 17 km E of Khantau Vill., 12.06.1990 (A.F., A.Z.) (BI); 1♂, Alma-Ata Area, NE bank of Kaptchagay Water Reservoir, 9.09.1989 (A.Z., A.F.) (ZMMU). Uzbekistan, 4♀, Dzhizak Area, Tashkent-Samarkand Road, turn to Bakhmal Vill., 5.05.1990 (A.F., A.Z.) (BI). Turkmenistan: 1♂, 1♀, Environs of Nebit-Dagh Town, foothills of Bolshoy Balkhan Mt. Range, 8.11.1982 (V.F.) (ZMMU); 1♂, 1♀, Firuza, Kopetdagh Reserve, 19-29.10.1990 (V.V.DUBATOLOV) (BI). Tajikistan: 1♀, South slope of Karateginski Mt. Range, 5.04.1976 (Y.L.) (ZMMU); 1♀, Gandzhyno, 20.04.1966 (PIS); 1m, W Pamir, Parzut Kishlak, Shakdara River, 2300 m, 20.08.1977 (V.TURKOV) (JW); 2♀, Khozratisho Mt. Range, 15 km from Muminabad to Chil'dukhtaron,

15.06.1966 (PIS); 4j, North Slope of Zeravshan Mt. Range, Shtut River Basin, Urech River, 2500m, 4.08.1971 (A.STATSENKO) (PIS); 1♂, 4♀, Aktau Mt. Range, environs of Garavuti, 1973-1974 (A.K.) (1♂, 2♀ JW; 1♀ ZMMU); 1♀, Nuratau, 14.05.1976 (A.K.) (BI); 1♀, Ghissar Mt. Range, Karatag, 6.07.1941 (Ye.LUPPOVA) (PIS).

Distribution: Widespread in Middle Asia: from Mangyshlak at the north-west, south to Iran and Afghanistan.

Xysticus luctuosus (BLACKWALL, 1836) Figs. 28-29

Material examined: Kazakhstan, 1♀, East-Kazakhstan Area, Ulansk and Samarsk Districts, Kaindinski Forest, 26-28.08.1985 (A.B. NENILIN et al.) (IZA).

Distribution: Circumholarctic range.

Xysticus mongolicus SCHENKEL, 1963

Material examined: Kazakhstan, 1♂, Taldy-Kurgan Area, Panfilov Distr., 65 km from Nizhni Pidzhim, Moynkum Sands, 6.10.1989 (IZA).

Distribution: From Alma-Ata (MARUSIK, LOGUNOV, 1990) and Taldy Area on the west, east to China.

Xysticus minor CHARITONOV, 1946

Material examined: Kirghizia, 1♂, Talass Distr., Chichikan River, 07.1986 (A.Z.) (JW). Turkmenistan: 4♀, Kurkulab, 20-27.05.1977 (G.K.) (ZMMU). SW Kopetdagh: 1♂, Khodzahkala, 400 m, 1-18.11.1981 (N.M.YERMAKOV) (ZMMU); 1♂, Kara-Kala, 300 m, 14-23.03.1985 (T.L.) (JW); 1♂, Syunt-Khasardagh Reserve, 10-20.12.1984 (T.SORGINA) (ZMMU). 1♂, Central Kopetdagh, Kurgaudan Canyon, 19-26.03.1980 (G.K.) (ZMMU); 1♂, 1♀, Krasnovodsk Area, Chil'mamedkum Sands, 1985 (E.KHASHNIKOV) (ZMMU); 1♂, W Turkmenia, Chil'mamedkum Sands (desert), Ubyk Vill., 5.11.1984 (E.KHAGIKOV) (ZMMU); 2♂, Badkys, Kysyl-Djar, 17-18.02.1978 (KRIVOKHATSKI) (ZMMU); 1♂, Repetek, 7.03.1982 (KRIVOKHATSKI) (ZMMU); 1♂, 18♀, same locality, 31.03.-4.04.1989 (O.L.) (BI); 1♂, Environs of Ashkhabad, Bezengi, 04.1980 (G.K.) (ZMMU); ♂♂, same locality, 25.07.1979 (G.K.) (ZMMU); 1♂, same locality, 30-31.10.1990 (V.V.DUBATOLOV) (BI). Tajikistan: 4♀, Kurkulab, 20-27.05.1977 (G.K.) (JW); 2♀, Shugnanski Mt. Range, environs of Khorog, Sangou-dara, 3800-4000 m, 15.10.1970 (PIS); 1♂, 5♀, Aktau Mt. Range, environs of Garavuti, 02-06.1973 (A.K.) (BI); 1♂, 1♀, environs of Gandzhyno, Aruk-Tau Mt. Range, 29.10.1969 (T.DOMRACHOVA) (PIS); 1♂, Pamir, Sarezskoye Lake, Irkht meteorological station, 2.08.1989 (A.V.ABRAMOV) (BI).

Distribution: Widespread in Middle Asia, from South Kazakhstan south to Afghanistan [ROEWER (1961) mentioned this species as *X.acerbus*, female and male in SMF, examined), from Krasnovodsk Area on the west, east to Tajikistan.

*Xysticus ninnii* THORELL, 1872

*X.ninnii*: UTOTCHKIN, 1968: figs. 107-109.

*X.ninnii*: THALER, 1981: figs. 54-56 (♂).

Material examined: Kazakhstan: 1♂, Pavlodar Area, Yermakovsk Distr., environs of Aksu Vill., Irtysh River Valley, 26.06.1990 (O.L.) (BI); 1♂, East Kazakhstan Area, Zaisan Distr., Sarybulak River, 7.06.1990 (K.E.) (IBPN). Turkmenistan: 4♂, Central Kopetgadh, Germab, 16-22.06.1982 (G.K.) (ZMMU); 2♂, SW Kopetdagh, Syunt-Khasardagh Reserve, 05.1982 (N.U.) (ZMMU).

Distribution: Europe and Middle Asia.

*Xysticus ovtsharenkoi* MARUSIK et LOGUNOV, 1990

Material examined: Uzbekistan, 1♀, Karaulbazar, 25.08.1980 (A.B. NENILIN) (ZMMU). Turkmenistan: SW Kopetdagh: 5♂, Peredovoy Mt. Range, 1000 m, 20.06.1985 (S.T.ZABELIN) (3♂ ZMMU; 2♂ JW); mm, near Kizil-Arvat, 800 m, 20.06.1983 (V.F.) (ZMMU); 4♂, Syunt-Khasardagh Reserve, 18.06.1982 (N.U.) (BI). 1♂, W Kopetdagh, El' dere Canyon, 23.05.-3.06.1980 (V.F.) (JW); 1♂, Central Kopetdagh, Mirzadagh, 22.06.-2.07.1981 (G.K.) (ZMMU); 1♂, Central Kopetgadh, Germab, 16-22.06.1982 (G.K.) (JW); 1♂, Ashkhabad, Bekrava, 3.04.1977 (G.K.) (BI). Tajikistan: 1♀, Turkestan Mt. Range, near Kusavli-Say, 30.09.1970 (PIS); 1♂, Dushambe-Khorog Road, 10 km of Komsomolabad, 3.07.1970 (PIS); 1♂, 1♀, Ramit, 1-7.07.1967 (PIS); 1♀, Beshkentak Canyon, 26-30.05.1967 (PIS); 1♂, 1♀, Kondara, Kvak, 23.06.1967 (PIS); 1♀, Kondara, 29.07.1948 (Ye.LUPPOVA); 1♀, Takob, Mel'nichny (Mill) Say, 5.07.1966 (PIS); 1♀, Maikhura River near confluence with Kaznokh, 2400 m, 07.1967 (T.KURBANOVA) (PIS); 2♀, Pamir, Manem Kishlak 12 km from Khorog, 11.07.1976 (A.KONONENKO) (PIS); 1♀, Pyandz River Valley, Spring 1970 (E.A.) (PIS); 1♀, Khorog botanical garden, 2320 m, 23.06.1970 (L.ZHARKOVA) (PIS); 1♀, North slope of Alay Mt. Range, Sokh River Valley, 1600 m, 24.06.1970 (PIS); 2♂, Aktau Mt. Range, Gandzhyno Vill., 24.06.1969 (T.DOMRACHOVA) (PIS); 1♀, environs of Gandzhyno, Aruk-Tau Mt. Range, Barsovoye Canyon, 8.06.1969 (T.DOMRACHOVA) (PIS); 1♀, Ghissar Mt. Range, Takob Canyon, 1850m, 17.07.1969 (E.A.) (PIS).

Distribution: South Middle Asia: Turkmenistan and Tajikistan, female from Uzbekistan belongs to *X.turlan* possibly.

*Xysticus palpimirabilis* MARUSIK et CHEVRIZOV, 1990

*X.palpimirabilis* MARUSIK et CHEVRIZOV, 1990: 89-91, figs. 1-6 (♂).

Material examined: Kirghizia, holotype ♂, Terskey-Atatoo Mt. Range, Chon-Kysyl-Su River basin, 2400 m, 26.06.1966 (P.V.) (ZMMU).

Distribution: Type locality only (MARUSIK, CHEVRIZOV, 1990).

*Xysticus robustus* (HAHN, 1831)

*X.robustus*: UTOTCHKIN, 1968: figs. 130-131.

Material examined: Kazakhstan, 1♂, Pavlodar Area, Kyzyl-Tau Reserve, 30.06.1989 (O.L.) (BI).

Distribution: Europe and North-East Kazakhstan.

*Xysticus striatipes* L.KOCH, 1870

Material examined: Kazakhstan, Pavlodar Area: 2♂, environs of Pavlodar, 20.06.1988 (O.L.) (JW); 1♀, same locality, 2.05.1990 (O.L.) (JW); 1♂, 45 km N of Pavlodar, 19.09.1989 (O.L.) (JW); 1♀, Kyzyl-Tau Reserve, 15.08.1989 (O.L.) (BI); 2♂, 2♀, environs of Yaminyevskii Sovkhoz, 12.09.1989 (O.L.) (BI); 6♂, Maisky Distr., Kirovskii Sovkhoz, 10-15.08.1989 (O.L.) (BI); 1♂, Bayanaul Distr., Alka-Mergen Lake, 24.08.1990 (O.L.) (ZMMU). Kirghizia, 1♂, Tyan-Shang, Issyk-Kul' Lake hollow, Pokrovka Village, 1700 m, 24.08.1965 (P.V., ZLOBIN) (PIS).

Distribution: Transpalearctic range.

*Xysticus tristrami* (O.P.CAMBRIDGE, 1872) Figs. 52-54

Material examined: Kazakhstan: 1♂, Dzhabul Area, Moyinkum Distr., 17 km E of Khantau, Khantau Mt. foothill of Sunkar Mt., 12.06.1990 (A.F., A.Z.) (BI); 5♀, Alma-Ata Area, Yli Distr., Kapchagai Town, 18-27.05.1988 (A.Z.) (BI). Turkmenistan, 1♀, Krasnovodsk Area, Chimedkum Sands, 05.1985 (E.KHASHNIKOV) (ZMMU). Tajikistan: 1♂, Dushanbe, 06.1968 (Ya.G.RAMAZANOVA) (PIS); 1♂, Karatau Mt. Range, Ak-Kutal' Mt. Range, 23.04.1974 (K.N.) (BI); 2♀, Aktau Mt. Range, Garavuti, 14.03.-17.04.1974 (A.K.) (BI).

Distribution: From the Saudi Arabia on the West east to Tajikistan.

Xysticus turlan MARUSIK et LOGUNOV, 1990 Figs. 55-56

Material examined: Kazakhstan: 1♀, Chimbent Area, Tyul'kubas Distr., Aksu-Djabagly Reserve, 10.07.1973 (A.K.) (JW); Dzhabul Area: 13♂, Krasnogorsk Distr., 17 km NW Kenen Vill., Chu-Ili Mt. Range, 14-15.06.1990 (A.F., A.Z.) (6♂ JW; 7♂ BI); 1♂, 1♀, Moyinkum Distr., 17 km E Khantau Vill., Khantau Mt., foothills of Sunkar Mt., 12.06.1990 (A.F., A.Z.) (BI).

Measurements (mm).

Female. Carapace: 3.3-3.8 long, 3.2-3.8 wide, clypeus 0.40-0.49, MOA-WA 0.64-0.79, MOA-WP 0.69-0.86, MOA-L 0.61-0.69, chelicerae 1.06-1.33, AME 0.09-0.10, ALE 0.19, PME 0.10, PLE 0.15, AME-AME 0.44-0.60, AME-ALE 0.27-0.37, PME-PME 0.46-0.64, PME-PLE 0.53-0.64.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	3.1-2.4	1.4-1.8	2.3-2.5	2.1	0.9-1.0
II	2.7-3.4	1.5-1.9	2.1-2.4	1.9-2.1	0.9-1.0
III	2.0-2.3	1.0-1.3	1.4-1.6	1.3-1.4	0.8
IV	2.1-2.6	1.1-1.2	1.5-1.8	1.5-1.6	0.8-0.9

Description. Colouration variegated, dorsally darker (red-brown with yellow spots), ventrally lighter (yellow with red-brown spots). Carapace basally with yellow trapezoidal spot. Carapace and abdomen dorsally covered with thick near clavate spines (setae). Chelicerae and palps prolaterally with numerous spines. Leg I spination: v. 2-2-1-2-2-2-2ap; metatarsus p. 1-1-1-1-2ap, r. 1-1-1-1-2ap, v. 2-2-2-2-2-2. Epigyne as in figs. 55-56.

Diagnosis: Females of X.turlan are very similar to that of X.ovtsharenkoi from which they can be separated by the shape of epigynal scape.

Distribution: South-Central Kazakhstan. The range of this species does not overlap with that of closely related species, X.ovtsharenkoi.

Xysticus urqumchak MARUSIK et LOGUNOV, 1990

Material examined: Kazakhstan: 1♂, Taldy-Kurgan Area, Panfilovsk Distr., 31 km from Sholakai Vill., Karakim Sands (Desert), 07.10.1989 (A.Z.) (BI). Turkmenistan, 1♂, Krasnovodsk Area, Chimamedkum Sands, 10.1985 (E.KHASHNIKOV) (ZMMU).

Distribution: From West Kazakhstan and Turkmenistan northeast to East Kazakhstan Area.

Xysticus viduus KULCZYNSKI, 1898 (sensu UTOTCHKIN, 1968)

X.viduus: UTOTCHKIN, 1968: figs. 30-33 (♀ and ♂).

Material examined: Kazakhstan: 1♀, Environs of Pavlodar, Irtysh River Valley, 23.09.1990 (O.L.) (JW); 1♀, Pavlodar Distr., Zyrya Sovkhoz, 27.06.1990 (O.L.) (BI).

Xysticus xysticiformis (CAPORIACCO, 1935) Figs. 57-60

X.furcillifer SCHENKEL, 1936: 140-142, figs. 49a & b, holotype ♀ from "Sud-Kansu, Ardjuan, Min-shan", China in NRS, examined.Syn.n.

Material examined: Tajikistan, 2♂, Anzob Pass, 3500 m, 23.06.1967 (V.C.) (PIS); 12♀, Anzob, Summer 1967 (V.C.) (PIS).

Description. Male. Total length 3.9-4.3. Carapace: 1.8 long, 1.6-1.7 wide, dark brown or grey-brown, a white median band ends in the anterior part of the slope; because of the anterior brown V-shaped mark, the median band looks like a V-shaped mark; sides of thorax with numerous longitudinal yellow spots. Clypeus with 7 long macrosetae. Sternum light, with brown dots. Abdomen dirty white. Femora and patellae I and II brown, except for promarginal sides which are white. Femur I with 3 prolateral spines. Palp as in figs. 57-58. Embolus long, curved in a spiral, with exposed apical part, base of embolus with a distinct embolic spine. Tegular apophysis absent, but at basal part of tegulum there is a strong tegular projection.

Female. Measurements. Carapace: 2.20 long, 2.10 wide, MOA-WA 0.54, MOA-WP 0.56, MOA-L 0.49, clypeus 0.21, chelicerae 0.83, AME 0.08, ALE 0.14, PME 0.06, PLE 0.10, AME-AME 0.41, AME-ALE 0.21, PME-PME 0.43, PME-PLE 0.4.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.55	0.90	1.18	1.10	0.68
II	1.68	0.90	1.18	1.08	0.70
III	1.30	0.63	0.78	0.73	0.55
IV	1.40	0.55	0.70	0.80	0.65

Description. Carapace sandy-coloured with brownish stripes and two basal dark red-brown triangle spots basally. Sternum sandy-coloured with red-brownish dots. Labium red-brown, maxillae and chelicerae sandy-coloured. Abdomen uniformly grey-sandy, branchial opercula red-brown. Legs sandy-colored with red-brown dots and stripes. Epigyne as in figs. 59-60.

Diagnosis. X.xysticiformis undoubtedly belongs to the labradorensis-group of Xysticus recently revised (MARUSIK, 1989). By the shape of the tegulum, the new species is similar to the representatives of the sibiricus-subgroup in having no tegular ridge, but it is distinguished easily from all the representatives of the labradorensis-group by the strong projection of the tegulum. During copulation, this projection probably plays a role analogous to the strong basal tegular ridge of X.labradorensis KEYSERLING, X.deichmanni SOERENSEN, X.albidus GRESE and X.nenilini MARUSIK. The

thin embolus is somewhat similar to that of X.rugosus BUCKLE et REDNER, but the presence of the embolic spine and exposed apical part of the embolus indicate that X.xysticiformis belongs to the labradorensis-subgroup (for diagnosis of the subgroups, see below). - The holotype of X.furcillifer is smaller than specimens from Middle Asia, but size of epigyne are equal.

Remarks. As X.xysticiformis belongs to the labradorensis-group and is also related to X.zonshteini, we would like to remark at length about the composition and diagnosis of the labradorensis-group and its two subgroups, which were defined by MARUSIK, 1989.

Diagnosis of the labradorensis-group. The labradorensis-group contains the species in which the males have no tegular apophyses, the base of the embolus is situated in the retrolateral apical part of the bulb, the embolus is always spirally, and the palpal tibia has two apophyses of characteristic shape.

