

A review of the family Gnaphosidae in the fauna of the Urals (Aranei), 2. New and rare genera

Обзор семейства Gnaphosidae фауны Урала (Aranei). 2. Новые и редкие роды

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KEY WORDS: fauna, the Urals, Gnaphosidae, rare genera, new species.

КЛЮЧЕВЫЕ СЛОВА: фауна, Урал, Gnaphosidae, редкие рода, новый вид.

ABSTRACT. Eight gnaphosid species from the genera *Berlandina* Dalmas, 1922, *Leptodrassus* Simon, 1878, *Phaeoecelus* Simon, 1893, *Poecilochroa* Westring, 1874, *Sosticus* Chamberlin, 1922 and *Trachyzelotes* Lohmander, 1944 which occur in the Urals are reviewed. One new species, *Trachyzelotes chybyndensis* sp.n., is described. All species are re-described and figured from specimens collected in the Urals.

РЕЗЮМЕ. Фаунистический обзор восьми видов пауков-гнафозид из родов *Berlandina* Dalmas, 1922, *Leptodrassus* Simon, 1878, *Phaeoecelus* Simon, 1893, *Poecilochroa* Westring, 1874, *Sosticus* Chamberlin, 1922 and *Trachyzelotes* Lohmander, 1944, встречающихся на Урале. Один вид — *Trachyzelotes chybyndensis* sp.n. — описан как новый. Все виды переописаны и иллюстрированы на основе уральских материалов.

Introduction

This paper is a continuation of our earlier investigations on the gnaphosid fauna of the Urals [Efimik & Esyunin, 1996; Esyunin & Tuneva, 2002] and includes data on five genera considered rare in this region: *Berlandina* Dalmas, 1922, *Leptodrassus* Simon, 1878, *Phaeoecelus* Simon, 1893, *Sosticus* Chamberlin, 1922 (each represented by one species) and *Poecilochroa* Westring, 1874 (two species). The genus *Trachyzelotes* Lohmander, 1944 is recorded from the Urals for the first time. It includes two species: *T. adriaticus* (Caporiacco, 1951), which is a new record for the Russian fauna and *T. chybyndensis* sp.n.

All species recorded in this paper have been re-described and illustrated from material collected in the Urals. Most of this material has been deposited in the collection of the Department of Zoology, Perm State University (PSU). Some of the type specimens of the new species are deposited in the Zoological Museum of the Moscow University (ZMMU) and the Institute for Systematics and Ecology of Animals, Novosibirsk (ISEA).

The following abbreviations are used in the text: a — apical, d — dorsal, p — prolateral, r — retrolateral, v — ventral. Chaetotaxy is as follows: basal-medial-apical spines. For example, tibia I v1-2(1)-2(a) means that tibia I possesses one basal, two (or one) medial and two apical ventral spines. All measurements are in mm.

Records from the Urals given below under “Catalogue” are adopted from Esyunin & Efimik [1996], with some more recent additions. Species distribution follows the catalogue of Esyunin & Efimik [1996], amended as appropriate.

Review of species

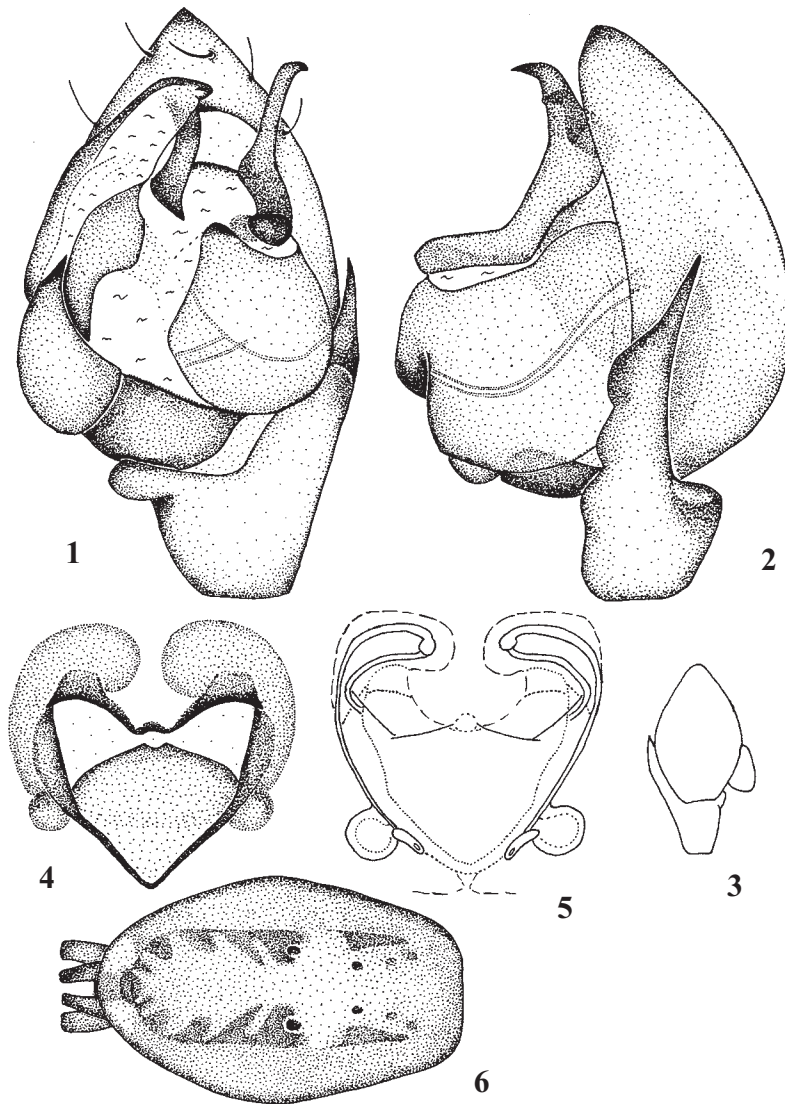
Berlandina Dalmas, 1922

Berlandina cinerea (Menge, 1872)
Figs. 1–6.

