

## New or little-known species of *Agyneta* and *Nippononeta* from Asia (Aranei: Linyphiidae)

### НОВЫЕ И МАЛОИЗВЕСТНЫЕ ВИДЫ *Agyneta* и *Nippononeta* из Азии (Aranei: Linyphiidae)

A.V. Tanasevitch

А.В. Танасевич

All-Russian Research Institute for Nature Protection, Ministry of the Protection of the Environment and Natural Resources of the Russian Federation.

Всероссийский институт охраны природы при Министерстве природных ресурсов РФ.

KEY WORDS: Spiders, Linyphiidae, *Agyneta*, *Nippononeta*, new species, Altai, Russian Far East, Eastern Kazakhstan.

КЛЮЧЕВЫЕ СЛОВА: Пауки, Linyphiidae, *Agyneta*, *Nippononeta*, новые виды, Алтай, Дальний Восток России, Восточный Казахстан.

ABSTRACT: Two new species, *Agyneta tibialis* sp.n. and *Nippononeta embolica* sp.n., are described from the Altai Mountains, South Siberia and the Russian Far East, respectively. *Agyneta mongolica* (Loksa, 1965) and *A. nigra* (Oi, 1960) are depicted based on new records in the Far East of Russia, while the European *A. simplicatarsis* (Simon, 1884) is recorded in Asia (Eastern Kazakhstan) for the first time.

РЕЗЮМЕ: Два вида, *Agyneta tibialis* sp.n. (Алтай) и *Nippononeta embolica* sp.n. (Дальний Восток России), описаны как новые для науки. Приведены рисунки и новые находки на Дальнем Востоке России видов *Agyneta mongolica* (Loksa, 1965) и *A. nigra* (Oi, 1960). Европейский вид *A. simplicatarsis* (Simon, 1884) впервые обнаружен в Азии (Восточный Казахстан).

#### Introduction

This paper provides descriptions of two new species belonging to two closely related linyphiid genera, *Agyneta* Hull, 1911 and *Nippononeta* Eskov, 1992.

The genus *Nippononeta*, with *Nippononeta kurilensis* Eskov, 1992 as the type species, was established for eight species of *Meioneta* Hull, 1920, predominately from Japan and Korea [Eskov, 1992]. Further 11 congeners have since been described from Japan [Ono & Saito, 2001]. Besides the traits mentioned by Eskov [1992], this genus is also characterised by the structure of the embolus, which usually shows a well-developed and sometimes long (e.g., *N. subnigra* Ono et Saito, 2001) embolus proper, often with a tooth near its base, as well as by a fairly strongly reduced distal part of the embolus (shown by Saaristo [1973] as “F-part” in figs 43–45). Such a conformation of the embolus corresponds to the structure of the lateral lobes of the female epigyne.

In addition, several interesting records of *Agyneta* species in Asia are provided.

#### Material and Methods

This paper is based on the collections of Miss G. Azarkina (Novosibirsk) from the Altai Mountains, of Drs R. Seifulina (Moscow) and E. Mikhaljova (Vladivostok) from the Russian Far East, as well as on my own material from the Maritime Province, Russia.

Types are deposited in the Zoological Museum of the Moscow State University (ZMMU), whereas the other material is housed in the author's personal collection (CAT).