Composition: X.labradorensis KEYSERLING 1877 (Labrador and Manitoba), X.deichmanni SORENSEN 1898 (Greenland, Canadian High Arctic across to the Yukon Territory), X.albidus GRESE 1909 (hyparctic and Arctic belts of the Palaearctic), X.nenilini MARUSIK 1989 (Yakutia and South Siberia), X.bonneti DENIS 1938 (European Mountains, South Ural and SW Siberia), X.rugosus BUCKLE et REDNER 1964 (Rocky Mountains of USA and Canada, Siberia (Upper Kolyma and Tuva), X.sibiricus KULCZYNSKI 1908 (Siberia), X.potamon ONO 1978 (Nepal), X.torsivus TANG et SONG 1988 (China), X.zonshteini MARUSIK 1989 (Tien-Shang), X.daisetsuzanus ONO 1988 (Hokkaido) and X.xysticiformis CAPORIACCO, 1935 (Karakoram and Tien-Shang).

By the shape of both the embolus and tegulum, it is easy to divide the labradorensis-group into two subgroups. The labradorensis-subgroup has the apical part of embolus exposed, base of embolus turned apically (except for X.potamon), the base of embolus usually with a spine (denticle), and the tegulum usually with strong tegular ridge. The component species are: X.labradorensis, X.deichmanni, X.albidus, X.daisetsuzanus, X.nenilini, X.xysticiformis, X.torsivus and probably X.potamon.

The sibiricus-subgroup has the embolus spiralled in one plane, the tegulum without a strong, basal tegular ridge or with small apical one, embolic spine absent. The component species are: X.sibiricus, X.bonneti, X.rugosus and X.zonshteini.

Distribution: Mountains of Kirghizia, Tajikistan, South Kansu and Karakoram Mt. Range.

Xysticus zonshteini MARUSIK, 1989 Figs. 61-62

X.zonshteini MARUSIK, 1989: 141-142, figs. 2 (1-4) (♂), in ZMMU.

Material examined: Kirghizia, 1♀, Kungey-Alatau Mt. Range, Toru-Aigyr, 14.05.1970 (A.K.) (BI); 1♂, 45 km W from Sary-Tash, Alay

Valley, 2850 m, 8.10.1970 (E.A.) (PIS). Tajikistan: 3♂, North slope of Alaiski Mt. Range, Naukat Research Station, upper flow of Mazar-Say River, 2400-3200 m, 1970 (L.ZHYLTSOVA) (PIS).

Measurements (mm).

Female. Carapace: 1.83-1.93 l ong, 1.73-1.90 wide, clypeus 0.17-0.20, MOA-WA 0.41-0.44, MOA-WP 0.44-0.51, MOA -L 0.40-0.45, chelicerae 0.64, AME 0.07, ALE 0.13, PME 0.06, PLE 0.09, AM E-AME 0.28-0.30, AME-ALE 0.18-0.21, PME-PME 0.33-0.38, PME-PLE 0.36-0.41.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.30-1.53	0.73-0.83	0.98-1.05	0.85-0.93	0.48-0.58
II	1.43-1.50	0.73-0.85	0.98-1.00	0.93	0.53-0.55
III	1.05-1.15	0.50-0.55	0.63	0.55-0.58	0.46-0.48
IV	1.15-1.18	0.50-0.63	0.73-0.78	0.65-0.68	0.55

Description. Carapace red-brown with a median yellow band, sternum cream-coloured with red-brownish dots. Maxillae, labium and chelicerae red-brown to cream-coloured, abdomen cream-coloured, dorsally with two wide longitudinal orange bands, ventrally with red-brown dots. Leg I spination: femur d.0-1-1-0 or 0-0-0-0, p.0-1-1-0, tibia v.2-2-2, metatarsus p.0-1-2ap., v.2-2. Epigyne as in figs. 61-62.

Diagnosis. Females can be easily distinguished from all other representatives of the labradorensis-group and sibiricus-subgroup by the shape of the epigynal fovea and receptacles.

Xysticus lindbergi ROEWER, 1961 Figs. 63-64

Material examined: Paratype 1 ♀, RII/13686, no.675 from Afghanistan, in SMF.

Total length 8.0. Carapace: 4.1 long, 3.9 wide, red-brown. Abdomen grey. Sternum yellow with red-brown spots. Legs red-brown with white spots and stripes. Chelicerae and clypeus with numerous macrosetae. Femur I with 3 prolateral spines, tibia I with 8 pairs of ventral spines, metatarsus - with 7. Epigyne as in figs. 63-64.

Diagnosis: X.lindbergi can be easily distinguished from all other Xysticus females from Middle Asia by the oval shape of the fovea and the shape of receptacles. This species is very similar to X.sabulosus (sensu TULLGRENN, 1944, and ROBERTS, 1985).

Distribution: Known from type locality only.

Xysticus soederbomi SCHENKEL, 1936 Figs. 65-67

Material examined: Paratype 1♀, No 415 from "S.W.Mongol.", in NRS.



Total length 9.5. Carapace: 3.7 long, 3.4 wide. Entire body discoloured by alcohol and uniformly yellow. Chelicerae with numerous macrosetae. Femur I with 3 prolateral spines, tibia with 4 pairs and metatarsus with 6 pairs of ventral spines. Epigyne as in figs. 65-67.

Diagnosis: Related to X.turkmenicus sp.n., from which it can be distinguished by the greater size of the fovea, smaller distance between fovea, and longer seminal ducts.

Distribution: Known from type locality only. The record of PAKHURKOV & UTOTCHKIN (1977) (p. 92, fig.4 (f)) of X.soederbomi from the North Ural was based on a different species.

Because of possibility to check many faunistic records given by FET (with co-authors) from Turkmenistan, and by ANDREEVA from Tajikistan, we were able to correct some determinations and to compile a new check list of Middle Asian thomisids, which was based on MIKHAILOV's unpublished catalogue.

Checklist of Thomisidae from Middle Asia and Kazakhstan: Diaea suspiciosa, Heriaeus buffonopsis, H.capillatus, H.charitonovi, H.fedotovi, H.horridus, H.oblongus?, H.spinipalpus, Misumena vatia?, Misumenops armata, M.tricuspidatus, M.turanica, Monaeses israeliensis, Ozyptila atomaria, O.conostyla, O.lugubris, O.praticola, O.pseudoblitea, O.rauda, O.scabricula, O.tricoloripes, Pistius undulatus, Runcinia lateralis, R.tarabayevi, Stiphropus strandi, Synema globosum, S.ornatum?, S.plorator, S.tadzhikistanicum, S.utotchkini sp.n., Thomisus onustus, T.zyuzini, Tmarus horvathi, Xysticus acerbus, X.altaicus?, X.abramovi sp.n., X.audax, X.bakanas, X.baltistanus, X.bifasciatus, X.caspicus, X.concinnus, X.cristatus, X.dzungaricus, Xembriki, X.ephippiatus, X.inaequalis, X.kaznakovi, X.kempeleni, X.kochi, X.kuzgi, X.lapidarius, X.lineatus, X.loeffleri, X.luctuosus, X.minor, X.mongolicus, X.ninni, X.ovadan sp.n., X.ovtsharenkoi, X.palpimirabilis, X.pseudoluctuosus sp.n., X.pygmaeus, X.robustus, X.striatipes, X.taukumkurt, X.tristrami, X.turkmenicus sp.n., X.turlan, X.tyshchenkoi sp.n., X.ulkan sp.n., X.ulmi, X.urgumchak, X.viduus, X.xysticiformis, X.zonshteini, X. cf. inaequalis, X. cf. obesus.

North Kazakhstan is quite different zoogeographically from south part and from all other Asian republics. For this reason in the text given below we used abbreviations "K", meaning North Kazakhstan mainly, and "MA", meaning Middle Asia except for North Kazakhstan.

#### Misidentified species:

Coriarachne depressa MA - X.zonshteini,  
Diaea dorsata - D.suspiciosa,  
Heriaeus hirsutus (= H.hirtus or H.oblongus) - misidentification,  
H.hirtus MA - misidentification, H.hirtus distributed in Mediterranean east to Yugoslavia, (LOERBROKS., 1983),  
H.mellotei K - H.oblongus, distribution of H.mellotei Far East only,  
H.oblongus K, MA - MA?, FET's (1983) not H.oblongus,  
Misumena vatia K, MA - MA? (D.suspiciosa or R.tarabayevi),  
Misumenops tricuspidatus K, MA - MA? (D.suspiciosa or R.tarabayevi),  
Monaeses caudicola MA? - M.israilensis,  
M.paradoxus MA - M.israilensis,  
Ozyptila blackwalli MA - ???,  
O.brevipes MA - ???,  
O.horticola MA - O.atomaria,  
O.sanctuararia - O.conostyla,  
Pistius truncatus K - P.undulatus,  
Synaema plorator K, MA - K and MA (except SW Turkmenistan) S.utotchkini sp.n.,  
Thomisus albus - T.onustus and T.zyuzini,  
Tmarus piger K - T.piger or T.rimosus (latter was recorded from Kurgan Area by LOGUNOV, 1990),  
X.altaicus K - ?,  
X.caperatus MA - X.ovadan sp.n.,  
X.cribratus MA - X.loeffleri,  
X.croceus FOX K? - X.obscurus COLLET,  
X.graecus K? (SPASSKY, SHNITNIKOV, 1937),  
X.lalandei - X.loeffleri,  
Xysticus luctuosus - K, but different species in Tajikistan,  
X.nataliae K - misidentification,  
Xysticus obesus - X.sp. (species mentioned by CHARITONOV, 1969, fig. 10, ANDREEVA, 1976, and in MARUSIK, LOGUNOV, 1990 belongs to the different species, holotype female of X.obesus in NRS (or Helsinki?), examined,  
X.rectilineus MA, - X.loeffleri,  
X.robustus K, MA, - in K (in MA X.loeffleri),  
X.sabulosus K, MA - X.tyshchenkoi sp.n.

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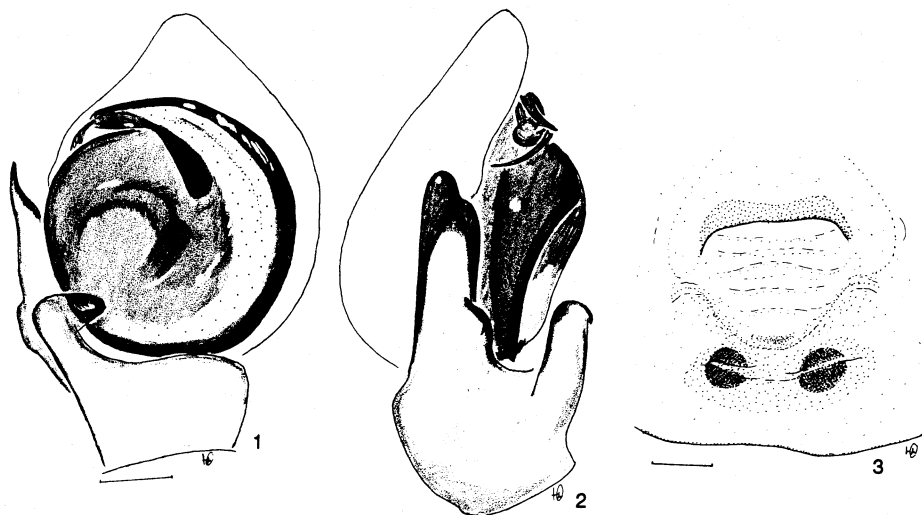
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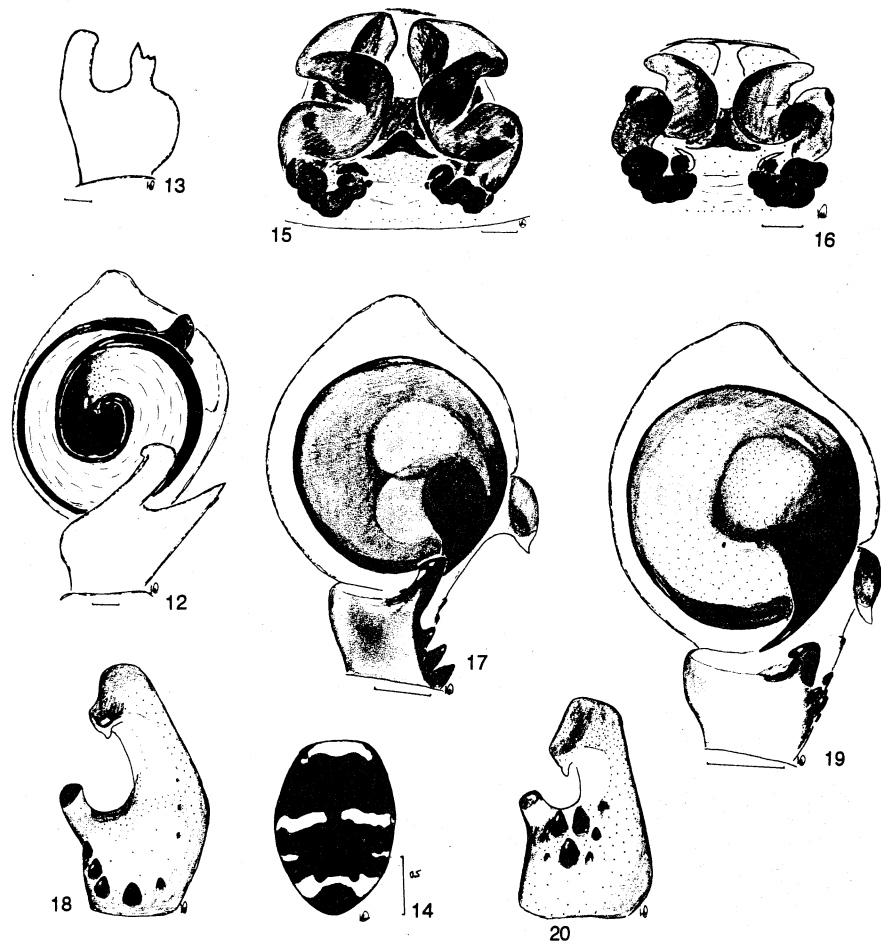
Figs. 1-3. Heriaeus horridus TYSHCHENKO; 1) ♂-palp, ventral view, 2) ♂-palp, retrolateral view, 3) ♀, epigyne, ventral view.



Figs. 4-7. Oxyptila conostyla HIPPA et al. (specimen from Georgia, Caucasus); 4) ♂-palp, ventral view, 5) ♂-palp, retrolateral view, 6) tegular apophysis, prolateral view, 7) tip of embolus, ventral view.

Fig. 8. Oxyptila tricoloripes STRAND, epigyne, ventral view.

Figs. 9-11. Stiphropus strandi SPASSKY (specimens from Turkmenistan); 9) ♂-palp, ventral view, 10) ♂-palp, retrolateral view, 11) ♀, epigyne, ventral view.

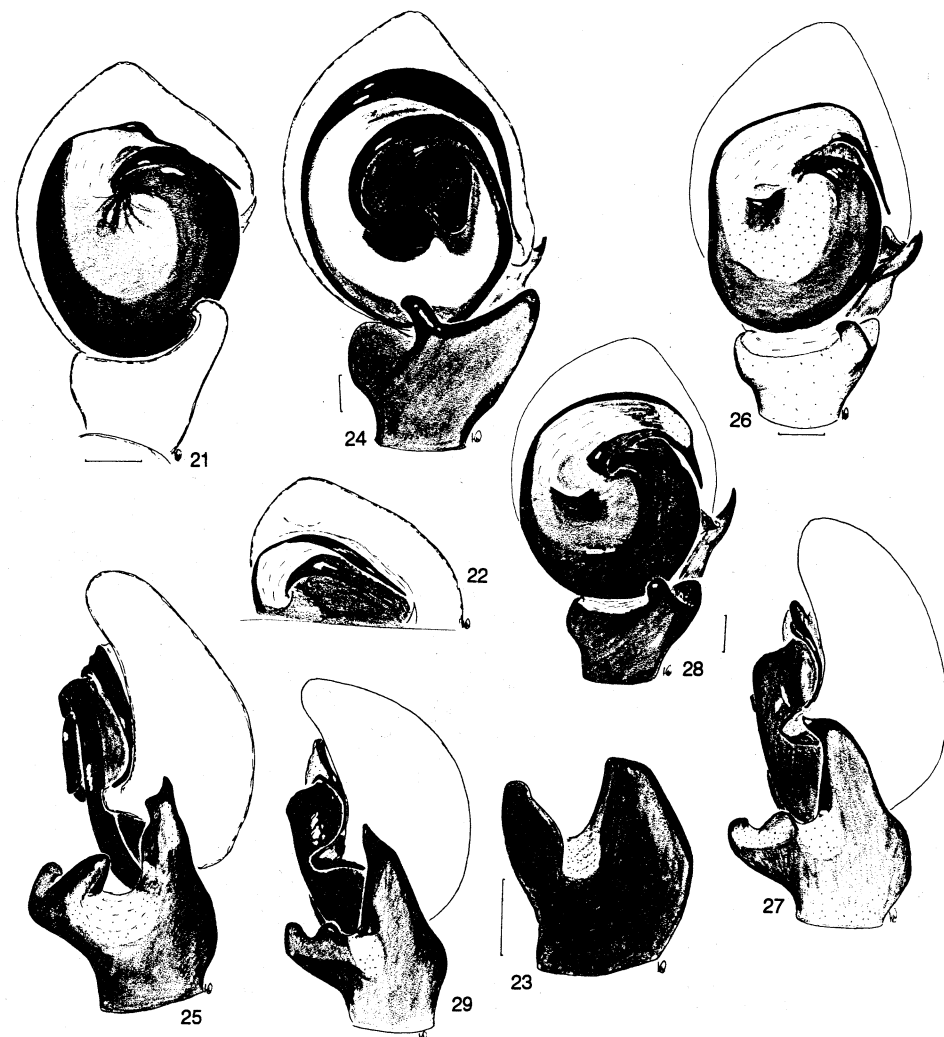


Figs. 12-15. *Synema utotchkini* sp.n.; 12) ♂-palp, ventral view, 13) tibial apophyses, 14) ♂-abdomen, dorsal view, 15) ♀, epigyne, dorsal view.

Fig. 16. *Synema plorator* O.P.-CAMBRIDGE; 16) ♀, epigyne, dorsal view.

Figs. 17-18. *Thomisus onustus* WALCKENAER; 17) ♂-palp, ventral view, 18) palp tibia, retrolateral view.

