A review of the family Gnaphosidae in the fauna of the Urals (Aranei), 1. Genera *Drassodes* Westring, 1851 and *Sidydrassus* gen.n.

Обзор семейства Gnaphosidae фауны Урала (Aranei). 1. Рода *Drassodes* Westring, 1851 и *Sidydrassus* gen.n.

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KEY WORDS: fauna, the Urals, Gnaphosidae, new genus, new species. КЛЮЧЕВЫЕ СЛОВА: фауна, Урал, Gnaphosidae, новый род, новые виды.

ABSTRACT. A new genus *Sidydrassus* gen.n. is described. One species of *Sidydrassus* gen.n. and eight species of the genus *Drassodes* Westring, 1851 are recognized and reviewed in the fauna of the Urals. Two new combinations, *Sidydrassus shumakovi* (Spassky, 1934) comb.n. and *S. tianschanica* (Hu et Wu, 1989) comb.n. (both ex *Drassodes*), are proposed. Four new species from Orenburg Area are described: *D. mazurae* sp.n. (\circlearrowleft), *D. natali* sp.n. (\circlearrowleft), *D. rostratus* sp.n. (\circlearrowleft), *D. chybyndensis* sp.n. (\circlearrowleft). One species, *D. lutescens* (C.L. Koch, 1839), is excluded from the species list for the Urals.

РЕЗЮМЕ. Описан новый род Sidydrassus. Дается обзор 1 вида Sidydrassus gen.n. и 8 видов рода Drassodes Westring, 1851 фауны Урала. Установлены новые комбинации Sidydrassus shumakovi (Spassky, 1934) comb.n. и S. tianschanica (Hu et Wu, 1989) comb.n. (оба из Drassodes). Из Оренбургской области описаны 4 новых вида: D. mazurae sp.n. (\circlearrowleft , D. natali sp.n. (\circlearrowleft , D. rostratus sp.n. (\circlearrowleft , D. chybyndensis sp.n. (\circlearrowleft). Один вид, D. lutescens (C.L. Koch, 1839), исключен из списка пауков Урала.

Introduction

Kharitonov [1923] provided the first report of *Drassodes* from the Urals. In the recent catalogue of the Urals spider fauna [Esyunin & Efimik, 1996], only four *Drassodes* species were listed: *D. lapidosus* (Walckenaer, 1802), *D. lutescens* (C.L. Koch, 1839), *D. pubescens* (Thorell, 1856) and *D. villosus* (Thorell, 1856).

New material collected in the steppe zone of the Urals during recent years contains numerous, both little-known and new species. In the present paper, we (1) have summarized the distribution data for four species: $D.\ lapidosus,\ D.\ pubescens,\ D.\ lesserti$ and $D.\ villosus$, in the Urals; (2) have described four new species: $D.\ mazurae$ sp.n. $(\circlearrowleft, D.\ natali$ sp.n. $(\circlearrowleft, D.\ nostratus)$

sp.n. (\circlearrowleft) , and *D. chybyndensis* sp.n. (\circlearrowleft) ; (3) have erected a new genus, *Sidydrassus* gen.n., with two species currently ascribed to it; (4) have re-described a little known species *Sidydrassus shumakovi* (Spassky, 1934) and (5) have corrected some former misidentifications.

The record of *D. lutescens* from Bashkiria (the South Urals) by Ghirfanova *et al.* [1992; material not re-examined], seems to have been based on a misidentification and is here considered dubious. This record should apparently be referred to *D. mazurae* sp.n. Thus the current study deals with eight species of *Drassodes* and one species of *Sidydrassus* gen.n. in the Urals and Cisuralia.

Most of the examined material is in the collection of the Department of Zoology of the Perm State University (PSU). Some of the type specimens of the new species are in the Zoological Museum of the Moscow University (ZMMU), the Institute for Systematics and Ecology of Animals, Novosibirsk (ISEA), the Zoological Museum of the Zoological Institute, St.-Petersburg (ZIN), and the Manchester Museum, University of Manchester (MMU).

The following abbreviations have been accepted in the text: a — apical, d — dorsal, p — prolateral, r — retrolateral, s.l. — same locality, v — ventral. Chaetotaxy notation is as follows: basal-medial-apical spines. For example, tibia I v1-2(1)-2(a) means the tibia I has one basal, two (or one) medial and two apical ventral spines. All measurements are in mm.

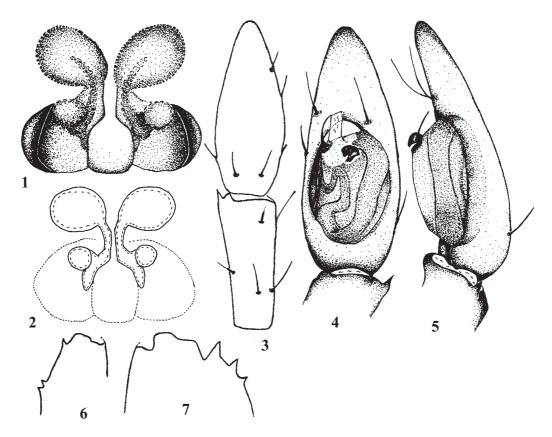
Records in the Urals given below under "Catalogue" are adopted from Esyunin & Efimik [1996], with some up-to-date additions. Distribution of species follows the catalogue of Esyunin & Efimik [1996], with recent rectifications.

Survey of species

Drassodes Westring, 1851

Drassodes chybyndensis **sp.n**. Figs 1–7.

MATERIAL. Holotype ♂ (ZMMU), <u>South</u> Urals, Orenburg Area, Sol-Iletsk District, Chybynda, scree under the chalk cliff, 05–13.VI.2000, leg. S.L. Esyunin. Paratype: 1♀ (ZMMU), together



Figs 1–7. Drassodes chybyndensis sp.n.: 1 — epigyne; 2 — spermathecae; 3 — tibia and cymbium of male palp, dorsal view; 4 — male palp, ventral view; 5 — ditto, lateral view; 6 — apical part of male chelicera, anterior view; 7 — ditto of female.

Рис. 1–7. Drassodes chybyndensis sp.n.: 1 — эпигина; 2 — сперматека; 3 — голень и цимбиум пальпа самца, вид сверху; 4 —

пальна самца, вид снизу; 5 — то же, вид сбоку; 6 — вершина хелицеры самца, вид спереди; 7 — то же самки.

with holotype; 1 ♂ (PSU-1413), s.l., declivity of the chalk cliff with *Spiraea* sp., 05–12.VI.2000, leg. S.L. Esyunin.

ETYMOLOGY. The species is named after the type locality.