#### Abbreviations

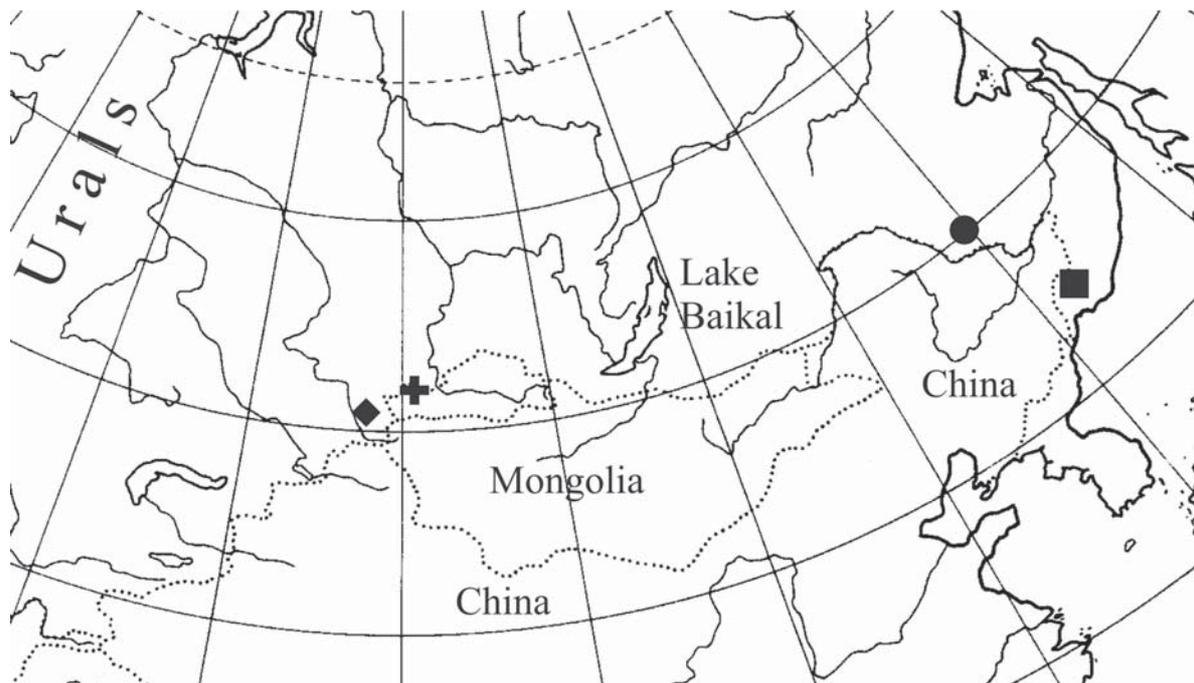
The following abbreviations are used in the text and figures: EP — embolus proper; Mt — metatarsus; TA — terminal apophysis; TmI — position of the metatarsal trichobothrium.

In the descriptions, chaetotaxy is given in the following formula: Ti I: 2-1-1-2(1). This stands for: 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 in millimeters. Scale line in figures = 0.1 mm, except if stated otherwise.

#### *Agyneta tibialis* sp.n.

Figs 1–8.

MATERIAL. Holotype ♂, Russia, Altai Mts, Charysh Distr., Bashchelaksky Mt. Ridge, 30 km NEE of Sentelek, near Zagrikha (see Map), 1700 m, *Abies* forest near top, 27.VI.2000, leg. G. Azarkina (ZMMU). Paratype ♂, together with holotype (ZMMU).



Map. Localities of *Agyneta* and *Nippononeta* species: ◆ — *Agyneta simplicitarsis* (Simon, 1884); + — *A. tibialis* sp.n.; ● — *A. mongolica* (Loksa, 1965); ■ — *A. nigra* (Oi, 1960) & *Nippononeta embolica* sp.n.

Карта. Места находок видов *Agyneta* и *Nippononeta*: ◆ — *Agyneta simplicitarsis* (Simon, 1884); + — *A. tibialis* sp.n.; ● — *A. mongolica* (Loksa, 1965); ■ — *A. nigra* (Oi, 1960) & *Nippononeta embolica* sp.n.

**DESCRIPTION.** Male. Total length, 1.83. Carapace 0.80 long, 0.58 wide, dark brown. Chelicerae 0.30 long. Legs pale brown. Leg I, 4.45 long (1.13+0.33+1.13+1.03+0.83), IV — 4.31 long (1.20+0.28+1.13+1.05+0.65). Chaetotaxy. Ti I–II: 2-1-0-0; Ti III–IV: 2-0-0-0; Mt I–IV spineless. Metatarsi IV without trichobothrium. TmI, 0.29. Palp as in Figs 1–8. Palpal tibia with a small retrolateral tooth-shaped process, lamella characteristica narrow, pointed distally, with a small branch basally. Abdomen 1.00 long, 0.50 wide, dark grey.

