The jumping spiders (Araneae, Salticidae) of Khabarovsk Province (Russian Far East)

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The paper presents data on the Salticidae (except of the genus Euophrys) of Khabarovsk Province (Russian Far East). Thirty-six species are reported; among them three are described as new (Harmochirus nigrinculus, Marpissa dersucalai, Marpissa zebra), four are new for Russia (Harmochirus pullus, Marpissa pulchra, Phintella linea, P. parva) and twelve are new for Khabarovsk Province (Harmochirus latens, Evarcha albaria, Heliophanus dubius, Marpissa dybowskiii, M. elongata, M. pulla, Myrmarchne formicaria, M. lugubris, Phintella arenicolor, P. popovi, Salticus cingulatus, Sitticus cutleri). Two names are synonymized (Yaginumaella ususudi with Y. striatipes and Phintella mellotei with P. arenicolor). The neotype of Phintella castriesiana is designated. Bianor latens is assigned to the genus Harmochirus, and the first description of the male of this species is provided. The differentiating diagnoses of poorly known Eastern Palaeartic species of the genera Marpissa, Myrmarchne and Phintella are given.

1. Introduction

Our knowledge of the Salticidae from different parts of the Palaeartic is very biased; whereas the Western Palaeartic species are relatively well known, our knowledge of the Central and Eastern Palaeartic species is grossly inadequate.

The current distribution of the Palaeartic species was shaped to a large extent by the Ice Age. After the retreat of the glaciers the species recolonized the Palaeartic from the refugia. Prószyński (1976) put forward a hypothesis that the species spreading from Western Palaeartic refugia were more expansive, colonizing large areas, and reaching in some cases to the shores of the Pacific Ocean. On the other hand, the species from the Eastern centres of dispersal were less dynamic, and this resulted in the small ranges of the Eastern Palaeartic species. To verify this hypothesis one needs to have a much better idea of species distribution patterns in the Central and Eastern Palaeartic. This demands not only faunistic studies in poorly known areas, but taxonomic work as well. The Asiatic species are
insufficiently known, and for many of them good descriptions and diagnoses are lacking, making their correct identification practically impossible.

Our knowledge of the Salticidae of the Khabarovsk Province (Khabarovsk Krai) (Fig. 1) stems from only a few publications. Initial information was provided by Grube (1861), who reported eight species from there. It was not until more than a century later that papers by Prószyński (1979) and Dunin (1984) allowed us to extend the list of species known from this area to twenty. Four of the species from this list have not been found in our material. These are: Evarcha laetabunda (C. L. Koch), Pellenes ignifrons (Grube), Sitticus caricis (Westring) and Sitticus pubescens (Fabricius). The latter species was recorded in the Amur river valley by Grube (1861). This information was repeated by Kharitonov (1932), Azheganova & Stenchenko (1977), Dunin (1984) and Nenilin (1985). Unfortunately, the specimen has disappeared from Grube’s collection (Prószyński 1971), so verification of this record is impossi-

ble. As this European species has never again been found East of the Urals (see Prószyński 1983: fig. 5), it seems that its inclusion in the fauna of Khabarovskii Krai is based on a mistake.

This paper is based on the rather large amount of material collected by D. V. Logunov in Bolshekhetskisirkii reserve (referred to as BR in the text), situated 15–20 km South of Khabarovsk, in 1987. Smaller collections were accumulated by D. K. Kurenschikov and Dr. N. A. Ryabinin (Institute of Water and Ecological Problems, Khabarovsk) and of S. V. Ivanov (Bolshekhetsirkii reserve). The material in the Zoological Museum of Moscow University (collection of V. I. Sychevskaya) and in the Museum of Natural History in Wrocław (collection of A. E. Grube) was studied as well.

Both the previous information and our data refer to the southern part of Khabarovsk Krai, mainly the Amur river valley (see Fig. 1). For some species data from the neighbouring Amurskaya Oblast and Primorye are included as well. For Phintella popovi and Sitticus cutleri data from Khakassya (South of Krasnoyarskii Krai) and for Harmochirus latens data from Khakassya and Buryatia are added too.

All the Salticidae species apart from those of the genus Euophrys are dealt with here. The latter genus will be treated separately, as its Eastern Palaearctic species demand a thorough taxonomic revision. Most probably 2–3 Euophrys species occur within the study area.

The material forming the foundations of this paper originates from the following collections:

BI Zoological Museum of Institute of Biology, the Russian Academy of Sciences, Novosibirsk
MNH Museum of Natural History, Wrocław University, Wrocław
ZMMU Zoological Museum of Moscow University, Moscow
ZI Zoological Institute, the Russian Academy of Sciences, St. Petersburg
IWP Institute of Water and Ecological Problems, the Russian Academy of Sciences, Khabarovsk
IBS Biological Institute of WSRP, Siedlce
ZMT Zoological Museum, Turku University, Turku.
2. Methods

Specimens were examined in a dish with alcohol. Descriptions of colours pertain to wet specimens. The drawings were made with the aid of a reticulated eyepiece attached to a stereomicroscope with a magnification of 7.5 to 48 times. If not stated otherwise, specimens from Khabarovskii Krai are shown in the figures. The male pedipalp and epigyne were removed for the study. The epigyne was cleared in warm lactic acid or macerated in 10% KOH for 48 hours at normal room temperature and cleared in xylene. After drawing, the genitalia were placed in microvials with alcohol.

All measurements are given in mm. In the descriptions the following abbreviations are used:

AM diameter of anterior median eyes
AL distance between anterior lateral eyes
PL distance between posterior eyes.

3. Taxonomic survey of species

_Aelurollus festivus_ (C. L. Koch, 1834)

Material: Khabarovskii Krai, BR, the Ussuri river, 2♂, 1♀, 10 IX.1987, S. Ivanov (BI, No 150, 155).

_Habitat_. Collected on rocky river shore among stones.


_Carrhotus xanthogramma_ (Latreille, 1819)


_Habitat_. This species was collected by sweeping grass in deciduous woods (aspen, birch, oak); also recorded in coastal vegetation on stream submersion areas.

_Dendryphantes fusconotatus_ (Grube, 1861)?


These specimens differ slightly from the type. Perhaps they belong to another, closely related species. Settlement of this question will be possible only after thorough study.

_Evarcha albarea_ (L. Koch, 1878)


_Habitat_. Collected by sweeping grass and bushes in deciduous forest (aspen, birch, oak), as well as in litter.


_Evarcha arcuata_ (Clerck, 1757)

Material: Khabarovskii Krai, BR, 14♂, 6♀, 2–19 VI.1987, D. Logunov (BI, No 280, 291, 316, 321, 323, 324, 327), 1♂, 1♀ (MNH), 1♀ (IBS); the Amur river, Rybachi island, 2♀, 21 VI.1987, D. Kurenschikov (BI, No 317).

_Habitat_. Collected by sweeping both in dry deciduous woods (aspen, birch, oak) and in moister places (among sparse ferns in alder carr with single larches), as well as in clearings and on meadows.
Fig. 2. Harmochirus latens (Logunov), male. — A–B: palpal organ, ventral and lateral views. — C: cheliceral dentition. — D: first leg.


_Evarcha falcata_ (Clerck, 1757)


_Habitat._ Collected by sweeping in deciduous woods (aspen, birch, oak) and at wood edges.


_Harmochirus latens_ (Logunov, 1991) comb. n.

Figs. 2–3

_Bianor latens_ Logunov, 1991

Material: Khabarovskii Krai, BR, 2♂, 10–19.VI.1987, D. Logunov (BI, No 645, 646); Amurskaya Oblast, Khingan reserve, Antonovskoe forest-range, 1♀, 1.VIII.1983, Yu. Marusik (ZJ); Primore, Khasanski distr., near Primorskaia station, 1♂, 1♀, 31.V.1978, B. Zakharov (ZJ); Buryatia, Selenginskii distr., Taezhnoe village, 1♂, 13.VIII.1984, B. Zakharov (BI, No 644); South of Krasnoyarskii Krai, Khakassia, Altaiiskii distr., 40 km SE of Belyi Yar, 15–17 km E of Novorossiiskoe, the Jenisei river, 1♂, 24.VI.1990, D. Logunov (BI, No 1115).

