

New records of sheet web spiders from Slovenia (Arachnida: Araneae: Linyphiidae)

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Abstract. Spiders from the family Linyphiidae: *Agyphantes expunctus*, *Gongylidium rufipes*, *Hylyphantes nigrinus*, *Oedothorax apicatus* and *Panamomops mengei*, new for the Slovenian fauna, are discussed.

Key words: Aranea, Linyphiidae, new species, Slovenia, faunistics

Izveček. NOVE NAJDBE PAJKOV BALDAHINARJEV V SLOVENIJI (ARACHNIDA, ARANEA, LINYPHIIDAE) - Prispevek obravnava pet v Sloveniji doslej še neodkritih vrst pajkov iz družine baldahinarjev (Linyphiidae): *Agyphantes expunctus*, *Gongylidium rufipes*, *Hylyphantes nigrinus*, *Oedothorax apicatus* in *Panamomops mengei*.

Ključne besede: Aranea, Linyphiidae, nove vrste, Slovenija, favnistika

Introduction

The family Linyphiidae, commonly known as sheet-web spiders, money spiders, or dwarf spiders, is the second largest spider family in the world and the largest in Northern Hemisphere (Platnick 2004). So far, 182 linyphiid species have been recorded in Slovenia (CKFF 2004), compared to 386 in Italy (Stoch 2003), 364 in Austria, 374 in Germany, 343 in Switzerland (Blick et al. 2002), 189 in Hungary (Samu & Szinetár 1999), 57 in Croatia (Nikolić & Polenc 1981), and 301 Czech Republic (Buchar & Růžička 2002). This translates to nearly 9 linyphiid species per 1000 km² in Slovenia, higher than for any of the countries listed. This is clearly a combination of real diversity and intensity of the carried out study. For example, the linyphiid spider fauna of Croatia and Hungary is relatively unknown, so their relatively low

diversity (1.01 and 2.03 species per 1000 km², respectively) is not surprising. Well-studied Germany (0.97 species per 1000 km²) probably reflects evenness in species composition across a large area. Switzerland (8.31 species per 1000 km²) is both small and well-studied and compares well with Slovenia.

Material and methods

The material presented was collected during Student Summer Research Camps Cerkno 2000, Semič 2001, Videm pri Ptujju 2002, and Žirovnica 2003. The systematics and nomenclature of the determined spiders follow Platnick (2004). For each species the data on the collected material, including description of the collecting site, its geographic latitude and longitude in UTM coordinates and altitude in meters above the sea, are given, followed by data on distribution of the species in other countries in the area and comments on the findings. The specimens are deposited in the Department of Biology, Biotechnical Faculty, University of Ljubljana.

Results and discussion

According to the previous records of Slovenian sheet-web spiders (CKFF 2004), three genera and five species listed below were determined to be new for the Slovenian fauna. Due to the great diversity of the family, the number of species recorded in the neighboring countries and relatively poor knowledge of Slovenian spiders, the records of sheet-web spiders presented here are just a minor contribution to the Slovenian spider fauna.

List of species

***Agnyphantes expunctus* (O.P.-Cambridge, 1875)**

Material

1 female, Mojstrana, Vrata valley, forest, altitude: 1,000 m, coordinates: x: 141723, y: 411733, 25.07.2003, leg.: Student Summer Research Camp 2003, det.: J. Miller, coll.: R. Kostanjšek.

Distribution:

Palaearctic (Platnick 2004). This species has been recorded in the Czech Republic (Buchar & Růžička 2002), Germany (Platen et al. 1995), Switzerland (Maurer & Hänggi 1990), and Serbia (Nikolić & Polenec 1981); Austria is the only country adjacent to Slovenia in which this species has been found (Thaler 1995).

Comments:

This species was transferred from the genus *Lepthyphantes* Menge, 1866 by Saaristo & Tanasevitch (1996). Since *A. expunctus* is the only European species in the genus *Agnyphantes* Hull, 1932, it is the first record for the genus in Slovenia as well.

***Gongylidium rufipes* (Linnaeus, 1758)**

Material:

1 female, Krnica, left bank of the Radovna river, low vegetation, altitude: 660 m, coordinates: x: 137953, y: 427019, 28.07.2003, leg.: R. Kostanjšek, det.: J. Miller, coll.: R. Kostanjšek;
1 female, Idrija, meadow east of Žirovnica, altitude: 520 m, coordinates: x: 96821, y: 430382, 03.08.2000, leg.: Student Summer Research Camp 2000, det.: J. Miller, coll.: R. Kostanjšek.

Distribution:

Palaearctic (Platnick 2004). This species is common and widespread in northern Europe (Nentwig et al. 2003). Recorded from Austria (Thaler 1999), Germany (Platen et al. 1995), Switzerland (Maurer & Hänggi 1990), Hungary (Samu & Szinetár 1999), the Czech Republic (Buchar & Růžička 2002), and the Slavonia region in Croatia (Nikolić & Polenec 1981).