Figs. 19-20. *Thomisus zyzuzini* MARUSIK et LOGUNOV; 19) ♂-palp, ventral view, 20) palp tibia, retrolateral view.

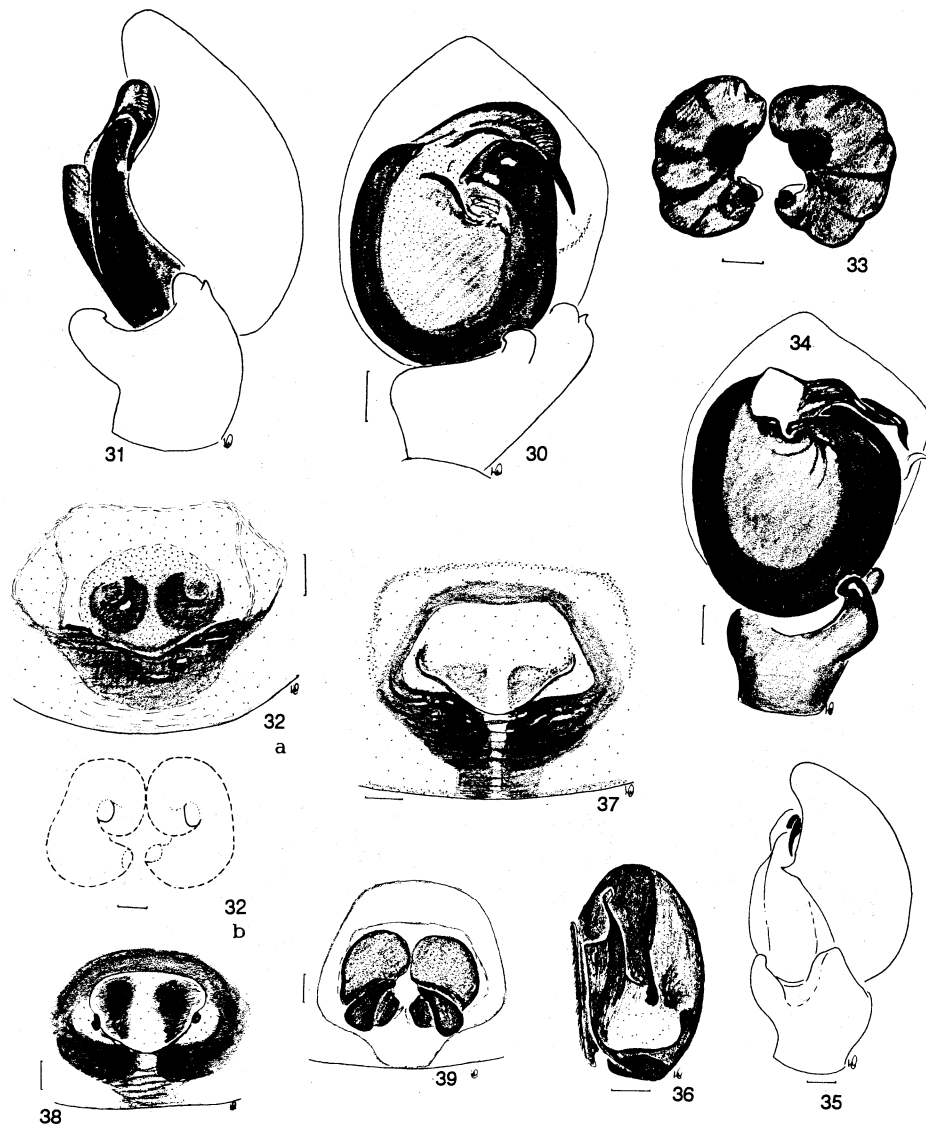


Figs. 21-23. *Xysticus abramovi* sp. n.; 21) ♂-palp, ventral view, 22) apical part of ♂-palp, 23) palp tibia, retrolateral view.

Figs. 24-25. *Xysticus ovadan* sp. n.; 24) ♂-palp, ventral view, 25) ♂-palp, retrolateral view.

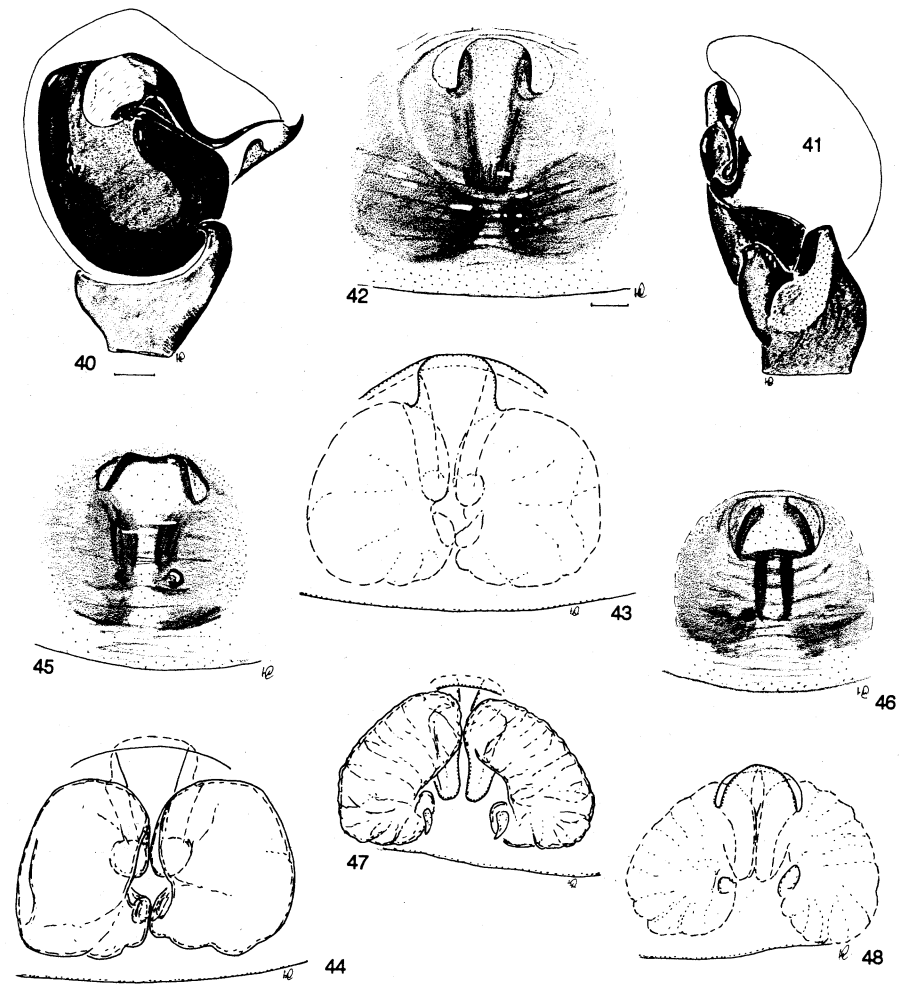
Figs. 26-27. *Xysticus pseudoluctuosus* sp.n.; 26) ♂-palp, ventral view, 27) ♂-palp, retrolateral view.

Figs. 28-29. *Xysticus luctuosus* (BLACKWALL) (specimen from Tuva); 28) ♂-palp, ventral view, 29) ♂-palp, retrolateral view.



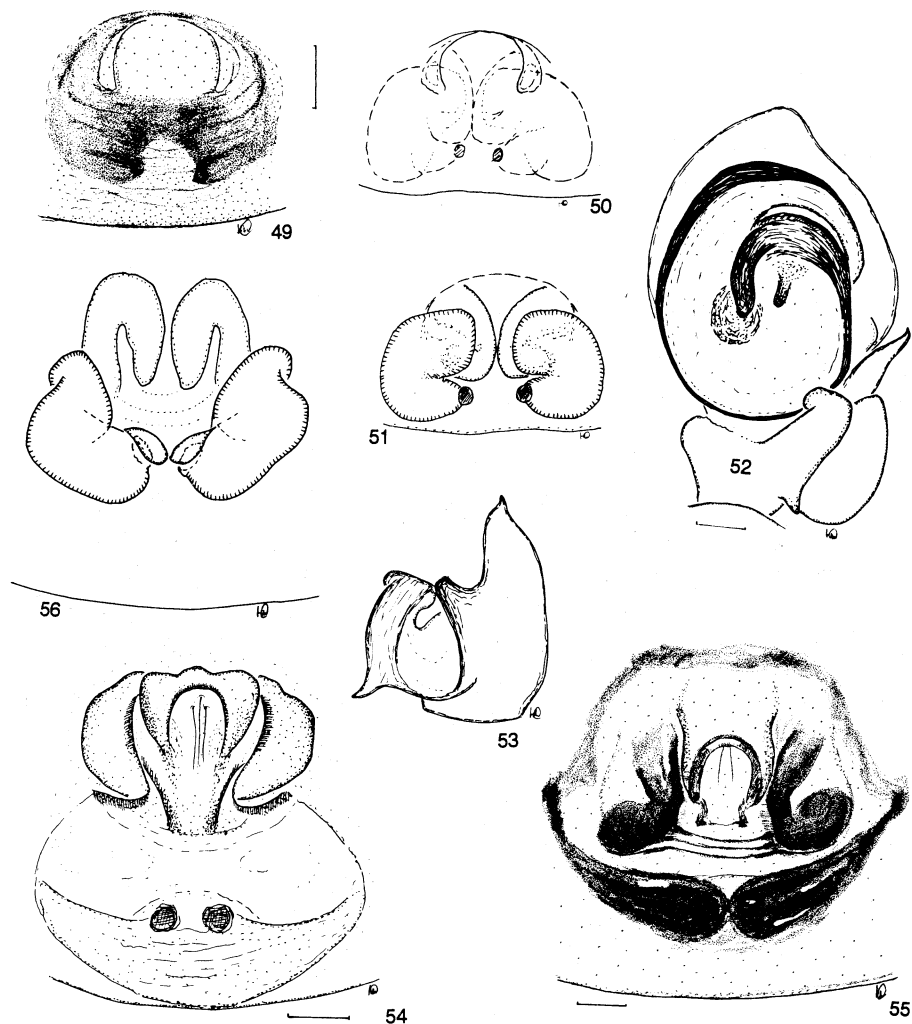
Figs. 30-33. *Xysticus turkmenicus* sp.n.; 30) ♂-palp, ventral view, 31) ♂-palp, retrolateral view, 32a) ♀, epigyne, ventral view, 32b) epigyne after maceration, ventral view, 33) epigyne, dorsal view.

Figs. 34-39. *Xysticus tyshchenkoi* sp.n.; 34) ♂-palp, ventral view, 35) ♂-palp, retrolateral view, 36) embolus from above, 37) ♀, epigyne, ventral view, 38) epigyne, ventral view, 39) epigyne, dorsal view.



Figs. 40-41. *Xysticus embriki* KOLOSVARY; 40) ♂-palp, ventral view, 41) ♂-palp, retrolateral view.

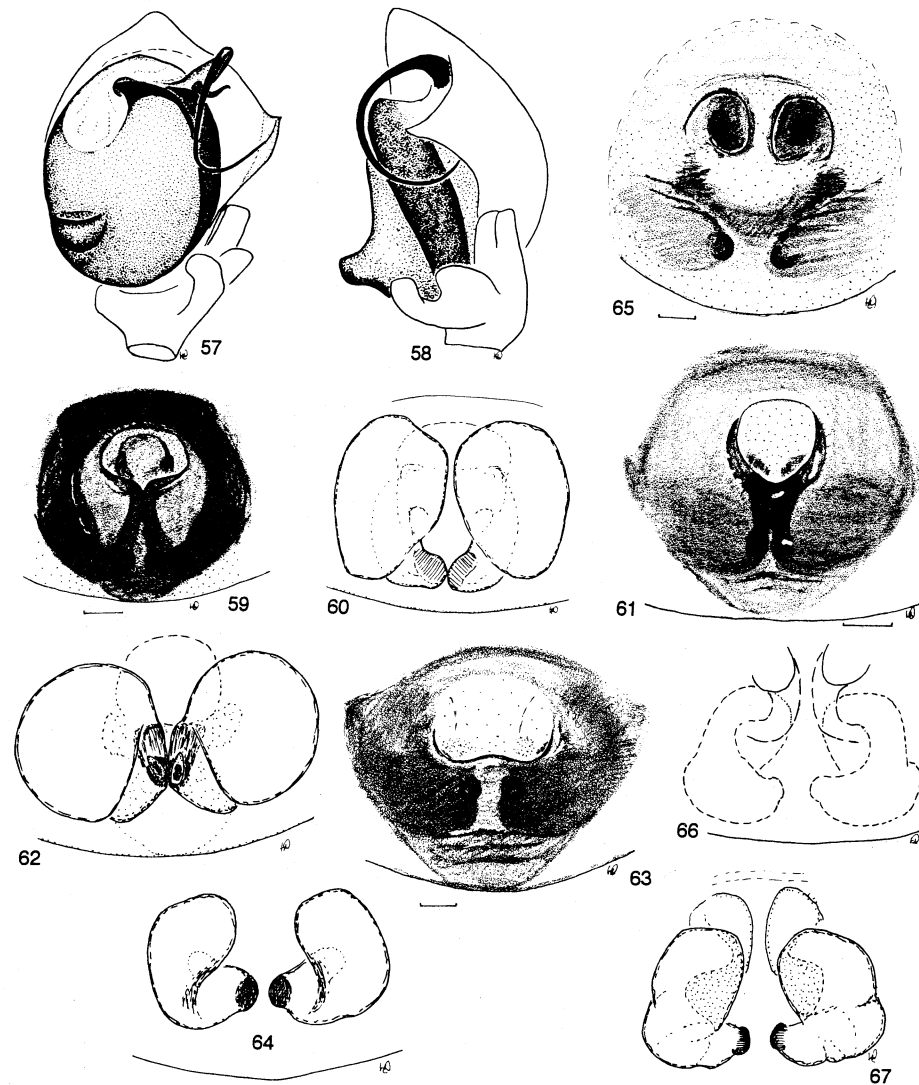
Figs. 42-48. *Xysticus inaequalis* KULCZYNSKI; 42) ♀, epigyne, ventral view (Chimkent Area), 43) epigyne after maceration, ventral view (Chimkent Area), 44) epigyne, dorsal view (Chimkent Area), 45) epigyne, ventral view (Alma-Ata Area, Kurty Distr.), 46) epigyne, ventral view (Alma-Ata Area, Ili Distr.), 47) epigyne after maceration, ventral view (Alma-Ata Area, Ili Distr.), 48) epigyne, dorsal view (Alma-Ata Area, Ili Distr.).



Figs. 49-51. *Xysticus* cf. *inaequalis* KULCZYNSKI; 49) ♀, epigyne, ventral view, 50) epigyne after maceration, ventral view, 51) epigyne, dorsal view.

Figs. 52-54. *Xysticus tristrami* (O.P.-CAMBRIDGE); 52) ♂-palp, ventral view, 53) palpal tibia, retrolateral view, 54) ♀, epigyne, ventral view.

Figs. 55-56. *Xysticus turlan* MARUSIK et LOGUNOV; 55) ♀, epigyne, ventral view, 56) epigyne, dorsal view.



Figs. 57-60. *Xysticus xysticiformis* (CAPORIACCO); 57) ♂-palp, ventral view, 58) ♂-palp, retrolateral view, 59) ♀, epigyne, ventral view, 60) epigyne, dorsal view.

Figs. 61-62. *Xysticus zonshteini* MARUSIK, ♀; 61) epigyne, ventral view, 62) epigyne, dorsal view.

Figs. 63-64. *Xysticus lindbergi* ROEWER, ♀; 63) epigyne, ventral view, 64) epigyne, dorsal view.

Figs. 65-67. *Xysticus söderbomi* SCHENKEL, ♀; 65) epigyne, ventral view, 66) epigyne after maceration, ventral view, 67) epigyne, dorsal view.

GNAPHOSID SPIDERS FROM TUVA AND ADJACENT TERRITORIES, RUSSIA

(Aranei: Gnaphosidae)

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Abstract: The Gnaphosid spider fauna (Aranei: Gnaphosidae) from Tuva and adjacent territories (Russia) are studied and compared with the faunas of NE-Siberia, China and Mongolia. New described taxa are: Berlandina schenkeli, Berlandina absunurica, Drassodes longispinus, Echemus sibiricus, Gnaphosa tuvinica and Tuvadras-sus. New synonyms and combinations: Drassodes tegulatus SCHENKEL, 1963 = Tuvadras-sus tegulatus comb.n., Gnaphosa charitonovi SCHENKEL, 1963 & G. mandschurica SCHENKEL, 1963 = G. glandifera SCHENKEL, 1963 (both probably syn.n.), Gnaphosa holmi SCHENKEL, 1963 = G. glandifera SCHENKEL, 1963, syn.n..

Gnaphosid faunas of Tuva and adjoining areas till last time were very poorly studied if compared with those of NE Siberia, China, Mongolia. No species were recorded from Tuva. During two years of arachno-entomological expeditions undertaken by the Zoological Museum of Biological Institute, Novosibirsk, 46 species were found in Tuva and not less than 51 in the whole SW Siberia around Tuva. Five of them and one genus are new to science and 11 to fauna of Russia, and one genus (Echemus) is new to Siberia. Numerous Micaria species were not included in the paper as whole material was sent for revision to Kirill G. MIKHAILOV (Moscow), and S.DANILOV (Ulan-Ude).

Abbreviations used in paper are: AME, ALE, PME, PLE refer respectively to anterior median, anterior lateral, posterior median, and posterior lateral eyes; MOQ - median ocular quadrangle; d, p, r, v refer respectively to dorsal, prolateral, retrolateral and ventral spines; ALT - Gorno Altai Region; Tuva: ER - Erzin Distr., KZ - Kyzyl Distr., MT - Mongun-Taiga Distr., OV - Ovyurski Distr., PK - Piy-Khemski Distr., TA - Tandinski Distr., TD - Todzha Distr., TK - Tes-Khem Distr., UK - Ulug-Khem Distr.; Khakassia: AS - Asskiz Distr., AT - Altay Distr., BG - Bograd Distr., SH - Shira Distr., UZ - Uzhur Distr.; Krasnoyarsk Prov.: KYR - Yermakovskoye Distr.

All measurements are given in mm, scale = 0.1 mm, if not otherwise indicated.

