Five new Linyphiidae spiders from the Russian Far East, with notes on synonymy (Arachnida: Aranei)

Пять новых видов пауков семейства Linyphiidae из российского Дальнего Востока с заметками о синонимии (Arachnida: Aranei)

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KEY WORDS: Spiders, Linyphiidae, Russian Far East, Micronetinae, Erigoninae, new species, synonymy. КЛЮЧЕВЫЕ СЛОВА: Пауки, Linyphiidae, Дальний Восток, Micronetinae, Erigoninae, новые виды, синонимия.

ABSTRACT. Five new species of the family Linyphiidae are described from the Russian Far East, i.e. *Agyneta laimonasi* sp.n., *Anguliphantes ryvkini* sp.n., *Tiso golovatchi* sp.n., *Wabasso koponeni* sp.n., and *W. saaristoi* sp.n. The following new synonym is proposed (valid name on the right): Crispiphantes amurensis (Tanasevitch, 1988) = Crispiphantes rhomboideus (Paik, 1985) syn.n.

РЕЗЮМЕ. Из Дальнего Востока описаны пять новых видов пауков сем. Linyphiidae: Agyneta laimonasi sp.n., Anguliphantes ryvkini sp.n., Tiso golovatchi sp.n., Wabasso koponeni sp.n., и W. saaristoi sp.n. Установлен новый синоним: (валидное название справа) Crispiphantes amurensis (Tanasevitch, 1988) = Crispiphantes rhomboideus (Paik, 1985) syn.n.

Introduction

Three papers devoted to linyphild spiders of two nature reserves (N.R.), both located in the Russian Far East, i.e. Bureinsky (Khabarovsk Province) and Norsky (Amurskaya Area), have recently been published. The Bureinsky N.R. appears to support 143 linyphild species [Tanasevitch & Trilikauskas, 2004; Trilikauskas & Tanasevitch, 2006], while the Norsky N.R., 109 species [Tanasevitch, 2006b]. Material from these previously completely unexplored regions contains a lot of new linyphild taxa, some of which have already been described [Tanasevitch, 2006a; Tanasevitch & Trilikauskas, 2006]. In this paper, another few new species are put on record, two from the Bureinsky N.R., and three from the Norsky N.R.

Material and methods

This paper is based on the material collected by Drs Alexander B. Ryvkin and Elena M. Veselova (Moscow, Russia), as well as by Laimonas A. Trilikauskas (Chegdomyn, Russia) from the Norsky Nature Reserve, Khabarovsk Province, and the Bureinsky Nature Reserve, Amurskaya Area, Russia.

The holotypes and the majority of the paratypes have been deposited in the Zoological Museum of the Moscow State University, Moscow, Russia; some duplicates, both para- and non-types, are in the author's personal collection.

In the descriptions, chaetotaxy in Erigoninae is given using the following formula: 2.2.2.1, which refers to the number of dorsal spines on tibiae I–IV, respectively; in Micronetinae as follows: Ti I: 2-1-1-2(1), which means that tibia I has two dorsal, one pro- and one retrolateral spine, and two or one ventral spine (the apical spines are herewith disregarded). The sequence of leg segments in measurement data is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are given in mm. Scale lines in figures = 0.1 mm, unless otherwise indicated.

Abbreviations

Abbreviations used in the text and figures: Ca — carina, CAT — personal collection of Andrei Tanasevitch, Moscow, DP — dorsal plate, E — embolus, ED — embolic division, EP — embolus proper, Fe — femur, LL — lateral lobe, Mt — metatarsus, N.R. — Nature Reserve, Pr — protegulum, Ps — proscape, RA — radical apophysis, SA suprategular apophysis, St — stretcher, Th — thumb (= lateral extension of embolus), Ti — tibia, TmI — position of trichobothrium on tibia I, ZMMU — Zoological Museum of the Moscow State University, Moscow, Russia.

Descriptions of new species

Agyneta laimonasi **sp.n.** Figs 1–7.