MATERIAL. South Urals: 2♂♂, 2♀♀ (PSU-1136), Orenburg Area, Sol-Iletsk District, Chybynda (=Shybyndy), chalk cliff slope with *Salvia*, forb and wormwood steppes, pitfall-traps, 05–13.VI.2000, leg. S.L. Esyunin & G.S. Farzaliyeva; 8♂♂, 3♀♀ (PSU-1683), Orenburg Area, Kuvandyk District, Aituar, forb and stony steppes, pitfall-traps, 15.V–07.VI 1996, leg. N.S. Mazura; 2♀♀ (PSU-1684), Chelyabinsk Area, Troitsk District, Ui River, stony steppe, pitfall-traps, 23.VI–08.VII.1994, leg. S.L. Esyunin.

DESCRIPTION. Male. Total length 5.92 (5.15–6.80). Carapace 2.61 (2.40–2.85) long, 1.98 (1.50–2.40) wide, grey-brown, with white hairs. Abdomen grey, with black pattern as in Fig. 6. Femur II 1.59 (1.45–1.75) long. Chelicerae grey-brown, retromargin with the dented carina. Palp and legs grey-brown. Palpal femur with 1 dorso-medial spine and 1 dorso-apical spine. Palp as in Figs 1–3. Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-0-1; III d1-1-1, p0-1-2, r0-1-1; IV d1-1-1, r0-0-1; tibiae I v1-1-2; II p0-0-1, v1-1-2; III d1-0-1, p2-1-2, r0-1-1, v2-2-2(a); IV d1-0-01 p2-1-2, r2-1-1, v2-2-2(a); metatarsi I v2-3-2; II v3-2-2; III–IV ample (=irregular pattern).

Female. Total length 7.29 (5.80–8.60). Carapace 2.73 (2.45–3.00) long, 2.06 (1.90–2.40) wide. Body colouration and spination of the chelicerae and pedipalps as for male. Femur II 1.49 (1.30–1.75) long. Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-0-1; III d1-1-1, p0-1-1, r0-1-1; IV



Figs 1–6. Copulatory organs and abdomen of *Berlandina cinerea* (Menge, 1872): 1 — male palp, ventral view; 2 — ditto, lateral view; 3 — tibia and cymbium of male palp, dorsal view; 4 — epigyne, ventral view; 5 — spermathecae, dorsal view; 6 — abdomen.

Рис. 1–6. Гениталии и брюшко *Berlandina cinerea* (Menge, 1872): 1 — палец самца, вид снизу; 2 — то же, вид сбоку; 3 — голень и цимбиум пальца самца, вид сверху; 4 — эпигина, вид снизу; 5 — сперматека, вид сверху; 6 — брюшко.

d1-1-1, p0-0-1, r0-0-1; tibiae I v0-1-2, II p0-0-1, v1-1-2; III d1-0-1, p2-1-2, r0-1-1, v2-2-2(a); IV d1-0-1, p2-1-2, r2-1-1, v2-2-2(a); metatarsi I v2-1-2, II v1-1-2; III–IV ample (=irregular pattern). Epigyne as in Fig. 4; spermathecae as in Fig. 5.

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

DISTRIBUTION. Euro-Siberian steppe range. Middle Europe, Kazakhstan, South Siberia.

HABITAT. Various steppes (under stones).

Leptodrassus Simon, 1878

Leptodrassus memorialis Spassky, 1940

Figs. 7–10.

MATERIAL. South Urals: 3♂♂, 5♀♀ (PSU-1161), Orenburg Area, Sol-Iletsk District, Chybynda (=Shybyndy), chalk cliff slope

with *Spiraea*, rodent burrows and pitfall-traps, 4–12.VI.2000, leg. S.L. Esyunin.

DESCRIPTION. Male. Total length 2.63 (2.58–2.65). Carapace 1.11 (1.10–1.13) long, 0.86 (0.80–0.90) wide, corn-coloured. Sternum colour as in carapace, with dark brown margins. Abdomen pale grey. Femur II 1.01 (0.98–1.05) long. Chelicerae yellow, with 2 promarginal and 3 small retromarginal teeth. Palp and legs yellow. Palpal femur with 1 dorso-medial spine and a distal group of 3 dorsal spines. Palp as in Figs 9–10. Leg spination: femora I d1-0-0(1), p0-0-1; II d1-0-0(1), p0-0-1; III d1-1(0)-1, p0-0-1, r0-0-1; IV d1-1(0)-1, p0-0-1, r0-0-1; tibiae I v0-2-0; II v0-1(2)-0; III d1-0-0, p1-1-0, r1-1-0, v2(1)-1-0(a); IV p1-0-1, r1-0-1, v1-1-2(a); metatarsi I v2-0-0; II v2-0;0 III p1-0-2, r0-0-1, v2-0-2 (a); IV p1-1-2, r0-1-2, v1-2-2 (a).

Female. Total length 3.19 (2.83–3.55). Carapace 1.21 (1.18–1.25) long, 0.95 (0.90–1.00) wide. Body colour and

spination of the chelicerae and pedipalps as for male. Femur II 0.90 (0.88–0.98) long. Leg spination: femora I d1-0-0, p0-0-1; II d1-0-0, p0-0-1; III d1-0-1, p0-0-1, r0-0-1; IV d1-1(0)-1, p0-0-1, r0-0-1; tibiae I v2-2-0, II v1-2-0; III p1-1-0, r1-1-0, v1-1-0(a); IV p1-0-1, r1-0-1, v1-2-2(a); metatarsi I v2-0-0, II v2-0-0; III p2-0-2 r0-1-2 v2-0-2, IV p1-1-2, r0-1-2, v1-1-2(a). Epigyne as in Fig. 7; spermathecae as in Fig. 8.

DISTRIBUTION. East Euro-Kazakhstan steppe range: Ukraine, Russia (Rostov and Samara areas, Kalmykia) and Kazakhstan. A new record for the Urals.