DESCRIPTION. Male. Total length 7.63 (7.25–8.00). Carapace 3.60 (3.30–3.90) long, 2.53 (2.35–2.70) wide, brown with grey edging. Sternum grey-yellow. Abdomen grey. Femur II 3.15 (3.05–3.25) long. Chelicerae brown, with 3 promarginal teeth (Fig. 6) and 1 small retromarginal tooth. Palp and legs yellow. Palpal femur with 1 dorsomedial spine and a distal group of 3 connivent dorsal spines. Spination of the palpal tibia and cymbium as in Fig. 3. Embolus curved, apically situated (Fig. 4). Retrolateral tibial apophysis short (Figs 3–5). Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-1(2)-1; III d1-1-1, p0-1-1, r0-1-1(0); IV d1-1-1, p0-1-1, r0-1-1; tibiae I, II v0-1-0; III d1-1(0)-0, p1-1-1, r0-1-1, v1-1-2(a); IV d1-1-0, p1(0)-1-1, r1(0)-1-1, v1-2-2(a); metatarsi I v2-0-0; II v2-0(1)-0; III d0-2-0, p1-1-2, r1-1-2, v2-2-2(a); IV d1-2-0, p1-1-2, r1-1-2, v2-2-2(a).

Female. Total length 15.5. Carapace 6.75 long, 5.10 wide, brown. Sternum dark brown. Abdomen grey, with long orange hairs densely set on anterior edge. Femur II 4.15 long. Chelicerae dark brown (almost black), with light distal spot; armed by 3 promarginal teeth (Fig. 7) and 1 small retromarginal tooth. Pedipalps and legs grey-yellow. Palpal femur with 1 dorsomedial spine and a distal group of 3 connivent dorsal spines. Leg spination: femora I d1-1-0, p0-1-0; II d1-1-0, p0-1-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1(0)-1, r0-1(0)-1; tibiae I, II v0-1-0; III d1(2)-0-0, p1-1-1, r1-1-1, v1-2-2(a); IV d1-1-0, p1-

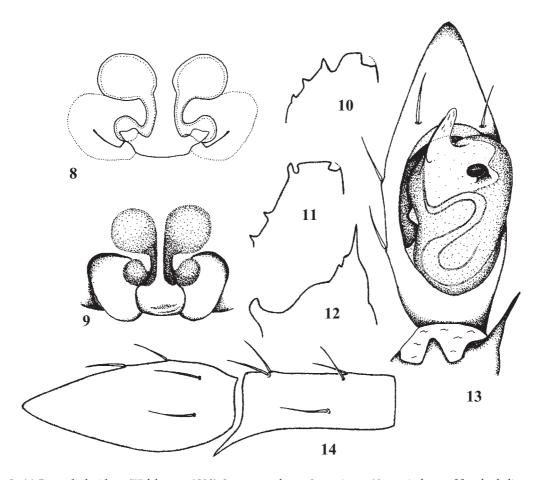
1-1, r1-1-1, v2-2-2(a); metatarsi I, II v2-0-0; III d0-2-0, p1-1-2, r1(2)-2-2, v2-2-2(a); IV d1-2-0, p1-1-2, r1-1-2, v2-2-2(a). Epigyne as in Fig. 1; spermathecae as in Fig. 2.

DIAGNOSIS. *D. chybyndensis* sp.n. is closely related to *D. lapidosus* (Walckenaer, 1802) and *D. natali* sp.n., but can be distinguished from both by the short tibial apophysis in males and the median plate of the epigyne constricted in the front in females.

DISTRIBUTION. Known only from the type locality.

Drassodes lapidosus (Walckenaer, 1802) Figs 8–14.

MATERIAL. North Urals: 3 ♂♂, 1 ♀ (PSU-812), Perm Area, Krasnovishersk District, Visherskii Reserve, open woodland with green moss, pitfall-traps, 28.VI-04.VII.1995, leg. N.S. Mazura; 1 7, 10~ $\$ (PSU-813), Perm Area, Krasnovishersk District, Kvarkush Range, talus (Siberian name "kurumy"), Betula elfin woodland with Carex, under stones, 06-16.VII.1996, leg. N.S. Mazura; 5 of of, 1 \(\text{(PSU-415)}, Ekaterinburg Area, Ivdel' District, Denezhkin Kamen Range, 900-1100 m a.s.l., mountain tundra, 16.VI-23.VII.1997, 1998, pitfall-traps, leg. A.I. Ermakov. <u>Middle</u> Urals: 14 ੀਂਹਾਂ, 9 😭 (PSU-808), Perm Area, Gornozavodsk District, Basegi Reserve, 850-950 m. a.s.l., Betula elfin woodland, talus, mountain tundra, pitfall-traps and under stones, 26.VI-14.VIII.1984, 1986, 1990, leg. S.L. Esyunin; 2 o'o' (PSU-811), Ekaterinburg Area, Kirovgrad District, Belaya Mountain, 715 m a.s.l., under stones, 01.VI.1988, leg. Yu.I. Korobeinikov, 1 ♀ (PSU-814), Perm Area, Kishert District, Preduralie Reserve, 1982, collector unknown. South Urals: 2 0707, 8 99 (PSU-809), Chelyabinsk Area, Iremel



Figs 8–14. Drassodes lapidosus (Walckenaer, 1802): 8 — spermathecae; 9 — epigyne; 10 — apical part of female chelicera, anterior view; 11 — ditto of male; 12 — apical part of male palpal tibia, lateral view; 13 — male palp, ventral view; 14 — tibia and cymbium of male palp, dorsal view.

Рис. 8-14. Drassodes lapidosus (Walckenaer, 1802): 8 — сперматека; 9 — эпигина; 10 — вершина хелицеры самки, вид спереди; 11 — то же самца; 12 — вершина голени пальпа самца, вид сбоку; 13 — пальпа самца, вид снизу; 14 — голень и цимбиум пальпа самца, вид сверху.

Range, mossy mountain tundra, pitfall-traps, 31.V.1989, leg. V.E. Efimik; 1 ♂, 3 ♀♀ (PSU-810), Bashkiria, Burzyan District, Shulgan-Tash Reserve, Kulukai, under stones, 21.VI.1986, leg. V.E. Efimik.

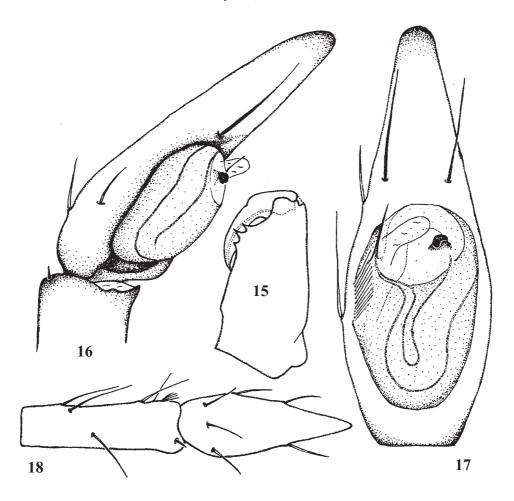
DESCRIPTION. Male (n=10). Total length 9.5 (10.3–12.9). Carapace 4.1 (3.1–5.3) long, 3.1 (2.5–4.0) wide. Femur II 3.3 (2.6–4.3) long. Chelicerae with three promarginal (Fig. 11) and two retromarginal denticles. Palpal femur with 3 dorsodistal spines and 1 dorsomedial spine. Spination of the palpal tibia and cymbium as in Fig. 14. Embolus direct, apically situated (Fig. 13). Retrolateral tibial apophysis lamellar, directed along tibia (Figs 12, 13). Leg spination: femora I d1-0-1, p0-0-1; III d1-0-1, p0-1-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1(2)-1, p0-1-1, r0-0-1; tibiae I, II v0-0-1; III d1-0-0, p1-1-1, r1-1-1, v1-2-2; IV d1-0-1, p1-1-1, r1-1-1, v2(1)-2-2; metatarsi I, II v1(2)-0-0; metatarsi III, IV — ample.