_Diagnosis._ The shape of epigyne and swollen tibiae of front legs in males suggest that this species should be placed in the genus _Harmochirus_. Exact delimitation of _Bianor_ and _Harmochirus_, though, calls for future detailed studies. The male similar to _Bianor aurocinctus_ (Ohlert) and _Bianor aemulus_ (Gertsch), may be distinguished by stronger tibial apophysis, flatter tegulum and position of seminal ducts (Fig. 2A–B). The female may be easy recognized by long sidewards depressions of epigyne (Fig. 3A–B).

_Description._ Measurements (male/female). Cephalothorax: length 1.47/1.89, width 1.10/1.40, height 0.61/0.77. Abdomen: length 1.50/2.57, width 1.07/1.76. Eye field: length 0.83/1.03, AL 0.89/1.13, PL 1.07/1.46. AM 0.29/0.37. Legs: I 0.79/0.97 + 0.51/0.56 + 0.54/0.63 + 0.40/0.47 + 0.34/0.37; II 0.57/0.81 + 0.37/0.50 + 0.30/0.44 +
0.29/0.40 + 0.29/0.34; III 0.73/1.00 + 0.46/0.49 + 0.34/0.46 + 0.36/0.53 + 0.29/0.34; IV 0.71/1.03 + 0.36/0.50 + 0.41/0.60 + 0.43/0.63 + 0.29/0.37. — Male. Carapace flattened, much swollen in the area of eyes III, dark brown, eye field with metallic shine. Scarce brown bristles on carapace, few white scales behind posterior eyes. Clypeus low with long hairs. Chelicerae (Fig. 2C), maxillae, labium and sternum brown. Abdomen rounded, dark brown with gleaming scutum. Legs I thick dark brown with long dense black hairs on ventral surface of femora and tibiae (Fig. 2D). Remaining legs pale brown. Pedipalp dark with single straight tibial apophysis, bulbus more or less rounded, embolus very thin (Fig. 2A–B). — Female. Carapace dark brown, eye field black. Sides on cephalothorax and clypeus covered with white hairs. Sternum brown with white hairs. Labium, maxillae and chelicerae brown. Abdomen and spinnerets dark grey. Legs I with thicken dark brown femora, patellae reddish-brown or brown, tibiae red with brown band on their distal parts, metatarsi and tarsi yellow or yellowish-grey. Remaining legs brown, their distal parts yellow or yellowish-grey. Pedipalp yellow or grey, its femur brown. Epigyne is given in Fig. 3A–B, its internal structures in Fig. 3C–D.

**Habitat.** Collected by sweeping grass in woods and floodplains, as well as in litter in poplar woods.

**Distribution.** Siberia: Khakassya, Tuva, Buryatya, Khabarovskyi Krai, Amurskaya Oblast, Primorye.

This species was described by Logunov (1991) on the basis of a female from Tuva. The male is described here for the first time.
**Harmochirus nigrilicus** sp. n.

Figs. 4–5


**Diagnosis.** The species clearly shows affinities with *Bianor aurocinctus* (Ohlert). The male may be distinguished by more clearly marked pear-shaped depression in tegulum cone (PD, cf. Fig. 4B and 4D), by position of turn of seminal duct, presence and situation of ventral knob on palpal tibia (VK, cf. Fig. 4A and 4C), and by smaller size of both pedipalp and whole body. The female can be separated by position of loops of insemination ducts (cf. Fig. 5B and 5C). It seems also to have differently coloured legs: *H. nigrilicus* has brown patellae I and greyish-brown
legs II–IV, while *B. aurocinctus* has red patellae I and yellow legs II–IV (see also Logunov & Marusik 1991).

**Description.** Measurements (male/female). Cephalothorax: length 1.42/1.73, width 1.10/1.28, height 0.56/0.75. Abdomen: length 1.71/2.50, width 1.19/1.50. Eye field: length 0.86/0.95, AL 0.91/1.05, PL 1.10/1.30. AM 0.29/0.34. Legs: I 1.09/0.93 + 0.64/0.58 + 0.68/0.60 + 0.64/0.35 + 0.34/0.35; II 0.61/0.70 + 0.36/0.45 + 0.38/0.40 + 0.34/0.40 + 0.48/0.28; III 0.79/0.93 + 0.37/0.50 + 0.34/0.43 + 0.57/0.45 + 0.29/0.30; IV 0.83/0.93 + 0.37/0.50 + 0.49/0.55 + 0.57/0.58 + 0.27/0.30. — Male. Carapace brownish, eyes surrounded with black. Sternum brownish. Labium, maxillae and chelicerae reddish-brown. Abdomen greyish-brown, with scutum. Spinnerets greyish-brown. Legs I brown with strong flat femora. Pedipalp structure shown in Fig. 4A–B. — Female. Carapace dark brown with black reticulate pattern, eyes surrounded by black rings. Whole surface of carapace with white adherent hairs. Abdomen grey with indistinct longitudinal streak. Legs I dark brown, remaining ones greyish-brown. Epigyne with central pocket (Fig. 5A), its internal structures shown in Fig. 5B.

**Habitat.** Collected by sweeping in mixed woods, on meadows and dry places on the ground.

**Distribution.** Khabarovskii Krai and Primore.

Repeated study of specimens from Primore identified as *B. aurocinctus* by (Prószynski 1979 and Nenilin 1985) showed that they belonged to *H. nigricus*.

### Harmochirus pullus (Bösenberg et Strand, 1906)

Figs. 6–7


**Description.** Measurements (male/female). Cephalothorax: length 1.54/1.63, width 1.24/1.40, height 0.74/0.78. Abdomen: length 1.50/1.88, width 1.21/1.45. Eye field: length 0.93/1.03, AL...
1.03/1.15, PL 1.22/1.40. AM 0.36/0.36. Legs: I 1.03/0.90 + 0.59/0.50 + 0.81/0.58 + 0.53/0.53 + 0.39/0.35; II 0.69/0.73 + 0.38/0.45 + 0.41/0.40 + 0.37/0.43 + 0.30/0.30; III 0.88/0.93 + 0.41/0.48 + 0.44/0.50 + 0.44/0.53 + 0.32/0.35; IV 0.90/1.05 + 0.37/0.48 + 0.49/0.58 + 0.53/0.63 + 0.34/0.38. — Male. Colouration typical for the genus. Carapace convex uniform reddish-brown, surroundings of eyes black. Adherent white hairs on lateral surfaces of carapace. Sternum, labium, maxillae and chelicerae reddish-brown. Abdomen uniform dark grey with gleaming scutum. Spinnerets dark grey. Legs I: femora, patellae and tibiae reddish-brown, coxae, metatarsi and tarsi yellow. Femora with rows of scale-like black hairs on ventral surfaces, the same hairs on dorsal surfaces of tibiae (Fig. 7B). Remaining legs yellow. Pedipalp with long curved tibial apophysis (Fig. 6). — Female. Colouration resembling male. Abdomen without scutum. Young specimens yellow-greyish with white legs. Epigyne with large central depression and small pocket (Fig. 7A).

Habitat. Collected on moist clearing with *Stratiotes* sp.

Distribution. New for Russia. Earlier known from Japan (Bösenberg & Strand 1906 and Bohdanowicz & Prószyński 1987) and from Korea (Wesołowska 1981a and Paik 1987).

This species was recorded from Primorje by Shternbergs (1988), but erroneously identified as *Siler cupreus* Simon.

**Heliophanus dubius** C. L. Koch, 1835


Habitat. Collected by sweeping in deciduous forest.