Female unknown.

**TAXONOMIC REMARKS.** This species is very close to *A. ripariensis* Tanasevitch, 1984, *A. simplex* (Emerton, 1926) and *A. brusnewi* (Kulczyński, 1908), but is well distinguished by the large retrolateral tooth-shaped process, as well as by the narrower lamella characteristica. From the most closely related *A. ripariensis*, the new species differs in shape of the patella and paracymbium (cp. Figs 3, 4 & 10; 2 & 9).

**DISTRIBUTION.** Known from the type locality only.

#### *Nippononeta embolica* sp.n.

Figs 11–14.

**MATERIAL.** Holotype ♂, Russia, Maritime Province, Chernigovka District, near Dmitrievka (see Map), deciduous forest on hill, litter, 24–30.VII.1990, leg. A. Tanasevitch (ZMMU).

**DESCRIPTION.** The holotype being quite strongly damaged, the description will be incompleting. Male. Body very pale, abdomen with an ambiguous dorsal pattern. Chaetotaxy. Ti I–II 2-0-1-0, III–IV: 2-0-0-0. Metatarsi spineless. TmI, ?. Metatarsus IV without trichobothrium. Palp as in Figs 11–14. Patella with a sharp tooth-shaped process retro-

laterally. Cymbium with a small posterodorsal outgrowth. Posterior and anterior pockets of paracymbium fused into a large pocket. Lamella characteristica with a serrate narrow branch. Embolus with a deep notch in middle part; embolus proper well-developed, with a small tooth near its base.

**DISTRIBUTION.** Known from the type locality only.

**REMARK.** This is the second species of the genus *Nippononeta* in the Russian fauna.

#### *Agyneta simplicitarsis* (Simon, 1884)

Figs 15–19.

**MATERIAL.** 1 ♂, Eastern Kazakhstan, near Ust-Kamenogorsk (see Map); date and collector unknown (CAT).

This species is widespread in Western Europe, with only a single reliable record in Eastern Europe, i.e. Lugansky Nature Reserve, Ukraine [Polchaninova, 1995].