Female. Total length 11.99 (10.30–12.85). Carapace 5.35 (4.60–5.80) long, 3.86 (3.60–4.15) wide. Femur II 3.41 (3.10–3.80) long. Chelicerae with 3 promarginal (Fig. 10) and 2 retromarginal denticles. Palpal femur with 3(4) dorsodistal spines and 1 dorsomedial spine. Leg spination: femora I, II d1-0-1, p0-0-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-0-1; tibiae I, II v0-0-1; III d1-0-0, p1-1-1, r1-1(0)-1, v1-2(1)-2; IV d1-0(1)-0(1), p1-1-1, r1-1-1, v1(2)-1(0)-1; metatarsi I, II v1-0-0; metatarsi III, IV — ample. Epigyne as in Fig. 9. Spermathecae sinuous (Fig. 8).

DIAGNOSIS. *D. lapidosus* seems to be closest to *D. chybyndensis* sp.n. and *D. natali* sp.n., but can be distinguished by the longer, non-dented tibial apophysis in males and by the shape of the epigynal foveae in females.

REMARKS. Some forms of this species have been diagnosed from Europe on the basis of cheliceral armament (e.g. see Locket & Millidge [1951]). The status of these forms is disputable. In this connection Grimm [1985] wrote: "Dieses Art-Problem kann erst durch weitergehende Unresuchungen geklärt werden, etwa anhand statistisch auswertbarer großer Serien von wenigen, aber ausgewählten Standorten" (S. 120-121). On the contrary, Asian specimens are much more similar to each other in this feature (see fig. 44 in Loksa [1965] and fig. 6 in Hayashi [1984]). Specimens from the Ural region are homogeneous and identical to Asian specimens. We refer them to the *cupreus* form. Some European authors insist on a specific independence of D. cupreus (Blackwall, 1834) [Thaler, 1981; Roberts, 1987]. If this is true, the most appropriate name for the Ural specimens should be D. cupreus (Blackwall, 1834). Marusik & Koponen [Marusik & Koponen, 2000; Marusik et al., 2000] are of the same opinion.

CATALOGE. <u>North</u> Urals: Komi Republic, Perm and Ekaterinburg areas. <u>Middle</u> Urals: Perm and Ekaterinburg areas [Ukhova & Esyunin, 1996]. <u>South</u> Urals: Bashkiria [Efimik, 1997], Chelyabinsk Area.



Figs 15-18. Drassodes mazurae sp.n.: 15 — chelicera, anterior view; 16 — palp, lateral view; 17 — ditto, ventral view; 18 — tibia and cymbium of palp, dorsal view.

Рис. 15-18. Drassodes mazurae sp.n.: 15 — хелицера, вид спереди; 16 — пальпа, вид сбоку; 17 — то же, вид снизу; 18 — голень и цимбиум пальпа, вид сверху.

DISTRIBUTION (the *cupreus* form). Trans-Palearctic temperate range [sensu Marusik et al., 2000].

HABITAT. Alpine belt: talus, tundra and elfin woodland, with stony denudations; foothill: rocks or stony mountain steppe (under stones).

Drassodes lesserti Schenkel, 1936 Figs 60–62.

MATERIAL. <u>South</u> Urals: 2 $\$ (PSU-1928) Orenburg Area, Sol-Iletsk District, Chybynda, steppe, 17.08.2001, leg. S.L. Esyunin & G.S. Farzalieva. <u>Middle Siberia</u>: 1 $\$ (PSU-1904), Krasnoyarsk Province, Stolby Reserve, forb mountain steppe, 25.VII.2001, leg. Al.Yu. Sipaeva.

DESCRIPTION. Male see Loksa [1965], and further comments of Marusik & Logunov [1995]. Palpal structure as in Fig. 62.

Female. Total length 10.7 (7.4–14.4). Carapace 4.5 (4.1–5.2) long, 3.4 (3.2–3.8) wide, with yellow-brown thoracic region and brown cephalic region. Sternum dark, with brown thin margins. Abdomen light to dark grey, with a brown cardiac mark. Femur II 2.9 (2.1–3.4) long. Chelicerae dark, armed by 3 promarginal and 2 small retromarginal teeth. Pedipalps and legs yellow-brown, metatarsus and tarsus blackish. Palpal femur with 1

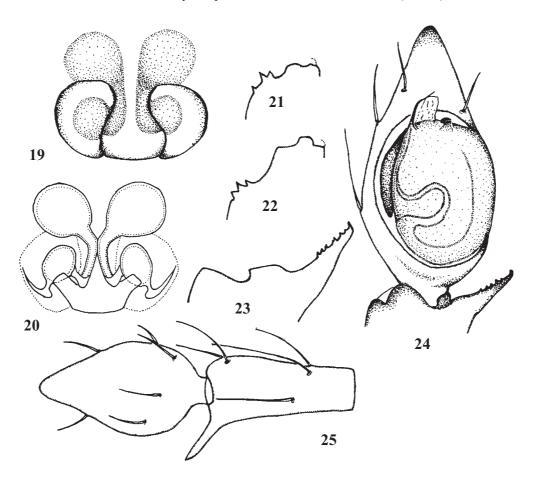
dorsomedial spine and a distal group of 3 connivent dorsal spines. Leg spination: femora I d1-1(0)-0(1), p0-0-1; II d1-1-0, p0(1)-1(0)-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-1-1; tibiae I, II v0-1-0; III d1-0-0, p1-1-1, r1-0-1, v1-1-2(a); IV d1-1-0, p1-1-1, r1(2)-1(0)-1, v1-2-2(a); metatarsi I, II v1-0-0; III d0-1-1, p1-1-1, r1-1-2, v2-2-2(a); IV d1-2-0, p1-2-2, r1-2-2, v2-2-2(a). Epigyne as in Fig. 60; spermathecae as in Fig. 61.

DIAGNOSIS. D. lesserti is most close to D. pseudolesserti Loksa, 1965 and D. longispinus Marusik et Logunov, 1995, but can be distinguished by the shape of the seminal duct loop of the male bulbus and the broad epigynal foveae of females.

DISTRIBUTION. South-Siberia, Mongolia and North China (see Map 32 in Marusik *et al.* [2000]). New for the fauna of the Urals.

Drassodes mazurae **sp.n**. Figs 15–18.