**Heliophanus lineiventris** Simon, 1868

Habitat. Collected by sweeping in grass and shrubs.


Heliophanus ussuricus Kulczyński, 1895


Habitat. Collected by sweeping both in dry deciduous woods and in moister places (among sparse mosses and ferns in alder carr) as well as in clearings and on meadows.


Marpissa dersuuzalai sp. n.

Figs. 8–10


Diagnosis. The male in general appearance and colouration very similar to Marpissa pulchra Prósnyński, Marpissa magister (Karsch), Marpissa elongata (Karsch) and Marpissa nobilis (Grube). May be easily told apart from them by bifurcared tibial apophysis (Fig. 8D). Similar, though not identical, apophysis possessed by “species 4” of Chikuni & Yaginuma (1976). The female closely resembles Marpissa ibarakiensis Bohdanowicz et Prósnyński, but can be separated by configuration of spermathecae loops (cf. Figs. 10C and 11). For complete list of differences between females of M. dersuuzalai and M. ibarakiensis see Table 1. It is

<table>
<thead>
<tr>
<th></th>
<th>M. dersuuzalai</th>
<th>M. ibarakiensis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>ca 7 mm</td>
<td>&gt;10 mm</td>
</tr>
<tr>
<td>Cephalothorax length</td>
<td>ca 3 mm</td>
<td>&gt;4 mm</td>
</tr>
<tr>
<td>Sternum</td>
<td>pale with dark margins</td>
<td>dark</td>
</tr>
<tr>
<td>Abdomen ventrally</td>
<td>3 thin lines</td>
<td>3 wide bands</td>
</tr>
<tr>
<td>Legs I</td>
<td>uniform</td>
<td>with contrasting Me, Ta</td>
</tr>
<tr>
<td>Insemination ducts</td>
<td>short, strongly coiled</td>
<td>long, slightly coiled</td>
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</table>
very likely that *M. ibarakiensis* and the female of Chikuni & Yaginuma (1976), “species 4”, are conspecific.

**Description.** Measurements (male/female). Cephalothorax: length 2.53–2.88/2.85–3.02, width 1.80–2.05/1.95–2.30, height 0.85–1.03/0.93–1.20. Abdomen: length 2.88–3.45/2.85–3.02, width 1.45–1.70/1.95–2.30. Eye field: length 1.08–1.30/1.20–1.43, AL 1.33–1.48/1.40–1.63, PL 1.38–1.65/1.20–1.43. AM 0.40–0.43/0.47–0.50. Legs: I 1.63–1.95/1.55–2.00 + 0.88–1.20/0.95–1.15 + 1.38–1.68/1.20–1.45 + 0.98–1.25/0.85–1.05 + 0.53–0.63/0.45–0.55; II 1.15–1.33/1.20–1.45 + 0.65–0.73/0.75–0.90 + 0.73–0.83/0.70–0.95 + 0.70–0.85/0.65–0.90 + 0.43–0.48/0.40–0.50; III 1.20–1.40/1.25–1.50 + 0.65–0.73/
Fig. 9. *Marpissa dersuuzalai* sp. n., paratypes, female, epigyne.

Fig. 10. *Marpissa dersuuzalai* sp. n., paratypes, female. — A–C: epigyne and its internal structures. — D: abdominal pattern.
Fig. 11. Marpissa ibarakiensis Bohdanowicz et Prószyński, holotype (from Japan), female, internal structures of epigyne.

0.70–0.80 + 0.63–0.83/0.75–0.80 + 0.75–0.90/0.75–1.00 + 0.48–0.53/0.45–0.50; IV 1.28–1.63/1.50–1.80 + 0.68–0.83/0.75–1.00 + 0.98–1.20/1.05–1.30 + 0.88–1.0 8/1.00–1.20 + 0.50–0.53/0.50–0.55. — Male. Whole body elongated (Fig. 8A). Carapace dark brown with almost black punctured-reticulate eye field, behind eye field five spots formed by white hairs. Lateral edges of carapace with white narrow band. Sparse thin dark hairs on carapace. In vicinity of eyes few brown setae. Sternum dark brown. Clypeus brown, very low. Labium and maxillae dark brown with light margins. Chelicerae dark brown, promargin with two teeth, retromargin with single tooth. Abdomen black with bright golden shine and four pairs of white spots surrounded by black mat rings. Abdomen covered with thin dark hairs, denser at anterior margin. Ventrally abdomen dark with two longitudinal light lines, laterally additional lines formed by rows of points. Spinnerets dark. Legs brown with darker femora. Lateral surfaces of remaining segments of legs dark. Legs I thick. All legs with numerous thin dark hairs and brown spines. Pedipalp small, dark brown. Tibial apophysis two-cleft, pincers-shaped, posterior edge of cymbium with additional process, bulbus elongated, embolus geminate (Fig. 8B–D). — Female. Carapace brown with yellow or orange edges, eye field black; in some specimens whole carapace black. Whitish-grey dense hairs cover carapace, near eyes sparse brown setae. Sternum yellow with dark margins. Labium and maxillae brown, sometimes with yellow margins. Chelicerae yellow or brown. Abdomen brown with golden shine, medially light streak formed by white hairs (Fig. 10D), in some specimens streak not visible. Ventrally abdomen light with three longitudinal dark stripes. Spinnerets brown. Legs yellow, in some specimens legs I brown. Pedipalp yellow. Epigyne small with two round copulatory openings (Figs. 9 and 10A–B). Insemination ducts rather short, weakly sclerotized, spermatothecae multi-chambered (Fig. 10C).

Habitat. Collected by sweeping on meadows and wet places in clear woods (aspen, larch).


Etymology. Species named after Dersu Uzala, the legendary hero of V. A. Arsenyev’s novel, who supposedly died near the type locality.

Marpissa dybowskii (Kulczyński, 1895)

Material: Khabarovskii Krai, Evreiskaya Autonomnna Oblast, Digun (?), 1♂, 13–18.VIII.1978, Belov (Zl); Primorie, Ryazanovka, 1♂, VIII.1980, G. Belova (Zl).

Diagnosis. The species closely resembles Marpissa pomata (Walckenaer). The main diagnostic differences are given in Prószyński (1979) and Bohdanowicz & Prószyński (1987).


Marpissa elongata (Karsch, 1879)

Material: Khabarovskii Krai, environs of Khabarovsk, the Amur river, Zelony island, 1♂, 7.VII.1931, V. Sychevskaya (ZMMU); Amurskaya Oblast, Khinganski reserve, Lebedinskoe forest-range, 1♂, 2♂, 8.VIII.1983, Yu. Marusik (Zl); Lebedinskoe lake, 4♂, 2–3.VIII.1991, D. Kurenshchikov (BI, No 1121); Primorie, Chernigovskii distr., Dmitrevka, 1♂, 16.VII.1989, A. Borok (BI, No 1122); Prikhnakskii distr., Khazan lake, Kamen-Rybolov village, 2♂, 2♀, 4.V–24.VII.1908, A. Cherskii (Zl).
**Marpissa magister** (Karsch, 1879)

Figs. 12–13

Material: Khabarovskii Krai, BR, 1♀, 19.VI.1987, D. Logunov (BI, No 1123), 1♂, 17.VII. 1987, D. Logunov (MNH); Nizhnespaskoe, 53 km SE of Khabarovsk, 1♂, 15.VI.1988; D. Kurenschikov (BI, No 1124); Primorye, Khazanski distr., Talmi lake, Khazan village, 1♀, 27.VII. 1976, B. Zakharov (BI, No 1125).

**Diagnosis.** The species resembles *Marpissa nobilis* (Grube) and *Marpissa pulchra* Prószyński. The diagnostic features are given in Prószyński (1973), Chikuni & Yaginuma (1976), Wesołowska (1981a), as well as Bohdanowicz & Prószyński (1987).