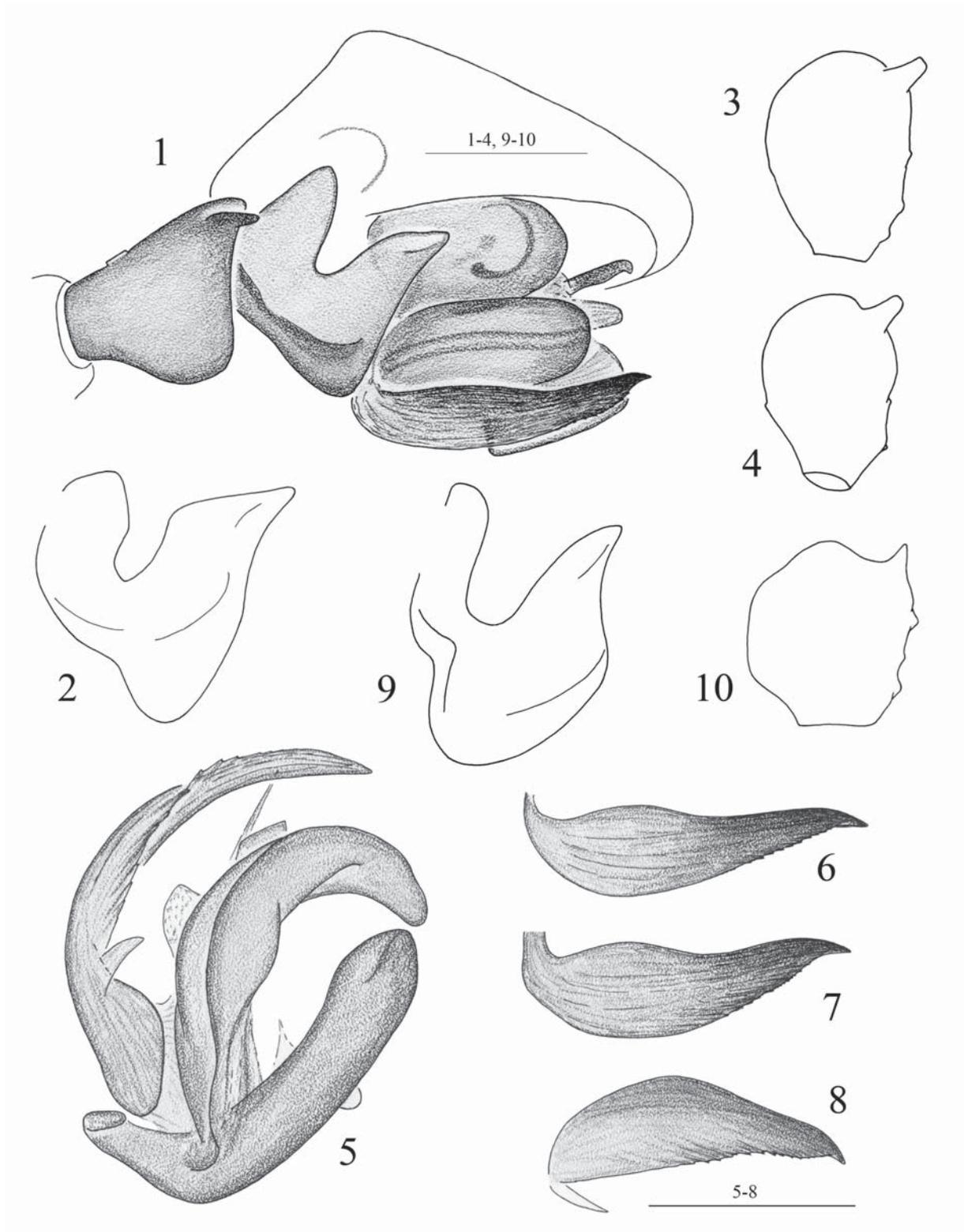
This is the first record of *A. simplicitarsis* in Asia. At present its distribution pattern can be considered as Euro-Siberian.