Holotype ♂ (ZMMU), Russia, Khabarovsk Province, Verkhnebureinsky District, Bureinsky N.R., upper reaches of Pravaya Bureya River, source of Lednikovyi River (ca 52°08' N, 134°26' E), montane tundra, 30.VI.2000, leg. L. Trilikauskas.

ETYMOLOGY. The species honours Laimonas Trilikauskas (Chegdomyn, Russia), Russian arachnologist, who collected the type of this species.

DESCRIPTION. Male. Total length 1.58. Carapace 0.70 long, 0.50 wide, pale greyish brown. Chelicerae 0.30 long. Legs yellow. Leg I, 2.21 long (0.60+0.18+0.53+0.50+0.40), IV, 2.28 long (0.65+0.15+0.55+0.53+0.40). Chaetotaxy: Ti I-II: 2-1-0-0, III-IV: 2-0-0-0. TmI 0.27. Metatarsi IV without trichobothrium. Palp (Figs 1-7): Tibia faintly modified, with a small tooth anterolaterally. Cymbium conical. Posterior pocket of paracymbium as a tooth-like pigmented outgrowth. Lamella characteristica relatively large, with a long pointed process apically. Abdomen 0.88 long, 0.60 wide, pale grey.

Female. Unknown.

TAXONOMIC REMARKS. The new species is most similar to A. ripariensis Tanasevitch, 1984, but differs by the peculiar shape of the palpal tibia, the larger tooth-like pigmented outgrowth on the proximal lobe of the paracymbium, as well as by the lamella characteristica: the longest apical process is in the middle, as opposed to the longest process being upper in A. ripariensis.

DISTRIBUTION. Known only from the type locality.

Anguliphantes ryvkini sp.n. Figs 8-18.

Holotype ♂ (ZMMU), Russia, Amurskaya Area, Selemdzhinsky District, Norsky N.R. (ca 52°32' N, 129°96' E), Nora River basin near Maltsevskiy cordon, Lake Maltsevskoye, mosses and leaf litter among sedge and gramineous tussocks with Spiraea spp., Salix sp., Filipendula palmata, Iris sp., Anemonidium dichotomum, Maianthemum bifolium, Polytrichum spp., Hypnum sp., Sphagnum squarrosum, Plagiomnium sp., undergrowth of Betula sp., 14.VI.2005, leg. E. Veselova & A. Ryvkin.

Paratypes: 1 ♂, 1 ♀ (ZMMU), same locality, near Maltsevskiy cordon, mosses, leaf litter, soil under Alnus sp., Padus sp., *Salix* spp. with ferns, Poaceae, *Carex* spp., etc., on clayey slumping bank, 17.VI.2005; $1 \ \varphi$ (ZMMU), same locality, steep bank of Nora River near Maltsevskiy cordon, shingles, sand, loam, spots of mosses Marchantiales, Carex spp., Poaceae, Fabaceae, leaf litter under Alnus sp. and Padus sp. with ferns, 16.VI.2005; 1 9 (CAT), same locality, near Maltsevskiy cordon, Lake Maltsevskoye, mosses and leaf litter among sedge and gramineous tussocks with Spiraea spp., Salix sp., Filipendula palmata, Iris sp., Anemonidium di-chotomum, Maianthemum bifolium, Polytrichum spp., Hypnum sp., Sphagnum squarrosum, Plagiomnium sp., H_{F} growth of *Betula* sp., 13.VI.2005; 1 \Im (ZMMU), same locality, lower reaches of Chervinka River, mosses, plant debris, leaf litter on swamp with tussocks of Carex spp. and Poaceae with Salix spp., Alnus sp., Betula fruticose, Ledum palustre, Chamaedaphne calyculata, Vaccinium uliginosum, undergrowth and young trees of Betula platyphylla and Populus tremula, individual trees of Larix gmelinii, Sphagnum squarrosum, Polytrichum spp., 2.VII.2005; 1º (ZMMU), Selemdzhinsky District, Nora River, bank of Sorokavyorstnaya channel, under foot of rocky NE slope of Mt. Maltsevskaya, leaf litter under *Alnus* sp., *Salix* spp., *Populus* sp., *Padus* sp., 12.VI.2005, all leg. E. Veselova & A. Ryvkin.