D. lutescens (non C.L. Koch, 1839): Ghirfanova et al., 1992. MATERIAL. Holotype ♂ (ZMMU), South Urals, Orenburg Area, Kuvandyk District, Aituar, rockslide, pitfall-traps, 25.IX—04.X.1996, leg. N.S. Mazura. Paratype: 1 ♂ (ZIN), s.l., rock (south gently sloping), under stone, 15—24.V.1997, leg. S.L. Esyunin; 1 ♂ (PSU-1414), Orenburg Area, Sol-Iletsk District, Chybynda,



Figs 19–25. Drassodes natali sp.n.: 19 — epigyne; 20 — spermathecae; 21 — apical part of female chelicera, anterior view; 22 — ditto of male; 23 — apical part of male palpal tibia, ventral view; 24 — male palp, ventral view; 25 — tibia and cymbium of male palp, dorsal view.

Рис. 19—25. Drassodes natali sp.n.: 19— эпигина; 20— сперматека; 21— вершина хелицеры самки, вид спереди; 22— то же самца; 23— вершина голени пальпа самца, вид снизу; 24— пальпа самца, вид снизу; 25— голень и цимбиум пальпа самца, вид сверху.

scree under the chalk cliff, 05–12.VI.2000, leg. S.L. Esyunin; 1 ♂ (ZMMU), s.l., declivity of the chalk cliff, 05–12.VI.2000, leg. S.L. Esyunin; 2 ♂ ♂ (ISEA), s.l., base of the chalk cliff, 05–12.VI.2000, leg. S.L. Esyunin; 3 ♂ ♂ (MMU), s.l., steppe with *Astragalus* sp., 13–22.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva; 3 ♂ ♂ (ISEA), s.l., chalk scree, 14–23.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva; 5 ♂ ♂ (PSU-1926), 5 ♂ ♂ (ZMMU), s.l., stony steppe, 14–22.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva

14–22.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva. ETYMOLOGY. The species is named in honour of the first collector, Dr. N.S. Mazura.

DESCRIPTION. Male. Total length 7.5. Carapace 3.2 long, 2.2 wide, light brown. Femur II 2.8 long. Chelicerae brown, with three promarginal (middle tooth biggest) (Fig. 15) and two widely spaced small retromarginal teeth. Palpal femur with one dorsomedial spine and a distal group of three connivent dorsolateral spines. Spination of the palpal tibia and cymbium as in Fig. 18. Embolus acerate (=needle-shaped), situated laterally (Fig. 17). Retrolateral tibial apophysis reduced to a tiny, anterior cusp (Figs 16, 18). Leg spination: femora I, II d1-0-1, p0-0-1; III, IV d1-1-1, p0-1-1, r0-1-1; tibiae I, II v0-0-1, III d1-0-0, p0-1-1, r0-1-1, IV d1-0-1, p1-1-1, r1-1-1, v1-2-2(a); metatarsi I, II v1-0-0, III p1-2-2, r1-1-2, v1-2-2(a), IV d0-2-0, p1-1-2, r1-1-2, v2-2-2(a).

Female unknown.

DIAGNOSIS. *D. mazurae* sp.n. is closely related to the Nearctic *D. gosiutus* Chamberlin, 1919 and *D. louisianus* Rod-

dy, 1957 by the absence of the tibial apophysis. From *D. louisianus* it can be distinguished by the longer cymbium and the lateral position of the embolus, and from *D. gosiutus* by the acerate (=needle-shaped) embolus and the armed cymbium. The new species is clearly similar to the Mediterranean *D. lutescens* (C.L. Koch, 1839) (see figs 13–14 in Di Franco [1994]), but differs in the absence of a visible kink of the seminal duct in the front of the tegulum (well marked in *D. lutescens*).

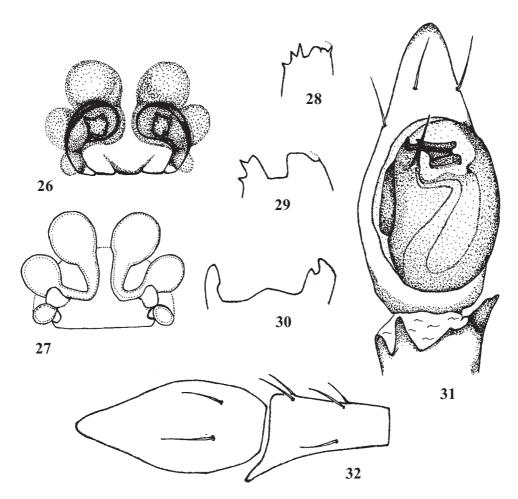
REMARKS. The record of *D. lutescens* (C.L. Koch, 1839) from Bashkiria (South Urals) by Ghirfanova *et al.* [1992] seems to be based on a misidentification and can apparently be referred to *D. mazurae* sp.n.

CATALOGUE. <u>South</u> Urals: Bashkiria [Ghirfanova et al., 1992: sub D. lutescens].

DISTRIBUTION. The South Urals.

Drassodes natali **sp.n**.

Figs 19–25.



Figs 26–32. Drassodes pubescens (Thorell, 1856): 26 — epigyne; 27 — spermathecae; 28 — apical part of female chelicera, anterior view; 29 — ditto of male; 30 — apical part of male palpal tibia, lateral view; 31 — male palp, ventral view; 32 — tibia and cymbium of male palp, dorsal view.

Рис. 26-32. Drassodes pubescens (Thorell, 1856): 26- эпигина; 27- сперматека; 28- вершина хелицеры самки, вид спереди; 29- то же самца; 30- вершина голени пальпа самца, вид сбоку; 31- пальпа самца, вид снизу; 32- голень и цимбиум пальпа самца, вид сверху.

Chybynda, sagebrush (*Artemisia*) steppe, 06–12.VI.2000, leg. S.L. Esyunin; $1 \circlearrowleft$ (ZMMU), s.l., declivity of chalk cliff, 11.VI.2000, leg. S.L. Esyunin; $1 \circlearrowleft$, $1 \updownarrow$ (ISEA), s.l., forb steppe, 05–13.VI.2000, leg. S.L. Esyunin; $1 \updownarrow$ (MMU), s.l., scree under chalk rock, 14–23.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva.

ETYMOLOGY. The specific epithet is an arbitrary combination of letters

DESCRIPTION. Male. Total length 6.9. Carapace 2.8 long, 2.2 wide, yellow with grey thin margins. Femur II 3.2 long. Chelicerae brown, with three promarginal (middle tooth is biggest) (Fig. 22) and two widely spaced small retromarginal teeth. Palpal femur with one dorsomedial spine and a distal group of three connivent dorsal spines. Spination of the palpal tibia and cymbium as in Fig. 25. Embolus weakly bent and situated apically (Fig. 24). Retrolateral tibial apophysis prominent, with numerous denticles as in Fig. 23. Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-1-1; IV d1-1-1, p0-1-1, r0-1-1; tibiae I, II v0-1-0; III d1-0-0, p0-1-1, r0-1-1, v1-1-2(a); IV d1-1-0, p1-1-1, r1-1-1, v1-2-2(a); metatarsi I, II v1-0-0; III d0-1-1, p1-1-1, r1-1-1, v2-2-2(a); IV d1-1-1, p1-1-2, r1-2-2, v2-2-2(a).