#### *Agyneta mongolica* (Loksa, 1965)

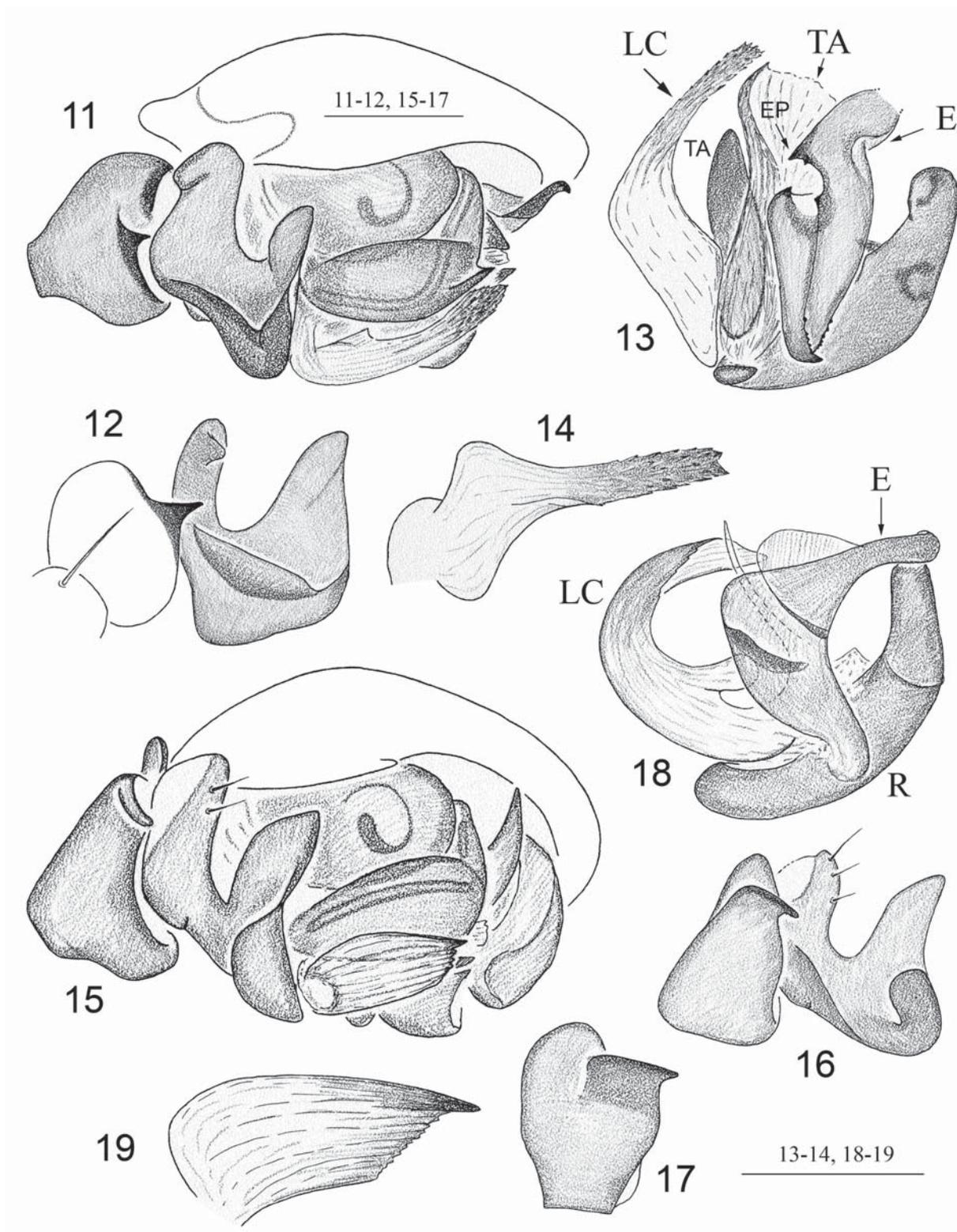
Figs 20–25.

**MATERIAL.** 3 ♂♂, Russia, Amurskaya Area, near Tambovka (ca 50 km SE of Blagoveshchensk, see Map), Muravyovskiy Park, 2001, leg. R. Seifulina (CAT).

In Russia, this species has been recorded in two places only: Bolshekhokhtyrsky Nature Reserve and Verkhne-Bureinsky Nature Reserve, both in the Khabarovsk Province [Eskov, 1992; Tanasevitch & Trilikauskas, 2004, respectively].