***Phaeoedus* Simon, 1893**

***Phaeoedus braccatus* (L. Koch, 1866)
Figs. 11–15.**

MATERIAL. Middle Urals: 1 ♂ (PSU-1058), Perm Area, Kungur District, Spasskaya Gora Reserve, *Tilia-Betula* forest, pitfall-traps, 17.VII.1990, leg. V.O. Kozminykh. South Urals: 1 ♂, 3 ♀♀ (PSU-1060), Chelyabinsk Area, Troitsk District, Troitskii Reserve, steppe and saline plots, pitfall-traps, 29.VI–24.VIII.1994, leg. S.L. Esyunin; 2 ♀♀ (PSU-1059), Bashkiria, Burzyan District, Shulgan-Tash Reserve, Sargaya, under stone, 18.VI.1988, 23.VIII.1997, leg. V.E. Efimik

DESCRIPTION. Male. Total length 4.88 (4.45–5.30). Carapace 2.10 (1.95–2.25) long, 1.63 (1.50–1.75) wide, red-brown. Abdomen grey, with scutum and white pattern as in Fig. 15. Femur II 1.18 (1.15–1.20) long. Chelicerae red-brown, with 1 promarginal tooth projecting anteriorly. Palps and femur of legs I–II grey-brown; other leg segments yellow-brown (tarsus and metatarsus sometimes grey-brown). Palpal femur with 1 dorsomedial spine and 1 prolateral spine. Palp as in Figs 13–14. Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-0-1; III d1-1-0, p0-0-1, r0-0-1; IV d1-1-0, r0-0-1; tibiae II v0-0-1; III p1(0)-1-1, r0-1(0)-1, v1(0)-1-2(a); IV p1(0)-0-1, r0-1-1, v1-2(1)-2(a); metatarsi III p0-0-2, r1-1-1, v1-0-2(a); IV p0-1-1, r0-1-2, v2-0-1(a).

Female. Total length 6.27 (5.25–7.70). Carapace 2.40 (2.00–2.55) long, 1.73 (1.50–1.80) wide, red-brown. Femur II 1.22 (1.05–1.30) long. Spination of chelicerae as for male. Palpal femur with 1 dorsomedial spine and a distal group of 3 connivent dorsal spines. Leg spination: femora I d1-1-0(1), p0-0-1; II d1-1-0, p0-0-1; III d1-1-0, p0-0-1, r0-0-1; IV d1-1-0; tibiae II v0-0-1; III p0-1-1, r0-1(0)-1, v0(1)-1-2(a); IV p0-0-1, r0-1-1, v1(2)-2(1)-2(a); metatarsi III p0-0-2, r0-1-2, v1-0-2(a); IV p0-0-2, r0-1-2, v2-0-1(a). Epigyne as in Fig. 11; spermathecae as in Fig. 12.

CATALOGUE. Middle Urals: Perm. South Urals: Bashkiria, Chelyabinsk.

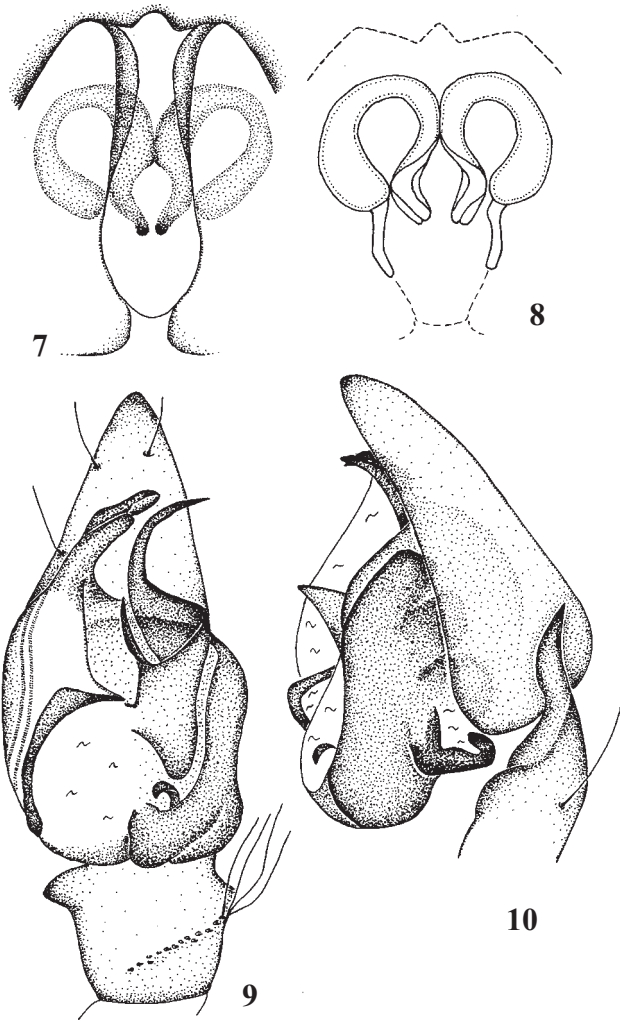
DISTRIBUTION. Trans-Palaeartic nemoral range: Europe, the Caucasus, Kazakhstan, South and Middle Siberia, Central Asia, Mongolia, China, Japan.

HABITAT. Xerothermic steppe-forests on southern slopes, meadows, steppes and saline lands.

***Poecilochroa* Westring, 1874**

***Poecilochroa conspicua* (L.Koch, 1866)
Figs 16–19.**

MATERIAL. Middle Urals: 3 ♂♂ (PSU-1062), Perm Area, Barda District, Sarashy Vil, oak forest, pitfall-traps, 01.VI.1991,