Female. Total length 8.0 (7.1–8.9). Carapace 3.4 (2.9–3.8) long, 2.4 (2.0–2.6) wide. Femur II 2.6 (2.2–3.0) long.

Chelicerae with 3 promarginal (Fig. 21) and 2 retromarginal denticles. Spination of the palpal femora and legs as in male. Epigyne as in Fig. 19. Spermathecae as in Fig. 20.

DIAGNOSIS. The males of *D. natali* sp.n. are closely related to those of *D. longispinus* Marusik & Logunov, 1995, *D. lesserti* Schenkel, 1936 and *D. pseudolesserti* Loksa, 1965. It can be distinguished from the first species by the shape of the seminal duct kink, which is rounded in the new species and binate or elongate in *longispinus* (cf. figs 26–28 in Marusik & Logunov [1995]). *D. natali* can be separated from the other two species by the weaker retrolateral tibial apophysis, which is armed with distinct denticles. Females of the new species are closest to *D. lapidosus* (Walckenaer, 1802), but differ in the shape of the epigynal foveae (cf. Figs 19 and 9) and epigynal ducts (cf. Figs 20 and 8).

DISTRIBUTION. Known only from the type locality.

Drassodes pubescens (Thorell, 1856) Figs 26–32.

MATERIAL. <u>North</u> Urals: 1 ♂ (PSU-805), Perm Area, Krasnovishersk District, Visherskii Reserve, clearing, pitfall-

traps, 24.VI-03.VII.1995, leg. N.S. Mazura; 1 ♂ (PSU-804), Perm Area, Krasnovishersk District, Kvarkush Range, mountain tundra, pitfall-traps, 09.VI-12.VII.1996, leg. N.S. Mazura. Middle Urals: 3 づづ (PSU-806), Perm Area, Gornozavodsk District, Basegi Reserve, mountain tundra, pitfall-traps, 14-17.VII.1984, 1990, leg. S.L. Esyunin; 2 o'o' (PSU-728), Ekaterinburg Area, burg Area, Talitsa District, "Pripyshminskie Bory" Reserve, Pinus-Betula forest, VII.1997, leg. D. Kazantsev. South Urals: 2 づづ, 1 우 (PSU-1223), Orenburg Area, Sol-Iletsk District, Chybynda, brook-bank and steppe, 05—12.VI.2000, leg. S.L. Esyunin; 3 이어 (PSU-807), Chelyabinsk Area, Ilmenskii Reserve, meadow, 19.VI-05.VII.1991, leg. I.O. Pichugina; 9 ♂♂, 5 ♀♀ (PSU-803), Chelyabinsk Area, Troitsk District, Troitskii Reserve, steppe and shore of lake, pitfall-traps, 12.VI-03.VII.1992, leg. P. Durmanov.

DESCRIPTION. Male. Total length 6.46 (4.90–7.70). Carapace 2.82 (2.40-3.30) long, 2.11 (1.65-2.70) wide. Femur II 2.07 (1.65-2.55) long. Chelicerae with promarginal process armed with 3 denticles (Fig. 29). Palpal femur with 3 dorsodistal spines and 1 dorsomedial spine. The aciform embolus is situated medially; median apophysis broad, sidelong with bifid apex (Fig. 31). Retrolateral tibial apophysis bifid apically (Fig. 30). Leg spination: femora I d1-0-1, p0-0-1; II d1-0-0, p0-0(1)-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1(0)-1, r0-0-1; tibiae I, II v0-0-1; tibiae III d1-0-0, p1-1- $1, r1 \hbox{-} 0 \hbox{-} 1, v1 \hbox{-} 2 \hbox{-} 2; tibiae IV d1 \hbox{-} 0 \hbox{-} 1, p1 \hbox{-} 1 \hbox{-} 1, r1 \hbox{-} 1 \hbox{-} 1, v1 \hbox{-} 1(2) \hbox{-} 2;$ metatarsi I, II v1-0-0; metatarsi III, IV — ample.

Female. Total length 7.83 (6.45-9.55). Carapace 3.20 (3.00–3.45) long, 2.32 (2.15–2.60) wide. Femur II 1.93 (1.60– 2.15) long. Chelicerae with 3 promarginal (Fig. 28) and 2 retromarginal denticles. Palpal femur with 3 dorsodistal spines and 1 dorsobasal spine. Leg spination: femora I, II d1-0-1, p0-0-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-0-1; tibiae I, II v0-0-1; tibiae III d1-0-0, p1-1-1, r1-0-1, v1-2(1)-2; tibiae IV d1-0-1, p1-1-1, r1-1-1, v1-1(2)-2; metatarsi I, II v1-0-0; metatarsi III, IV — ample. Epigyne as in Fig. 26, its posterior edge with a couple of marginal concavities bordering the central septum. Spermathecae three-chambered (Fig. 27).

CATALOGUE. North Urals: Perm Area. Middle Urals: Perm Area. South Urals: Bashkiria [Efimik, 1997], Chelyabinsk Area.

REMARKS. The record of D. pubescens from the Shulgan-Tash Reserve (Bashkiria) by Efimik & Gulyashchikh [1995] should be referred to *D. villosus* (see below).

DISTRIBUTION. East-Central Palearctic temperate range. Europe, Asia Minor, the Caucasus, Kazakhstan, Russia: West and Middle Siberia; Middle Asia, Mongolia.

HABITAT. In the North and Middle Urals, this species inhabits the alpine belt, where it has been collected in tundras. meadows and clearings. On the other hand, in the South Urals it is a dweller of both xerophytic (dry forests of pine, steppes and dry meadows), and humid (brook banks and lake shores) habitats.

Drassodes rostratus sp.n. Figs 33–37.

MATERIAL. Holotype of (ZMMU), South Urals, Orenburg Area, Sol-Iletsk District, Chybynda, declivity of the chalk cliff, 05-12.VI.2000, leg. S.L. Esyunin. Paratype: 2 ♂♂ (PSU-1417), 1 ♂ (ZMMU), s.l., sagebrush (Artemisia) steppe, 05-13.VI.2000, leg. S.L. Esyunin; 1 of (ISEA), s.l., saline lands, 05–12.VI.2000, leg. S.L. Esyunin; 2 づづ (MMU), s.l., saline land, 15-23.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva.

ETYMOLOGY. The specific epithet is derived from the Latin word "rostratus" meaning "stored by battering-ram or apophysis".