All materials have been shared beetwing the collections of the Zoological Museum of the Biological Institute (BI), Novosibirsk, Institute for Biological Problems of the North (IBPN), Magadan, American Museum of Natural History (AMNH), New-York and private collection of JÖRG WUNDERLICH (JW), Straubenhardt.

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The following lists summarize new facts given in this paper.

#### New taxa described:

Berlandina schenkeli sp.n  
Berlandina ubsunurica sp.n.  
Drassodes longispinus sp.n  
Echemus sibiricus sp.n.  
Gnaphosa tuvunica sp.n.  
Tuvadassus gen.n.  
Tuvadassus tegulatus gen.n sp.n.

#### Unknown males described:

Gnaphosa gracilior KULCZYNSKI  
Gnaphosa proxima KULCZYNSKI  
Tuvadassus tegulatus (SCHENKEL)

#### New synonyms and combinations:

Drassodes tegulatus SCHENKEL, 1963 = Tuvadassus tegulatus comb.n.  
Gnaphosa charitonovi SCHENKEL, 1963 & G. mandschurica SCHENKEL, 1963 = G. glandifera SCHENKEL, 1963, both probably syn.n.,  
Gnaphosa holmi SCHENKEL, 1963 = G. glandifera SCHENKEL, 1963, syn.n.

#### Species new for the USSR:

Berlandina potanini SCHENKEL,  
Drassodes lesserti SCHENKEL,  
Drassodes kaszabi LOKSA,  
Drassodes pseudolesserti LOKSA,  
Drassodes serratidens SCHENKEL,  
Gnaphosa denisi SCHENKEL,  
Gnaphosa glanndifera SCHENKEL,  
Gnaphosa gracilior KULCZYNSKI,  
Tuvadassus tegulatus (SCHENKEL),  
Zelotes barkol PLATNICK et SONG,  
Zelotes yutian PLATNICK et SONG.

#### TAXONOMIC SURVEY OF THE SPECIES

Berlandina potanini SCHENKEL, 1963 Figs. 1-3

Material examined: Tuva: KZ: 1Q, 5-7 km W of Kyzyl, Yenisei



River Valley, 700 m, 4-7.06.1989 (D.L.); 2♀, environs of Kyzyl, 700 m, 7.05.1990 (D.L.). OV: 1♀, north bank of Ubsu-Nur, 750 m, 12.06.1989 (D.L.).

**Measurements.** Total length: 6.5-7.5. Carapace: 2.5-2.9 long, 1.8-2.1 wide. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.11, PLE 0.08, all eyes closely separated, only PMA-PMA is about one diameter, MOQ 0.39-0.43 length, 0.43-0.49 front width, 0.51-0.56 back width.

**Description.** Carapace light yellow-greyish with grey stripes. Sternum, coxae and venter of abdomen yellow. All leg segments uniformly grey, except for metatarsi which are redbrown-greyish. Legs spination: leg I: femur dl-1, p0-0-1, tibia vl-1-lap., metatarsus v2-2-2ap., leg II: femur dl-1, p0-0-1, tibia p0-0-1-l, vl-1-2ap., metatarsus v2-1-2. Legs III and IV with numerous spines on tibia and metatarsus. Epigyne as in Figs. 1-3. Male unknown.

**Diagnosis and comments.** *B. potanini* can be easily separated from all other representatives of the genus by the shape of epigynal fovea (Figs. 1-3). Female from Ovyur District was collected together with male, which is very small and has different leg spination (see description of *B. ubsunurica* sp.n.).

**Distribution.** South Siberian range, early was known from North China SCHENKEL 1(936 (as *B. plumalis* (O.P.-CAMBRIDGE); 1963), Mongolia (personal information). Tuva is the first record in the USSR and northwesternmost point of distribution.

*Berlandina schenkeli* sp.n. Figs. 4-7

**Material examined:** Tuva: ER: 1♀, environs of Erzin Vill., 1000 m, Tes-Khem River Valley, 24.05.1990 (D.L.). MT: 1♀, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 18.05.1990 (D.L.); 8♂, same locality, 10-25.05.1989 (Ye.I.KHLEBOSOLOV). PK: 2♂, 3♀, 10 km SE of Sesarlig Vill., 1100-1200 m, 2.05.1990 (D.L.).

**Measurements** (male/female). Total length: 4.9-6.3/7.0-8.0. Carapace 2.3-2.8/3.0-3.3 long, 1.7-2.0/2.3-2.4 wide. Eye sizes and interdistances: AME 0.07/0.09, ALE 0.10/0.12, PME 0.09/0.11, PLE 0.09/0.10, all eyes closely separated, MOQ 0.34-0.37/0.41-0.46 length, 0.37-0.41/0.46-0.47 front width, 0.44-0.51/0.53-0.60 back width.

**Description.** Male. Carapace yellow-brown with 2 longitudinal red-brown stripes. Sternum red-brownish. Coxae yellow. Abdomen dark-grey with 2 longitudinal red-brown stripes, ventrally yellow. Legs yellow-grey with yellow tarsi. Legs spination: leg I: femur dl-1-0, p0-0-1, tibia vl-1-2, metatarsus v2-2-2ap.; leg II: femur dl-1-0, p0-0-1, tibia vl-1-2ap., metatarsus v2-1-2ap. or 2-0-2ap.; legs III and IV with numerous spines on patellae, tibiae and metatarsi. Palp as in Figs. 4-5.

Female. Colouration same as in male. Legs spination: leg I: femur dl-1, p0-0-1, tibia vl-2-2ap., metatarsus vl-2-1-2-2ap.; leg II femur dl-1, p0-0-1, tibia p0-1, vl-1-2ap., metatarsus v2-2-1-2ap. or 2-2-2ap.; legs III and IV with numerous spines as in male. Epigyne as in Figs. 6-7.

**Diagnosis.** This new species can be easily distinguished from all other *Berlandina* species by the very long tibial and median apophyses, shape of embolic division and epigyne.

**Distribution.** Tuva only.

*Berlandina ubsunurica* sp. nov. Figs. 8-10

**Material examined:** Tuva: OV: holotype ♂, north bank of Ubsu-Nur, 750m, 12.06.1989 (D.L.).

**Measurements.** Total length: 4.3. Carapace: 1.85 long, 1.48 wide. Eye sizes and interdistances: AME 0.06, ALE 0.09, PME 0.07, PLE 0.10, all eyes closely separated, PME-PME is about one their diameter, all other interdistances less, MOQ 0.31 length, 0.34 front width, 0.36 back width.

**Description.** Carapace yellow-grey, with dark-grey stripes. Abdomen dark-grey dorsally. Coxae, sternum and venter of abdomen yellow. Leg uniform dark grey with yellow tarsi. Leg spination: leg I: femur dl-1, p0-0-1, tibia p0-0-1, v2-1-2ap., metatarsus v2-2ap.; leg II: femur dl-1, tibia p0-0-1, vl-1-2ap., metatarsus v2-0-2ap.; leg III: femur dl-1-2, tibia dl-0, p & r 1-1, v2-2-2ap., metatarsus d2-3-2, v2-1-2ap.; leg IV: femur d0-1-2, tibia dl-1, p & r 1-1-1, v2-2-2, metatarsus d2-2, p & r lap, v2-2-2. Palp as in Figs. 8-10. Female unknown.

**Diagnosis and comments.** New species is related to *B. charitonovi* PONOMARJOV, 1979, from which it can be easily distinguished by the shape of embolus and tibial apophysis. A single male was taken from the same collecting sample as one female of *B. potanini*. As male is much smaller, has different colouration and spination we suppose that the two sexes belong to different species.

**Distribution.** Type locality only.

*Callilepis nocturna* (LINNAEUS, 1758)

**Material examined:** Khakassia: BG: 2♀, 5-6 km E of Bol'shaya Yerba Vill., 21.06.1990 (D.L.). SH: 1♀, 3-5km S of Shira Vill., Itkul' Lake, 22.07.1990 (D.L., S.C.); 18♀, 5 km SE of Shiira Vill., Shira Lake, 21.06.1990 (D.L., V.M.). Tuva: ER: 1♂, 2♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 28.05.1990 (O.L.); 2♂, same locality, Yamaalyg Mt. Range, 1200-1300 m, 9-10.06.1989

(D.L.); 5♂, 3♀, environs of Erzin Vill., 1000 m, Erzin River Valley, 23-26.05.1990 (D.L.); 1♂, Tere-Khol' Lake, Eder-Elezin Sands (Desert), 1150-1200 m, 26.05.1989 (D.L.); 1♀, 30-35 km NE of Erzin Vill., Upper flow of Ular-Khem River, 1300-1400 m, 11.06.1989 (D.L.); 2♂, 20 km NW of Erzin Vill., Tes-Khem River Valley, 800-900 m, 31.05.1989 (D.L.). KZ: 1♀, environs of Kyzyl, 700-900 m, 3.07.1989 (D.L.). MT: 1♂, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 20.05.1990 (D.L.); 1♀, 30-35 km SW of Mugur-Aksy Vill., down flow of Kargy River, Semigorki, 1700 m, 15.06.1989 (D.L.); 1♀, 55 km SW of Mugur-Aksy, Eski-Tolayty Lake, 2100-2200 m, 14-15.06.1989 (D.L.). PK: 1♀, 5-7 km NW of Sesarlig Vill., 1000-1400 m, 24-25.07.1989 (D.L.); 1♂, 4-5 km NW of Cherbi Vill., 850-1000 m, 1.07.1990 (D.L.). TA: 1♂, 20♀, environs of Chagytay Lake, 1000-1200 m, 26.06.-2.07.1989 (D.L.). TK: 6♀, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.); 3♀, 8 km NE of Khol'-Oozhu Vill., 1-2 km Ayskanny-Khem River, near Alak Mt., 1300-1800 m, 14.07.1989 (D.L.); 1♂, Upper flow of Nariyn-Gol River, 900 m, 10.06.1989 (D.L.); 1♂, environs of Khol'-Oozhu, 1200 m, 8.07.1989 (D.L.); 2♂, 50 km W of Erzin Vill., Shara-Nur Lake, 800-900 m, 3.06.1989 (V.Z.). KYR: 1♀, 14 km SW of Tanzybey Vill., Filin Spring, 400-500 m, 13.07.1990 (D.L.).

Distribution. Transpalearctic range, from West Europe to NE Siberia.

Drassodes lapidosus (WALCKENAER, 1802)

Material examined: Khakassia: SH: 2♀, 1 km of Kommunar Vill., 1300-1400 m, 23.07.1990 (D.L.). Tuva: MT: 1♂, 8-9 km NE of Mugur-Aksy, upper flow of Kuge-Dabaa, 2500-2700 m, 19.05.1990 (D.L.). PK: 4♂, 10♀, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). TK: 1♂, 14♀, 15-20 km NW of Khol'-Oozhu Vill., Kangay-Kyry Mt., 2000-2100 m, 8-9.07.1989 (D.L.). KYR: 1♂, 32♀, West Sayany, Oiski Mt. Range, 8-10 km S of Oiskoye Lake, Oisky Pass, 1800 m, 27.06-10.07.1990 (D.L.); 2♀, 25-30 km N of Aradan Vill., 9.07.1990 (D.L.).

Distribution. Transpalearctic range (OVTSHARENKO, MARUSIK, 1988), from West Europe to NE Siberia.

Drassodes lesserti SCHENKEL, 1936 Figs. 13-18

Material examined: Tuva: ER: 4♂, 3-5 km E of Erzin Vill., 1000-1200 m, 23-25.05.1990 (D.L.); 1♂, 8♀, 20-30 km W of Erzin Vill., Yamaalyg and Onchalaan Mt. Ranges, 1200-1300 m, 9-12.06.1989 (D.L.); 3♂, Onchalaan Mt. Range, 1200-1300 m, 27.05-1.06.1990; 1♂, 3♀, 30-35 km NE of Erzin Vill., Upper flow of Ular-Khem River, 1300-1400 m, 11.06.1989 (D.L.); 1♀, 20 km NW of Erzin Vill., Tes-Khem River Valley, 800-900 m, 131.05.1989 (D.L.). KZ: 7♂, 16♀, environs of Kyzyl, 700-900 m, 20.05.-20.07.1989 (D.L.); 5♂,

2♀, same locality, 1.05-1.07.1990 (D.L.). MT: 3♂, 4♀, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 16.05-5.06.1990 (D.L., O.L.). OV: 1♀, north bank of Ubsu-Nur, 750 m, 12.06.1989 (D.L.). PK: 2♂, 10 km SE of Sesarlig Vill., 1100-1200m, 2.05.1990 (D.L.). TA: 21, environs of Chagytay Lake, 1000-1200m, 26.06.-2.07.1989 (D.L.); UK: 1♂, 5km E of Shagonar Town, Khayirkan Mt., 10.05.1990 (D.L.).

Comments. This species was described twice by SCHEKEL in 1936 (p.254-255, fig. 83) and in 1963 (p.31, fig.12) under same name. Both female holotypes belong to one species. Redescription of the female and description of the male was published by LOKSA (1965). According to our materials males described as D. lesserti by LOKSA belong to a different species (D. neglectus?). Males found together with D. lesserti females in Tuva can be distinguished from sympatric species by the characteristic shape of both embolus and tibial apophysis. Males of D. lesserti has palpal spines shorter than in D. longispinus sp.n. but longer than in D. serratidens. Females of this species can be easily separated from other Drassodes species by the shape of epigynal fovea and septum.

Distribution. North China (SCHENKEL, 1936, 1963), Mongolia (LOKSA, 1965) and Tuva (first record in the USSR).

Drassodes kaszabi LOKSA, 1965 Figs. 11-12

Material examined: Tuva: MT: 1♀, 45-50 km W of Mugur-Aksy Vill., upper flow of Kargy River, Kholchugdug Natural limit, 2200-2300 m, 20.05.1990 (O.L.).

Comments. Description of this species was based on a one female (LOKSA, 1965). A single female with the same epigyne was found in Tuva. Females of D. kaszabi can be easily distinguished from other Drassodes species by the great epigynal fovea and small septum. According to drawings of D. licenti SCHENKEL, 1953, described from East Mongolia this species is closely related to D. kaszabi or belongs to the same species. But as SCHEKEL's types described in 1953 were lost, we were unable to compare the two species.

Distribution. Earlier this species was known from Mongolia (LOKSA, 1965) only, Tuva is a first record in USSR.

Drassodes serratidens SCHENKEL, 1963 Figs. 19-25

Material examined: Tuva: ER: 1♂, 1♀, environs of Erzin Vill., 1000-1100 m, Tes-Khem River Valley, 24.05-15.08.1989 (D.L.). PK: 2♂, 1♀, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). TD: 1♂, 1♀, Azass Reserve, environs of Azass Lake, 19-23.06.1989 (D.L.); 3♂, same reserve, environs of Chagytay Lake, 1200 m, 28-29.06.1989 (D.L.).

Comments. Firstly we determined females of this species as D. ndamicus SCHENKEL, 1963. But after the males were recognized as D. serratidens we have found that the female of latter species described by SCHENKEL, belongs to a different species. Both males and females found in Tuva has very characteristic abdominal pattern (see fig. 14 in SCHENKEL, 1963) unusual for Drassodes. So D. ndamicus is a synonym of D. serratidens. As no holotype was selected by SCHENKEL for the latter species it would be possible to designate the female as lectotype. In this case names for both species will be valid. We leave this procedure for the first reviser of Asian Drassodes or SCHEKEL's materials. Males of D. pseudolesserti described by LOKSA (1965) from Ulan-Bator, Mongolia are similar to that of D. serratidens and may belong to the same species, while females are quite different. Males of D. serratidens are easily distinguishable by the shape of median and tibial apophyses, embolus and short tibial spines. Females can be easily separated from other species by the shape of epigynal fovea, margins of the fovea and septum.

Distribution. Early was known from China (SCHENKEL, 1963) only, first record in the USSR.

Drassodes neglectus (KEYSERLING, 1887)

Material examined: ALT: 1♀, environs of Kosh-Agach Vill., 13.06.1972 (A.P.KONONENKO). Khakassia: AS: 4♀, 8 km E Birikchul' Vill., 16-18.07.1990 (D.L.); 5♀, 25-27 km NE of Askiz Vill., 19.07.1990 (D.L.). SH: 35♀, 3-5km S of Shira Vill., Itkul' Lake, 22.07.1990 (D.L., S.C.); 5♂, 12♀, 5 km SE of Shiira Vill., Shira Lake, 21.06.1990 (D.L., V.M.). Tuva: ER: 1♂, 3♀, 20 km NW of Erzin Vill., Tes-Khem River Valley, 800-900 m, 13-15.08.1989 (D.L.); 1♀, environs of Erzin Vill., 1000 m, Tes-Khem River Valley, 15.08.1989 (D.L.). KZ: 1♀, 25 km E of Kyzyl Town, Kaa-Khem River Valley, 700 m, 30.06.1990 (D.L.) MT: 2♀, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 14-15.06.1989 (D.L.). PK: 1♂, 1♀, 5-7 km NW of Sesarlig Vill., 1000-1400 m, 29.06.1990 (D.L.). TA: 1♂, 3♀, environs of Chagytay Lake, 1000-1200 m, 26.06.-2.07.1989 (D.L.). TK: 1♂, 5♀, 10-12 kmNW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.); 5♀, 8 km NE of Khol'-Oozhu Vill., 1-2 km Arysanny-Khem River, near Alak Mt., 1300-1800 m, 14.07.1989 (D.L.).

Distribution. Siberian-American range (OVTSHARENKO, MARUSIK, 1988), Tuva is westernmost point of distribution.

Drassodes pseudolesserti LOKSA, 1965 ?

Material examined: Khakassia: BG: 2♀, 5-6 km E of Bol'shaya Yerba Vill., 21.06.1990 (D.L.). UZ: 5♀, 20 km N of Kopylovo Vill., Uchyum Lake, 24.07.1990 (D.L.). Tuva: UK: 1♂, 1♀, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.).

Distribution: Early this species was known from Ulan Bator, Mongolia, only (LOKSA, 1965). Tuva and Khakassia are northwesternmost points of its distribution.