ETYMOLOGY. The species honours Dr Alexander B. Ryvkin, a well-known Russian entomologist who collected part of the type material of this species.

DESCRIPTION. Male. Total length 1.95. Carapace 1.03 long, 0.85 wide, pale brown. Chelicerae 0.50 long. Legs yellow. Leg I, 4.46 long (1.13+0.30+1.15+1.10+0.78), IV, 4.50 long (1.20+0.30+1.15+1.15+0.70). Chaetotaxy: TiI: 2-1-1-0; II: 2-0-1-0; III-IV: 2-0-0-0; MtI-IV: 1-0-0-0. TmI 0.22. Palp (Figs 10–16): Patella with a special spine, slightly protruded apically. Tibia modified as in Fig. 12. Cymbium with a small posterodorsal outgrowth. Paracymbium with a large claw-shaped tooth behind anterior pocket; edge of posterior pocket with one or two small teeth (depending on the angle of observation). Lamella characteristica long and rather slender, with two claw-shaped processes apically. Embolus like a sharp tooth, carina small, thumb (lateral extension) well-developed. Abdomen 1.05 long, 0.68 wide, dark grey, dorsal pattern absent.

Female. Total length 2.25. Carapace 1.05 long, 0.78 wide. Chelicerae 0.45 long. Leg I, 4.23 long (1.13+0.30+ 1.05+1.00+0.75), IV, 4.13 long (1.20+0.28+1.05+1.00+0.60). TmI 0.25. Abdomen 1.63 long, 0.95 wide. Epigyne (Figs 8, 9, 17, 18): Proscape relatively slender, widened distally. Lateral lobes faintly expressed. Stretcher long and narrow. Posterior median plate with a shallow notch apically, lateral processes absent. Body and leg colouration, chaetotaxy as in male.

TAXONOMIC REMARKS. The new species is most similar to A. maritimus (Tanasevitch, 1988) and A. ussuricus (Tanasevitch, 1988), but is easily distinguished from both by the shape of the distal part of the lamella characteristica and the structure of the paracymbium; from A. maritimus also by the absence of lateral processes on the posterior median plate, which are well visible in A. maritimus on both sides of the proscape, and from A. ussuricus by the relatively shorter and wider proscape.

DISTRIBUTION. Known only from the Norsky N.R., Amurskaya Area, Russia.

Tiso golovatchi **sp.n.** Figs 19-25.

Holotype ♂ (ZMMU), Russia, Far East, Khabarovsk Province, Verkhnebureinsky District, Bureinsky N.R., ca 210 km NE of Chegdomyn, 3.5 km downstream of confluence of Pravaya & Levaya Bureya rivers (ca 51°65' N, 134°26' E), spruce forest, in moss, 27.V.2003, leg. A. Tanasevitch.

Paratype: 1 ° (ZMMU), together with holotype, 27.V. 2003, leg. A. Tanasevitch.

ETYMOLOGY. The species honours Dr Sergei Golovatch (Moscow, Russia), a well-known Russian myriapodologist.

DESCRIPTION. Male. Total length 1.73. Carapace 0.85 long, 0.63 wide, dark brown. Cephalic pits present (Fig. 25). Chelicerae 0.23 long. Legs pale reddish brown. Leg I, 1.86 long (0.55+0.18+0.45+0.38+0.30), IV, 1.94 long (0.55+ 0.18+0.50+0.43+0.28). Chaetotaxy: 1.1.1.1. Spines on Ti I-II very short, on Ti III-IV about as long as diameter of tibia. TmI 0.53. Metatarsi IV without trichobothrium. Palp (Figs 19-24): Palpal tibia with a hook-like outgrowth apically and a small tooth at its base. Suprategular apophysis small, pointed, with a rounded ridge laterally. Radical part of embolic division large, curved. Embolus short and flat. Abdomen 1.00 long, 0.70 wide, dark grey, almost black.

Female. Unknown.