DESCRIPTION. Male. Total length 6.7 (5.9-7.5). Carapace 2.97 (2.55-3.25) long, 2.18 (1.85-2.40) wide, with yellow-brown thoracic region and brown cephalic region. Sternum yellow, with brown edging. Abdomen grey, with dark lanceolate cardial mark. Femur II 2.37 (2.10–2.60) long. Chelicerae brown, gibbous (Fig. 35), covered with numerous small knobbles, with 3 promarginal (middle tooth is biggest) (Fig. 34) and 2 widely spaced small retromarginal teeth. Palps and legs yellow. Palpal femur with 1 dorsomedial spine and a distal group of 3 connivent dorsal and retrolateral spines. Spination of the palpal tibia and cymbium as in Fig. 33. Palp with bent, apically situated embolus (Fig. 37); retrolateral tibial apophysis long and pointed (Figs 36, 37). Palpal tibia ventrally with a diagonal row of long thin setae (Figs 36, 37). Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-1-1; III and IV d1-1-1, p0-1-1, r0-1-1; tibiae I p0-0-1, v1-2-0; II p0-0-1, v0-2-0; III d1-0-0, p1-1-1, r0-1-1, v1-2-2(a); IV d1-1-0, p1-1-1, r1-1-1, v2-2-2(a); metatarsi I, II v2-0-0; III, IV — ample.

Female unknown.

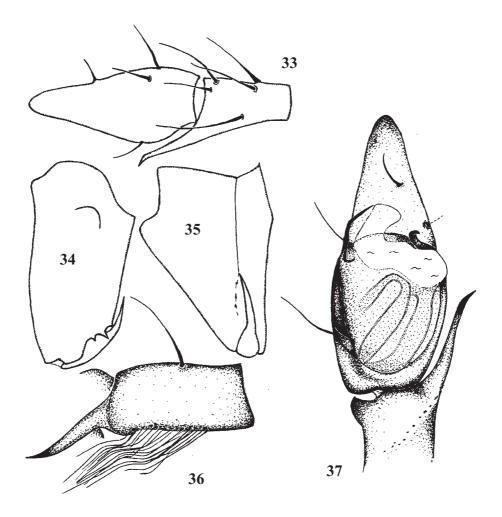
DIAGNOSIS. The new species can easily be distinguished from other Drassodes species by the following characters: 1) the knobby surface of the chelicerae and their shape, 2) the long narrowed retrolateral tibial apophysis (except for Drassodes jakkabagensis Charitonov, 1946) and 3) a row of the long thin setae on the palpal tibia. In our opinion the generic position of D. rostratus sp.n. is uncertain and it is placed here provisionally in *Drassodes*. It should most probably be assigned to a new genus.

DISTRIBUTION. Known only from the type locality.

Drassodes villosus (Thorell, 1856) Figs 38–47.

MATERIAL. Middle Urals: 1 of (PSU-801), Ekaterinburg City, in house, 10.VI.1917, leg. D.E. Kharitonov; 2 or or (PSU-791), Perm Area, Kungur District, Spasskaya Gora Reserve, limestone denudation and stony steppe, pitfall-traps, 24.VI.1988, 27.V.1989, leg. S.L. Esyunin; 1 ♂ (PSU-792), environs of Perm City, Bolshoe Savino, clearing, under tree bark, V.1989, leg. S.L. Esyunin; 1 ♂ (PSU-796), environs of Perm City, Verkhnyaya Kuriya, Pinus forest, 28.IV.1991, leg. V.O. Kozminykh; 1 ♀ (PSU-800), environs of Perm City, Nizhnyaya Kuriya, building, 16-25.V.1922, leg. D.E. Kharitonov; 1 of (PSU-795), Perm Area, Ocher Town, 07.VI.1996, leg. V.G. Novokshonov. South Urals: 19 (PSU-797), environs of Orenburg City, Nezhenka, under stones, 01.VII.1985, leg. and det. S. Kuznetsov (as D. pubescens); 9 ♂♂, 3 🜳 (PSU-798), Orenburg Area, Kuvandyk District, Aituar, stone denudation and stony steppe, under stones and pitfall-traps, 17–24.V.1995, 1997, leg. N.S. Mazura & S.L. Esyunin; 2 \circlearrowleft , 3 \hookrightarrow (PSU-799), Chelyabinsk Area, Troitsk District, Troitskii Reserve, barton and in house, 21-28.VI.1992, 1994, leg. P. Durmanov & S.L. Esyunin; 2 0'0' (PSU-799), Chelyabinsk Area, Troitsk District, Ui River, stony steppe, pitfall-traps, 08.VII.1994, leg. S.L. Esyunin; 3 0 (PSU-793), Bashkiria, Burzyan District, Bashkirskii Reserve, mountain steppe, 24.VII.1988, leg. V.E. Efimik; 12 (PSU-794), Bashkiria, Burzyan District, Shulgan-Tash Reserve, Kapovo, mixed forest, 09.VI.1985, leg. V.E. Efimik (det. hitherto by V. Efimik as D. pubescens), 1 \updownarrow (PSU-794), Bashkiria, Burzyan District, Shulgan-Tash Reserve, Irgizly, rock, 23.VIII.1997, leg. V.E. Efimik & S.L. Esyunin.

DESCRIPTION. Male. Total length 10.38 (6.55-12.80). Carapace 4.45 (3.05–5.30) long, 3.36 (2.20–4.30) wide. Femur II 3.87 (2.75–4.95) long. Chelicerae with 3 promarginal (Figs 38, 39) and 2 retromarginal denticles. Palpal femur with 3(4) dorsodistal spines and 1 dorsomedial spine. Spination of the palpal tibia and cymbium as in Fig. 47. Embolus situated apically (Fig. 46). Retrolateral tibial apophysis with numerous (from 6 to 10) denticles (Fig. 44). Leg spination: femora



Figs 33–37. Drassodes rostratus sp.n.: 33 — tibia and cymbium of palp, dorsal view; 34 —chelicera, anterior view; 35 — ditto, internal view; 36 — palpal tibia, lateral view; 37 — palp, ventral view.

Рис. 33-37. Drassodes rostratus sp.n.: 33 — голень и цимбиум пальпа, вид сверху; 34 — хелицера, вид спереди; 35 — то же, вид изнутри; 36 — голень пальпа, вид сбоку; 37 — пальпа самца, вид сбоку.

I, II d1-0-1, p0-1(0)-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-0-1; tibiae I, II v0-0-1; tibiae III d1-0-0, p1-1-1, r1-1-1, v1-2(1)-2; tibiae IV d1-0-1, p1-1-1, r1-1-1, v2-2-2; metatarsi I, II v1-0-0; metatarsi III, IV — ample.

Female. Total length 12.01 (9.05–15.80). Carapace 5.02 (4.25–5.60) long, 3.52 (3.05–3.80) wide. Femur II 3.58 (3.30–3.90) long. Chelicerae with 3 promarginal (Fig. 43) and 2 retromarginal denticles. Palpal femur with 3 dorsodistal spines and 1 dorsobasal spine. Leg spination: femora I, II d1-0(1)-1(0), p0-1(0)-1; femora III d1-1-1, p0-1-1, r0-1-1; femora IV d1-1-1, p0-1-1, r0-1-1; tibiae I, II v0-0-1; tibiae III d1-0-0, p1-1-1, r1-1-1, v1-1(2)-2; tibiae IV d1-0-1, p1-1-1, r1-1-1, v1(2)-1(2)-2; metatarsi I, II v1-0-0; metatarsi III, IV — ample. Epigyne with a broad median plate (Figs 41, 42). Spermathecae sinuous (Fig. 40).