Drassodes longispinus sp.n. Figs. 26-33

Material examined: Tuva: KZ: Holotype ♂, environs of Kyzyl, 700-900 m, 17.20.05.1990 (D.L.); paratypes: ♂m, 15♀, environs of Kyzyl, 700-900 m, 20.05-3.07.1989 (D.L.); 1♀, same locality, 17.05-1.07.1990 (D.L.); 1♀, 65 km W of Kyzyl, Otuk-Dash Natural limit, 10.05.1990 (D.L.). PK: 1♀, 5-7 km NW of Sesarlig Vill., 1000-1400 m, 24-25.07.1989 (D.L.). TD: 1♀, Azass Reserve, environs of Azass Lake, 21-22.06.1989 (D.L.). UK: 1♂, 1♀, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.); 1♂, 1♀, 5 km E of Shagonar Town, Khayirkan Mt., 10.05.1990 (D.L.).

Description: Total length 9.6-13.0/9.0-14.7. Carapace: 4.0-6.0/4.4-6.25 long, 2.9-4.2/2.85-4.4 wide. Colouration common for Drassodes. Abdomen with indistinct heart-line. Palp with relatively short embolus and long seminal duct (Figs. 26-30), epigyne with small fovea and short margins (Figs. 32-33). Male chelicera as in Fig. 31.

Diagnosis and comments. The new species has unique for Drassodes long and curved into some loops seminal duct of the male bulb. This character, as well as long tibial spines on the male palp, shape of embolus, tibial apophysis, and structure of female epigyne and vulva are diagnostic for D. longispinus sp.n.. Females of this species are very similar to that of D. pseudolesserti, and can be separated by greater size of the body and epigyne and by rounded base of the scape.

Distribution: Tuva only.

Drassodes villosus (THORELL, 1856)

Material examined: Tuva: ER: 1♀, 30-35 km NE of Erzin Vill., upper flow of Ular-Khem River, 1300-1400 m, 11.06.1989 (D.L.); 1♂, 20-25 km W of Erzin Vill., Onchaalan Mt. Range, 1300-1400 m, 27.05.1989 (D.L.). PK: 2♀, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). TD: 1♀, Azass Reserve, environs of Azass Lake, 21-22.06.1989 (D.L.); 1♀, environs of Toora-Khem, 18-23.06.1989 (D.L.).

Distribution. Transpalearctic range (OVTSHARENKO, 1982).

Echemus sibiricus sp. n. Figs. 34-36

Material examined: Holotype ♂, Tuva, MT: 3-4 km SE of Mugur-Aksy Vill., 1800-1850 m, 16-20.05.1990 (D.L.).

Description. Male. Total length 3.0. Carapace: 3.0 long, 2.15 wide. Eye sizes and interdistances: AME 0.16, ALE 0.14, PME 0.13, PLE 0.14, AME-AME 0.08, AME-ALE overlapping, PME-PME 0.10, PME-PLE 0.09, ALE-PLE 0.07, MOG length 0.40, MOQ frontal width 0.37, MOQ back width 0.36. Carapace orange-brown. Abdomen yellow-grey with short red-brown scutum and 3 pairs of muscle dots and with dense cluster of long curved erect setae at the anterior end. Sternum orange, as in Drassodes with many small angles. Legs light-brown, tarsi I-IV lighter than other segments. Tarsi IV, palpal patella and apical part of femur pale. Cymbium and palpal tibial brown. Leg spination: femur I pl, II-III p2, patella III-IV pl and rl., tibia III and IV d7, p3, r2, v2-2-2, metatarsus III p4, r4 and pv3, metatarsus IV p5, r5, v.2-2-2?. Palp (Figs. 34-36) with long tibial apophysis, large median apophysis and curved large embolus.

Diagnosis and comments. E. sibiricus sp.n. can be easily separated from European E. angustifrons (WESTRING) by long the tibial apophysis and the large median apophysis. We had no possibility to compare our specimen with the type species of the genus: E. angustifrons and we placed new species into Echemus according to the diagnosis given in GRIMM (1985) and TY-SHCENKO (1971). Structure of the male genitalia are given poor in the drawings of GRIMM (1985) and TULLGREN (1946). And it is difficult to compare the shape of median apophysis and embolus. So we are not sure about placement of new species in correct the genus.

Note. SIMON (1895) described from SW Siberia two Gnaphosa species: G. potanini and G. mongolica. We examined only one of them, G. potanini (Fig. 37) (which is deposited in Museum National d'histoire Naturelle, Paris). So, one the species listed below can belongs to G. mongolica, holotype of which we were unable to re-examined. G. mongolica were recorded from Mongolia (LOKSA, 1965, no drawings) and East-Kazakhstan Area (SAVEL'YEVA, 1972, figs. 1-2). Types of G. mongolica were not reexamined by both authors. Drawings in the paper of SAVEL'YEVA are similar to G. punctata.

Gnaphosa borea KULCZYNSKI, 1908

Material examined: Tuva: PK: 1♀, 5-7 km NW of Sesarlig Vill., 1000-1100 m, 24-25.07.1989 (D.L.). TK: 1♂, 15-20 km NW of Khol'-Oozhu Vill., Kangay-Kyry Mt., 2000-2100 m, 8-9.07.1989 (D.L.).

Distribution. Siberian-american range (OVTSHARENKO, MARUSIK, 1988), Tuva is south-westernmost point of distribution.

Gnaphosa denisi SCHENKEL, 1963 Figs. 81-82

Material examined: Khakassia: AS: 5♀, 8 km E Birikhchul' Vill., 16-18.07.1990 (D.L.). Tuva: ER: 23m, 13♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 27.05-12.08.1989 (D.L.); 7♂, 10♀, same locality, Yamaalyg Mt. Range, 1200-1300 m, 9-10.06.1989 (D.L.). KZ: 1♂, 65 km W of Kyzyl, Otuk-Dash Natural limit, 10.05.1990 (D.L.). PK: 1♀, environs of Ust'-Uyuk Vill., 800-900 m, 21.05.1898 (D.L.). TD: 1♀, Azass Reserve, environs of Azass Lake, 21-22.06.1989 (D.L.). UK: 2♂, 3♀, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.); 8♂, 3♀, 5 km E of Shagonar Town, Khayirkan Mt., 10.05.1990 (D.L.).

Comments. Recently (SONG, 1987) G. acuaria SCHENKEL, 1963 and G. aeditua were synonymized with G. denisi. According to drawings of G. licenti SCHENKEL, 1953 this species belongs to the same species as G. denisi probably. As SCHENKEL's types of 1953 were lost we can not compare types of both species.

Distribution. Earlier the species was known from China only (SONG, 1987). Within Soviet Union this species was also found in East-Kazakhstan Area (Saur Mt. Range).

Gnaphosa glandifera SCHENKEL, 1963 Figs. 38-39

G. glandifera SCHENKEL, 1963: 72-73, fig. 39, holotype ♀ from China, in MNHN, examined.  
G. holmi SCHENKEL, 1963: 73-75, fig. 40 (♀), paratype ♀ from China, in MNHN, examined. Syn.n.  
G. charitonovi SCHENKEL, 1963: 75-76, fig. 41, holotype from China, in MNHN, not examined. Probably syn.n.  
G. mandschurica SCHENKEL, 1963: 71-72, fig. 38, holotype from Mongolia or China, in MNHN, not examined. Probably syn.n.

Material examined: Khakassia: AS: 1♀, 8 km E of Birikhchul' Vill., 18.07.1990 (D.L.). SH: 1♀, 3-5 km S of Shira Vill., Itkul' Lake, 22.07.1990 (D.L., S.C.); 4♀, 5 km SE of Shiira Vill., Shira Lake, 21.06.1990 (D.L., V.M.). UZ: 4♀, 20 km N of Kopylovo Vill., Uchyum Lake, 24.07.1990 (D.L.). Tuva: PK: 1♀, 5-7 km NW of Sesarlig Vill., 1000-1400 m, 29.06.1990 (D.L.). TK: 3♀, 10-12 kmNW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.).

Comments. Types of G. glandifera and G. holmi with no doubts belong to one species. According to SCHENKEL's (1963) and SONG's (1987) drawings of G. charitonovi and G. mandschurica both species are conspecific with G. glandifera. We selected G. glandifera as a senior synonym of G. holmi because the latter species is a homonym of G. holmi TULLGREN (male = G. orites, female = G. microps), and types of two other species were not reexamined by us.

Gnaphosa gracilior KULCZYNSKI, 1901 Figs. 40-46

Material examined: Khakassia: SH: 1♀, 5 km SE of Shiira Vill., Shira Lake, 21.06.1990 (D.L., V.M.) TA: 1♀, 5 km SW of Khovu-Aksy, Elegend River Valley, 4-6.05.1990 (D.L.). Tuva: ER: 4♀, 20 km NW of Erzin Vill., Dus-Khol' Lake, 800-900 m, 31.05-13.08.1989 (D.L.); 4♂, 11f, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 27.05-12.08.1989 (D.L.); 1♂, 4♀, environs of Erzin Vill., 1000 m, 23-26.05.1990 (D.L.); 1♀, Tere-Khol' Lake, Eder-Elezin Sands (Desert), 1150-1200 m, 9.08.1989 (D.L.). KZ: 4♀, environs of Kyzyl, 700-900 m, 5.06-22.07.1989 (D.L.); 1♂, 5♀, same locality, 1.05-1.07.1990 (D.L.). MT: 7♂, 33♀, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 16.05.-11.06.1990 (D.L., O.L.); 1♀, 30-35 km SW of Mugur-Aksy Vill., down flow of Kargy River, Semigorki, 1700m, 15.06.1989 (D.L.); 9♀, 45-50 km W of Mugur-Aksy Vill., Cholchugdug-Khovu Natural limit, 2200-2300 m, 17. 05. 1990 (D.L.); 1♀, Barlyk River Valley, confluence with Onachy River, 6. 06.1 990 (O.L.). PK: 1♀, 5-7 km NW of Seserlig Vill., 1000-1400 m, 2. 05. 1989 (D.L.). TK: 5♀, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.); 2♂, 50 km W of Erzin Vill., Shara-Nur Lake, 3.06.1989 (V.Z.). UK: 6♀, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.).

Comments. Description of this species was based on one female collected in Urga (Ulan-Bator now). Within gnaphosids collected in Mongolia and Tuva we found many species similar to G.gracilior and G. proxima. When male of both species were found (male of G. proxima was recently found near type locality Verkhojansk, NE Yakutia) it was possible to separate females. G. gracilior vary in size of genitalia greatly (see figs. 44-46 and scales). Especially big males and females were found near Kyzyl. Males of the two species can be easily separated by the shape and position of the basal embolic ridge, and also by the shape of median and tibial apophyses. Females can be separated only by structure of the vulva. Epigynal glands are in G. proxima thinner, longer and directed to scape, while in G. gracilior they are shorter and thicker and directed dorsally.

Distribution. Mongolia and Tuva. Tuva is northernmost point of distribution, and first record in the USSR.

Gnaphosa inconspicua SIMON 1878 Figs.63-64

Material examined: Tuva: ER, 2♀, 3-5km S of Erzin Vill., Tes-Khem River Valley, valley forest, ≈1100m, 14.08.1989 (D.L.); 1♀, same locality, 1000-1100m, 24.05.1990 (O.L.).

Distribution: Palearctic.

Gnaphosa leporina (L.KOCH, 1866)

Material examined: Tuva: TK: 1♂, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.); 3♂, 15-20 km NW of Khol'-Oozhu Vill., Kangay-Kyry Mt., 2000-2100 m, 8-9.07.1989 (D.L.). KYR: 1♀, 25-30 km N of Aradan Vill., 9.07.1990 (D.L.)

Distribution. European-Middle-Siberian range, from West Europe east to Lena River.

Gnaphosa muscorum (L.KOCH, 1866) Figs. 51-52, 55-56

Material examined: Tuva: KZ: 2♀, 65 km W of Kyzyl, Otuk-Dash Natural limit, 10.05.1990 (D.L.). MT: 1♂, 45-50 km SW of Mugur-Aksy Vill., Khara-Kharagay River, 2200-2300 m, 14.06.1989 (D.L.). PK: 1♂, 4♀, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). TA: 2♂, 3♀, environs of Chagytay Lake, 1000-1200 m, 26.06.-2.07.1989 (D.L.). TD: 1♂, 1♀, environs of Toora-Khem, 18-23.06.1989 (D.L.). TK: 17♂, 1♀, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.). UK: 1♂, 5 km E of Shagonar Town, Khayirkan Mt., 10.05.1990 (D.L.)

Distribution. Circumholarctic range.

Gnaphosa nigerrima L.KOCH, 1878

Material examined: Tuva: OV: 4♀, Ubsu-Nur Lake, 12.06.1989 (D.L.).

Distribution. Transpalearctic range (OVTSHARENKO, MARUSIK, 1988), Tuva is southernmost point in Siberia.

Gnaphosa proxima KULCZYNSKI, 1908 Figs. 47-50

Material examined: Tuva: ER: 1♂, 1♀, 3-5 km E of Erzin Vill., 1100-1200 m, 23-25.05.1990 (D.L.). MT: 1♀, 3 km E of Mugur-Aksy Vill., 1800-1850 m, 14.06.1989 (D.L.). OV: 1♀, 15 km E of Khandagayty Vill., Ulatay River Valley, 1000-1100 m, 12.06.1989 (D.L.). TK: 1♀, ≈3 km E of Ak-Erik Vill., Tes-Khem River Valley, 29.05.1990 (O.L.). UK: 1♂, 5-7 km E of Shagonar Town, Khaykran Mt., 10.05.1990 (D.L.).

Comments. This species is closely related to G. gracilior. We did not find differences in external shape of epigyne but only in size (it is smaller) and position of epigynal glands. Males of G. proxima which are described for the first time can be separated by the smaller size of carapace and palp, as well as by smaller tibial apophysis, and shape of embolic ridge.

Distribution. Siberian range (OVTSHARENKO, MARUSIK, 1988), Tuva is the southwesternmost point of distribution.

Gnaphosa punctata KULCZYNSKI, 1901

Material examined: Tuva: ER: 2♂, 3♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 30.05.-2.06.1989 (D.L.); 1♀, same locality, Yamaalyg Mt. Range, 1200-1300 m, 9-10.06.1989 (D.L.). KZ: 7♂, 5♀, environs of Kyzyl, 700-900 m, 20.05.-22.07.1989 (D.L.); 1♂, 4♀, same locality, 17.05-1.07.1990 (D.L.); 3♂, 65 km W of Kyzyl, Otuk-Dash Natural limit, 10.05.1990 (D.L.). MT: 1♀, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 18.05.1990 (D.L.); 1♀, 55 km SW of Mugur-Aksy, Eski-Tolayty Lake, 2100-2200 m, 14-15.06.1989 (D.L.). OV: 1♀, 15 km E of Khan-dagayty Vill., Ulatay River Valley, 1000-1100 m, 12.06.1989 (D.L.); 1♂, 1♀, north bank of Ubsu-Nur, 750 m, 12.06.1989 (D.L.). TK: 1♂, 1♀, environs of Khol'-Oozhu Vill., 1200 m, 8.07.1989 (D.L.); 1♀, 50 km W of Erzin Vill., Shara-Nur Lake, 800-900 m, 3.06.1989 (V.Z.). UK: 1♂, 1♀, 5 km E of Shagonar Town, Khayirkan Mt., 10.05.1990 (D.L.); 1♀, 10-15 km SW of Shagonar Town, Chaaty River, 8.05.1990 (D.L.)

Comments. G. punctata was synonymized with European G. spinosa KULCZYNSKI, 1897 by LOKSA (1965). Both species were known by females only. Recently, WEISS and MARCU (1988) described the male of G. spinosa. Males collected in Tuva and in Mongolia together with females of G. punctata are quite different from that of G. spinosa. G. punctata were described several times by SCHENKEL from China under different names: G. auriceps SCHENKEL, 1953 (♂ and ♀), G. chaffanjonii SCHENKEL, 1963 (♂), G. corifera SCHENKEL, 1963 (♀). So, all 3 species should be synonymized with G. punctata. We leave this procedure to the first revisor of SCHENKEL's gnaphosids or Asian Gnaphosa.

Distribution. This species is very common in all collections from Mongolia, and Tuva, early was recorded from Mongolia (KULCZYNSKI, 1901; LOKSA, 1965) and China (SCHENKEL, 1953, 1963) and Kalmykia, USSR (PONOMARYOV, 1981).

Gnaphosa sticta KULCZYNSKI, 1908

Material examined: Tuva: TK: 1♀, 15-20 km NW of Khol'-Oozhu Vill., Kangay-Kyry Mt., 2000-2100 m, 8-9.07.1989 (D.L.).

Distribution. Transpalearctic range (OVTSHARENKO, MARUSIK, 1988), Tuva is the southernmost point in Siberia.

Gnaphosa tuvinica sp.n. Figs. 57-60

Material examined: Tuva: MT: Holotype ♂, 4-5 km SE of Mugur-Aksy Vill., 2000-2500 m, 7.06.1990 (O.L.); 1♂, 3-4 km SE of Mugur-Aksy, mountain steppe, ≈1900 m, 18.05.1990 (D.L.); 5♀, ≈5 km E of Mugur-Aksy Vill., upper flow of Kuge-Davaa River, 2000 m, 18.05.1990 (D.L.).

Description. Total length (male/female) 9.7-10.5/10.4-13.6. Carapace: 5.0-5.3/4.3-5.4 long, 3.8-4.0/3.3-4.0 wide. Colouration as in G. muscorum. Abdomen in male dark-grey, and grey in female. Femur I in male with p2, tibia I v2-2-2, in female tibia Iv0-1-2. ♂-palp (figs. 57-58) with long embolus and median apophysis, high tegulum, short tibial apophysis. Embolus with small ridge in basal third. Epigyne (figs. 59-60) with relatively long scape, short fovea margins and glands.

Diagnosis. The new species belongs to the G. lugubris-group (sensu PLATNICK, SHADAB, 1975). Within south Siberian species of Gnaphosa G. tuvinica sp.n. is similar to G. muscorum, from which it can be distinguished by the more apical position of embolus, absence of erectile basal spur, higher position of tegulum, and by the shape of epigyne. The new species is not similar to any species described by SCHENKEL from China.

Distribution. The species known from Mongun-Taiga District only. As G. tuvinica sp.n. it is high mountain species and is probably endemic of Tuva.

Gnaphosa wiehleii SCHENKEL, 1963 Figs. 69-70

Material examined: Tuva: ER: ≈20km W of Erzin, Onchalan Mt. Range, 1100-1800m, 4.06.1990 (D.L.).