**Habitat.** Collected by sweeping grass.


**Marpissa magister** (Karsch, 1879)

Figs. 12–13

Material: Khabarovskii Krai, BR, 1♀, 19.VI.1987, D. Logunov (BI, No 1123), 1♂, 17.VII. 1987, D. Logunov (MNH); Nizhnespaskoe, 53 km SE of Khabarovsk, 1♂, 15.VI.1988; D. Kurenschikov (BI, No 1124); Primorye, Khazanski distr., Talmi lake, Khazan village, 1♀, 27.VII. 1976, B. Zakharov (BI, No 1125).

**Diagnosis.** From other similar *Marpissa* species the male is told apart by broader tibial apophysis (Fig. 12 B and 12 D), the female by shape of epigyne and spermathecae (Fig. 13 C, see also Chikuni & Yaginuma 1976 and Bohdanowicz & Prószyński 1987).

**Description.** Measurements (male/female). Cephalothorax: length 2.93/2.55, width 2.00/1.73, height 0.98/0.78. Abdomen: length 3.65/3.40, width 1.75/1.45. Eye field: no measurements. AM 0.46/0.49. Legs: I 2.25/1.45 + 1.15/0.85 + 1.60/1.15 + 1.10/0.80 + 0.55/0.45; II 1.25/1.00 + 0.75/0.65 + 0.75/0.65 + 0.65/0.60 + 0.45/0.40; III 1.25/1.00 + 0.60/0.65 + 0.70/0.55 + 0.70/0.60 + 0.45/0.45; IV 1.60/1.35 + 0.75/0.75 + 1.10/0.95 + 0.95/0.85 + 0.45/0.45. — Male. Whole body coloured dark brown. White hairs form separate spots on carapace and abdomen (Fig. 13A). At anterior margin of abdomen narrow white band. Sternum black, labium and maxillae black with yellow margins. Legs brown with yellow trochanters and tarsi. Pedipalp shown in Fig. 12. Tibial apophysis broad (Fig. 12B and 12D).
— Female. Carapace light brown with darker eye field, eyes surrounded with black. Sternum centrally yellow, marginally brown. Labium grey with lighter margin, maxillae yellow, chelicerae orange. Abdomen with two longitudinal broad brown stripes with golden shine and four pairs of square black spots (Fig. 13B). Ventrally abdomen yellowish brown with three longitudinal brown streaks. Spinnerets yellow with dark dots. Legs yellowish-brown, legs I a little darker. Epigyne small with depression in posterior part, divided by triangular median ridge (Fig. 13C).

Habitat. Collected by sweeping in dry deciduous woods and meadows, as well as in moister places.


Dunin’s (1984) records of Marpissa pichoni (Schenkel) from Primore actually refer to M. magister, as can clearly be seen from his figures (42–44).

Marpissa nobilis (Grube, 1861)

Figs. 14–15


Diagnosis. The species very close to Marpissa pulchra Prószyński. The male can be separated by lack of tooth on tibial apophysis (cf. Figs. 14B–E and 16A–C) and by colouration of legs. Patellae and tibiae II–IV of M. nobilis are yellow, whereas those of M. pulchra are brown. The female may be easily recognized by structure of vulva (cf. Figs. 15C and 17C).

Description. Measurements (male/female). Cephalothorax: length 3.13/3.03, width 2.20/2.03, height 1.05/0.98. Abdomen: length 3.90/5.25, width 1.80/2.25. Eye field: length 1.38/1.28, AL 1.55/1.48, PL 1.55/1.55, AM 0.54/0.41. Legs: I 3.20/1.70 + 1.60/1.10 + 2.90/1.50 + 1.90/1.05 + 0.50/0.50; II 1.55/1.25 + 0.85/0.95 + 1.10/0.80 + 0.90/0.75 + 0.50/0.40; III 1.50/1.35 + 0.80/0.75
+ 0.95/0.75 + 1.00/0.85 + 0.55/0.55; IV 1.90/1.60 + 0.85/1.25 + 1.50/0.85 + 1.30/1.15 + 0.55/0.45. — Male. Whole body coloured dark brown, eyes surrounded by black. Carapace and abdomen with ornament composed of white hair spots (Fig. 14A). Abdomen ventrally with two thin light longitudinal lines. Legs I dark brown with yellowish tarsi. Remaining legs yellow, only femora brown with yellow streaks. Pedipalp structure similar to *M. pulchra*, details of structure of tibial apophysis shown in Fig. 14B–E. — Female. Carapace brown with orange margins, eye field black. Sternum yellowish-brown. Labium and chelicerae brown, maxillae yellow. Abdomen yellowish with two broad dark longitudinal bands (Fig. 15A), ventrally with three thin brown lines. Spinnerets yellow. All legs yellow, only patella, tibia and metatarsus of leg I brownish. Epigyne with small depression in posterior part, partially divided by wide median ridge (Fig. 15B). Its internal structures as in Fig. 15C.

**Habitat.** Collected by sweeping on meadows and in swampy woods.

**Distribution.** Eastern Palaearctic species, reported from the Russian Far East (Grube 1861, Prószyński 1971, 1979) and China (Schenkel 1963 and Wesołowska 1981b).

**Marpissa pomatia** (Walckenaer, 1802)


Habitat. Collected by sweeping in deciduous woods and in clearings.


Marpissa pulchra Prószynski, 1976
Figs. 16–17


Description. Measurements (male/female). Cephalothorax: length 2.53/2.88–3.00, width 1.70/1.95–2.05, height 0.88/0.80–1.00. Abdomen: length 3.45/5.30, width 1.40/2.15. Eye field: length 1.10/1.28–1.38, AL 1.28/1.30–1.80, PL 1.28/1.45–1.80. AM 0.42/0.46–0.50. Legs: I 1.85/1.80–2.00 + 1.15/1.00–1.20 + 1.80/1.60–1.80 + 1.05/1.05–1.25 + 0.60/0.60; II 1.20/1.15–1.35 + 0.65/0.70–0.75 + 0.75/0.75–0.85 + 0.65/0.65–0.80 + 0.40/0.50; III 1.05/1.20–1.35 + 0.60/0.60–0.65 + 0.70/0.65–0.75 + 0.70/0.80–0.85 + 0.50/0.45–0.55; IV 1.20/1.50–1.65 + 0.70/0.80–0.85 + 1.05/1.15–1.20 + 0.95/1.00–1.15 + 0.50/0.50–0.55. — Male. Carapace dark brown, eye field black, behind eye field two white spots. Sternum and chelicerae dark brown, labium and maxillae brown with yellow margins. Abdomen brown with golden gleam, with scutum. Four pairs of white spots, composed of hairs, on abdomen (Fig. 16D). Spinnerets brown. All legs dark brown, only tarsi yellowish. Pedipalp structure shown in Fig. 16A–C, characteristic small tooth on apex of tibial apophysis. — Female. Carapace brown, covered with white hairs, eye field black. Abdomen grey with medial longitudinal broad white band and four pairs of black spots (Fig. 17D).
Sides of abdomen yellow, ventrally abdomen with wide longitudinal brown band and two thin yellow lines. Legs I brown with yellow metatarsi and tarsi, remaining ones yellow with brownish proximal parts of tarsi. Pedipalp yellow with brownish tarsus. Epigyne and its internal structures shown in Fig. 17A–C.

Habitat. Collected on grass in paludal forest.


**Marpissa pulla** (Karsch, 1879)


Habitat. Collected by sweeping grass on forest clearing.


Among specimens treated by Prószynski (1979) as *M. pulla*, there were also individuals of *M. zebra*, as is clearly visible in his figures 84–187).

**Marpissa zebra** sp. n.

Fig. 18

**Fig. 17. Marpissa pulchra** Prószynski, female. — A–C: epigyne and its internal structures. — D: general appearance.

**Diagnosis.** The species can be easily distinguished from other *Marpissa* species by its very characteristic colouration pattern (Fig. 18C) and small size. Palpal structure very similar to *Marpissa elongata* (Karsch), *Marpissa nobilis* (Grube) and *Marpissa pulchra* Prószynski, but may be separated by yellow colouration of cymbium and configuration of tibial apophysis and embolus.