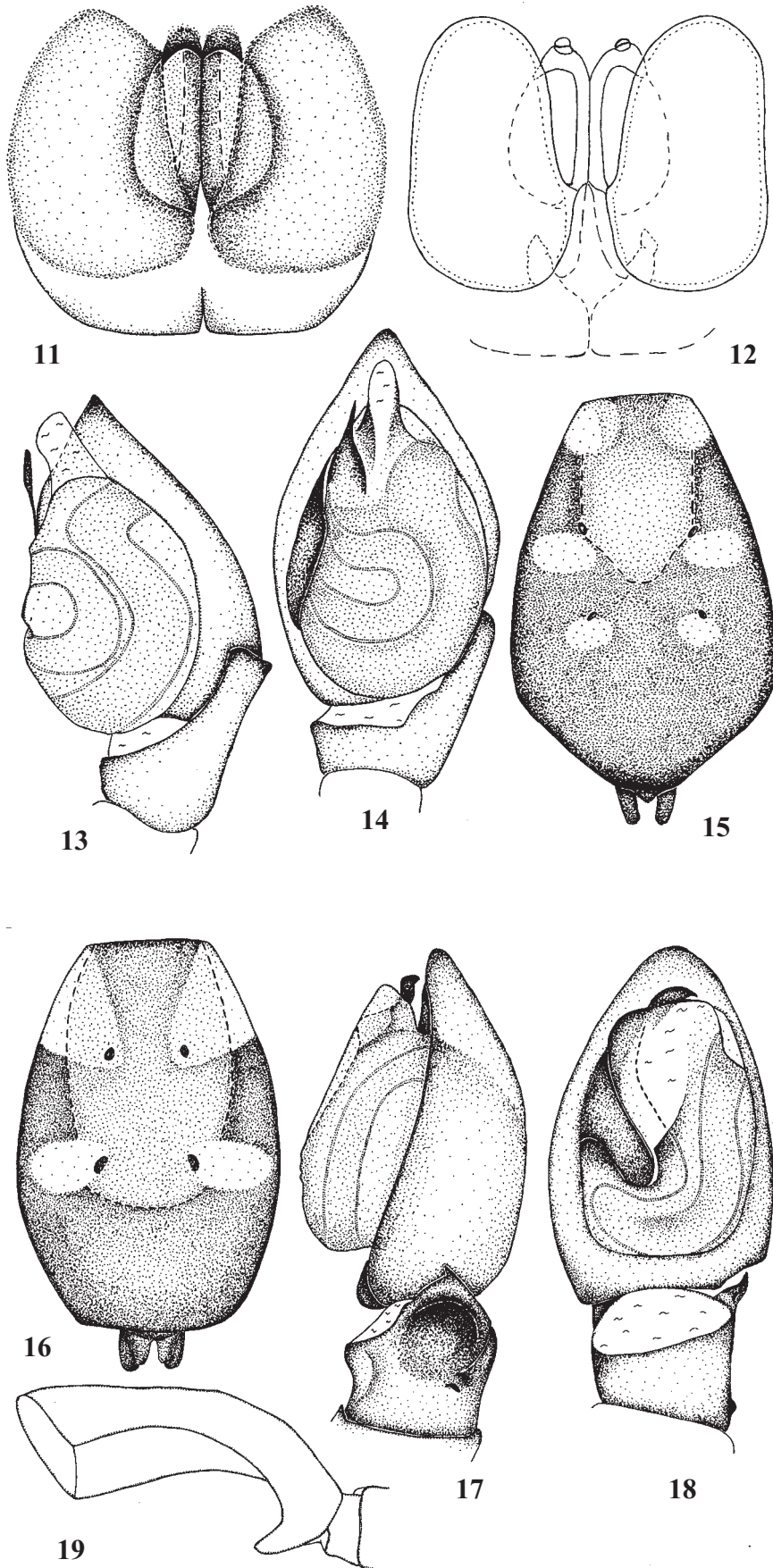


Figs 7–10. Copulatory organs of *Leptodrassus memorialis* Spassky, 1940: 7 — epigyne, ventral view; 8 — spermathecae, dorsal view; 9 — male palp, ventral view; 10 — ditto, lateral view.

Рис. 7–10. Гениталии *Leptodrassus memorialis* Spassky, 1940: 7 — эпигина, вид снизу; 8 — сперматека, вид сверху; 9 — палепус самца, вид снизу; 10 — тоже, вид сбоку.

leg. V.O. Kozminykh. South Urals: 1 ♂ (PSU-1061), Bashkiria, Burzyan District, Shulgan-Tash Reserve, Kush-Elga, oak light forest, pitfall-traps, 28.VI.1985, leg. V.E. Efimik

DESCRIPTION. Male. Total length 5.46 (5.20–5.70). Carapace 2.41 (2.35–2.50) long, 1.81 (1.70–1.85) wide, dark brown. Abdomen dark brown, with a scutum and a pattern of white spots as in Fig. 16. Femur II 1.44 (1.40–1.50) long. Chelicerae with two (small + large) promarginal teeth and a small retromarginal tooth. Leg colour: femora dark brown, other segments yellow-brown to red-brown (tibia I darker than other segments). Palp red-brown (cymbium darker). Palpal femur concave as in Fig. 19, with 1 dorsomedial spine and a distal group of 2 connivent dorsal spines. Tibia laterally with a hollow lying in the base of the retrolateral tibial apophysis (Fig. 17). Palp as in Figs 17–18. Leg spination: femora I d1-1-1; II d1-1-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-0-1, r0-0-1; tibiae I p1-0-1, v1-2-2; II p0-0-1, v1-2-2; III d1(2)-0-0, p1-1-1, r0-1-1, v1-2-2; IV d1-0-0, p1-1-1, r1-0-1, v1-2-2; metatarsi I v2-0-0; II v2-0-0; III p1-2-2, r1-1-2, v2-0-2; IV p1-2-2, r1-2-2, v2-2-2.

