On linyphiid spiders (Aranei: Linyphiidae) from Moscow Area, Russia

О пауках-линифидах (Aranei: Linyphiidae) из Московской области, Россия

R.R. Seyfulina
P.P. Сейфулина

ABSTRACT. 12 spider species of fam. Linyphiidae are reported as the first records in Moscow Area (Russia), one of which is new also for the fauna of Middle Russia (Impropohantes complicatus). Comments with species distribution and early records from the country, as well as taxonomical and biological notes are attached to the list. New synonym is proposed: Incestophantes australis (Gnelitsa, 2009) = Incestophantes crucifer (Menge, 1866), syn.n. (valid name on the right).


Material and Methods

Linyphiidae specimens were collected by the author during inventory study of the Prioksko-Terrasny State Biosphere Reserve, initiated in 2014. The Reserve is located in the south of Moscow Area on the left side of Oka river (N 54°52' E 37°36', Fig. 1). It covers the territory about 50 sq. kilometers and contains different types of forest, dry and lowland meadows, steppe patches, small lakes, rivers, and sphagnum bogs. Material for this paper was gathered by using pitfall traps and sifter in four type of forests, in two different meadows, as well as on the water sides. Specimens listed below are verified by Dr A.V. Tanasevitch and kept in the Reserve (PTSBR).

Abbreviations of the names of palp and epigyne are following: DPs — the distal part of the scape; LCh — lamella characteristica. Other abbreviations: p.t. — pitfall traps; s.l. — same locality.
inventory study, 59 of which were considered as new to this territory. At the same time, 17 species proved to be new for the fauna of Moscow Area. Five species have been reported [Seyfulina, 2017], twelve are listed below. One of them is reported also for the first in the Middle Russia.

List of species

**Aphileta misera** (O. Pickard-Cambridge, 1882)


**Biological Notes.** Rare species inhabited well-humid moss in forests [Nentwig et al., 2019]. Was found near the water in the litter.

**Comments.** The first record in Moscow Area and the second in Middle Russia after Oliger [2016], reported this species from Leningrad Area. Distributed from Europe to Ye-nisei River. Reported also from Karelia [Mikhailov, 2015], Ural [Tanasevitch, 2005b], Orenburg Area [Kozminykh, 2016], West Siberia [Tanasevitch, 2005b], Irkutsk Area [Tanasevitch, 2008b], Krasnoyarsk Province [Esakov, 1983].

**Centromerus levisarius** (Simon, 1884)

*C. l.*: Palmgren, 1975: 15, f. 2.19–22.


**Biological Notes.** Rare species inhabited well-humid moss in forests [Nentwig et al., 2019]. Was found near the water in the litter.

**Comments.** The first record in Moscow Area and the second in Middle Russia after Oliger [2016], reported this species from Leningrad Area. Distributed from Europe to Middle Siberia. Registered also in Karelia [Uzenbaev, 1984, 1995, 1999], West Siberia [Tanasevitch, 2005b], Irkutsk Area [Tanasevitch, 2008b], Krasnoyarsk Province [Esakov, 1983].

**Centromerus semiaters** (L. Koch, 1879)


**Biological Notes.** Rare species occurred in very humid moss, mostly near the water [Nentwig et al., 2019]. Found in the typical habitat (moss on the lake or bog shore).

**Comments.** The first record in Moscow Area and the second in Middle Russia after Oliger [2016], reported this species from Leningrad Area. Distributed from Europe to Ye-nisei River. Reported also from Karelia [Mikhailov, 2013], Orenburg Area [Kozminykh, 2016], Ural [Pakhorukov, 2014].

**Ceratinella scabrosa** (O. Pickard-Cambridge, 1871)

* C. s.: Palmgren, 1976: 45, f. 3.20–22.
**MATERIAL EXAMINED.** 4 ♂ ♂ 2 ♀ ♀ (PTSBR), RUSSIA, Moscow Area, Serpukhov Dist., Prioksko-Terrasny Nat. Res., 5 block, small-leaved forest, N 54°55′41″ E 37°34′36″, p.t., 21–31.05.2014 (R.R. Seyfullina); 3 ♂ ♂ 1 ♀ ♀ (PTSBR), s.l., block 10, mixed forest, N 54°53′55″ E 37°34′36″, p.t., 21–31.05.2014 (R.R. Seyfullina); 2 ♂ ♂ (PTSBR), s.l., 31.05–10.06.2014 (R.R. Seyfullina).

**BIOLOGICAL NOTES.** Quite rare species inhabited litter layer of damp woodland [Nentwig et al., 2019]. We found it in moderately moist deciduous and mixed forest.