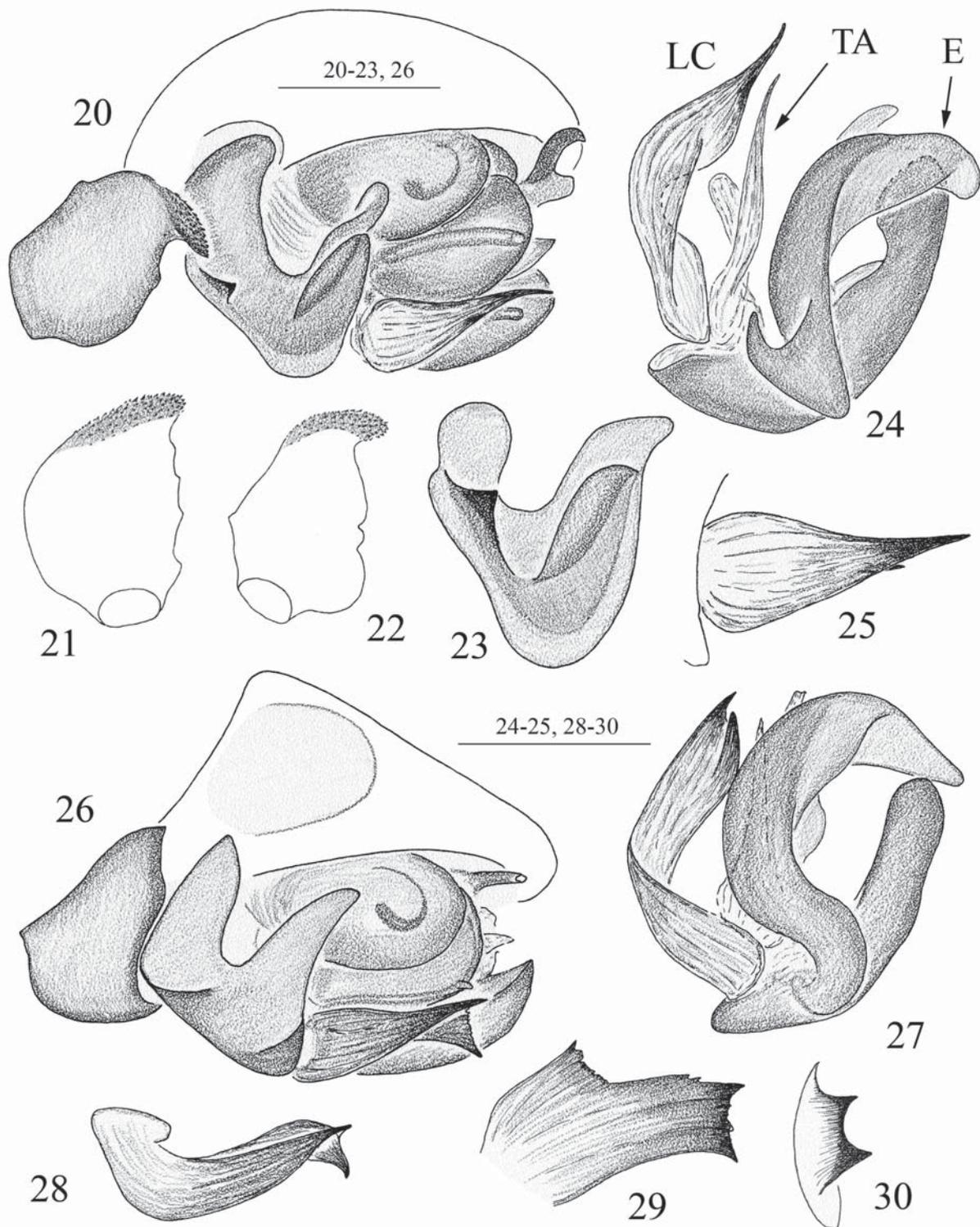


Figs 1–10. Details of palp structure in *Agyneta tibialis* sp.n. (1–8) and *A. ripariensis* Tanasevitch, 1984 (9, 10): 1 — right palp; 2, 9 — paracymbium; 3, 4, 10 — palpal tibia, dorsal view; 5 — embolic division; 6–8 — lamella characteristic.  
 Рис. 1–10. Детали строения пальпы *Agyneta tibialis* sp.n. (1–8) и *A. ripariensis* Tanasevitch, 1984 (9, 10): 1 — правая пальпа; 2, 9 — парацимбиум; 3, 4, 10 — голень пальпы, сверху; 5 — эмболюсный отдел; 6–8 — ламелла характеристика.