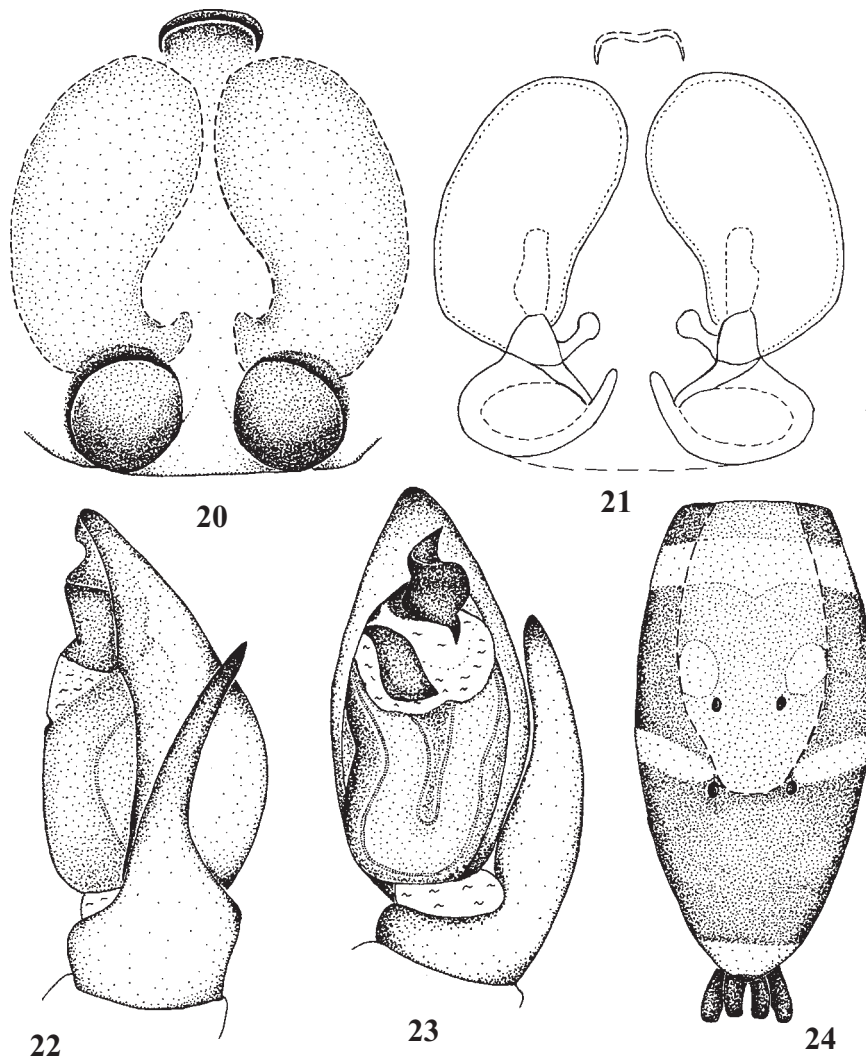


Figs 11–15. Copulatory organs and abdomen of *Phaeoecedes braccatus* (L. Koch, 1866): 11 — epigyne, ventral view; 12 — spermathecae, dorsal view; 13 — male palp, lateral view; 14 — ditto, ventral view; 15 — abdomen.

Рис. 11–15. Гениталии и брюшко *Phaeoecedes braccatus* (L. Koch, 1866): 11 — эпигина, вид снизу; 12 — сперматека, вид сверху; 13 — палец самца, вид сбоку; 14 — то же, вид снизу; 15 — брюшко.

Figs 16–19. Male copulatory organs and abdomen of *Poecilochroa conspicua* (L. Koch, 1866): 16 — abdomen; 17 — palp, lateral view; 18 — ditto, ventral view; 19 — palp femur, lateral view.

Рис. 16–19. Гениталии и брюшко самца *Poecilochroa conspicua* (L. Koch, 1866): 16 — брюшко; 17 — палец, вид сбоку; 18 — то же, вид снизу; 19 — бедро пальпуса, вид сбоку.



Figs 20–24. Copulatory organs and abdomen of *Poecilochroa variana* (C.L.Koch, 1839): 20 — epigyne, ventral view; 21 — spermathecae, dorsal view; 22 — male palp, lateral view; 23 — ditto, ventral view; 24 — abdomen.

Рис. 20–24. Гениталии и брюшко *Poecilochroa variana* (C.L.Koch, 1839): 20 — эпигина, вид снизу; 21 — сперматека, вид сверху; 22 — палец самца, вид сбоку; 23 — то же, вид снизу; 24 — брюшко.

CATALOGUE. Middle Urals: Perm. South Urals: Bashkiria.

DISTRIBUTION. Trans-Palaeartic nemoral range: South and Middle Europe, the Caucasus, Kazakhstan, Central Asia, Khabarovsk and Primorie provinces.

HABITAT. Oak forests.

Poecilochroa variana (C.L.Koch, 1839)

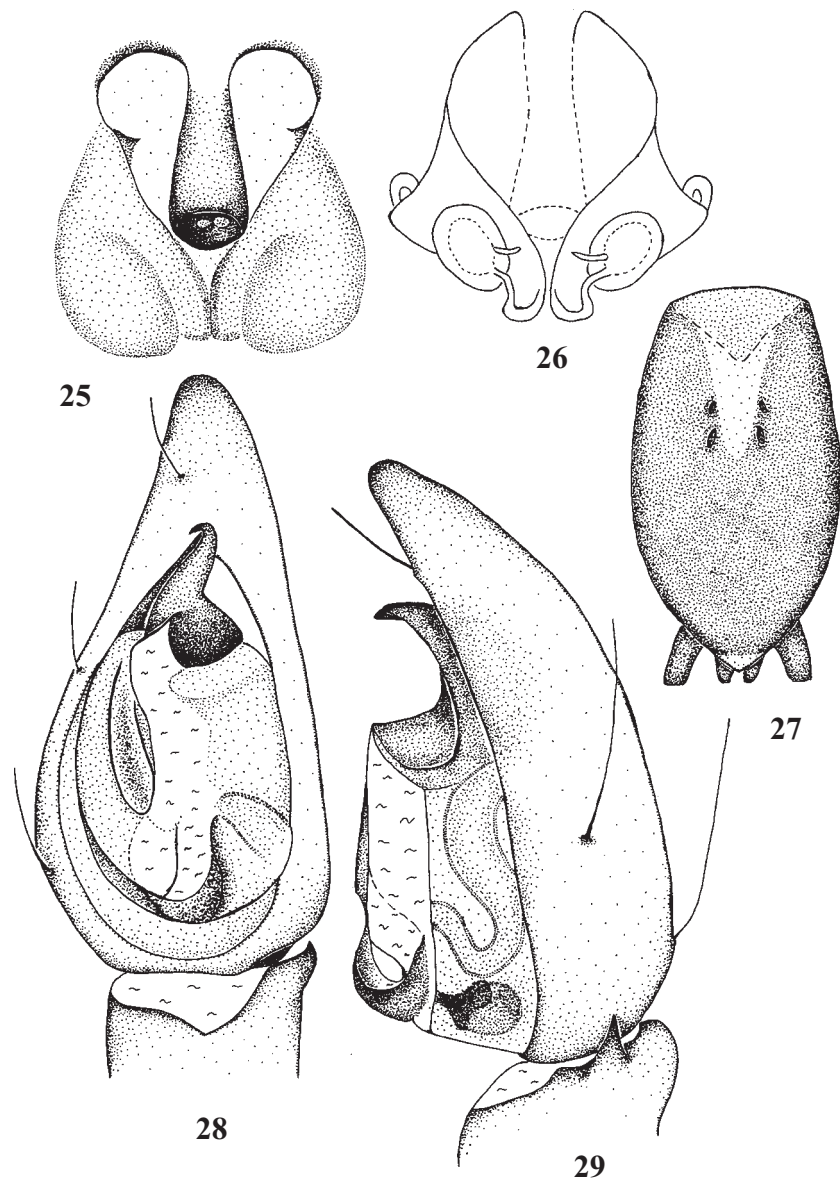
Figs 20–24.