Comments: This species is similar to muscorum from which it can be separated by the shape of the scape and smaller size.

Gnaphosa sp. 1 Figs. 61-62

Material examined: Khakassia: SH: 19♀, ≈1 km S of Kommunar Vill., lichen-stony mountain tundra, 1300-1400 m, 23.07.1990 (D.L.). KYR: 6♀, Sayany, Oisky Pass, 8-10 km S od Oiskoye Lake, 1700-1800 m, 27.06.-10.07.1990 (D.L.).

Comments. This probably new species is similar to G. petrobia L.KOCH (see figs. 58-59 in GRIMM, 1985), which is known from Europe only. It is differ from european species by the shape of epigynal fovea margins, wider opening, and by the structure of the vulva.

Gnaphosa sp. 2 Figs. 65-66

Material examined: Tuva: UK: 1♀, ≈8 km S of Torgalyg Vill., gravelly bank of the Torgalyg River, 900-950 m, 8-9.05.1990 (D.L.).

Comments. This species is similar to G.davidi SCHENKEL, 1963, described from China and belongs to same species probably.

Gnaphosa sp. 3 Figs. 67-68

Material examined: Tuva: MT: 2♀, Barlyk River Valley near confluence with Onchalan River, 6.06.1990 (O.L.).

Comments. Gnaphosa sp. 3 is similar to G.orites CHAMBERLIN, G.opaca HERMAN and G.lapponum (L.KOCH) but can be separated from all of them by the shape of epigynal fovea, scape, openings and structure of vulva.

Haplodrassus hiemalis EMERTON, 1909 Figs. 71-75

Material examined: Khakassia: AS: 3♀, 8 km E Birikchul' Vill., 16-18.07.1990 (D.L.).

Comments. H.hiemaleis is very similar to H.moderatus.

Diagnosis of both species see below (moderatus).

Distribution. Siberian-american range (OVTSHARENKO, MARUSIK, 1988), Khakassia is southwesternmost point of distribution.

Haplodrassus moderatus (KULCZYNSKI, 1897) Figs. 76-80

Material examined: Tuva: PK: 3♀, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). TD: 3♀, Azass Reserve, 19-23.06.1989 (D.L.).

Comments. H.moderatus is closely related to H.hiemaleis. Females can be easily distinguished by the shape of epigynal fovea margins. Males of two species are very similar. They can be distinguished by the shape of embolus and terminal apophyses. H.moderatus has greater terminal apophysis, pointed embolus and small embolic dent.

Distribution. Transpalearctic range, from Europe east to NE Siberia (environs of Magadan).

Haplodrassus pugnans (SIMON, 1885)

Material examined: Khakassia: SH: 2♀, 3-5km S of Shira Vill., Itkul' Lake, 22.07.1990 (D.L., S.C.). Tuva: ER: 3♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 27-30.05.1989 (D.L.); 2♀, 30-35 km NE of Erzin Vill., Upper flow of Ular-Khem River, 1300-1400 m, 11.06.1989 (D.L.). KZ: 1♀, 5-7 km W of Kyzyl Town, Yenisey River Valley, 700 m, 4-7.06.1989 (D.L.). MT: 2♂, 11♀, 5-8 km SEE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 16-20.05.1990 (D.L.); 1♀, same locality, 14.06.1989 (D.L.); 5 ♀, Barlyk River Valley, confluence with Onachy River, 6.06.1990 (O.L.); 1♀, 45-50 km W of Mugur-Aksy Vill., Cholchug-dug-Khovu Natural limit, 2200-2300 m, 17.05.1990 (D.L.); 1♀, 3-5 km N of Kyzyl-Khaya Vill., bank of Mogen-Buren River, 15.06.1989 (D.L.). PK: 1♀, 5-7 km NW of Sesarlig Vill., 1000-1400m, 2.05.1990 (D.L.). TK: 1♀, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.); 2♀, 8 km NE of Khol'-Oozhu Vill., 1-2 km Arys-kanny-Khem River, near Alak Mt., 1300-1800 m, 14.07.1989 (D.L.).

Distribution. Widespread siberian species (OVTSHARENKO, MARUSIK, 1988), early was known from Central Siberia, Magadan Area, Japan and China. Tuva is the northwesternmost point of its distribution.

Haplodrassus signifer (C.L.KOCH, 1879)

Material examined: Tuva: PK: 1♂, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). TK: 2♂, 9♀, 15-20 km NW of Khol'-Oozhu Vill., Kangay-Kyry Mt., 2000-2100 m, 8-9.07.1989 (D.L.).

Distribution. Circumholarctic range (OVTSHARENKO, MARUSIK, 1988).

Haplodrassus soerenseni (STRAND, 1900)

Material examined: Tuva: PK: 1♀, 5-7 km NW of Sesarlig Vill., 1000-1100 m, 24-25.07.1989 (D.L.); 1♀, West Sayany, Kurtushinski Mt. Range, 10 km NW of Shivilig Vill., 1100-1200 m, 6-8.07.1990 (D.L.). KYR: 1♀, West Sayany, Oiski Mt. Range, 8-10 km S of Oiskoye Lake, Oisky Pass, 1400 m, 27-28.06.1990 (D.L.).

Distribution. Transpalearctic range (OVTSHARENKO, MARUSIK, 1988), from Europe east to Magadan Area.

Phaeoecedus braccatus (L.KOCH, 1866)

Material examined: Khakassia: AS: 3♀, 8 km E Birikchul' Vill.,

16-18.07.1990 (D.L.); 3♀, 25-27 km NE of Askiz Vill., 19.07.1990 (D.L.). Tuva: ER: 8♀, 20 km NW of Erzin Vill., Dus-Khol' Lake, 800-900 m, 13-15.08.1989 (D.L.); 3♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 11-12.08.1989 (D.L.). KZ: 1♀, 5-7 km W of Kyzyl, Yenisei River Valley, 700 m, 4-7.06.1989 (D.L.). PK: 1♀, 5-7 km NW of Sesserlig Vill., 1000-1400 m, 24-25.07.1989 (D.L.). TK: 1♀, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.); 2♂, 2♀, 8 km NE of Khol'-Oozhu Vill., 1-2 km Aryskanny-Khem River, near Alak Mt., 1300-1800 m, 14.07.1989 (D.L.); 1♂, environs of Khol'-Oozhu, 1200 m, 8.07.1989 (D.L.).

Distribution. European-Middle Siberian species.

Tuvadrassus gen.n.

Type species: Drassodes tegulatus SCHENKEL, 1963.

Diagnosis. The new genus belongs to Drassodinae and is related to Haplodrassus and Drassodes. From both genera Tuvadrassus gen.n. can be separated by the eye spacing (AME approximated on less than diameter), and by the shape of genitalia. Embolic division of Tuvadrassus gen.n. with terminal apophysis as all Haplodrassus species, but it is strongly reduced, and smaller than embolus. Embolus unlike as in Haplodrassus long and thin, but wider than in Drassodes. Seminal duct as in Haplodrassus. Transparent unsclerotized conductor situated in retrolateral apical part of tegulum (in Drassodes it is apical-prolateral, and absent in Haplodrassus). Palpal tibia longer than in Haplodrassus and shorter than in majority of Drassodes species. It is similar to that in Parasyrisca. Palpal tibial apophysis longer than in Haplodrassus and pointed apically. It is longer than in Drassodes also, and has no denticles. As palpal tibia, tibial apophyses is somewhat similar to that in Parasyrisca. Epigyne similar to that in Haplodrassus, but anterior ridge (pocket) curved (only few species Haplodrassus species have ridge, but it is straight) and has real pocket (see Figs. 86-87) which is absent in Haplodrassus. Lateral margins of epigynal fovea are nearly parallel and constricted apically in Tuvadrassus gen. n., while in Haplodrassus they are curved and often diverging apically. So Tuvadrassus gen.n. combines characters of Drassodes (presence of conductor, long palpal tibia) and Haplodrassus (presence of terminal and median apophyses, similar shape of seminal duct, distinct lateral and anterior margins of epigynal fovea, etc).

Tuvadrassus tegulatus (SCHENKEL, 1963) comb.n. Figs. 83-87

Drassodes tegulatus SCHENKEL, 1963: 40-41, fig. 18 (♀), from Kansu, in MNHN, not examined.

Material examined: Tuva: ER: 1♀, Tere-Khol' Lake, Eder-Elesin

Sands, 1150-1200 m, 26.05.1989 (D.L.). MT: 1♀, 45-50 km W of Mugur-Aksy Vill., upper flow of Kargy River, Kholchugdug Natural limit, 2200-2300 m, 20.05.1990 (O.L.); 4-5 km SE of Mugur-Aksy Vill., 1750-1800 m, desert like steppe, 18.05.1990 (D.L.).

Measurements (male/female). Total length 6.2/8.5-9.0. Carapace: 3.3/3.7 long, 2.5/2.75 wide. Eye sizes and interdistances: AME 0.14/0.16, ALE 0.14/0.14, PME 0.11/0.13, AME-AME 0.13/0.13, AME-PME 0.17/0.19, AME-ALE 0.03/0.03, ALE-PLE 0.14/0.13, PME-PME 0.06/0.06, PME-PLE 0.16/0.24, MOQ length 0.43/0.49, MOQ frontal width 0.36/0.44, MOQ back width 0.43/0.44.

Description. Colouration same as in Haplodrassus and Drassodes: carapace yellow or orange, cephalic part, chelicerae, maxillae and labium brown, sternum yellow-brown, abdomen grey, femora ventrally and coxae pale white. Chelicerae with 2 retromarginal teeth. Coxae I and II longer than III and IV. Leg spination same in male and female. Femora I-III with 1p, 2d, femora III and IV with 1r, metatarsus II with 2v, tibia III and IV v2-2-2, p3, r2, metatarsus III and IV v2-1-2, p2-2, r2-2 (apically with 6 spines 2v, 2p and 2r). Male palp as in figs. 83-85, with 2d on femora, 1p on tibia and 6 on cymbium, terminal apophysis strongly reduced, conductor small and transparent, tibial apophysis long and pointed. Female epigyne (figs. 86-87) with parallel margins of fovea, and sclerotized anterior ridge (pocket).

Diagnosis. T. tegulatus is a single species of the Tuvadrassus gen.n. It can be easily separated from representatives of related genera by the shape of male palp and epigyne.

Zelotes baltistanus CAPORACCO, 1935

Material examined: Tuva: ER: 4♂, 9♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 27.05-12.08.1989 (D.L.); 5♂, 2♀, Tere-Khol' Lake, Eder-Elesin Sands (Desert), 1150-1200 m, 8-13.08.1989 (D.L.). MT: 1♀, 5-8 km SE of Mugur-Aksy Vill., Kargy River Valley, 1700-1900 m, 18.05.1990 (D.L.). OV: 1♂, north bank of Ubsu-Nur, 750 m, 12.06.1989 (D.L.).

Distribution. From Karakoram Range at the south through Mongolia and Tuva north to East Yakutia and Upper Kolyma (OVTSHARENKO, MARUSIK, 1988).

Zelotes barkol PLATNICK et SONG, 1986

Material examined: Tuva: ER: 5♂, 5♀, 20 km NW of Erzin Vill., Tes-Khem River Valley, 800-900 m, 13-15.08.1989 (D.L.). TA: 1♀, 5km SW of Khovu-Aksy, Elegest River Valley, 4-6.05.1990 (D.L.).

Distribution. First record in Russia and northwesternmost point of distribution. Earlier it was recorded from China (PLATNICK,



SONG, 1986) and Mongolia (OVTSHARENKO, personal communication).

Zelotes fratris CHAMBERLIN, 1920

Material examined: Khakassia: AS: 6♀, Asskiz Reserve, 8 km E of Birikhchul', 17-18.07.1990 (D.L.). KYR: 9♂, 24♀, 14 km SW Tanzybei Vill., Filin Spring, 400-500 m, 13.07.1990 (D.L.).

Distribution. Siberian-American range (OVTSHARENKO, MARUSIK, 1988), Khakassia is the southwesternmost point of distribution.

Zelotes cf. fratris CHAMBERLIN, 1920

Material examined: Tuva: UK: 1♀, 8 km S of Torgalyg Vill., Torgalyg River, 900-950 m, 8-9.05.1990 (D.L.).

Distribution: Holarctic.

Zelotes longipes (L.KOCH, 1866)

Material examined: Khakassia: AS: 1♂, 8 km E Birikhchul' Vill., 16-18.07.1990 (D.L.).

Distribution. Transpalearctic range (PLATNICK, SONG, 1986).

Zelotes potanini SCHENKEL, 1963

Material examined: Khakassia: AT: 1♂, 40 km SE of Bely-Yar Vill., 15-18 km E of Novorosiyskoye Vill., 380-400 m, 23-24.06.1990 (D.L.). SH: 1♂, 4♀, 5 km SE of Shiira Vill, Shira Lake, 21.06.1990 (D.L., V.M.). Tuva: ER: 5♂, 3♀, 20-30 km W of Erzin Vill., Onchalaan Mt. Range, 1200-1400 m, 27.05-2.06.1989 (D.L.); 1♀, same locality, 28.05.1990 (O.L.); 2♀, same locality, Yamaalyg Mt. Range, 1200-1300 m, 9-10.06.1989 (D.L.). KZ: 7♂, 6♀, environs of Kyzyl, 700-900 m, 5.06-3.07.1989 (D.L.); 2♀, same locality, 7.05.1990 (D.L.); 1♂, 5-7 km W of Kyzyl, Yenisei River Valley, 700 m, 4-7.06.1989 (D.L.); 1♂, 4♀, environs of Erzin Vill., Erzin River Valley, 1000m, 23.05.1990 (D.L.). MT: 8♂, 7♀, ~5-8km SE of Mugur-Askyl Vill., Kargy River Valley, 1700-1900 m, 16-20.05.1990 (D.L.); 1♂, 1♀, 30-35 km SW of Mugur-Aksy Vill., down flow of Kargy River, Semigorki, 1700 m, 15.06.1989 (D.L.); 1♀, 45-50 km W of Mugur-Aksy Vill., Chalyyasha Natural limit, 2200-2300 m, 13.05.1990 (D.L.). OV: 1♀, 15 km E of Khandagayty Vill., Ulatay River Valley, 1000-1100 m, 12.06.1989 (D.L.). PK: 1♀, 4-5 km NW of Cherbi Vill., 850-1000 m, 1.07.1990 (D.L.). TK: 1♂, 1♀, 8 km NE of Khol'-Oozhu Vill., 1-2 km Ayskanny-Khem River, 1150-1200 m, 14.07.1989 (D.L.); 1♀, Upper flow of Nariyn-Gol River, 900 m,

10.06.1989 (D.L.); 1♂, 50 km W of Erzin Vill., Shara-Nur Lake, 800-900 m, 3.06.1989 (V.Z.). UK: 1♀, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.); 1♂, 5 km E of Shagonar Town, Khayirkan Mt., 10.05.1990 (D.L.); 1♀, 10-15 km SW of Shagonar Town, Chaaty River, 8.05.1990 (D.L.).

Distribution. Widespread Siberian species, north from Central Yakutia, west to East-Kazakhstan Area, south to Mongolia, China and Japan.

Zelotes puritanus CHAMBERLIN, 1922

Material examined: Tuva: TK: 1♀, 10-12 km NW of Khol'-Oozhu Vill., Belengishch Natural Limit, 1700-1800 m, 9-11.07.1989 (D.L.).

Distribution. Circumholarctic disjunctive range (OVTSHARENKO, MARUSIK, 1988).

Zelotes sula LOWRIE et GERTSCH, 1955

Material examined: Tuva: PK: 3♂, 4♀, 5-7 km NW of Sesarlig Vill., 1000-1400 m, 24-25.07.1989 (D.L.). TA: 2♂, 5km SW of Khovu-Aksy, 4-6.05.1990 (D.L.). UK: 2♀, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.).

Distribution. Siberian-American range (OVTSHARENKO, MARUSIK, 1988), Tuva is the southwesternmost point of distribution.

Zelotes yutian PLATNICK et SONG, 1986 Figs. 88-90

Material examined: Khakassia: AT: 1♂, 1♀, 40 km SE of Bely-Yar Vill., 15-18 km E of Novorosiyskoye Vill., 380-400 m, 23-24.06.1990 (D.L.). Tuva: MT: 1♀, 30-35 km SW of Mugur-Aksy Vill., down flow of Kargy River, Semigorki, 1700 m, 15.06.1989 (D.L.). UK: 1♂, 8 km S of Torgalyg Vill., 1100-1250 m, 9.05.1990 (D.L.).

Distribution. This species is new for USSR fauna. According to our collections it is also present in Buryatia (Selenga Distr.), Saur Mt. Range (East-Kazakhstan Area) and in Central Yakutia. Earlier it was known from China (PLATNICK, SONG, 1986) only.

Parasyrisca lugubris (SCHENKEL, 1963)

Material examined: Tuva: ER: 1♂, 5-7 km SW of Erzin Vill., Tes-Khem River Valley, 1000-1100 m, 24.05.1990 (D.L.). KZ: 6♀, 5km W of Kyzyl Town, 700 m, 25.05.1989 (D.L.); 4♀, same locality,

13-22.05.1990 (D.L.). PK: 1♀, 10 km SE of Sesarlig Vill., 1100-1200 m, 2.05.1990 (D.L.).

Parasyrisca sp. 1

Material examined: Tuva: TK: 1♂, 20 km NW of Khol'-Oozhu Vill., Kangay-Kyry Mt., 2100-2173 m, 8-9.07.1989 (D.L.).

Parasyrisca sp. 2

Material examined: Tuva: MT: ♀♀ in different localities.

Parasyrisca sp. 3

Material examined: Tuva: MT: 1♀, environs of Mugur-Aksy Vill., 2500-2700 m, 19.05.1990 m (D.L.); 2♀, Barlyk River Valley, confluence with Onachy River, 6.06.1990 (O.L.).

Parasyrisca sp. 4

Material examined: Khakassia: AS: 1♂, 8 km E of Birikhchul' Vill., 18.07.1990 (D.L.).