Figs 11–19. Details of palp structure in *Nippononeta embolica* sp.n. (11–14) and *Agyneta simplicitaris* (Simon, 1884) (15–19): 11, 15 — right palp; 12, 16 — palpal tibia and paracymbium, retrolateral view; 13, 18 — embolic division; 14, 19 — lamella characteristic; 17 — palpal tibia, dorsal view.

Рис. 11–19. Детали строения пальпы *Nippononeta embolica* sp.n. (11–14) и *Agyneta simplicitaris* (Simon, 1884) (15–19): 11, 15 — правая пальпа; 12, 16 — голень пальпы с парацимбиумом, ретролатерально; 13, 18 — эмболюсный отдел; 14, 19 — ламелла характеристика; 17 — голень пальпы, сверху.



Figs 20–30. Details of palp structure in *Agyneta mongolica* (Loksa, 1965) (20–25) and *A. nigra* (Oi, 1960) (26–30): 20, 26 — right palp; 21, 22 — palpal tibia, dorsal and retrolateral views, respectively; 23 — paracymbium; 24, 27 — embolic division; 25, 28–30 — lamella characteristic.

Рис. 20–30. Детали строения пальпы *Agyneta mongolica* (Loksa, 1965) (20–25) и *A. nigra* (Oi, 1960) (26–30): 20, 26 — правая пальпа; 21, 22 — голень пальпы, соответственно дорсально и ретролатерально; 23 — парацимбиум; 24, 27 — эмболюсный отдел; 25, 28–30 — ламелла характеристика.

**BRIEF DESCRIPTION.** Male palp as in Figs 20–25. Palpal tibia apically with a serrate outgrowth directed retro-laterally. Cymbium without conical elevation. Posterior pocket of paracymbium well-sclerotised, tooth-shaped. Embolus basally with a hook-like outgrowth, lamella characteristica gradually constricted proximally; apical part thin and sharp.

Female unknown.

**DISTRIBUTION.** Mongolia; Russia: Far East.

*Agyneta nigra* (Oi, 1960)  
Figs 26–30.

**MATERIAL.** 1 ♂, Russia, Maritime Province, Chernigovka Distr., Dmitrievka (see Map), soya field, 14.VII.1988, leg. E. Mikhailjova (CAT).

**DISTRIBUTION.** Japan, Korea, China, Mongolia. In Russia, this species is known from the Far East, East Siberia and South Siberia up to Lake Baikal in the west.

**ACKNOWLEDGEMENTS.** The author is very grateful to Galina Azarkina, Rimma Seifulina and Elena Mikhailjova,

whose material has been used in this paper, as well as to Michael Saaristo (Turku, Finland) for some useful advice on the taxonomy of the *Agyneta* clade of micronetines. Sergei Golovatch kindly edited the English of an advanced draft.

## References

- Eskov K.Y. 1992. A restudy of the generic composition of the linyphiid spider fauna of the Far East (Araneida: Linyphiidae) // Entomologica scand. Vol.23. P.153–168.
- Ono H., Saito H. 2001. New species of the family Linyphiidae (Arachnida, Araneae) from Japan // Bull. natn. Sci. Mus. Tokyo. Ser.A. Vol.27. P.159–203.
- Polchaninova N.Y. 1995. [Araneofauna of the "Streltsovskaya Steppe" (Lugansk Area) and its place in the fauna of protected steppe territories] // Problemy sokhraneniya raznoobraziya prirody stepnykh i lesostepnykh regionov. Mater. Rossiisko-Ukrainskoi nauchn. konf. posv. 60-letiyu Tsent.-Chernozem. zapov. pos. Zapovednyi, Kurskaya obl., 22–27 maya 1995 g. Moscow: KMK Sci. Press. S.185–186 [in Russian].
- Saaristo M.I. 1973. Taxonomical analysis of the type-species of *Agyneta*, *Anomalaria*, *Meioneta*, *Aprolagus*, and *Syedrella* (Araneae, Linyphiidae) // Ann. Zool. Fenn. Vol.10. P.451–466.