**Description.** Measurements (holotype). Cephalothorax: length 1.98, width 1.35, height 0.65. Abdomen: length 2.53, width 1.02. Eye field: length 0.90, AL 1.00, PL 1.05, AM 0.60. Legs: I 1.18 + 0.70 + 1.05 + 0.85 + 0.43; II 0.83 + 0.35 + 0.55 + 0.50 + 0.30; III 0.80 + 0.40 + 0.50 + 0.50 + 0.33; IV 0.95 + 0.53 + 0.73 + 0.65 + 0.35. — Male. Carapace yellow with brown reticulate pattern, near eyes black. Sternum, maxillae and chelicerae yellow, labium brown with light margin. Abdomen yellow with four transversal brown streaks and narrow median line along anterior third of its length (Fig. 18C). Ventrally abdomen light yellow with three longitudinal dark streaks. Legs I yellow with darker metatarsi and tarsi, remaining legs yellow with longitudinal dark lines, on tibiae elongated brown spots. Pedipalp shown in Fig. 18A–B. — Female unknown.

**Habitat.** Collected from wet places in mixed woods and on meadows.

**Distribution.** Khabarovskii Krai and Amurskaya Oblast.

**Myrmarachne formicaria** (De Geer, 1778)

Figs. 19–21

Material: Khabarovskii Krai, BR, 1 ♂, 1 ♀, 16.VI.1987, D. Logunov (BI, No 901, 902); Nanaiskii distr., 1 ♂, 1983, N. Ryabinin (ZMMU); Amurskaya Oblast, Khinganskii reserve, Antonovskoe forest-range, 1 ♀, 2–3.VIII.1983, Yu. Marusik (ZI); the Ussuri river, 1 ♀, 10.VII.1931, V. Sychevskaya (ZMMU, Ta-3427); Primore, Ussuriiskii reserve, 1 ♂, 5.VIII.1975, M. Shternbergs (BI, No 903).
**Diagnosis.** See under *Myrmarchne lugubris* and Table 2.

**Description.** Measurements (male/female). Cephalothorax: length 1.63/2.50, width 0.88/1.08, height 0.63/0.80. Abdomen: no measurements. Eye field: length 0.80/1.00, AL 0.83/1.05, PL 0.95/1.18. AM 0.23/0.36. Legs: I 0.98/1.18 + 0.45/0.63 + 0.80/0.95 + 0.50/0.55 + 0.33/0.35; II 0.75/0.80 + 0.38/0.50 + 0.48/0.68 + 0.38/0.50 + 0.30/0.30; III 0.75/0.80 + 0.35/0.45 + 0.68/0.50 + 0.30/0.53 + 0.30/0.30; IV 1.00/1.40 + 0.43/0.63 + 0.93/1.20 + 0.78/1.13 + 0.35/0.40. — Male. Dorsal aspect in Fig. 19A. Carapace reddish with darker punctured-reticulate eye field, eyes surrounded by black. Labium and maxillae dark brown, sternum lighter. Chelicerae very elongated, horizontal, dark brown, with numerous teeth (Fig. 19B). Cheliceral fang with small protuberance on ventro-lateral side (Fig. 19C). Abdomen elongated brown, posteriorly darker, with anterior and posterior scutum, whole covered by sparse adherent hairs. Few white hairs form two small transverse spots mid-length of posterior scutum, posterior part of this scutum almost black.

**Fig. 18.** *Marpissa zebra* sp. n., holotype, male. — A–B: palpal organ, ventral and lateral views. — C: general appearance.

**Fig. 19.** *Myrmarchne formicaria* (De Geer), male. — A: general appearance. — B: cheliceral dentition. — C: fang of chelicerae, ventro-lateral view.
Ventrally abdomen light with longitudinal broad grey streak medially and many dark lines laterally. Spinnerets brown. Legs I yellow with brown femora and metatarsi. Remaining legs yellowish. Pedipalp brown, small with distinctive tibial apophysis (Fig. 20A–C). — Female. Colouration as in male, but darker. Carapace reddish with black eye field. Sternum dark brown. Labium and maxillae brown with yellow margins, chelicerae brown. Abdomen grey with two pairs of white small transversal spots dorsally, on lateral surfaces of abdomen white stripes. Coxae yellow, all of them — except first — with broad dark stripes. Legs I shown in Fig. 21A. Legs III and

Table 2. Differences between *Myrmarchne lugubris* and *M. formicaria*.

<table>
<thead>
<tr>
<th></th>
<th><em>M. lugubris</em></th>
<th><em>M. formicaria</em></th>
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<tbody>
<tr>
<td>Male and female</td>
<td>Carapace uniform — blackish brown (Fig. 21B) brownish</td>
<td>reddish, eye field black yellow (Fig. 21A) yellow</td>
</tr>
<tr>
<td></td>
<td>Tarsus I without teeth brown</td>
<td>with additional tooth (Fig. 19C) hairs absent (Fig. 20A) first and frontal part of second reddish</td>
</tr>
<tr>
<td></td>
<td>Coxae III–IV with tuft of hairs (Fig. 22A) brownish</td>
<td></td>
</tr>
<tr>
<td>Male only</td>
<td>Cheliceral fang</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cymbium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scutae</td>
<td></td>
</tr>
<tr>
<td>Female only</td>
<td>Abdomen uniform — dark grey</td>
<td>with pair of transversal light spots</td>
</tr>
<tr>
<td></td>
<td>Epigyne</td>
<td>Fig. 23A–B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fig. 20D</td>
</tr>
</tbody>
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IV with black longitudinal streaks on patellae and tibiae. Epigyne with large, more or less triangular depression, partially divided by median ridge (Fig. 20D). Internal structures of epigyne shown in Fig. 20E.

**Habitat.** Collected in wet woods (oak, birch, ferns) in litter.


**Myrmarachne lugubris** Kulczyński, 1895

Figs. 21–23

Material: Khabarovskii Krai, BR, 1♂, 1♀, 14.VI.1987, D. Logunov (MNH); BR, the Chirka river, 1♂, 1♀, 17–30.V.1988, S. Ivanov (BI, No 1136, 1137); Khabarovsk, cemetery, 25.VI.1931, 2♀, V. Sychevskaya (ZMMU); Nanaiskii distr., Slavyanka, 1♂, 23.V.1988, D. Kurenschikov (BI, No 1135), 2♀ (ZMMU); Primore, Vladivostok, 1♂, 1♀, 1.VI.1979, B. Zakharov (ZI).

**Diagnosis.** Very similar to Myrmarachne formicaria (De Geer), therefore often mistaken with this species. Complete list of differences between those species is presented in Table 2. *M. formicaria* and *M. lugubris* occur in different microhabitats. In Bolshekhetskisirsky reserve the former species was found in forest litter and the latter was recorded while sweeping from grasses in woodland glades.

**Description.** Measurements (male/female). Cephalothorax: length 2.75/2.95, width 1.33/1.43, height 0.95/1.08. Abdomen: no measurements. Eye field: length 1.13/1.18, AL 1.18/1.28, PL 1.28/1.35. AM 0.38/0.35. Legs: I 1.75/1.55 + 0.73/0.68 + 1.53/1.35 + 1.03/0.85 + 0.55/0.45; II 1.28/1.25 + 0.65/0.55 + 0.98/0.90 + 0.75/0.75 + 0.40/0.40; III 1.43/1.40 + 0.63/0.60 + 1.05/
Fig. 22. Myrmarachne lugubris (Kulczyński), male, palpal organ. — A: ventral view. — B: lateral view. — C: dorsal view.

Fig. 23. Myrmarachne lugubris (Kulczyński), female. — A–B: epigyne. — C: internal structures of epigyne.