MATERIAL. South Urals: 1 ♂, 2 ♀♀ (PSU-1064), Chelyabinsk Area, Troitsk District, Troitskii Reserve, *Betula* forest and saline land, pitfall-traps, VI.1992, leg. P. Durmanov; 1 ♀ (PSU-1065), Orenburg Area, near Orenburg, Nezhenka, Ural River bank, under stones, 01.VIII. 1985, leg. S. Kuznetsov; 1 ♂ (PSU-1066), Orenburg Area, Kuvandyk District, Aituar, mountain steppe, under stones, 15.V. 1996, leg. N.S. Mazura.

DESCRIPTION. Male. Total length 5.00. Carapace 2.05 long, 1.45 wide, yellow-brown. Abdomen grey-brown, with a

light pattern as in Fig. 24. Femur II 1.00 long. Chelicerae with one carine-shaped promarginal tooth. Chelicerae, palpal and leg femora grey-brown; remaining leg segments yellow-brown. Palpal femur with 1 dorsomedial spine and a distal group of 3 connivent dorsal spines. Palp as in Figs 22–23. Leg spination: femora I d1-1-1, p0-0-1; II d1-1-1, p0-0-1; III d1-1-1, p0-1-1, r0-1-1; IV d1-1-1, p0-0-1, r0-0-1; tibiae I, II v0-0-1; III p1-1-1, r0-1-1, v1-2-2; IV p1-0-1, r1-0-1, v2-2-2(a); metatarsi I v2-0-0; II v2-0(1)-0; III p0-1-2, r1-1-2, v2-0-2(a); IV p1-2-2, r1-2-2, v2-2-2(a).

Female. Total length 6.02 (5.20–6.45). Carapace 2.47 (2.20–2.75) long, 1.60 (1.45–1.75) wide. Colour as for male. Femur II 1.33 (1.25–1.45) long. Palpal femur with 1 dorsomedial spine and a distal group of 3 connivent dorsal spines. Leg spination: femora I d1-1-1, p0-0-1; II d1-1-1, p0-0-1; III d1-1-1, p0-0(1)-1, r0-1-1; IV d1-1-1, p0-0-1, r0-0-1; tibiae I, II v0-0-1; III p1-1-1, r0-1-1, v2-2-2(a); IV p1-1-1, r0-1-1, v2-2-2(a); metatarsi I, II v1-0-0; III p1-0-2, r1-0-2, v2-0-2(a); IV p1-2-2, r1-2-2, v2-2-2(a). Epigyne as in Fig. 20; spermathecae as in Fig. 21.



Figs 25–29. Copulatory organs and abdomen of *Sosticus loricatus* (L. Koch, 1866): 25 — epigyne, ventral view; 26 — spermathecae, dorsal view; 27 — abdomen; 28 — male palp, ventral view; 29 — ditto, lateral view.

Рис. 25–29. Гениталии и брюшко *Sosticus loricatus* (L. Koch, 1866): 25 — эпигина, вид снизу; 26 — сперматека, вид сверху; 27 — брюшко; 28 — палец самца, вид снизу; 29 — то же, вид сбоку.

CATALOGUE. South Urals: Orenburg, Bashkiria.

DISTRIBUTION. Euro-Central Asian steppe range: Europe, Kazakhstan, Central Asia.

HABITAT. Xerothermic *Betula* forests, saline lands.

Sosticus Chamberlin, 1922

Sosticus loricatus (L. Koch, 1866)

Figs 25–29.

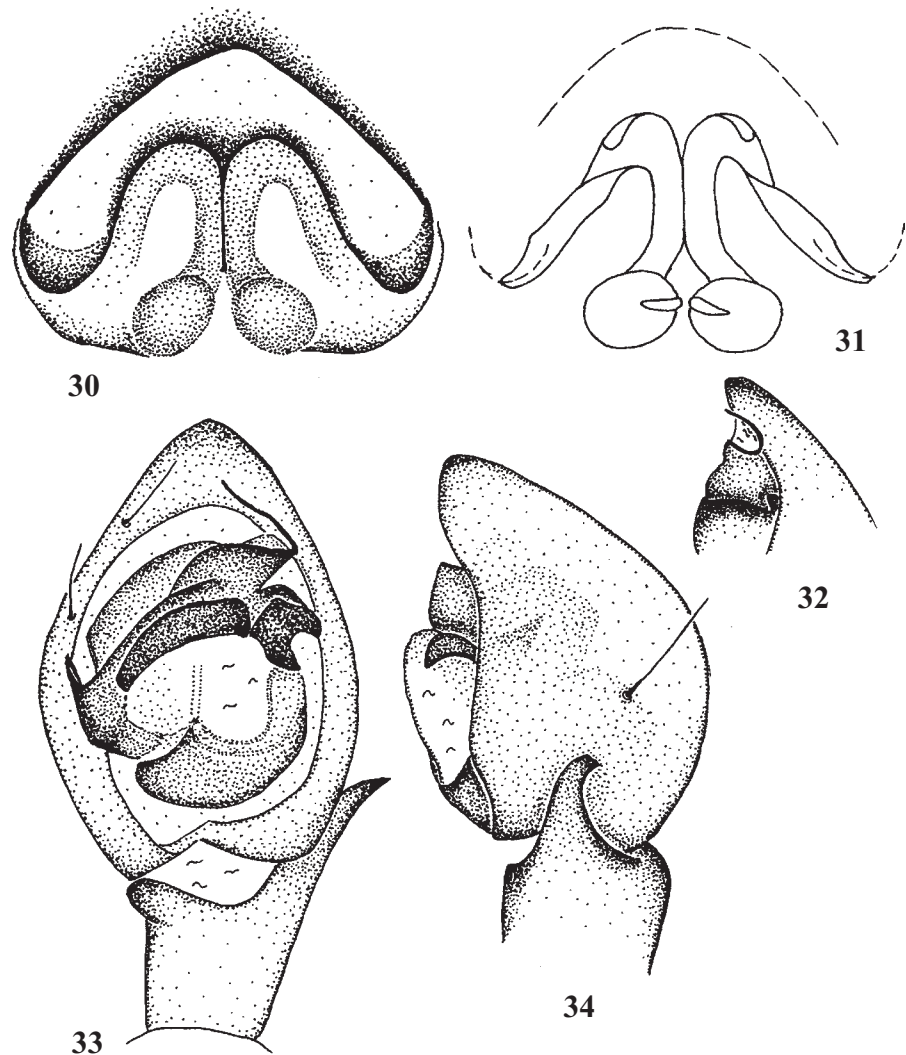
MATERIAL. Middle Urals: 2 ♂♂, 1 ♀ (PSU-259), Perm Area, Perm City, in a house, 27.X.1998 and II.2000, leg. S.L. Esyunin; 1 ♂ (PSU-1063), Ekaterinburg Area, Krasnoufimsk District, date and collector unknown. South Urals: 1 ♂ (PSU-83), Chelyabinsk

Area, Troitsk District, Troitskii Reserve, in a house, VIII.1994, leg. S.L. Esyunin.