TAXONOMIC REMARKS. The new species differs from other species of Tiso Simon, 1884 by the peculiar shape of the embolic division (a large radix, a broad, flat and short embolus), and the presence of postocular pits on the male carapace. This new species is obviously not congeneric with the type species Tiso vagans (Blackwall, 1834), so it is assigned to this genus only provisionally. In the absence of the female, the taxonomic position of this species is unclear. Most probably, it belongs to a new monotypic genus so numerous in Siberia [Eskov, 1989, 1990, etc.].

DISTRIBUTION. Known only from the type locality.



Figs 1–9. Agyneta laimonasi sp.n., holotype (1–7) & Anguliphantes ryvkini sp.n., \mathcal{Q} paratype (8, 9): 1 – right palp (retrolateral view); 2 – palpal tibia (dorsal view); 3 – palpal tibia and paracymbium (lateral view); 4–6 – lamella characteristica (lateral view, different angles); 7 – embolic division (ventral view); 8 – epigyne (ventral view, scape removed); 9 – scape (lateral view). Abbreviations used: E – embolus, LL – lateral lobes, PMP – posterior median plate, Ps – proscape, St – stretcher.

Рис. 1—9. *Agyneta laimonasi* sp.n., голотип (1—7) и *Anguliphantes ryvkini* sp.n., паратип ♀ (8, 9): 1 — правая пальпа (ретролатерально); 2 — голень пальпы (дорсально); 3 — голень пальпы и парацимбиум (латерально); 4—6 — lamella characteristica (латерально, под разными углами); 7 — эмболюсный отдел (вентрально); 8 — эпигина (вентрально, скапус удален); 9 — скапус (латерально).



Figs 10—18. Anguliphantes ryvkini sp.n., ♂ & ♀ paratypes: 10 — right palp (retrolateral view); 11 — cymbium (dorsal view); 12 — palpal patella & tibia (lateral view); 13, 14 — paracymbium (lateral view, different angles); 15 — distal part of lamella characteristica (lateral view); 16 — embolus (lateral view); 17, 18 — epigyne (ventral and lateral views, respectively). Abbreviations used: Ca — carina, EP — embolus proper, Th — thumb. Рис. 10—18. Anguliphantes ryvkini sp.n., паратипы ♂ и ♀: 10 — правая пальпа (ретролатерально); 11 — цимбиум (дорсально); 12 — колено и голень пальпы (латерально); 13, 14 — парацимбиум (латерально, под разным углом); 15 — дистальная часть lamella characteristica (латерально); 16 — эмболюс (латерально); 17, 18 — эпигина (соответственно вентрально); 17, 18 — эпигина (соответственно

вентрально и латерально).



Figs 19—25. *Tiso solivagus* sp.n., ♂ paratype: 19, 20 — right palp (retrolateral and prolateral views, respectively); 21 — palpal tibia (dorsal view); 22, 23 — embolic division (different views); 24 — suprategulum (lateral view); 25 — carapace (lateral view). Abbreviations used: E — embolus, ED — embolic division. Рис. 19—25. *Tiso golovatchi* sp.n., паратип ♂: 19, 20 — правая пальпа (соответственно ретролатерально и пролатерально); 21 — голень пальпы (дорсально); 22, 23 — эмболюсный отдел (под разными углами); 24 — супратегулярная апофиза (латерально); 25 — карапакс (латерально).

Wabasso koponeni sp.n. Figs 26–31.

Holotype ♂ (ZMMU), Russia, Amurskaya Area, Selemdzhinsky District, Norsky N.R. (ca 52° 32' N, 129° 96' E), Burunda River near Ozyornyi Rill mouth, plant debris and mosses among tussocks of Carex spp. and Poaceae with Spiraea sp., Vicia sp., small true mosses on gently sloping side