1.03 + 1.08/1.10 + 0.43/0.40; IV 2.15/2.15 + 0.68/0.80 + 1.60/1.73 + 1.50/1.63 + 0.50/0.48.
Chelicerae yellowish-brown, very long and slender, horizontal (Fig. 21C). Abdomen dark grey. Spinnerets dark. Pedipalp structure shown in Fig. 22. Characteristic tuft of hairs on basal part of cymbium (Fig. 22A). — Female. Colouration resembling male. Coxae I–II light yellow, III–IV dark brown. Legs I shown in Fig. 21B, legs II yellow with dark stripes on femora, tibiae and patellae, legs III brown with yellow metatarsi and tarsi, legs IV brown. Epigyne with great incision on posterior edge. Large depression partially divided by median ridge (Fig. 23A–B). Internal structures of epigyne as in Fig. 23C.

**Habitat.** Collected by sweeping in deciduous forest (aspen, birch, oak). Also recorded in stream submersion areas.


**Phintella arenicolor** (Grube, 1861)

Figs. 24–27

**Phintella mellotei** (Simon, 1888), syn. n.

Material: Khabarovskii Krai, BR, 2♂, 17.VI.1987, D. Logunov (BI, No 684); Nanaiskii distr., Slavyanka, 1♀, 26.V.1989, D. Kurenshchikov (BI, No 683); environs of Khabarovsk, the Amur river, Zelenyi island, 1♀, 22.VI.1931, V. Sychevskaya (ZMMU); the Amur river, 1♂ lectotype of *Attus arenicolor* (nomen nudum “*Salticus pallidus*”), 2 juv. ♀, [leg.] Dittmar, coll. Grube (MNH, No 429); Amurskaya Oblast, Khinganski reserve, Antonovskoe forest-range, 2♀, 1.VIII.1983, Yu. Murusik (ZI); Primore, Khasanskii distr., Kedrovaya Pad reserve, 1♀, 29.VIII.1968, F. Popov (ZI); Primorskaya station, 1♂, VII.1979, B. Zakharov (BI, No 682); Chuguevskii distr., 1♀, 23.IX.1974, (ZMMU); Ussuriiski reserve, 1♀, 3.X.1977, G. Kurcheva, E. Mikhailova (ZMMU); middle stream of the Bikin river, 1♀, VIII.1978, Shibli (BI, No 685); Prihankaiskii distr., Khorol village, 2♀, 18.VII.1968, F. Popov (ZI); Khazan lake, Kamen-Rybolov village, 1♂, 1♀, 19.VII.1968, F. Popov (ZI); Furugelm island, 1♂, 18.VIII.1975, M. Shternbergs (BI, No 686). — Additional material: Japan, Goto Islands, Nagasaki Pref., 2♂ (incorrectly determined as “*P. castriesiana*”), 14–20.V.1968, coll. Yaginuma (IBS).
Diagnosis. In colouration similar to Phintella parva (Wesołowska), but differs in absence of dark longitudinal lines on femora III and IV, smaller size and shape of tibial apophysis. In structure of genitalia P. arenicolor is very similar to Phintella castriesiana (Grube). The male can be distinguished by structure of tibial apophysis (cf. Fig. 27C and 27D), thinner apical part of tegulum (cf. Fig. 27E and 27F) and body colouration (cf. Fig. 27A and 27B). Distinguishing the females of both species is especially difficult. The female may be recognized by shape and smaller size of spermathecae (cf. Figs. 26C and 29B–C).

Description. Measurements (male/female). Cephalothorax: length 1.50/1.68, width 1.15/1.28, height 0.75/0.75. Abdomen: length 1.63/2.50, width 0.93/1.73. Eye field: length 0.90/0.88, AL 0.98/1.03, PL 0.93/1.03. AM 0.30/0.30. Legs: I 1.10/1.90 + 0.63/0.53 + 0.88/0.58 + 0.73/0.78 + 0.43/0.35; II 0.98/0.88 + 0.48/0.45 + 0.65/0.53 + 0.70/0.55 + 0.38/0.30; III 0.98/1.00 + 0.43/0.45 + 0.75/0.63 + 0.90/0.78 + 0.40/0.38; IV 1.15/1.35 + 0.43/0.48 + 0.88/0.85 + 0.95/0.95 + 0.43/0.40. — Male. Carapace light yellow, eyes surrounded by black. Carapace covered with translucent scales, on its posterior part scales brown. Sternum, labium and maxillae yellow, chelicerae yellow with dark longitudinal stripes on front. Abdomen yellow with indistinct darker ornament (Fig. 27A). Spinnerets yellow. Legs yellow with dark longitudinal stripes on femora I–II and brown rings on apical ends of tibiae I–II. Pedipalp structure in Figs. 24 and 25. — Female. Dorsal aspect in Fig. 26A. Colouration similar to male, but chelicerae and legs uniform yellow. Epigyne weakly sclerotized (Fig. 26B), insemination ducts rather straight, spermathecae more or less spherical (Fig. 26C).

Habitat. Collected in swampy woods and on meadows in grass.


P. arenicolor was described by Grube (1861), and was later synonymized with P. castriesiana (Grube) by Prószyński (1979). However, a renewed examination of the type material leads us to the conclusion that P. arenicolor constitutes a valid species, and that high variability of colouration and of reproductive structures recorded earlier in P. castriesiana (Prószyński 1979 and Matsumoto 1989) could be due to the fact that they were unaware that they were actually dealing with two species.
P. arenicolor is new for Japan; by Bohdano-wicz & Prószynski (1987) erroneously reported as Phintella castriesiana (Grube).

**Phintella castriesiana** (Grube, 1861)

**Figs. 27–29**

Material: Neotype: Khabarovsk Krai, BR, 1♂, 5–22 VI.1987, D. Logunov (MNH, No 625). Together with neotype, 33♂, 45♀ (BI, No 648, 650, 652, 654, 655, 656, 662, 663), 6♂, 9♀ (MNH); the Khor river, 17 km upper of Kutuzovka village, 1♂, 6–10 VI.1985, S. Pustoroi, A. Makoedov (ZMMU).

**Designation of the neotype. Phintella castriesiana** was described (Grube 1861) on the basis of a single female. The holotype (examined) kept in collection of Museum of Natural History in Wrocław consists now only of separated cephalothorax, devoided of legs and pedipalps (see also Prószynski 1971); it is thus devoid of diagnostic features. The designation of the neotype is necessary in this case, as there are serious problems with differentiating between *P. castriesiana* and the closely related *P. arenicolor* (a list of features differentiating these species is given under “diagnosis” in description of *P. arenicolor*). *P. castriesiana* is relatively well known. Hence, there is no doubt that the neotype is consistent with the holotype. The type locality was not given precisely by Grube (1861) but it is known that the holotype was collected in the Amur river valley, between the mouth of the Ussuri river and Nikolaevsk na Amure. The Bolshekhetskisirskii reserve, from where the neotype originates is situated in the SW part of this area.

**Diagnosis.** The largest and the darkest species of the genus *Phintella* from the Russian Far East. In the genitalia structure very close related to *Phintella arenicolor* (Grube) (differentiation see under *P. arenicolor*).