**COMMENTS.** The first record in Moscow Area. Distributed in Palearctic. Recorded in many localities throughout Russia, in particular in Leningrad Area [Olinger, 2016], Kirov Area [Eskov et al., 2011], Kursk Area [Polchанинова, 2009], Belgorod Area [Полчанинова, 2003], Samara Area [Краснобаев, 2004], Voronezh Area [Ejunin et al., 1993], Rostov Area [Пономарёв, Лебедева, 2014], Orenburg Area [Козминых, 2016], Urals [Ejunin et al., 1995], Penza Area [Полчанинова, 2008], Caucasus [Tanasevitch, 1990], Altai Mts [Трилкинскас, 2013].

**Improphantes complicatus** (Emerton, 1882)


**BIOLOGICAL NOTES.** Rare species occurred in grass heathland and in mountain region [Nentwig et al., 2019]. Found in typical conditions.

**COMMENTS.** The first record in Moscow Area and Middle Russia. Distributed in Holarctic. Known from Kola Peninsula [Tanasevitch, Kamayev, 2011], North and Middle Urals [Пакhoverуков, 1981; Есюнин, Ермаков, 2012], West Siberia [Tanasevitch, 2005], Altai Mts [Трилкинскас, 2013], Kamchatka Peninsula [Tanasevitch, 2008b].

**Incestophantes crucifer** (Menge, 1866)

Figs 2–4.

  I. c.: Marusik, 2015: 688, f. 14 K-M.

**BIOLOGICAL NOTES.** Normally found in humid moss and litter layer of forests [Nentwig et al., 2019]. Apart from typical habitat (lake shore with moss and some birches), found it in the leaf litter of dry steppe site under the single tree. In Europe Russia, widespread but locally distributed, quite strict in habitat requirements. Rather rare, although been considered by the last authors as a very frequent species.

**COMMENTS.** The first record in Moscow Area. Distributed in Europe. In Russia, registered in Karelia [Камяев, 2012], Leningrad Area [Олжер, 2016], Kursk Area [Полчанинова, 2009], Mordovia [Михайлов, Трушина, 2013], Mari El, Samara Area [Краснобаев, 2004], Voronezh Area [Есюнин et al., 1993], Orenburg Area [Козминых, 2016], Urals [Есюнин et al., 1995], Penza Area [Полчанинова, 2008], Caucasus [Tanasevitch, 1990], Altai Mts [Трилкинскас, 2013].

**Incestophantes australis** Gnelitsa, 2009

Figs 2–4.


**BIOLOGICAL NOTES.** Normally found in humid moss and litter layer of forests [Nentwig et al., 2019]. Apart from typical habitat (lake shore with moss and some birches), found it in the leaf litter of dry steppe site under the single tree. In Europe Russia, widespread but locally distributed, quite strict in habitat requirements. Rather rare, although been considered by the last authors as a very frequent species.

**COMMENTS.** The first record in Moscow Area. Distributed in Europe. In Russia, registered in Karelia [Камяев, 2012], Leningrad Area [Олжер, 2016], Kursk Area [Полчанинова, 2009], Mordovia [Михайлов, Трушина, 2013], Mari El, Samara Area [Краснобаев, 2004], Voronezh Area [Есюнин et al., 1993], Orenburg Area [Козминых, 2016], Urals [Есюнин et al., 1995], Penza Area [Полчанинова, 2008], Caucasus [Tanasevitch, 1990], Altai Mts [Трилкинскас, 2013].

Incestophantes c.: Saaristo, Tanasewitsch, 2000: 257. 

BIOLOGICAL NOTES. Rare species inhabited dry heathland and open pine forests [Nentwig et al., 2019]. Found in typical habitat, dry and clear green moss pine forest on alluvial sands with no undergrowth.

COMMENTS. The first record in Moscow Area. Distributed from Europe to West Siberia. Registered in many localities of Urals: from Komi Republic in the north to Bashkortostan in the south (e.g. Esyunin et al., 1995), in Udmurtiya [Sozontov, Shirobokova, 2014], Samara Area [Krasnoyarsk Province [Marusik et al., 2005].

TAXONOMIC REMARKS. Transferred from Bolophantes by Saaristo & Tanasewitsch [2000]. I. australis was first described from Crimea as a species very close to I. crucifer, differing in some minor structural details of the paracymbium, lamella characteristic (LCh), terminal apophysis, and the distal part of the scape (DPs) with the notes on high variability of the other characters of female genitalia [Gnelitsa, 2009]. When compared with the drawings in this description, we found out that the specimens examined are similar with I. australis in many diagnostic features, although they apparently belong to I. crucifer. Thus, the only diagnostic character in females is DPs, which should be narrower and elongated in I. australis, and its outline seems to be more similar to one given for the last species than to I. crucifer (compare Fig. 2, orig. and Fig. 3 c, g in Gnelitsa, 2009: 314). On the other hand, the shape of scape in I. crucifer in Thaler et al. [1994] is identical to our specimen.