Addendum: New material was obtained from Altai, environs of Kosh-Agach Vill., Kurai Mt. Range, 16.VI.1971, A. P. KONONENKO leg.:

Berlandina schenkeli sp.n., 1♂ paratype,

Drassodes neglectus 1♂,

Gnaphosa braendegaardi, 1♂,

Haplodrassus pugnans, 4♂1♀,

Tuvadrassus tegulatus, ♀♂,

Zelotes potanini, 104♂3♀.

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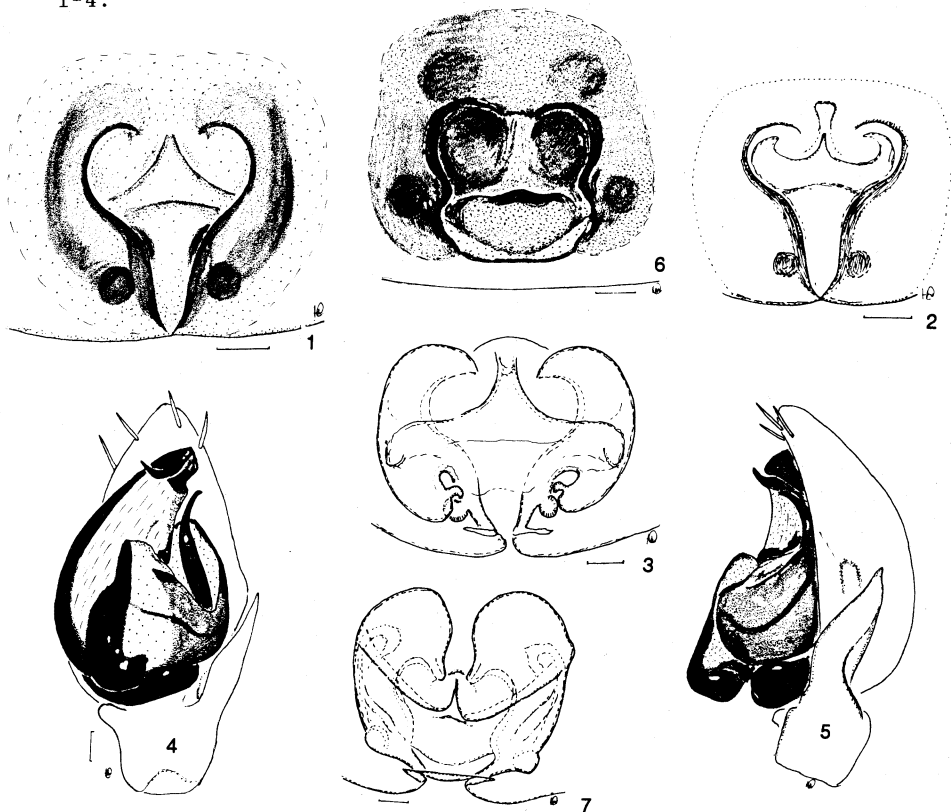
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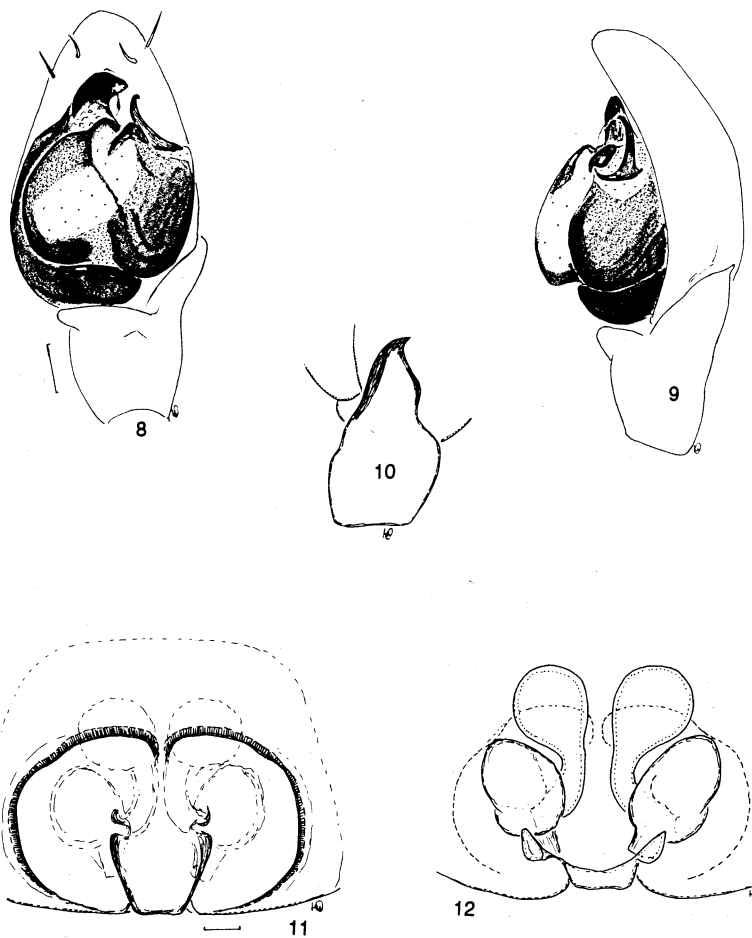
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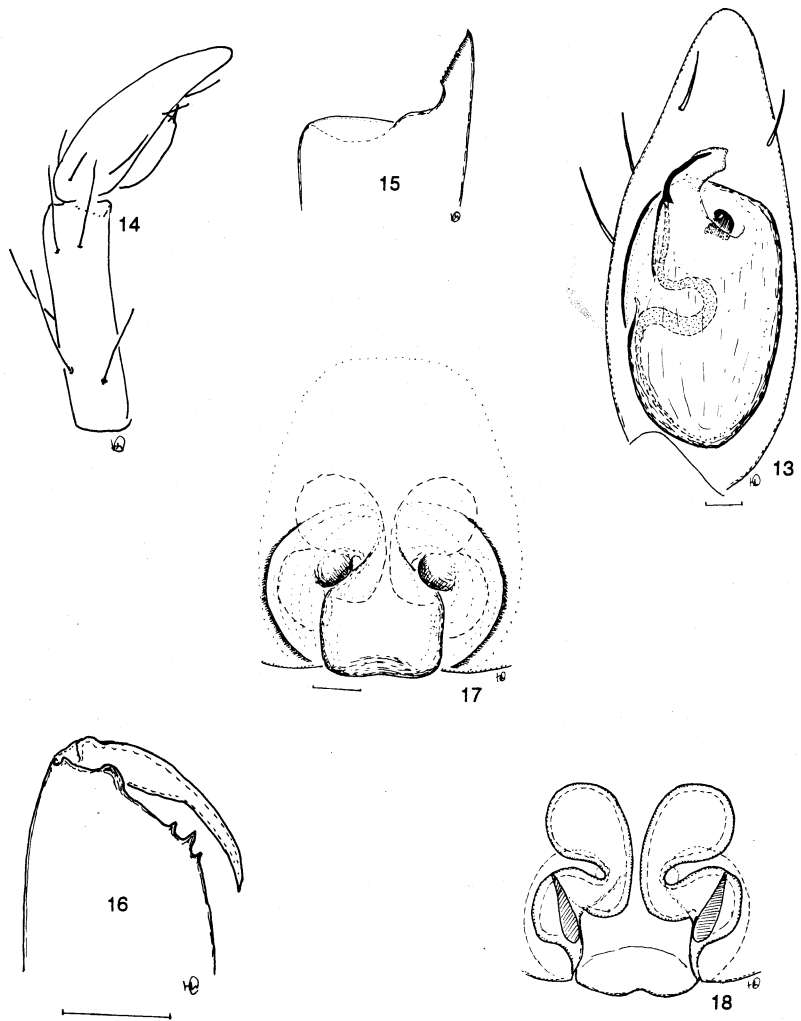
Figs. 1-3. *Berlandina potanini*; 1-2) ♀, epigyne, ventral view; 3) epigyne, dorsal view.

Figs. 4-7. *Berlandina schenkeli* sp.n.; 4) ♂-palp, ventral view; 5) ♂-palp, retrolateral view; 6) ♀, epigyne, ventral view; 7) ♀, epigyne, dorsal view.

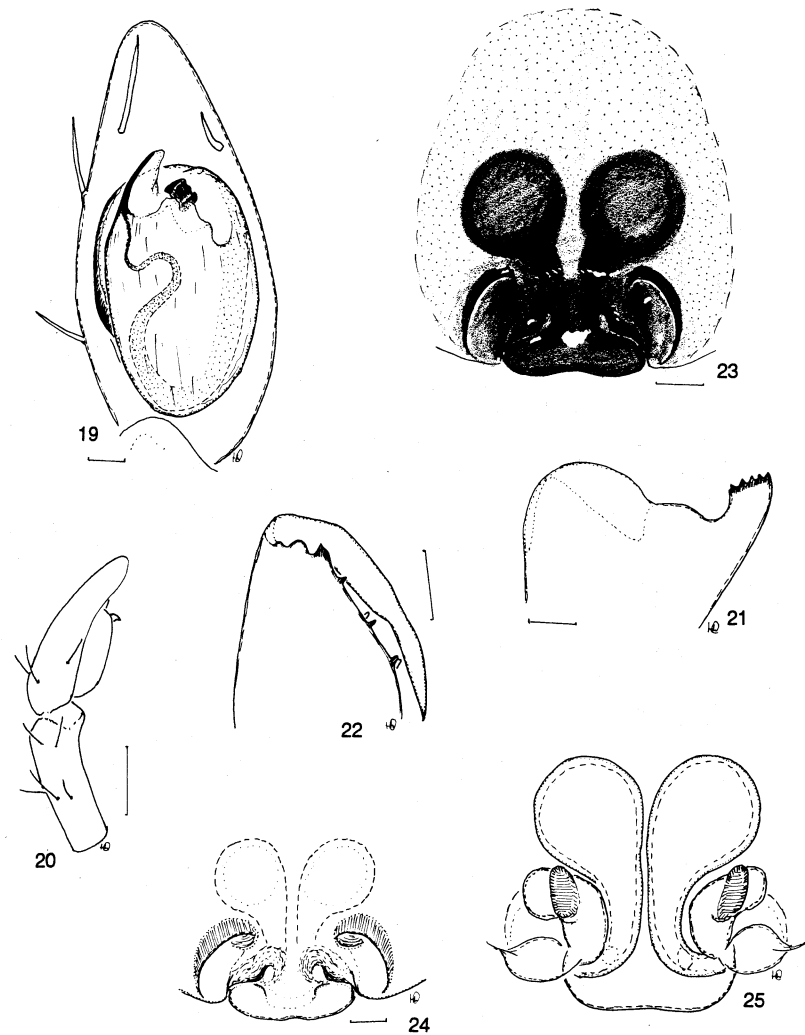


Figs. 8-10. *Berlandina absunurica* sp.n.; 8) ♂-palp, ventral view; 9) ♂-palp, retrolateral view; 10) tibia of the ♂-palp, retrolateral view.

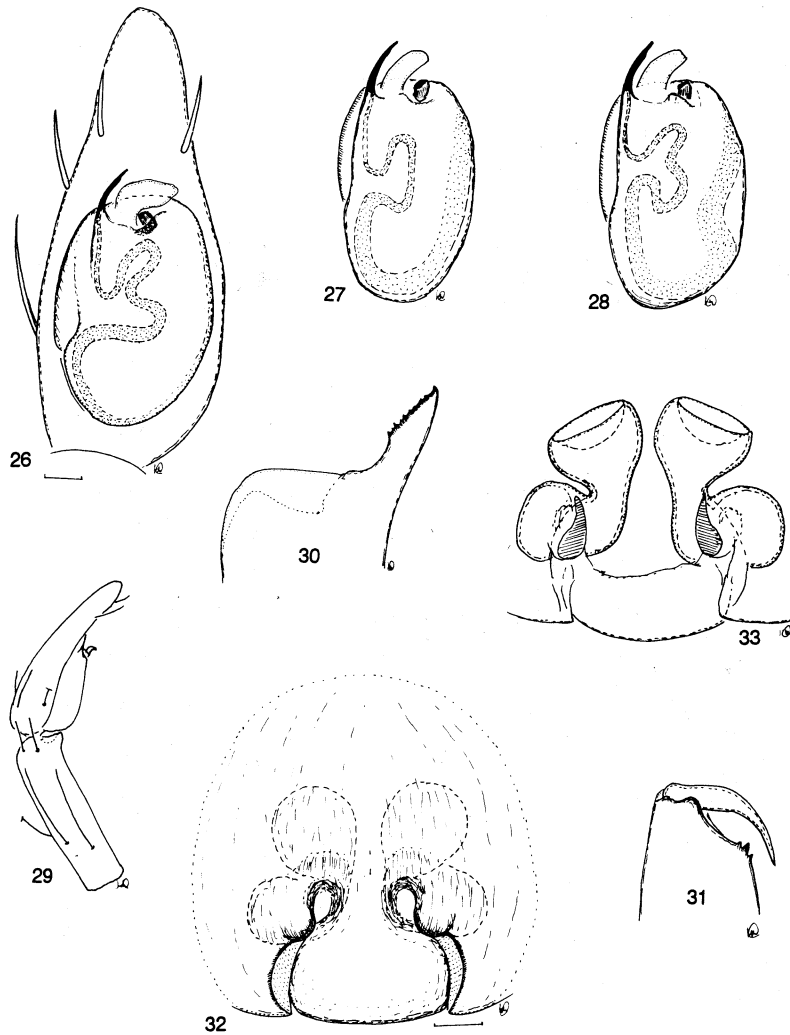
Figs. 11-12. *Drassodes kaszabi*, ♀; 11) epigyne, ventral view; 12) epigyne, dorsal view.



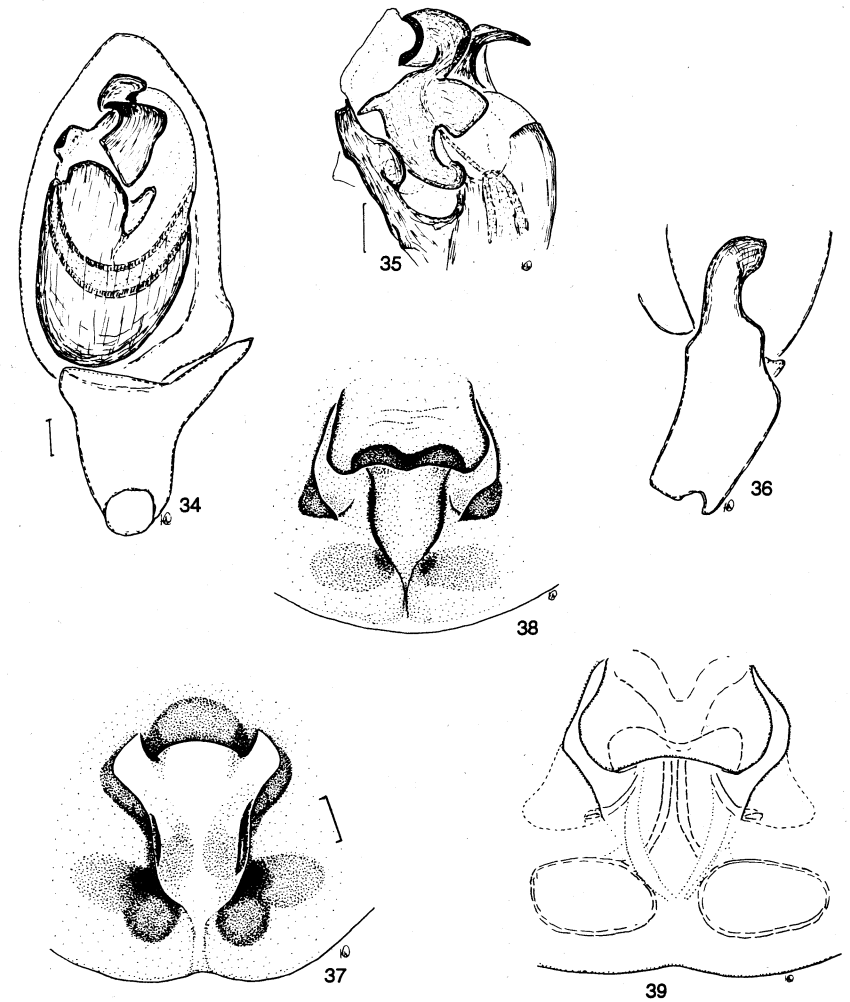
Figs. 13-18. *Drassodes lesserti*; 13) ♂-palp, ventral view; 14) ♂-palp, prolateral view; 15) tibial apophysis, ventral view; 16) apical half of ♂-chelicera; 17) ♀, epigyne, ventral view; 18) ♀, epigyne, dorsal view.



Figs. 19-25. *Drassodes serratidens* 19) ♂-palp, ventral view; 20) ♂-palp, prolateral view; 21) tibial apophysis, ventral view; 22) apical half of male chelicera; 23) and 24) ♀, epigyne, ventral view; 25) ♀, epigyne, dorsal view.