DESCRIPTION. Male. Total length 7.70 (7.00–8.50). Carapace 3.51 (3.10–4.10) long, 2.68 (2.50–2.95) wide, yellow-brown. Abdomen ginger, with light spots (Fig. 27). Femur II 2.33 (2.25–2.45) long. Chelicerae yellow-brown, with 3 promarginal teeth and 1 retromarginal tooth. Palp and legs ginger. Palpal femur with 1 dorsomedial spine and a distal group of 3(4) connivent dorsal spines. Palp as in Figs 28–29. Leg spination: femora I d1-1-0, p0-1-1; 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; tibiae I v2-2-2; II p1-0-1, v2-2-2; III d1-0-0, p1(2)-1-1, r1(2)-1-1, v1(2)-2-2(a); IV d1-1-0, p2-2-0, r2-2-0, v1(2)-2-2(a); metatarsi I v2-1-0; II p0-1-0, v2-2-0; III d1-1-0, p1-2-2, r1-1-2, v2-2-2(a); IV d1-0-0, p1-2-2, r1-2-2, v2-2-2(a).

Figs 30–34. Copulatory organs of *Trachyzelotes adriaticus* (Caporiacco, 1951): 30 — epigyne, ventral view; 31 — spermathecae, dorsal view; 32 — apical part of male palp, lateral view; 33 — male palp, ventral view; 34 — ditto, lateral view.

Рис. 30–34. Гениталии *Trachyzelotes adriaticus* (Сапорьяццо, 1951): 30 — эпигина, вид снизу; 31 — сперматека, вид сверху; 32 — вершина пальпуса самца, вид сбоку; 33 — пальпус самца, вид снизу; 34 — то же, вид сбоку.



Female. Total length 9.25. Carapace 4.00 long, 3.00 wide, brown. Femur II 2.45 long. 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. 25; spermathecae as in Fig. 26.

CATALOGUE. Middle Urals: Perm, Ekaterinburg. South Urals: Bashkiria. New record for the Chelyabinsk Area.

DISTRIBUTION. Holarctic range: Europe, Kazakhstan, Siberia, Central Asia, China, the Russian Far East (Amur Area), North America.

HABITAT. Synanthropic.

Trachyzelotes Lohmander, 1944

Trachyzelotes adriaticus (Caporiacco, 1951)

Figs 30–34.

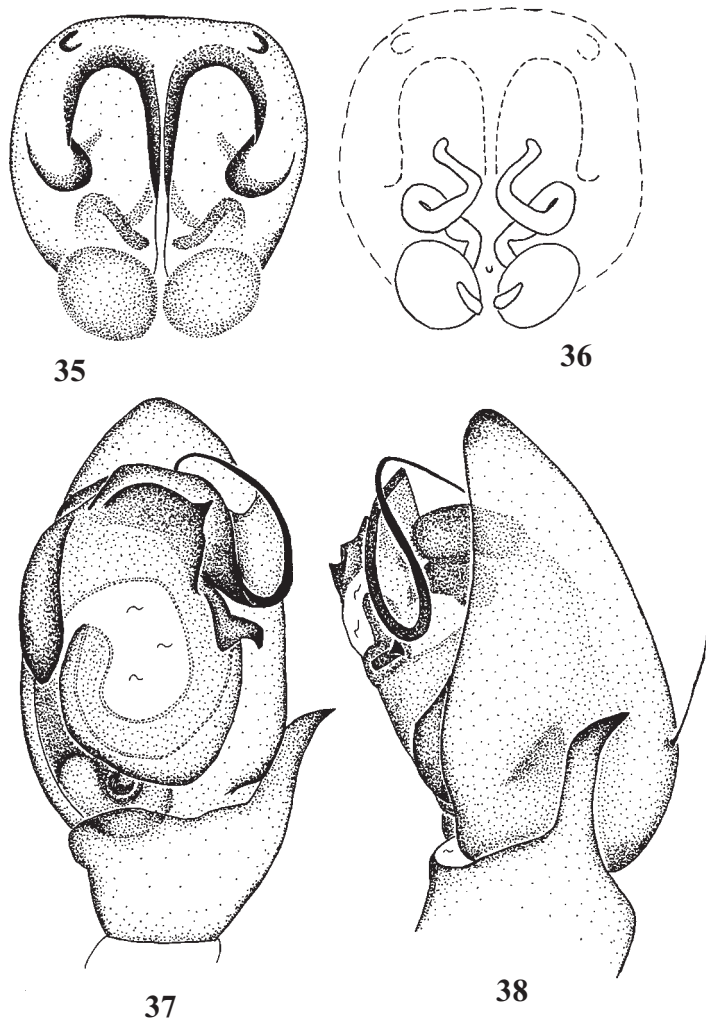
MATERIAL. South Urals: 5 ♂♂, 1 ♀ (PSU-1300), Orenburg Area, Sol-Ilets District, Chybynda (=Shybyndy), chalk slopes

and saline lands, pitfall-traps, 05–12.VI.2000, leg. S.L. Esyumin & G.S. Farzalieva.

DESCRIPTION. Male. Total length 4.59 (4.00–4.95). Carapace 1.85 (1.65–2.00) long, 1.55 (1.40–1.60) wide, brown. Sternum dark brown; legs yellow; palps almond-coloured. Abdomen grey. Femur II 1.26 (1.00–1.45) long. Chelicerae brown, with 1 small promarginal tooth. Palpal femur with 1 dorsomedial spine and a distal group of 2 connivent dorsal spines. Palp as in Figs 32–34. Leg spination: femora I d1-1-0, p0-0-1; II d1-1-0, p0-0-1; III d1-1-0, p0-1-1, r0-(0)1-1; IV d1-1-0, p0-0-1, r0-0-1; tibiae III p1-0-1, r0-1-1, v2-2-2(a); IV p1-1-1, r1-1-1, v2-2-2(a); metatarsi III p0-1-2, r(0)1-1-2, v1-0-numerous(a); IV p1-2-2, r1-2-1, v2-2-numerous(a).