of small flood-plain lake, 2.X.2004, leg. A. Ryvkin. Paratypes: $1 \circ, 1 \circ$ (ZMMU), together with holotype, 2.X.2004; $1 \circ$ (ZMMU), same, buffer zone of Norsky N.R., Burunda River basin near Burunda cordon, plant debris and mosses, sweeping on swampy sides of flood-plain lake: Carex spp., Poaceae, *Spiraea* sp., sparse *Climacium* sp., *Hypnum* sp., *Sphagnum* sp., *Polytrichum* sp., 9.IX.2004; $1 \triangleleft, 3 <footnote>$ (CAT), same locality, Burunda River near Ozyornyi Rill mouth, mosses and plant debris among sedge-gramineous tussocks on gentle slope near intermittent channel: Carex spp., *Calamagrostis* sp., *Polytrichum* sp. and other true mosses, *Spiraea* sp., 27.IX.2004; 3 \, (ZMMU), same locality, Nora River basin near Meunskiy cordon, mouth of Opasnyi Rill, mosses and plant debris among tussocks of Poaceae, Carex spp., on flood plain, 15.VII.2005, all leg. A. Ryvkin.

ETYMOLOGY. The species honours Dr Seppo Koponen (Turku, Finland), a well-known Finnish arachnologist, an expert in the chorology of spiders.

DESCRIPTION. Male. Total length 1.78. Carapace 0.80 long, 0.63 wide, unmodified, pale brown. Chelicerae 0.30 long. Legs yellow to pale brown. Leg I, 2.06 long (0.60+ 0.23+0.48+0.40+0.35), IV, 2.18 long (0.63+0.20+0.55+ 0.45+0.35). Chaetotaxy 2.2.2.1. TmI 0.38. Metatarsi IV without trichobothrium. Palp (Figs 26-29): Tibia with two small teeth apically. Paracymbium slender, L-shaped. Protegulum small, conical. Suprategular apophysis long and narrow. A relatively large and elongated embolic division with two flattened, weekly sclerotised, membrane-like radical apophyses, one of which slender and originating from embolic base, the other one wide, originating from middle part of radix (Fig. 29). Abdomen 0.93 long, 0.70 wide, grey.

Female. Total length 1.60. Carapace 0.78 long, 0.55 wide. Chelicerae 0.28 long. Leg I, 1.71 long (0.48+0.18+ 0.38+0.34+0.33), IV, 1.89 long (0.50+0.18+0.50+0.38+ 0.33). TmI 0.40. Abdomen 0.88 long, 0.63 wide. Epigyne (Figs 30, 31): Slightly protruded, with two small hollows posteriorly. Dorsal plate large, elongated, narrowing posteriad. Seminal ducts well visible as a rule, like two slender stripes almost parallel to each other. Receptacles large, spherical. Body and leg colouration, chaetotaxy as in male.

TAXONOMIC REMARKS. The epigyne and vulva of this new species is very similar to that of W. hilairoides Eskov, 1988, but differ by the larger receptacles and the slightly longer posterior median plate. The male of W. koponeni sp.n. differs in the absence of stout spines on the tibia, the shape of the palpal tibia, the flat and wide suprategular apophysis, as well as by the presence of two radical apophyses in the embolic division (no such apophyses in W. hilairoides).

DISTRIBUTION. Known only from the Norsky N.R., Amurskaya Area, Russia.

Wabasso saaristoi sp.n. Figs 32-38.

Holotype ♂ (ZMMU), Russia, Amurskaya Area, Selemdzhinsky District, buffer zone of Norsky N.R. (ca 52°32' N, 129°96' E), Burunda River, 1 km below Burunda cordon, mosses (Plagiomnium sp. etc.) and leaf litter under Salix sp. with Poaceae, Carex sp., Filipendula palmata, Pyrola sp.,