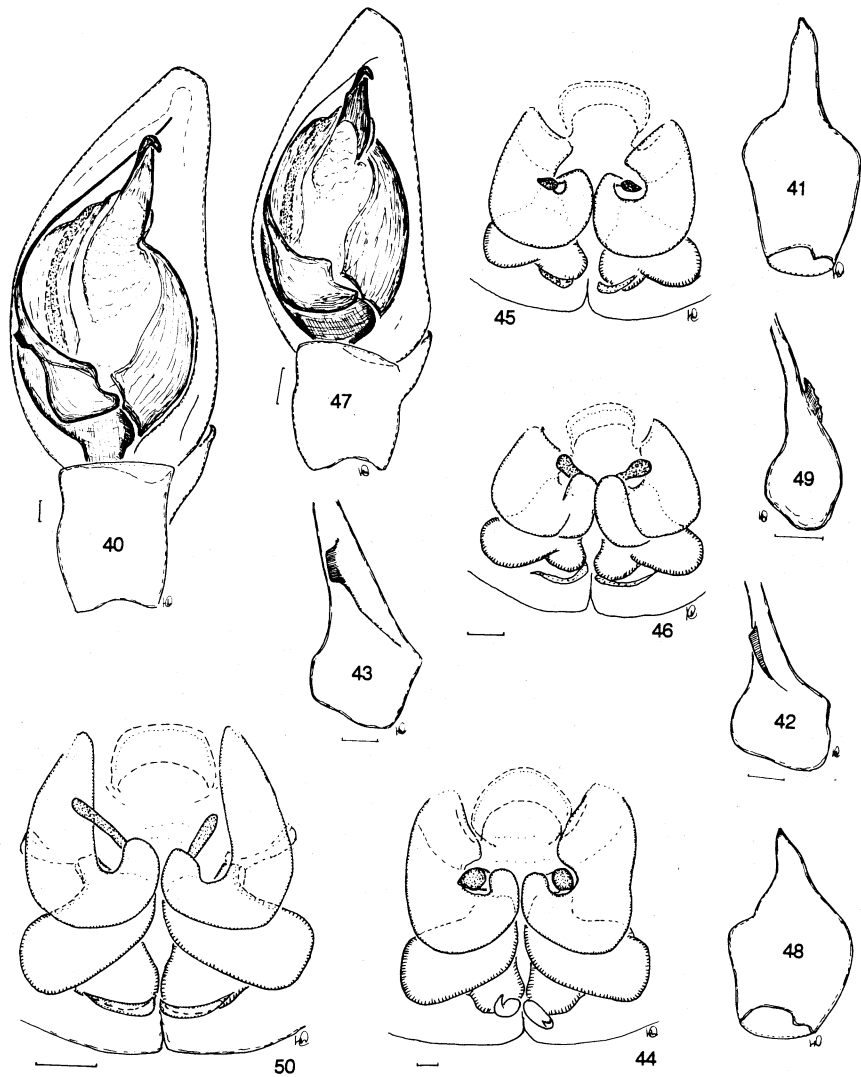
Figs. 26-33. *Drassodes longispinus* sp.n.; 26) ♂-palp, ventral view; 27) and 28) bulb, ventral view; 29) ♂-palp, prolateral view; 30) tibial apophysis, ventral view; 31) apical half of male chelicera; 32) ♀, epigyne, ventral view; 33) epigyne, dorsal view.



Figs. 34-36. *Echemus sibiricus* sp.n., ♂; 34) palp, ventral view; 35) embolic division, prolateral view; 36) tibia of the palp, retrolateral view.

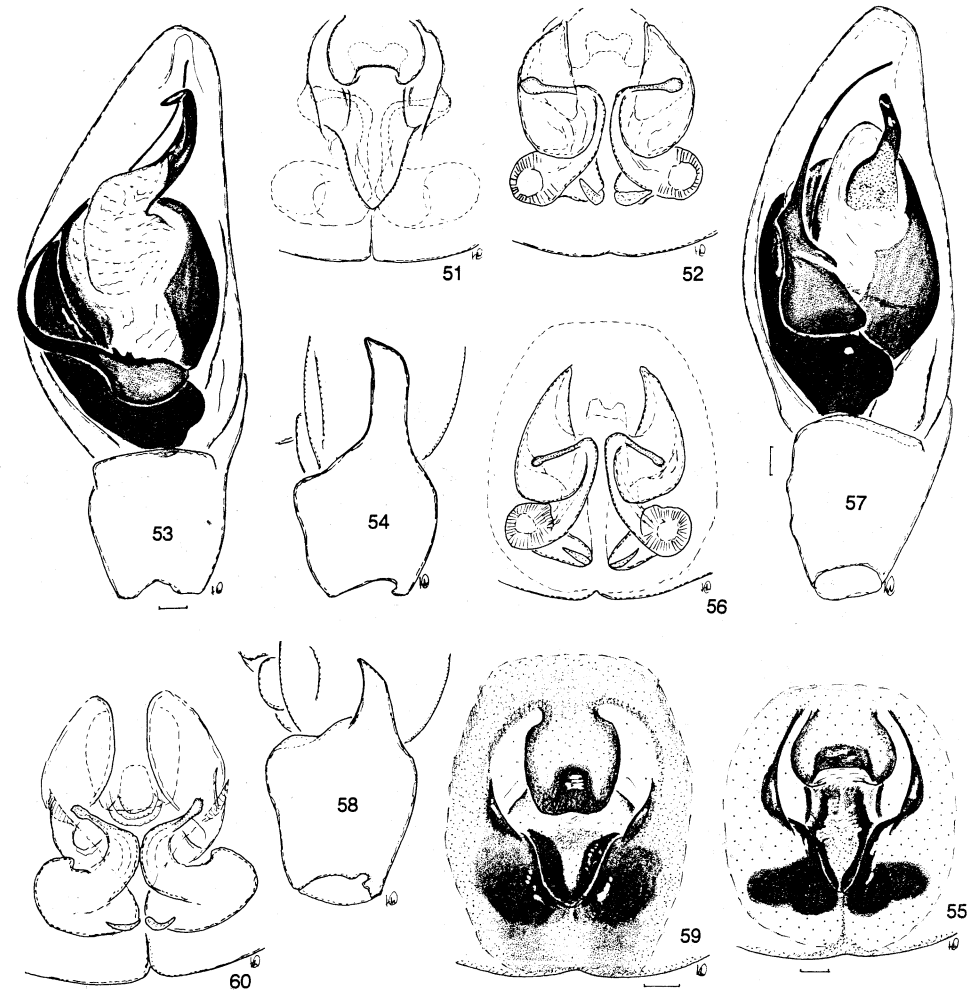
Fig. 37. *Gnaphosa potanini* ♀, holotype, epigyne, ventral view.

Figs. 38-39. *Gnaphosa glandifera*, ♀; 38) holotype, 39) paratype of *G. holmi*, epigyne, ventral view.



Figs. 40-46. *Gnaphosa gracilior*; 40) ♂-palp, ventral view; 41) tibia of the ♂-palp, retrolateral view; 42) and 43) basal part of the embolus, prolateral view; 44-46) epigyne, dorsal view.

Figs. 47-50. *Gnaphosa proxima*; 47) ♂-palp, ventral view; 48) tibia of the ♂-palp, retrolateral view; 49) basal part of the embolus, prolateral view; 50) ♀, epigyne, dorsal view.

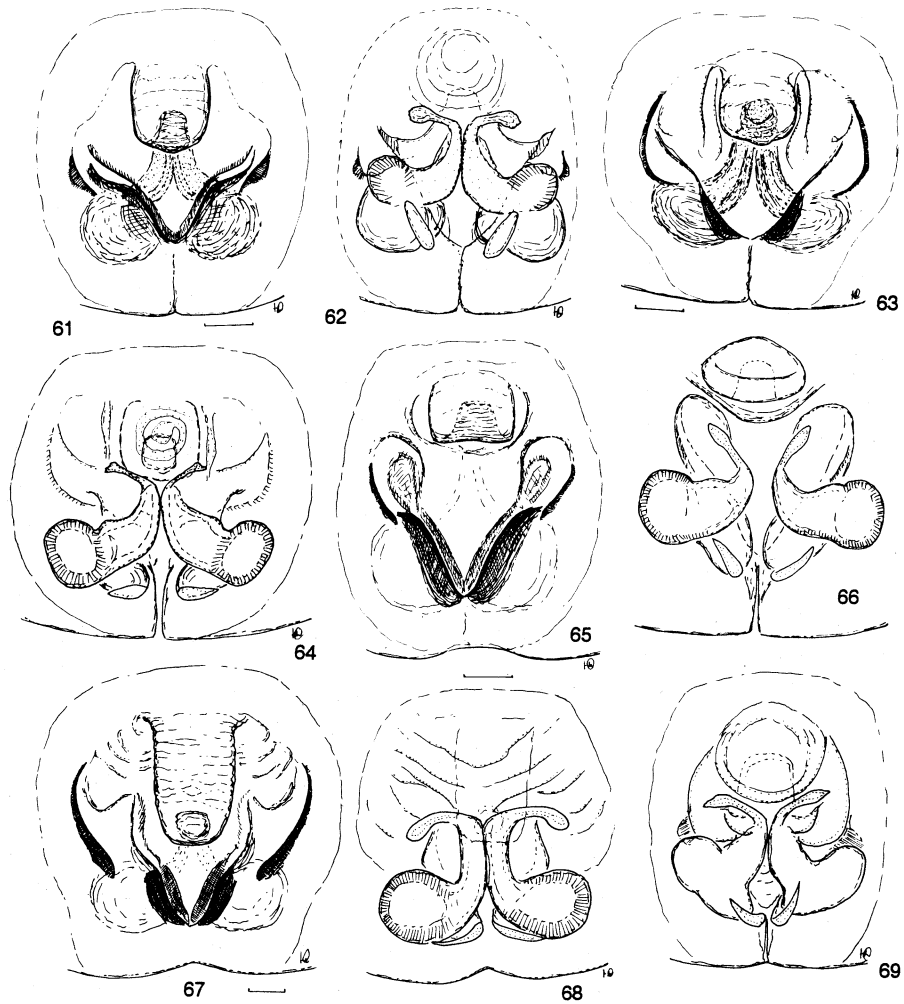


Figs. 51-52. *Gnaphosa muscorum*, ♀; 51) epigyne after maceration, ventral view; 52) epigyne, dorsal view.

Figs. 53-54. *Gnaphosa mandschurica* SCHENKEL, 1963, ♂; 53) palp, ventral view; 54) tibia of the palp, retrolateral view.

Figs. 55-56. *Gnaphosa muscorum* (L. KOCH, 1866), ♀; 55) epigyne, ventral view; 56) epigyne, dorsal view.

Figs. 57-60. *Gnaphosa tuvinica* sp.n.; 57) ♂-palp, ventral view; 58) tibia of the ♂-palp, retrolateral view; 59) ♀, epigyne, ventral view; 60) epigyne, dorsal view.



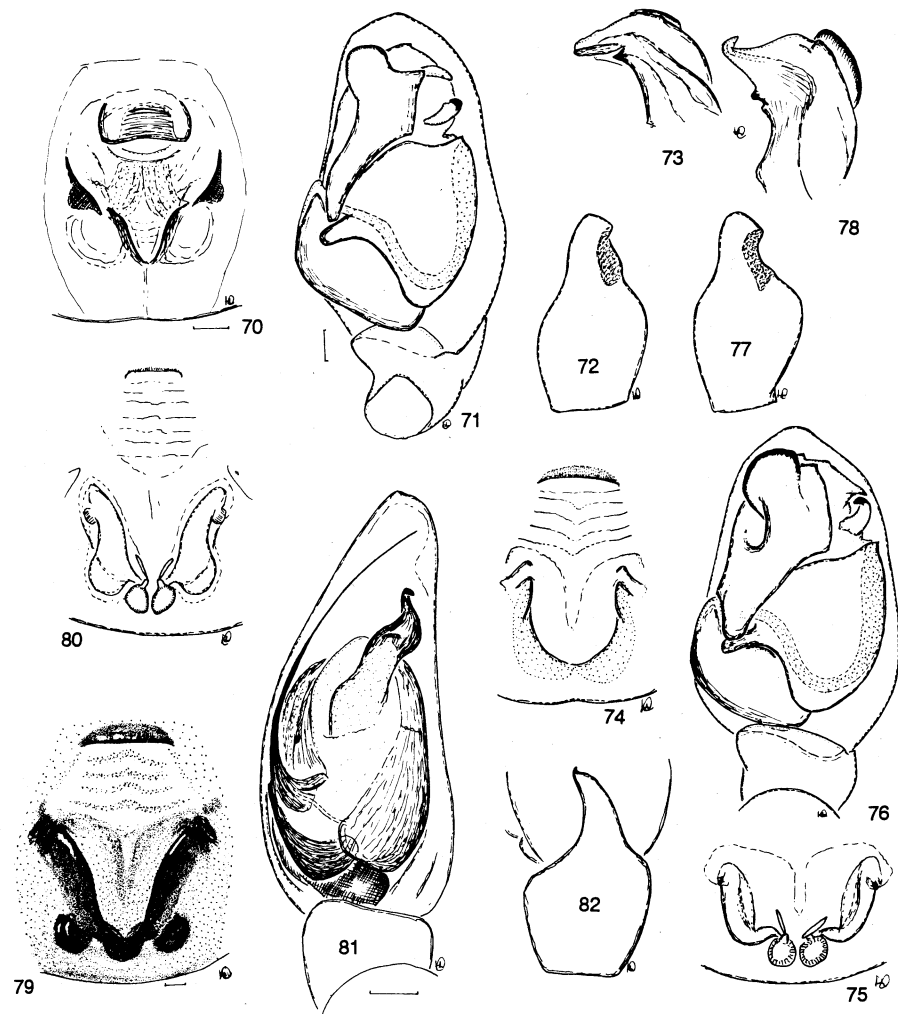
Figs. 61-62. *Gnaphosa* sp. 1, ♀; 63) epigyne, ventral view; 64) epigyne, dorsal view.

Figs. 63-64. *Gnaphosa inconspecta* SIMON, 1878, ♀; 63) epigyne, ventral view; 64) epigyne, dorsal view.

Figs. 65-66. *Gnaphosa* sp. 2, ♀; 65) epigyne, ventral view; 66) epigyne, dorsal view.

Figs. 67-68. *Gnaphosa* sp. 3, ♀; 67) epigyne, ventral view; 68) epigyne, dorsal view.

Figs. 69-70. *Gnaphosa wiehle* SCHENKEL, 1963, ♀; 69) epigyne, ventral view; 70) epigyne, dorsal view. →



Figs. 71-75. *Haplodrassus hiemalis* (♂ from Magadan Area); 71) ♂-palp, ventral view; 72) tibia of the male palp, retroapical view; 73) apical part of embolus, apical view; 74) ♀, epigyne, ventral view; 75) epigyne, dorsal view.

Figs. 76-80. *Haplodrassus moderatus* (male from Finland); 76) ♂-palp, ventral view; 77) tibia of the ♂-palp, retroapical view; 78) apical part of the embolus, apical view; 79) ♀, epigyne, ventral view; 80) epigyne, dorsal view.

Figs. 81-82. *Gnaphosa denisi*, ♂; 81) palp, ventral view 82) tibia of the palp, retrolateral view.

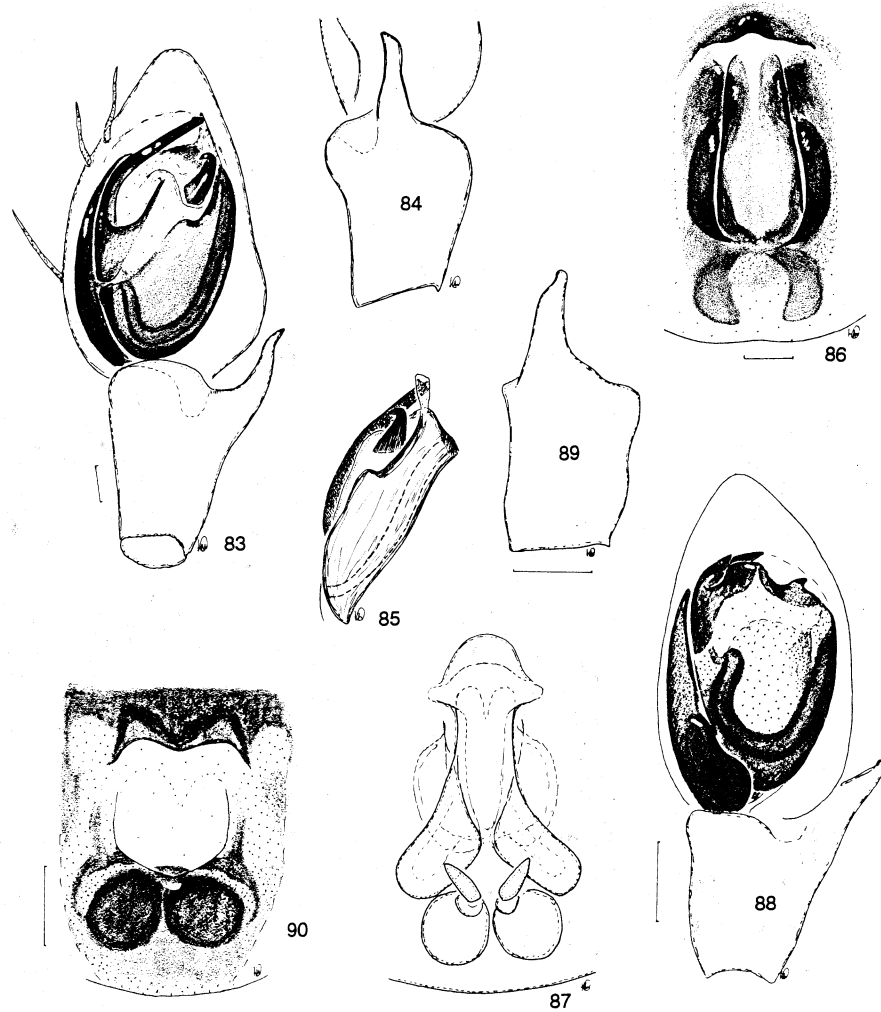
A NEW SPECIES AND TWO INTERESTING RECORDS OF THE BLACK-WIDOW SPIDERS FROM MIDDLE ASIA AND THE CAUCASUS (Aranei, Theridiidae)

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**Abstract:** *Latrodectus tadzhicus* n.sp. (Aranei: Theridiidae) from Russia is described and compared with its sibling species *L. dahli*.

Introduction

The members of the genus *Latrodectus* are of considerable importance as their venom is poisonous to mammals. Three species of karakurts (the local Asian name for widow spiders, which means "kara" - black, "kurt" small invertebrate or insect) are known to be distributed in what was formerly the USSR. They are: *L. tredecimguttatus* ROSSI, *L. pallidus* O.P.-CAMBRIDGE and *L. dahli* LEVI (TYSHCHENKO, ERGASHEV, 1974). Despite numerous publications devoted to the widow spiders of the Soviet Union (see references in MARIKOVSKI, 1956 and ERGASHEV, 1990), this group of spiders is still poorly known. Poor knowledge of karakurts can be illustrated by the present paper, in which a new species is described



Figs. 83-87. *Tuvadrassus tegulatus* (SCHENKEL, 1963); 83) ♂-palp, ventral view; 84) tibia of the ♂-palp, retroapical view; 85) apical part of the bulb, retrolateral view; 86) ♀, epigyne, ventral view; 87) epigyne, dorsal view.

Figs. 88-90. *Zelotes yutian* (specimens from Yakutia); 88) ♂-palp, ventral view; 89) tibia of the ♂-palp, retrolateral view; 90) ♀, epigyne, ventral view.