**Description.** Measurements (male/female). Cephalothorax: length 1.95–2.30/2.08–2.33, width 1.45–1.65/1.53–1.70, height 0.88–1.03/0.85–0.95. Abdomen: length 2.00–2.35/2.95–3.38, width 1.15–1.38/2.00–2.08. Eye field: length 1.00–1.08/1.03–1.23, AL 1.23–1.28/1.23–1.44, PL 1.18–1.25/1.20–1.38. AM 0.40/0.38–0.45. Legs: I 1.38–1.60/1.10–1.33 + 0.68–0.78/0.60–0.75 + 1.03–1.23/0.80–0.88 + 0.95–1.0 3/0.68–0.80 + 0.50–0.55/0.43–0.48; II 1.25–1.38/1.08–1.23 + 0.60–0.65/0.53–0.60 + 0.88–0.93/0.70–0.80 + 0.90–0.95/0.68–0.73 + 0.43–0.45/0.38–0.45; III 1.33–1.40/1.23–1.33 + 0.58–0.63/0.55–0.58 + 0.88–1.03/0.75–0.93 + 1.15–1.25/0.98–1.10 + 0.45/0.48–0.50; IV 1.40–1.68/1.38–1.58 + 0.60–0.65/0.55–0.68 + 1.10–1.25/1.00–1.18 + 1.35–1.3 8/1.18–1.35 + 0.48–0.50/0.45–0.53. — Male.
Carapace yellowish-brown with black veins, eyes surrounded by black. In vicinity of eyes white scales. Sternum, labium and maxillae yellow, chelicerae brownish. Abdomen yellow with dark grey pattern (Fig. 27B), ventrally light with dark longitudinal streak. Spinnerets yellowish-grey. Legs yellow with brown longitudinal stripes on femora I–III and brown dots on proximal and distal parts of tibiae I–II. Pedipalp structure shown in Fig. 28. — Female. Colournation resembling male but slightly paler. All legs yellow. Epigyne and its internal structures shown in Fig. 29.

**Habitat.** Collected on grass in mixed woods.

**Distribution.** Eastern Palaeartic species, recorded from the Russian Far East by Grube (1861), Kulczyński (1895), Prószyński (1971, 1976: map 95, 1979), Dunin (1984) and Nenilin (1985). Records from Western Palaearctic refer most probably to another, closely related species (this problem will be dealt with separately).

**Phintella linea** (Karsch, 1879)

Figs. 30–31

Material: Khabarovskii Krai, BR, 1♂, 1♀, 17.VI.1987, D. Logunov (BI, No 558, 559), 1♀ (MNH).

**Diagnosis.** The male can be easily distinguished by shape of tibial apophysis, great sharp embolus (Fig. 30A–B) and contrasting colouration (Fig. 30C). The female may be separated by the spermathecae being larger than in other Phintella species (Fig. 31C).

**Description.** Measurements (male/female). Cephalothorax: length 1.53/1.70–1.80, width 1.18/1.30–1.38, height 0.78/0.83–0.85. Abdomen: length 1.25/2.05–3.25, width 1.88/1.43–2.38. Eye field: length 0.88/0.95–1.00, AL 1.05/1.15–1.18, PL 1.03/1.20. AM 0.33/0.35–0.38. Legs: I 0.93/0.95–1.00 + 0.45/0.50–0.53 + 0.65/0.65–0.68 + 0.55/0.53–0.58 + 0.35/0.35–0.38; II 0.83/0.95 + 0.38/0.45–0.48 + 0.55/0.55–0.58 + 0.53/0.53–0.55 + 0.33/0.30–0.33; III 0.95/1.00–1.03 + 0.42/0.43–0.53 + 0.55/0.60–0.63 + 0.68/0.75–0.78 + 0.40/0.38; IV 1.03/1.20–1.28 + 0.43/0.48–0.53 + 0.65/0.75–0.83 + 0.80/0.95–1.00 + 0.40/0.35–0.38. — Male. Dorsal aspect as in Fig. 30C. Carapace brownish-yellow with dark brown spots. On carapace translucent scales with green shine. Sternum yellow with brown margin. Clypeus, labium and chelicerae brown. Maxillae yellow. Abdomen yellow with brown pattern composed of longitudinal and diagonal stripes, ventrally yellow with single longitudinal brown band. Spinnerets greyish. Legs yellow with brown rings
on segment ends. Pedipalp yellow with brown femur and basal part of cymbium. Palpal structure shown in Fig. 30A–B. — Female. Dorsal aspect in Fig. 31A. Carapace yellow, eyes surrounded by black. Sternum yellow with brown margin. Labium, maxillae, chelicerae, pedipalps and legs yellow. Abdomen as in male. Epigyne as in Fig. 31B. Insemination ducts short, spermathecae large, oval (Fig. 31C).

_Habitat._ Collected by sweeping grass in wet woods.

_Distribution._ Eastern Palaeartic species, new for Russia. The earlier record (Nenilin 1985) was based on misidentification. Reanalysis of his material showed that these specimens actually belonged to _Phintella popovi_ Prószyński. The record from Korea (Wesołowska 1981a) is also erroneous. The pictures in her paper actually refer to the female of _P. popovi_ (figs. 37–38) and the male of _P. arenicolor_ (figs. 42–44). Thus, so far, _P. linea_ has been doubtless recorded only from Japan (Karsch 1879, Bösenberg & Strand 1906, Prószyński 1973, 1976: map 102 — part, 1978, Bohdanowicz & Prószyński 1987 and Matsumoto 1989).

**Phintella parva** (Wesołowska, 1981)

Figs. 32–33

Material: Khabarovsky Krai, BR, 6♂, 2♀, 2–14.VI.1987, D. Logunov (BI, No 601, 603, 604, 605), 2♂, 4♀ (MNH); BR, the Chirka river, 1♀, 15.VI.1989, S. Ivanov (BI, No 602); Primore, Chuguevskii distr., 1♀, 9.IX.1974, G. Kurcheva...
Fig. 30. *Phintella linea* (Karsch), male. — A–B: palpal organ, ventral and lateral views. — C: general appearance.

Fig. 31. *Phintella linea* (Karsch), female. — A: general appearance. — B–C: epigyne and its internal structures.
Diagnosis. Resembles Phintella popovi (Prószynski); the male may be easily separated by straight tibial apophysis and curved embolus (cf. Figs. 32 and 34A–B), the female by longer insemination ducts (cf. Figs. 33C and 34D).

Description. Measurements (male/female). Cephalothorax: length 1.78–2.05/1.73–1.90, width 1.28–1.55/1.25–1.38, height 0.95/0.73–0.88. Abdomen: length 1.83–2.00/2.88–3.08, width 1.05–1.20/1.80–2.18. Eye field: length 0.83–1.05/0.88–1.05, AL 1.03–1.20/1.08–1.20, PL 0.98–1.15/1.08–1.20. AM 0.30–0.38/0.35–0.38. Legs: I 1.20–1.43/0.90–1.03 + 0.70–0.83/0.45–0.53 + 0.95–1.18/0.60–0.73 + 0.80–0.9 5/0.53–0.60 + 0.43–0.55/0.35–0.40; II 1.05–1.28/0.85–0.98 + 0.50–0.63/0.48–0.50 + 0.78–0.85/0.53–0.63 + 0.70–0.8 8/0.50–0.60 + 0.45/0.35–0.38; III 1.13–1.38/0.98–1.15 + 0.45–0.63/0.45–0.50 + 0.80–0.98/0.65–0.75 + 0.95–1.1 3/0.78–0.90 + 0.43–0.50/0.43–0.45; IV 1.25–1.55/1.03–1.25 + 0.48–0.55/0.35–0.53 + 0.95–1.15/0.65–1.00 + 1.10–1.3 3/0.73–1.10 + 0.35–0.43/0.35–0.55. — Male. Carapace yellow, eye surrounded by black. Translucent scales in vicinity of eyes. On sides of carapace wide band composed of brownish scales. Sternum yellow centrally, brown marginally. Labium yellow with brown basal part. Chelicerae yellow with brown oblique lines on front sides. Abdomen yellow with two broad longitudinal stripes dorsally, the same stripes on sides, ventrally single line. Spinnerets yellow. Legs yellow, all femora with brown longitudinal stripes. Tibial apophysis of palpdeltpalp, short, curved (Fig. 32). — Female. Colouration as in male, but a little paler. Legs yellow. Epigyne with dichotomous pocket in vicinity of epigastric furrow (Fig. 33A–B). Insemination ducts straight, rather long, spermathecae spherical (Fig. 33C).

Habitat. Collected on grass in pine woods.