along base of shingle-sandy spit, 25.IX.2004, leg. A. Ryvkin. Paratypes: 4 °°, 10 °° (ZMMU), 4 °°°, 10 °° (CAT), together with holotype, 25.IX.2004; 1 °, 3 °° (ZMMU), same locality, Meun River mouth, plant debris among Carex spp. & Equisetum sp. and leaf litter under Salix spp. & Alnus sp. on low bank of creek, 21.VIII.2004; 1 (ĈMMU), same locality, Burunda River near Ozyornyi Rill mouth, mosses and plant debris among sedge-gramineous tussocks on gentle slope near intermittent channel: Carex spp., *Calamagrostis* sp., *Polytrichum* sp. and other true mosses, *Spiraea* sp., 27.IX.2004; $1 \circ 2 \circ (ZMMU)$, same locality, Nora River basin near Meun River mouth, small swamp with *Carex* spp., Poaceae & *Sphagnum squarrosum*, 19.VIII.2004; 2 ♂♂, 4 ♀♀ (ZMMU), same locality, Nora River basin near Meunskiy cordon, mouth of Opasnyi Rill, mosses and plant debris among tussocks of Poaceae, Carex spp. on flood-plain, 15.VII.2005; 1 ♂ (ZMMU), Norsky N.R., rill (left confluent of Nora River), 1 km upstream of Mt. Gryashchinskaya, true mosses and plant debris among Carex spp., Poaceae, Alnus sp., Padus sp., Salix sp., 22.VII.2005; 1 ° (ZMMU), same locality, near Meunskiy cordon, swamp with sedge tussocks, Poaceae, Sphagnum squarrosum, 14.VII.2005, all leg. A. Ryvkin.

ETYMOLOGY. The species honours Dr Michael I. Saaristo (Turku, Finland), a well-known Finnish arachnologist, the author of fundamental publications devoted to linyphiid spiders.

DESCRIPTION. Male. Total length 1.95. Carapace 0.85 long, 0.63 wide, unmodified, pale brown. Chelicerae 0.33 long. Legs yellow to pale brown. Leg I, 2.34 long (0.70+ 0.23+0.53+0.43+0.45), IV, 2.65 long (0.73+0.23+ 0.68+ 0.58+0.43). Chaetotaxy 2.2.2.1. TmI 0.37. Metatarsi IV without trichobothrium. Palp (Figs 32-36): Tibia with a deep hollow apically, dividing the segment into two parts. Paracymbium small, simple. Protegulum small, conical. Suprategular apophysis long, wide, poorly sclerotised, pointed apically, with a tooth basally. Radical part of embolic division long and slender. Embolus narrow, spearshaped, with a membranous edge. Abdomen 1.13 long, 0.75 wide, grey.

Female. Total length 2.05. Carapace 0.93 long, 0.70 wide. Chelicerae 0.35 long. Leg I, 2.42 long (0.63+0.23+ 0.63+0.48+0.45), IV, 2.74 long (0.78+0.23+0.75+0.60+ 0.38). TmI 0.38. Abdomen 1.38 long, 0.90 wide. Epigyne (Figs 37, 38): Slightly protruded, with an indistinct, small, oval hollow. Dorsal plate rounded. Body and leg colouration, chaetotaxy as in male.

TAXONOMIC REMARKS. The male of this new species can easily be distinguished from all species of Wabasso Millidge, 1984 by the peculiar shape of the palpal tibia. The shape of the suprategular apophysis is very similar to that of W. replicatus (Holm, 1950), which has recently been revalidated and redescribed by Merrett & Dawson [2005]. These authors erroneously labeled this suprategular apophysis as a "membrane ... arising from between embolus and suprategulum", i.e. the median membrane [op. cit.: 119]. The epigyne and vulva of W. saaristoi sp.n. are very similar to those of W. millidgei Eskov, 1884, but can be distinguished by the rounded posterior edge of the dorsal plate, which has a notch in W. millidgei.

DISTRIBUTION. Known only from the Norsky N.R., Amurskaya Area, Russia.

Wabasso tungusicus Eskov, 1988 Figs 39-43.

1988 Wabasso tungusicus Eskov: 140 (examined).



Figs 26–31. Wabasso koponeni sp.n., \bigcirc & \bigcirc paratypes: 26, 27 — right palp (retrolateral and prolateral views, respectively); 28 — palpal tibia (dorsal view); 29 — embolic division (dorsal view); 30, 31 — epigyne (ventral and dorsal views, respectively). Abbreviations used: DP — dorsal plate, E — embolus, RA — radical apophysis, Pt — protegulum, SA — suprategular apophysis.