Female. Total length 6.00. Carapace 2.25 long, 1.90 wide. Body colour and spination of the chelicerae and palpal femora as for male. Femur II 1.50 long. Leg spination: femora I d1-1-0, p0-0-1; II d1-0-0, p0-0-1; III d1-1-0, p0-1-1, r0-0-1; IV d1-1-0, p0-1-1, r0-0-1; tibiae III p0-1-1, r1-1-1, v1-2-2(a); IV p1-1-1, r2-1-1, v2-2-2(a); metatarsi II v1-0-2; III p1-2-2, r1-1-2, v2-0-2; IV p0-2-2, r1-2-1, v2-2-1(a). Epigyne as in Fig. 30; spermathecae as in Fig. 31.

REMARKS. A new record for Russia; this Euro-Central Asian species has hitherto been recorded from South Europe (Italy and the Balkans) and China [Platnick, 1993].



Figs 35–38. Copulatory organs of *Trachyzelotes chybyndensis* sp.n.: 35 — epigyne, ventral view; 36 — spermathecae, dorsal view; 37 — male palp, ventral view; 38 — ditto, lateral view.

Рис. 35–38. Гениталии *Trachyzelotes chybyndensis* sp.n.: 35 — эпигина, вид снизу; 36 — сперматека, вид сверху; 37 — палец самца, вид снизу; 38 — то же, вид сбоку.

Trachyzelotes chybyndensis sp.n.

Figs. 35–38.

MATERIAL. Holotype: ♂ (ZMMU), South Urals, Orenburg Area, Sol-Iletsk District, Chybynda (=Shybyndy), chalk plateau, pitfall-traps, 13.VI.2000, leg. S.L. Esyunin & G.S. Farzalieva.

Paratypes: 1 ♂, 2 ♀♀ (PSU-1689), 1 ♂, 1 ♀ (ISEA), 2 ♀♀ (ZMMU), together with holotype.

ETYMOLOGY. The species is named after the type locality.

DESCRIPTION. Male. Total length 3.30 (3.10–3.63). Carapace 1.33 (1.25–1.45) long, 1.07 (1.03–1.10) wide, yellow. Sternum yellow, with dark brown margins. Abdomen corn-coloured. Body covered with dark spines. Femur II 0.83 (0.75–0.88) long. Chelicerae brown, with 1 small promarginal tooth. Palp and legs yellow. Palpal femur with 1 dorsomedial spine and a distal group of 2 connivent dorsal spines.

Palpal as in Figs 37–38. Leg spination: femora I d0-1-1; II d0-1-1; III d1-1-0, p0-1-1, r0-1-1; IV d1-1-0, p0-0-1, r0-0-1; tibiae III p0-1-1, r0-1-1(0), v1-2-2(a); IV p1-1(0)-1, r1-1-1, v2-2-2(a); metatarsi III p0-1-2(1), r0-1-1(0) v0-0-numerous(a); IV p1-2-2, r1-2-0, v0-0-numerous(a).

Female. Total length 3.86 (3.40–4.13). Carapace 1.32 (1.25–1.38) long, 1.07 (1.00–1.13) wide. Body colour and spination of the chelicerae and palpal femora as for male. Femur II 0.80 (0.75–0.85) long. Leg spination: femora I d0-1-1; II d0-1-1; III d1-1-0, p0-1-1, r0-1-1; IV d1-1-0, p0-0-1, r0-0-1; tibiae III p1(0)-1-1, r0-1-0, v1-2-2(a); IV p1-0(1)-1, r1-0-2, v2-2-2(a); metatarsi III p0-1-2, r0-1-1, v0-0-numerous(a); IV p0-2-2, r1-2-0, v1-0-1 numerous(a). Epigyne as in Fig. 35; spermathecae as in Fig. 36.

DIAGNOSIS. The presence of teeth on the terminal apophysis, the shape of the embolic kink (visible in lateral view) and the median plate of the epigyne. *T. chybyndensis* sp.n. is closest to the Mediterranean *T. costatus* (Denis, 1952) and Turkish *T. malkini* Platnick & Murphy, 1984. Males of the new species can easily be separated by the broadly rounded embolic kink (seen in lateral view; cf. Platnick & Murphy [1984: figs. 43 and 51]) and the concave retrolateral tibial apophysis (cf. Platnick & Murphy [1984: figs. 44 and 52]). Females can be distinguished by the shape of the insemination ducts (curved in the new species; straight and protruded forwards in other species).

Acknowledgments. We particularly wish to acknowledge the kind help of Dr. D. Penney (University of Manchester, UK), who edited the English of the manuscript. This work was supported in part by the Russian Foundation of Basic Research (RFFI), Projects ##00-04-49196 and 02-04-06331, as well as by the Scientific-Practical Program "Universities of Russia".

References

- Efimik V.E. 1997. [Biological distribution of the Bashkirian spiders] // Vestnik Permskogo Universiteta. No.3. P.128–138 [in Russian].
- Efimik V.E., Esyunin S. L. 1996. Remarks on the Ural Spider fauna, 6. New data on the taxonomy and faunistics of the gnaphosid spiders of the South Urals (Arachnida Aranei Gnaphosidae) // Arthropoda Selecta. Vol.5. No.3–4. P.105–111.
- Esyunin S.L., Efimik V.E. 1996. Catalogue of the spiders (Arachnida, Aranei) of the Urals. Moscow: KMK Sci. Press Ltd. 229 pp.
- Esyunin S.L., Tuneva T.K. 2002. A review of the family Gnaphosidae in the fauna of the Urals (Araneae), 1. Genera *Drassodes* Westring, 1851 and *Sidydrassus* gen.n. // Arthropoda Selecta. Vol.10 (for 2001). No.2. P.169–180.
- Platnick N. 1993. Advance in spider taxonomy 1988–1991. With synonyms and transfers 1940–1980. New York: New York Entomol. Soc. and Amer. Mus. Nat. History. 846 pp.
- Platnick N.L., Murphy J.A., 1984. A revision of the spider genera *Trachyzelotes* and *Urozelotes* (Araneae, Gnaphosidae) // Amer. Mus. Nov. No.2792. 30 pp.