Distribution. Eastern Palaeartic species, new for Khabarovsk Krai. The species was described from Korea (Wesołowska 1981a) on the basis of the female. In the Russian Far East recorded from Primorye (the females only) by Prószynski (1979: figs. 154–155 — as “Icicus sp.”), Dunin (1984) and Nenilin (1985). The male has been mentioned as Phintella difficilis (Bösenberg et Strand) from Primorye (Prószynski 1979; figs. 145–149, Dunin 1984, Nenilin 1985) and Furugelm island (Shternberger 1988).

P. parva is new for Japan; by Bohdanowicz & Prószynski 1987 erroneously reported as Phintella mellitei (Simon).

Phintella popovi (Prószynski, 1979)

Fig. 34

Material: Khabarovsk Krai, BR, 2♂, 3♀, 16–18.VI.1987, D. Logunov (MNH), 1♀ (BI, No 772); environs of Khabarovsk, 1♂, 19.VI.1931, V. Sychevskaya (ZMMU); Evreiskaya Autonomn Oblast, Playerkovo village, 3♀, 24.VI.1978, S. Toms (ZI); Nanaiskii distr., Slavyanka, 1♂, 1♀, 28.V.1989, D. Kurenschikov (BI, No 775); the Amur river, Slavyanskii island, 1♂, 23.VI.1989, D. Kurenschikov (BI, No 776); Amurskaya Oblast, Khinganskie reserve, Antonsvkoe forest-range, 4♀, 2–3.VII.1985, Yu. Marusik (ZI); Amurskii distr., Nizhnepokrovskoe village, 1♂ (palp only), 25.VI.1988, D. Kurenschikov (BI, No 777); Primorye, Prikhankaiskii distr.,
Khorol village, 1♂, 18.VI.1981 (ZMMU); Pozhariskii distr., middle flow of the Bikin river, 1♂, VIII.1977, Shibnev (BI, No 773); Khazanskii distr., Kedrovaya Pad reserve, 3♀, 16.V–20.VI. 1968, F. Popov (ZI); Vladivostok, Orlnoe Gnezdlo, 1♀, IV–V.1903, N. Palchevskii (ZI); Partizanskii distr., Tigrovaya village, 1♂, 12.VI.1927, Martynov (ZI; n — 554–927); Spasski distr., Yakovlevka village, 1♀, VI.1926, A. Dyakonov, N. Filipov (ZI; n — 539–926); Ussuri area, Kamenshka, 1♀, 7.VI.1981, G. Belova (ZI); Furugeln island, 1♂, 18.VII.1975, M. Shternbergs (BI, No 774); South of Krasnoyarskii Krai, Khakassya, Minusinsk, 2♂, 1981, Roschier (ZMT).

**Diagnosis.** Similar to *Phintella parva* (Wesołowska), but may be distinguished by colouration: *P. popovi* has four and *P. parva* two stripes on abdomen. The male easily distinguished by shape of tibial apophysis and embolus (cf. Figs. 34A–B and 32), the female by shorter insemination ducts (cf. Figs. 34D and 33C). The male is easy to recognize, but the female is often confused with other *Phintella* species. Thus, females of *P. popovi* were recorded as *P. linea* from Korea (Wesołowska 1981a) and the Russian Far East (Nenilin 1985), and also as *Phintella abnormis* (Bösenberg et Strand) from the Russian Far East (Prószyński 1976: map 99, 1979, Dunin 1984: fig. 27).

**Description.** Measurements (male/female). Cephalothorax: length 1.70–1.88/1.70–2.03, width 1.20–1.30/1.28–1.43, height 0.78/0.75–0.83. Abdomen: length 1.85–1.93/3.13–3.55, width 0.95–1.05/2.10–2.25. Eye field: length 0.80–0.93/0.90–0.93, AL 1.03–1.10/1.08–1.18, PL 1.00–1.08/1.03–1.13. AM 0.33/0.38. Legs: I 1.18–1.53/1.00–1.10 + 0.55–0.68/0.48–0.55 + 1.00–1.13/0.73–0.78 + 0.73–0.85/0.60–0.70 + 0.48–0.50/0.38–0.45; II 1.03–1.13/0.98–1.05 + 0.50–0.55/0.48–0.58 + 0.73–0.83/0.63–0.70 + 0.83/0.55 0.68 + 0.40–0.45/0.35–0.38; III 1.10–1.18/1.03–1.25 + 0.48–0.50/0.40–0.50 + 0.80–0.88/0.70–0.73 + 0.95–1.05/0.85–1.05 + 0.48–0.50/0.43–0.45; IV 1.25–1.38/1.25–1.43 + 0.43–0.68/0.48–0.58 + 0.95–1.08/0.90–1.05 + 1.15–1.45/1.08–1.43 + 0.45–0.50/0.45–0.50. — Male. Carapace yellow with black margins, eyes surrounded by black. In vicinity of eyes translucent.
scales. Sternum, labium, maxillae and chelicerae yellow. Abdomen yellow with two pairs of longitudinal blackish stripes. Spinnerets yellow. Legs yellow, femora I–III with black spots (see also Prószyński 1979: fig. 150). Pedipalp yellow, its structure shown in Fig. 34A–B. — Female. Colouration resembles male, but a little lighter. Legs yellow. Epigyne and its internal structures given in Fig. 34C–D.

**Habitat.** Collected from shrubs and grass.

**Distribution.** Eastern Palaeartic species, new for Khabarovskii Krai, distributed westwards to the Jenisej river.

Most likely all the existing records of *P. abnormis* from the Russian Far East (perhaps with exception of males shown in Dunin 1984: figs. 25–26) refer in fact to *P. popovi*.

**Pseudicus vulpes** (Grube, 1861)


**Habitat.** Collected in deciduous woods (aspen, birch, oak) and on meadows.


**Salticus cingulatus** (Panzer, 1797)


**Distribution.** New for Khabarovskii Krai. Species known from Europe and Western Siberia; recorded from the Russian Far East by Nenilin (1985).

**Sitticus cutleri** Prószyński, 1980

Habitat. Collected in moist glades.


_Sitticus fasciger_ (Simon, 1880)

Material: Khabarovskii Krai, BR, Bychikha village, 1♂, 1♀, VII–VIII.1987, S. Ivanov (BI, No 899); 1♀, V.1989 (MNH); Lasovskii distr., shore of the Kiya river, 1♂, VII.1987, Dyachenko (IWP).


_Sitticus floricola_ (C. L. Koch, 1837)


Habitat. Collected by sweeping on meadows and in moist places with _Stratiotes sp._ and sparse trees.


_Synageles venator_ (Lucas, 1836)


_Yaginumaella medvedevi_ Prószynski, 1979


Habitat. Collected by sweeping in various woods: in deciduous forest (aspen, birch, oak), in deciduous woods with larch, as well as in pine woods. Also found on moister places with single alders.


_Yaginumaella striatipes_ (Grube, 1861)

Fig. 35

_Yaginumaella ususudi_ (Yaginuma, 1972) syn. n.


Habitat. Collected in litter and by sweeping in various woods: in coniferous woods (spruce and fir), in mixed woods (pine, birch, rich undergrowth), as well as in deciduous woods (elm). Also found on clearings. _Y. medvedevi_ and _Y. striatipes_ differ to some extent in their altitudinal distribution. The former occurs in low positions between 100 and 400 m a.s.l. while the latter is found from 250 to above 900 m a.s.l. (highest points of the Bolshekhetskisirsky reserve).


In spite of having a series of _Y. ususudi_ specimens, in neither sex could we find any consistent difference from _Y. striatipes_, except for minor difference in the structure of tibial apophysis (cf. Fig. 35C–D and 35A–B). Thus, we conclude that they are conspecific, and that _Y. ususudi_ constitutes a junior synonym of _Y. striatipes._
Fig. 35. Yaginumaella striatipes (Grube), male, tibial apophysis. — A-B: specimens from Khabarovskii Krai. — C-D: specimens from Japan.

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References