Рис. 26—31. *Wabasso koponeni* sp.n., паратипы [¬] и ♀: 26, 27 — правая пальпа (соответственно ретролатерально и пролатерально); 28 — голень пальпы (дорсально); 29 — эмболюсный отдел (дорсально); 30, 31 — эпигина (соответственно вентрально и дорсально).



Figs 32—38. *Wabasso saaristoi* sp.n., ♂ & ♀ paratypes: 32, 33 — right palp (32 — retrolateral view, 33 — prolateral view); 34, 35 — palpal tibia (dorsal view, different angles); 36 — suprategular apophysis (lateral view); 37, 38 — epigyne (ventral and dorsal views, respectively). Abbreviations used: DP — dorsal plate, E — embolus, SA — suprategular apophysis. Рис. 32—38. *Wabasso saaristoi* sp.n., паратипы ♂ и ♀: 32, 33 — правая пальпа (соответственно ретролатерально и пролатерально); 34, 35 — голень пальпы (дорзально, под разными углами); 36 — супратегулярная апофиза (латерально); 37, 38 — эпигина (соответственно вентрально и дорсально).



Figs 39–43. *Wabasso tungusicus* Eskov, 1988 (specimens from Norsky N.R.): 39, 40 — right palp (retrolateral and prolateral views, respectively); 41 — palpal tibia (dorsal view); 42, 43 — epigyne (ventral and dorsal views, respectively). Abbreviations used: DP — dorsal plate, E — embolus, RA — radical apophysis, SA — suprategular apophysis.

Рис. 39—43. *Wabasso tungusicus* Eskov, 1988 (экземпляры из Норского заповедника): 39, 40 — правая пальпа (соответственно ретролатерально и пролатерально); 41 — голень пальпы (дорсально); 42, 43 — эпигина (соответственно вентрально и дорсально).

MATERIAL (new localities): $2 \circ^{\circ} \circ^{\circ}$, $4 \circ^{\circ} \circ^{\circ}$ (CAT), Amurskaya Area, Selemdzhinsky District, Norsky N.R. (ca 52°32' N, 129°96' E), Nora River basin near Meun River mouth, small swamp with *Carex* spp., Poaceae & *Sphagnum squarrosum*, 19.VIII.2004; $3 \circ^{\circ} \circ^{\circ}$, $13 \circ^{\circ} \circ^{\circ}$ (ZMMU), same locality,

small swamp with *Carex* spp., Poaceae & *Sphagnum squarrosum*, 20.VIII.2004; $3 \circ \circ$, $2 \circ \circ$ (ZMMU), same locality, right bank of Nora River near Meunskiy cordon, shingles, silt, clay, mosses and leaf litter under *Salix* sp. and *Alnus* sp., 20.VIII.2004; $1 \circ ($ ZMMU), same locality, mosses and