CATALOGUE. <u>Middle</u> Urals: Perm and Ekaterinburg areas. <u>South</u> Urals: Bashkiria [Efimik, 1997; Efimik & Gulyashchikh, 1995: as *D. pubescens*], Orenburg [Efimik *et al.*, 1997] and Chelyabinsk areas.

REMARKS. The female from Shulgan-Tash Reserve (Fig. 41) was erroneously identified as *D. pubescens* [see

Efimik & Gulyashchikh, 1995; their material re-examined], and this record should be referred to *D. villosus*.

DISTRIBUTION. Trans-Palaearctic subboreal range. Europe, the Caucasus, Kazakhstan, Russia: South Siberia, Khabarovsk Province; Middle Asia, the Himalayas.

HABITAT. Dry forests and clearings, limestone denudations and chalk declivities, stony steppes, saline lands; common in houses.

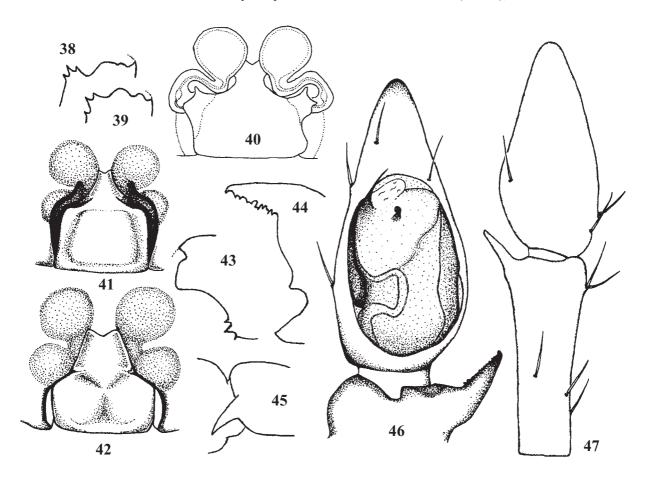
Sidydrassus gen.n.

Type species: *Drassus shumakovi* Spassky, 1934, by designation.

ETYMOLOGY. The specific epithet is derived from the name of Goidel deities — "Sidy", which inhabit crevices of rocks, and the gnaphosid genus *Drassus*.

Species included: *S. shumakovi* (Spassky, 1934) and *S. tianschanica* (Hu et Wu, 1989).

DIAGNOSIS. Species of *Sidydrassus* resemble those of the genus *Talanites* Simon, 1893 in having the wide, prolaterally situated embolus (acuminate in the type species — *T. fervidus*



Figs 38–47. Drassodes villosus (Thorell, 1856): 38, 39 — apical part of male chelicera, anterior view, variants; 40 — spermathecae; 41, 42 — epigyne, variants; 43 — apical part of female chelicera, anterior view; 44 — apical part of male palp tibia, ventral view; 45 — ditto, lateral view; 46 — male palp, ventral view; 47 — tibia and cymbium of male palp, dorsal view.

Рис. 38—47. Drassodes villosus (Thorell, 1856): 38, 39 — вершина хелицеры самца, вид спереди, варианты; 40 — сперматека; 41, 42 — эпигина, варианты; 43 — вершина хелицеры самки, вид спереди; 44 — вершина голени пальпа самца, вид сбоку; 45 — то же, вид сбоку; 46 — пальпа самца, вид снизу; 47 — голень и цимбиум пальпа самца, вид сверху.

Simon, 1893) and the strongly elongated, hamose (=hookshaped) median apophysis. Males of Sidydrassus can be distinguished from those of Talanites by having a long tibial apophysis (short and curved in Talanites), the shape of the median apophysis (ancistroid and with a lateral branch, which is absent in Talanites) and the armed cymbium of the palp (spineless in Talanites). Females differ in having circular receptacules (binary elongate in Talanites) and the fovea formed by anterior and lateral margins of the epigyne (absent in Talanites; anterior and lateral epigynal margins are not connected). Sidydrassus can be distinguished from Drassodes by the structure of the embolus and the median apophysis in males (embolar base absent, whereas the median apophysis short and ancistroid in Drassodes), and the crossinclined epigynal foveae in females (lengthened, with rounded margins in Drassodes).

DESCRIPTION. From above, anterior eye row straight, posterior row slightly procurved. The anterior median eyes circular, dark; posterior median eyes circular, light; lateral eyes oval, light; median ocular quadrangle longer than wide (Fig. 57). Palps with the large embolar base bearing the long embolus curved at its tip, the median apophysis with a lateral curved branch, and the membranous conductor (Figs 55, 59). Tibial apophysis long, strongly tapering to tip (?broken on *S*.

tianschanica). Epigyne wide, with a sinuous posterior margin (Fig. 48); the median epigynal ducts folded anteriorly (Figs 49, 58).

DISTRIBUTION. Southern part of Russian Plain, Middle and Central Asia.

REMARKS. The assignment of *Drassus shumakovi* to *Drassodes* by Kharitonov [1936] was merely a nomenclature modification and was not based on a thoroughly taxonomic study.

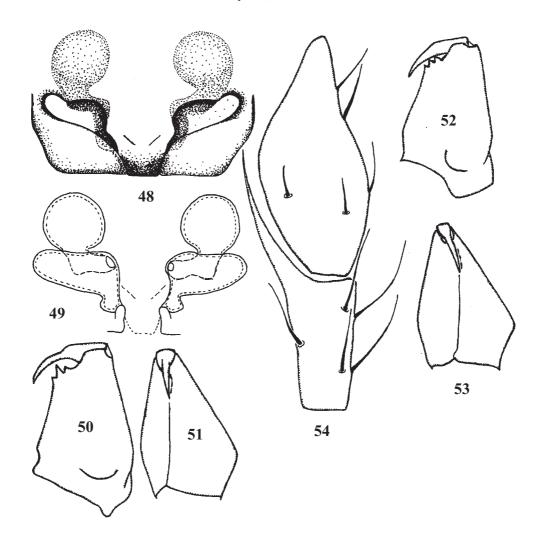
Drassodes tianschanica Hu et Wu, 1989 was described from North-West China (Xinjiang) [Hu & Wu, 1989]. We have been unable to re-examine the type material. However, the original illustrations provided by Hu & Wu [1989: figs 212, 1–4] allow us to conclude that this species belongs in Sidydrassus. Therefore, we propose the new combination, Sidydrassus tianschanica (Hu et Wu, 1989) comb.n.

Sidydrassus shumakovi (Spassky, 1934), comb.n. Figs 48–57.

Drassus shumakovi Spassky, 1934: 1, figs 1–2 (♂♀).

Drassodes shumakovi: Kharitonov, 1936: 205 (transferred from Drassus).