Comments:

This species is the first representative of the genus *Gongylidium* Menge, 1868 in Slovenia.

***Hylyphantes nigrinus* (Simon, 1881)**

Material:

3 females, Metlika, north-west of Griblje, marsh, altitude: 150 m, coordinates: x: 48016, y: 522620, 29.07.2001, leg.: Student Summer Research Camp 2001, det.: J. Miller, coll.: R. Kostanjšek;

1 female, forest south of Stranska vas pri Semiču, altitude: 180 m, coordinates: x: 53174, y: 517458, 31.07.2001, leg.: Student Summer Research Camp 2001, det.: J. Miller, coll.: R. Kostanjšek;

1 female, Zasip near Bled, right bank of the Sava Dolinka river, meadow, altitude: 460 m, coordinates: x: 138373, y: 432623, 29.07.2003, leg.: T. Lokovšek, det.: J. Miller, coll.: R. Kostanjšek.

Distribution:

Palaearctic (Platnick 2004), absent from north Europe (Nentwig et al. 2003). This species is rare and usually associated with mesic habitats (Nentwig et al. 2003). Recorded in Austria (Steinberger & Thaler 1994), Germany (Platen et al. 1995), Switzerland (Maurer & Hänggi 1990), Italy (Stoch 2003), Hungary (Samu & Szinetár 1999), Czech Republic (Buchar & Růžička 2002), and Serbia (Nikolić & Polenec 1981).

Comments:

Hylyphantes Simon, 1884 includes only two European species (Platnick 2004); this species is the first representative of *Hylyphantes* in Slovenia.

***Oedothorax apicatus* (Blackwall, 1850)**

Material:

8 females, Krnica, left bank of the Radovna river, low vegetation, altitude: 540 m, coordinates: x: 137953, y: 427019, 28.07.2003, leg.: R. Kostanjšek, det.: J. Miller., coll.: R. Kostanjšek;

1 male, Gruškovje south of Videm pri Ptuj, meadow, altitude: 270 m, coordinates: x: 129467, y: 570725, 12.07.2002, leg.: Student Summer Research Camp 2002, det.: J. Miller, coll.: R. Kostanjšek;

1 female, Planina pod Golico, south of Savske jame, forest, altitude: 1,140 m, coordinates: x: 148394, y: 429626, 28.07.2003, leg.: Student Summer Research Camp 2003, det.: J. Miller, coll.: R. Kostanjšek;

1 female, Želin, south of Cerkno, right bank of Idrijca river, altitude: 240 m coordinates: x: 419005, y: 106967, 30.07.2000, Student Summer Research Camp 2000, det.: J. Miller, coll.: R. Kostanjšek.

Distribution:

Palaearctic (Platnick 2004). This species is commonly found in a variety of habitats throughout northern Europe (Nentwig et al. 2003). Recorded from Austria (Thaler 1999), Germany (Platen et al. 1995), Switzerland (Maurer & Hänggi 1990), Italy (Stoch 2003), Hungary (Samu & Szinetár 1999), and the Czech Republic (Buchar & Růžička 2002). As far as the territory of the former Yugoslavia is concerned, the species is reported only from Kruševac in Serbia (Nikolić & Polenec 1981).

***Panamomops mengei* Simon, 1926**

Material:

1 female, Žiri, north-east of Sovra, meadow, altitude: 490 m, coordinates: x: 97980, y: 432103, 03.08.2000, leg.: Student Summer Research Camp 2000, det.: J. Miller., coll.: R. Kostanjšek.

Distribution:

Palaearctic (Platnick 2004). This species is rather rarely found in northern Europe (Nentwig et al. 2003). Recorded from Germany (Platen et al. 1995), Switzerland (Maurer & Hänggi 1990), and the Czech Republic (Buchar & Růžička 2002); Hungary is the only country adjacent to Slovenia from which this species has been recorded (Samu & Szinetár 1999).

Povzetek

Pajki baldahinarji (Linyphiidae) so najštevilčnejša družina pajkov severne poloble in s 182 vrstami tudi najštevilčnejša družina pajkov pri nas. Prispevek obravnava pet, v Sloveniji doslej še neodkritih vrst iz omenjene družine, in sicer: *Agnyphantes expunctus*, *Gongylidium rufipes*, *Hylyphantes nigritus*, *Oedothorax apicatus* in *Panamomops mengei*. Vse obravnavane vrste so palearktično razširjene, zato so v Sloveniji pričakovane. Glede na velikost družine, število najdenih baldahinarjev v sosednjih državah in pomanjkljivo poznavanje naše pajčje favne, lahko v Sloveniji pričakujemo še več deset vrst pajkov iz družine baldahinarjev.

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