plant debris on swampy flood-plain lakeside: Carex spp., Calamagrostis sp., Filipendula palmata, Geranium sp., Comarum palustre, Spiraea sp., Salix sp., Sphagnum girgensohnii, Sph. squarrosum, Polytrichum commune, Climacium sp. *Iris* sp., 28.VIII.2004; $1 \triangleleft 7$, 7 $\triangleleft 9$ (ZMMU), same locality, Meun River mouth, plant debris among *Carex* spp. & Equisetum sp. and leaf litter under Salix spp. & Alnus sp. on low bank of creek, 21.VIII.2004; 1 Q (ZMMU), same locality, rill (left confluent of Nora River) upstream of Mt. Gryashchinskaya, true mosses and plant debris among Carex spp., Poaceae, Alnus sp., Padus sp., Salix sp., 26.VIII.2004; 4 62 (ZMMU), Norsky N.R. (buffer zone), Burunda River basin, 0.5–0.7 km NW of Burunda cordon, sedge-gramineous (mesotrophic) swamp with Sphagnum girgensohnii and true mosses around lake, 10.IX.2004; 1º (ZMMU), same locality, Meunchik River bank: mosses and plant debris on stones near water, *Carex* spp., Poaceae, *Spiraea* sp., 14.IX.2004; 2 ♂♂, 4 ♀♀ (CAT), same locality, 1 km below Burunda cordon, mosses (Plagiomnium sp., etc.) and leaf litter under Salix sp. with Poaceae, Carex sp., Filipendula palmata, Pyrola sp., along base of shingle-sandy spit, 25.IX.2004; 7 $\varphi\varphi$ (ZMMU), same locality, Burunda River near Ozyornyi Rill mouth, mosses and plant debris among sedge-gramineous tussocks on gentle slope near intermittent channel: Carex spp., *Calamagrostis* sp., *Polytrichum* sp. and other true mosses, *Spiraea* sp., etc., 27.IX.2004; $1 \circ 7$ (ZMMU), same locality, mosses and leaf litter under Salix sp. and Alnus sp. with separate tussocks of *Carex* sp., *Plagiomnium* sp., etc. on flood-plain (near old channel), 30.IX.2004; 2 °°°, 2 °° (ZMMU), same locality, plant debris and mosses among tussocks of *Carex* spp. and Poaceae with *Spiraea* sp., *Vicia* sp., true mosses on gently sloping side of small flood-plain lake, 2.X.2004; 1 \circ , 6 \circ (ZMMU), same locality, Nora River basin near Meunskiy cordon, sweeping on *Carex* spp., *Eriophorum* spp., Poaceae with *Sphagnum* spp. along swampy road to Lake Dlinnoye, 13.VII.2005; 2 99 (ZMMU), same locality, rill (left confluent of Nora River), 1 km upstream of Mt. Gryashchinskaya, true mosses and plant debris among Carex spp., Poaceae, Alnus sp., Padus sp., Salix sp., 22.VII.2005, all leg. Â. Ryvkin.

TAXONOMIC REMARKS. This species differs well from other congeners by the very long and slender embolus, and the suprategular apophysis, both of which protrude far from the palp, as well as by the pyriform dorsal plate of the epigyne (Figs 39–43).

NOTE. The drawing of the epigyne in dorsal view as given by Eskov [1988: 139, fig. 3: 6] for *W. tungusicus* in its original description is in fact misleading: the dorsal plate is pyriform, not trapeziform.

DISTRIBUTION. The species *W. tungusicus* has hitherto been known from the Evenk Autonomous Region, Middle Siberia (62°23' N, 101°33' E) and in the Okhotsk District, Khabarovsk Province, Far East (59°01' N, 140°55' E) [Eskov, 1988]. The above new records are the southernmost localities of this species.

Synonymy

Crispiphantes amurensis (Tanasevitch, 1988) = *Crispiphantes rhomboideus* (Paik, 1985), **syn.n.**

Crispiphantes amurensis (Tanasevitch, 1988) was originally described as *Lepthyphantes* Menge, 1866 from Arkhara, southern part of the Amurskaya Area, Russia [Tanasevitch, 1988]. Later, the species was transferred to the genus *Crispiphantes* Tanasevitch, 1992, erected for three species: *Meioneta rhomboidea* Paik, 1985 (the type species), *Lepthyphantes biseulsanensis* Paik, 1985 and *Lepthyphantes amurensis* Tanasevitch, 1988 [Tanasevitch, 1992]. A restudy of the type specimens of *C. amurensis*, deposited in ZMMU, and their comparison with the very nice figures provided in the original description of *C. rhomboideus* [Paik, 1985] leave no doubt that we face the same species. So *C. amurensis* is to be considered as a junior synonym of *C. rhomboideus*, syn.n.

C. rhomboideus has hitherto been known only from Korea [Paik, 1985], but at present the northernmost locality in its distribution lies is the southern part of the Amurskaya Area, Russia ($49^{\circ}19'$ N, $130^{\circ}13'$ E).

ACKNOWLEDGEMENTS. I am very grateful to Drs Alexander B. Ryvkin and Elena M. Veselova (Moscow, Russia), as well as to Laimonas A. Trilikauskas (Chegdomyn, Russia), whose collections have been used here. I am also deeply indebted to Dr Sergei I. Golovatch (Moscow) for checking the English of the final draft.

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