MATERIAL. South Urals: $3 \degree \circlearrowleft$, $12 \degree \circlearrowleft$ (4 cocoons — 45, 61, 84 and 89 eggs) (PSU-1164), Orenburg Area, Sol-Iletsk District,



Figs 48—54. Sidydrassus shumakovi (Spassky, 1934): 48— epigyne; 49— spermathecae; 50— chelicera of male, anterior view; 51— ditto, internal view; 52— chelicera of female, anterior view; 53— ditto, internal view; 54—tibia and cymbium of male palp, dorsal view. Рис. 48—54. Sidydrassus shumakovi (Spassky, 1934): 48— эпигина; 49— сперматека; 50— хелицера самца, вид спереди; 51— то же, вид изнутри; 52— хелицера самки, вид спереди; 53— то же, вид изнутри; 54— голень и цимбиум пальпа самца, вид сверху.

Chybynda, scree under the chalk cliff, 04–09.VI.2000, leg. S.L. Esyunin; 1 \circlearrowleft , 7 \circlearrowleft (ZMMU), s.l. and habitat, 05–13.VI.2000, S.L. Esyunin; 1 \circlearrowleft , 5 \circlearrowleft (ISEA), s.l. and habitat, 06–13.VI.2000, S.L. Esyunin; 4 \circlearrowleft \circlearrowleft , 1 \circlearrowleft (PSU-1927), s.l., declivity of chalk cliff, 14–23.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva; 4 \circlearrowleft \circlearrowleft , 2 \hookrightarrow (MMU), s.l., scree under the chalk cliff, 14–23.VIII.2001, leg. S.L. Esyunin & G.S. Farzalieva. DESCRIPTION. Male. Total length 9.07 (8.00–10.10).

DESCRIPTION. Male. Total length 9.07 (8.00–10.10). Carapace 3.75 (3.15–4.10) long, 2.65 (2.45–2.90) wide, yellow-brown. Femur II 2.98 (2.60–3.20) long. Chelicerae brown, swollen (Fig. 51), covered with numerous small knobbles; with 3 promarginal (Fig. 50) and 2 retromarginal denticles. Palps and legs yellow. Palpal femur with 3 dorsodistal spines and 1 dorsomedial spine. Spination of the palpal tibia and cymbium as in Fig. 54. Palpal tibia ventrally with an oblique row of long thin setae (Fig. 55). Embolus curved apically, with a thick base and longitudinal costa (Figs 55, 56). Strongly elongated median apophysis with a lateral curved branch. Retrolateral tibial apophysis long, strongly tapering to tip (Figs 54, 55). Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-1-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-1-1, r0-1-

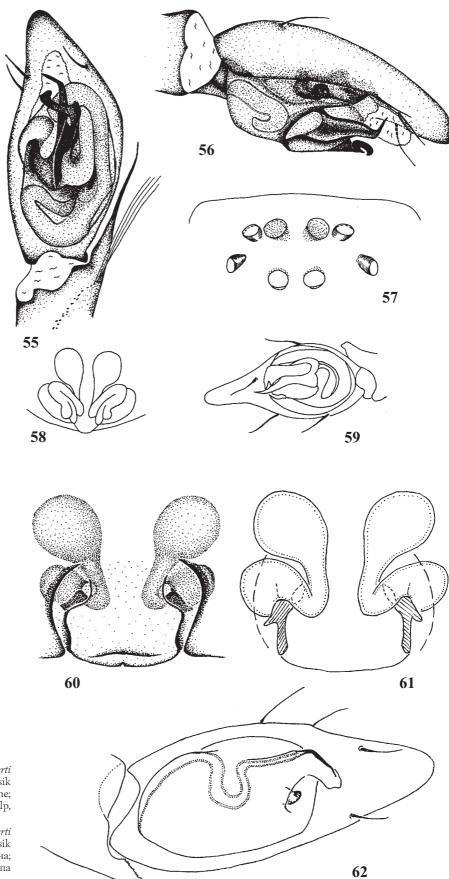
1-1,; tibiae I v1-2-0; II p0-0-1, v0-0-2; III d1-0-0, p1-1-1, r1-1-1, v1-2-2(a); IV d1-1-0, p1-1-1, r1-1-1, v2-2-2(a); metatarsi I and II v2-0-0; III d1-2-2, p1-1-1, r1-1-1, v2-2-2(a); IV d1(0)-2-2, p1-1-1, r1-1-1, v2-2-2(a).

Female. Total length 12.40 (10.00–16.00). Carapace 4.85 (4.00–5.50) long, 3.43 (2.75–3.80) wide. Femur II 3.76 (3.20–4.15) long. The shape and armor of the chelicerae as in male (Figs 52, 53). Leg spination: femora I d1-1-0, p0-1-1; II d1-1(0)-0(1), p0-1-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-1-1,; tibiae I v1(2)-2-0; II p0(1)-0-1, v2-2-0; III d1-0-0, p1-1-1, r1-1-1, v1-2-2(a); IV d1-1-0, p1-1-1, r1-1-1, v2-2-2(a); metatarsi I and II v2-0-0; III d1-2-2, p1-1-1, r1-1-1, v2-2-2(a); IV d2-2(3)-2, p1-1-1, r1-1-1, v2-2-2(a). Epigyne with the short median plate and inclined foveae (Fig. 48). Spermathecae rounded, seminal ducts short and curved (Fig. 49).

DISTRIBUTION. Russia: Rostov and Volgograd areas, Kalmykia [Spassky, 1934; Minoranskiy *et al.*, 1980; Ponomarev, 1981; Ovtsharenko, 1982; Minoranskiy & Ponomarev, 1984; Ponomarev & Minoranskiy, 1984: all sub *Drassodes s.*]; Kazakhstan: Kyzylkumy Desert [Zyuzin *et al.*, 1994: sub *Drassodes s.*].

Figs 55–59.Sidydrassus shumakovi (Spassky, 1934) (55–57) and Sidydrassus tianschanica (Hu & Wu, 1989) (58–59, sensu Hu & Wu, [1989]): 55, 59 — male palp, ventral view; 56 — ditto, lateral view; 57 — eye field; 58 — spermathecae.

Рис. 55—59.Sidydrassus shumakovi (Spassky, 1934) (55—57) и Sidydrassus tianschanica (Hu & Wu, 1989) (58—59, по Hu & Wu [1989]): 55, 59— пальпа самца, вид снизу; 56— то же, вид сбоку; 57— глазное поле; 58— сперматека.



Figs 60–62. Drassodes lesserti Schenkel, 1963 (62, sensu Marusik & Logunov [1995]): 60 — epigyne; 61 — endogyne; 62 — male palp, ventral view.

Рис. 60–62. *Drassodes lesserti* Schenkel, 1963 (62, *sensu* Marusik & Logunov [1995]): 60 — эпигина; 61 — сперматека; 62 — пальпа самца, вид снизу.

REMARKS. The record of *S. shumakovi* from Saratov Area by Tyshchenko [1971] is erroneous. This error is based on a misquotation of its type locality given in Kharitonov [1936] as "Saratov: Sarepta". The type locality, "Sareptam (Tinguta)" [see Spassky, 1934: 2], is actually located in Kalmykia (48°12′N, 44°24′E).

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