The first diagnostic character in males is the shape of LCh, which takes rather intermediate position in our specimen. In accordance with I. australis diagnosis, LCh has to possess a wide, rounded keel beneath the distal spire, lacking in I. crucifer. As one can see from Fig. 3, 4, LCh of specimen examined are obviously equipped with a keel, but less pronounced than in the description of I. australis [Gnelitsa, 2009: 313, Fig. 2 b]. It should be noted, that the right and left palps slightly differs in the keel shape, as well as in some other small details of palpal structure. At the same time, the typical appendices situated on paracymbium and terminal apophysis are more pointed than indicated in I. australis diagnosis. However, adjuncts of this kind are normally variable in shape in Incestophantes male palp according to A.V. Tanasewitsch (pers. comm.). On his expert opinion, the diagnostic characters of I. australis are actually individual variations in I. crucifer. In view of aforesaid, Incestophantes australis Gnelitsa, 2009 is being considered as a junior synonym of Incestophantes crucifer (Menge, 1866), syn.n.n.

Notioscorus sarcinatus (O. Pickard-Cambridge, 1873)

N. s.: Tanasewitsch, 2007: 144, f. 8, 22-25. 

BIOLOGICAL NOTES. Rare species preferred humid conditions, mainly in sphagnum [Nentwig et al., 2019]. Found in typical habitat.

COMMENTS. The first record in Moscow Area. Distributed from Europe to Yenisei River. Reported from Karelia [Kamayev, 2012], Leningrad Area [Olinger, 2016], Mari El [Kamayev, 2009], Chuvashia, Samara Area [Krasnoyarsk, 2004], Urals [Esyunin et al., 1995], West Siberia [Tanasewitsch, 2005], Krasnoyarsk Province [Marusik et al., 2006].

Silometopus incurvatus (O. Pickard-Cambridge, 1873)


COMMENTS. The first record in Moscow Area. Distributed from Europe to Middle Asia. In Middle Russia, found in Leningrad Area [Olinger, 2016] and Samara Area [Krasnoyarsk, 2004]. Also registered in Orenburg Area [Kozminykh, 2016], in Urals: from Polar to South [Esyunin et al., 1995], Caucasus [Tanasewitsch, 2011].

Tapinocyba insecta (L. Koch, 1869)


BIOLOGICAL NOTES. Occurs mainly in moss and litter of forests [Nentwig et al., 2019]. Very frequent in West Europe [Nentwig et al., 2019]. In European Russia: more common in the north, rare in centre, absent from the south [Sozontov, Shirobokova, 2014; Olinger, 2016]. Rare in PTSBR, collected from typical habitat.

COMMENTS. The first record in Moscow Area. Distributed from Europe to West Siberia. Reported from Leningrad Area [Olinger, 2016], Mari El [Krasnoyarsk, 2004], Mor dovia [Mikhailov, Trushina, 2013], Belgorod Area [Esyunin et al., 1993], Udmurtia [Sozontov, Shirobokova, 2014], Urals [Esyunin et al., 1995], West Siberia [Tanasewitsch, 2005].

Trosochrota scabra Kulczyński, 1894

On linyphiid spiders from Moscow Area, Russia

BIOLICAL NOTES. Very rare species found mostly in dry moss forests (e.g. Palmgren, 1976). In Russia, collected from similar habitats, green moss pine forests (orig.; Oliger, 2016; Esyunin, 2007), as well as from slope steppe meadows [Sonzontov, 2018].

COMMENTS. The first record in Moscow Area and the second in Middle Russia (previously registered in Leningrad Area: Oliger, 2016). Distributed in Europe. Reported also from Cisuralia (Udmurtia, Perm Province) [Eysunin, 2007; Hänggi, Stäubli, 2012; Sonzontov, 2018]. On some opinion, this species has disjunctive area of distribution including Fennoscandia, Central Europe Mountains (Swiss, Romanian), and Cisuralia [Eysunin, Marusik, 2011; Nentwig, 2019]. In view of Troxochrota scabra populations established in the south of Moscow Area, this statement seems to be rather a result of scarce data than the real situation.

Walcenneria mitrata (Menge, 1868)


MATERIAL EXAMINED. 1 ♀ (PTSBR, RUSSIA, Moscow Area, Serpukhov Distr., Prioksko-Terrasny Nat. Res., 3 block, sphagnum bog, N 54°54′86″E 37°36′08″, p.t., 11–21.05.2014 (R. Sefyulina)); 1 ♀ (PTSBR, s.l., mixed forest, N 54°53′80″E 37°34′35″, p.t., 21–31.05.2014 (R.R. Sefyulina).

BIOLICAL NOTES. Quite rare species occurred in moss and litter layer of moderately humid forests [Nentwig et al., 2019]. Found in mixed forest and in ecotone of sphagnum bog and mixed forest.


Acknowledgements. The author very appreciate to Dr A.V. Tanasevitch for his kind assistance in species identification and valuable comments to the manuscript, as well as to the staff of the Prioksko-Terrasny Biosphere Reserve for their help in sampling. We also wish to express our thanks to Dr K.G. Mikhailov for some bibliographic information.

References


