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New Barkfly records from Bulgaria (Insecta: Psocoptera)

Nové nálezy pisivek (Insecta: Psocoptera) z Bulharska

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Abstract. The study was carried out during September–October 2016. Six Psocoptera species were recorded as new to Bulgaria: *Liposcelis priesneri* Enderlein, 1925, *L. pearmani* Lienhard, 1990, *Ectopsocus vachoni* Badonnel, 1945, *Cuneopalpus cyanops* (Rostock, 1876), *Elipsocus moebiusi* Tetens, 1891 and *Mesopsocus immunis* (Stephens, 1836).

INTRODUCTION

The insects of the order Psocoptera are very poorly known in Bulgaria. To date, only 28 species have been recorded (Drensky, 1953, Lienhard 1998, Giese, 1964, Lienhard & Smithers 2002, Sziráki 2013). In this short note I report six new species for the country.

MATERIAL AND METHODS

The material was collected intensively during a very short period of September–October 2016 by sieving leaf litter or beating vegetation. Specimens were preserved in ethanol, or glycerin when prepared on microscope slides, and identified in the laboratory. Materials are deposited in the collection of the author. Six localities in Bulgaria were surveyed, situated in 3 geographic regions: Sarnena Gora Mts., Stara Planina Mts., and the Pre-Balkan area (= northern foothills of Stara Planina Mts.). Species identifications and taxonomy followed Lienhard (1998). Distribution data is based on Lienhard & Smithers (2002) and Sziráki (2013).

RESULTS

Liposcelididae

Liposcelis priesneri Enderlein, 1925

Material examined. Bulgaria: Sarnena Gora Mts., Hrishteni village, yard of a house, detritus beneath *Corylus* sp., 42°27′12.56″N 25°42′17.89″E, 183 a.s.l., 22.ix.2016, 2 ♀♀, D. Georgiev leg. et det. (Fig. 1).

Distribution. Known from the Apennines (Italy) and Balkan Peninsulas (Albania, Greece, Macedonia), and Cyprus (Lienhard & Smithers 2002). First record for Bulgaria.

Liposcelis pearmani Lienhard, 1990

Material examined. Bulgaria: Sarnena Gora Mts., East of Hrishteni village, *Pinus nigra* plantation, pine detritus and dead wood, 42°28′02.7″N 25°42′59.0″E, 306 a.s.l., 24.ix.2016, 1 ♀, D. Georgiev leg. et det.; Pre-Balkan, Dryanovski Manastir area, mixed forest under bark



Figs 1–4. *Liposcelis* Motschulsky, 1852 species recorded in Bulgaria during the present study (females): 1 – *L. priesneri* Enderlein, 1925, yard in Hrishteni vill., 2 – *L. silvarum* (Kolbe, 1888), pine forest near Trakia University (W of Stara Zagora city, additional record), 3 – *L. pearmani* Lienhard, 1990, pine forest east of Hrishteni vill., 4 – *L. pearmani* Lienhard, 1990, mixed forest near Dryanovo hotel. Photographed in glycerin.
Obr. 1–4. Druhy rodu *Liposcelis* Motschulsky, 1852 nalezené v Bulharsku v této studii (samice): 1 – *L. priesneri* Enderlein, 1925, nádvoří domu ve vsi Hrishteni, 2 – *L. silvarum* (Kolbe, 1888), borový les u Trácké university (západně od měst Stara Zagora, další nález druhu z Bulharska), 3 – *L. pearmani* Lienhard, 1990, borový les východně od vsi Hrishteni, 4 – *L. pearmani* Lienhard, 1990, smíšený les u hotelu Dryanovo. Fotografováno v glycerinu.

of dead *Pinus sylvestris*, 42°57′35.3″N 25°25′50.3″E, 290 a.s.l., 8.x.2016, 1 ♀, D. Georgiev leg. et det. (Figs 3, 4).
Distribution. Holarctic species (Lienhard & Smithers 2002). First record for Bulgaria.

Ectopsocidae

Ectopsocus vachoni Badonnel, 1945
Material examined: Bulgaria: Sarnena Gora Mts., East of Hrishteni village, edge of a corn field, grass detritus beneath *Rosa* sp., 42°27′38.3″N 25°43′07.9″E, 234 a.s.l., 24.ix.2016, 1 ♀, D. Georgiev leg. et det.; Sarnena Gora Mts., North of Malka Vereya village, mixed broad leaf forest, in mixed leaf detritus of *Acer tataricum*, *Prunus spinosa*, *Tilia* sp., *Acer campestre*, *Quercus* sp., 42°24′50.87″N 25°32′54.08″E, 380 a.s.l., 13.x.2016, 2 nymphs, D. Georgiev leg. et det.
Distribution. Cosmopolitan species (Lienhard & Smithers 2002). First record for Bulgaria, and first record of any member of the family Ectopsocidae for the country.

Elipsocidae

Cuneopalpus cyanops (Rostock, 1876)
Material examined: Bulgaria: Sarnena Gora Mts., West of Kolena village, *Pinus nigra* plantation, branches of *Pinus nigra*, 42°28′58.5″N 25°42′20.2″E, 263 a.s.l., 15.x.2016, 3 ♂♂, 1 ♀, D. Georgiev leg. et det.
Distribution. Holarctic species (Lienhard & Smithers 2002). First record for Bulgaria.

Elipsocus moebiusi Tetens, 1891
Material examined: Bulgaria, Stara Planina Mts., Shipka peak area, bush and grass terrain, branches of *Crataegus* sp., 42°45′26.74″N 25°18′55.12″E, 1100 a.s.l., 1.x.2016, 1 ♂, D. Georgiev leg. et det.
Distribution. European arboreal species, also probably introduced into Canada (Lienhard & Smithers 2002). First record for Bulgaria.

Mesopsocidae

Mesopsocus immunis (Stephens, 1836)
Material examined: Bulgaria: Sarnena Gora Mts., North of Malka Vereya village, bush and grass terrain, branches of *Crataegus* sp., 42°24′37.71″N 25°33′10.60″E, 380 a.s.l., 13.x.2016, 1 ♀, D. Georgiev leg. et det.
Distribution. Holarctic species (Lienhard & Smithers 2002). First record for Bulgaria.

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SOUHRN

Předložená studie byla provedena v září až říjnu 2016, shrnující nálezy ze tří regionů Bulharska. Uvedeny jsou první nálezy šesti druhů pisivek (Psocoptera) pro Bulharsko: *Liposcelis priesneri* Enderlein, 1925, *L. pearmani* Lienhard, 1990, *Ectopsocus vachoni* Badonnel, 1945, *Cuneopalpus cyanops* (Rostock, 1876), *Elipsocus moebiusi* Tetens, 1891 a *Mesopsocus immunis* (Stephens, 1836).