Some Psocoptera records from South-West Bulgaria

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Abstract. A total of 9 species were reported from three geographic areas of South-West Bulgaria (Kresna Gorge, Kozhuh Mt., and Ograzhden Mts.): *Liposcelis bostrychophila*, *L. decolor*, *L. silvarum*, *Lachesilla pedicularia*, *L. bernardi*, *E. annulatus*, *E. moebiusi*, *Amphigerontia contaminata*, and *Neopsocus rhenanus*.

Key words: Insecta, distribution, Balkans.

Introduction

The Psocoptera fauna of South-West Bulgaria is still not studied (Georgiev 2020). In this short note I report of some species recorded in three geographic areas of this region: Kresna Gorge, Kozhuh Mt, and Ograzhden Mts.

Material and Methods

The barkflies were collected by two methods: sieving with 1 mm mesh width sieve of detritus or crushed tree bark particles above white plastic container and beating the vegetation (or shaking of dry vegetation by hand) above same container. Specimens were then stored in ethanol and after processing, deposited in the collection of the author. The material was collected by D. Georgiev with an exception of this one from the Kresna Gorge (Ognyan Todorov leg.). Species identifications are based on Lienhard (1998). As a supporting source, Saville (2008) was also used. Photographs were made by digital microscope Levenhuk DTX 90.

Results

The following species were found:

Liposcelididae

Liposcelis bostrychophila Badonnel, 1931

Material examined: 24.5.2020, Ograzhden Mts, between Starchevo and Karnalovo villages, bushes and trees among grass terrains, from bark of dry *Carpinus betulus*, N41 28 06.4 E23 13 40.6, 171 m a.s.l., 1 \updownarrow , collected by sieving.

Liposcelis decolor (Pearman, 1925)

Liposcelis silvarum (Kolbe, 1888)

Material examined: 23.5.2020, Kozhuh Mt, north of the "Sveta Petka" church, mixed broad leaf forest, from dry brunch of *Populus alba*, N41 27 36.4 E23 15 41.4, 95 m a.s.l., 1 \updownarrow , collected by sieving.

Lachesillidae

Lachesilla pedicularia (Linnaeus 1758)

Material examined: 24.5.2020, Ograzhden Mts, between Starchevo and Karnalovo villages, bushes and trees among grass terrains, from dry brunches with dry leaves of *Celtis australis*, N41 28 06.4 E23 13 40.6, 171 m a.s.l., $1 \, \updownarrow$, collected by beating the vegetation (Fig. 1f); 25.5.2020, Ograzhden Mts, Starchevo village, yard of a house (guest house "Elitsa"), among dry *Poaceae* grass, N41 28 19.7 E23 13 50.4, 190 m a.s.l., $1 \, \circlearrowleft$, $1 \, \updownarrow$, collected by beating the vegetation (Fig. 1e).

Lachesilla bernardi Badonnel, 1938

Material examined: 24.5.2020, Ograzhden Mts, between Starchevo and Karnalovo villages, bushes and trees among grass terrains, from dry brunches with dry leaves of *Celtis australis*, N41 28 06.4 E23 13 40.6, 171 m a.s.l., 2 \circlearrowleft , 1 \circlearrowleft , collected by beating the vegetation (Fig. 1c); 25.5.2020, Ograzhden Mts, Starchevo village, yard of a house (guest house "Elitsa"), among dry *Poaceae* grass, N41 28 19.7 E23 13 50.4, 190 m a.s.l., 1 \circlearrowleft , collected by beating the vegetation (Fig. 1d).

Elipsocidae

Elipsocus annulatus Roesler, 1954

Material examined: 24.5.2020, Ograzhden Mts, between Starchevo and Karnalovo villages, bushes and trees among grass terrains, from dry brunches with dry leaves of *Celtis australis*, N41 28 06.4 E23 13 40.6, 171 m a.s.l., $1 \, \circ$, collected by beating the vegetation.

Elipsocus moebiusi Tetens, 1891

Material examined: 24.5.2020, Ograzhden Mts, north of Starchevo village, grass terrains with scattered bush vegetation, from brunches of *Pyrus* sp., N41 28 28.0 E23 13 39.6, 201 m a.s.l., $2 \, ^{\circ}$, collected by beating the vegetation (Fig. 1b).

Psocidae

Amphigerontia contaminata (Stephens, 1836)

Material examined: 23.5.2020, Kozhuh Mt, north of the "Sveta Petka" church, mixed broad leaf forest, from brunches of *Carpinus* sp., N41 27 36.4 E23 15 41.4, 95 m a.s.l., $1\$, collected by beating the vegetation (Fig. 1a); 24.5.2020, Ograzhden Mts, north of Starchevo village, grass terrains with scattered bush vegetation, from brunches of *Pyrus* sp., N41 28 28.0 E23 13 39.6, 201 m a.s.l., $1\$, collected by beating the vegetation.

Neopsocus rhenanus Kolbe, 1882

Material examined: 14.6.2017, Kresna Gorge, Stara Kresna village, under stone, N41 47 E23 10, 630 m a.s.l., $1 \circlearrowleft$, $1 \circlearrowleft$, collected by hand.

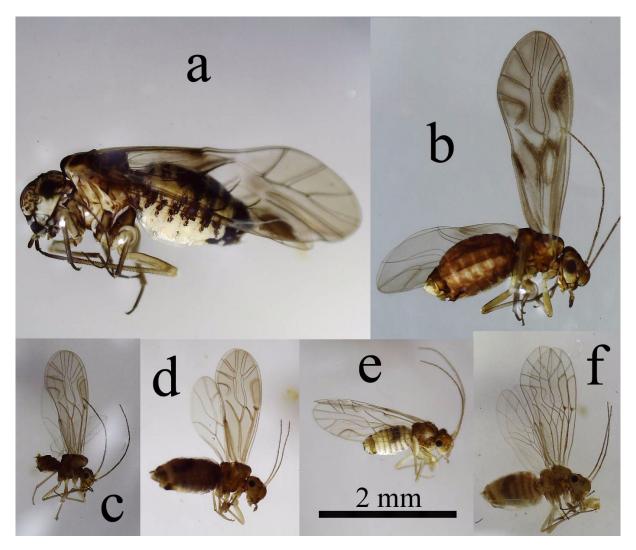


Fig. 1. Photographs of some of the species recorded: a - *A. contaminata* $\[\]$ (Kozhuh Mt), b - *E. moebiusi* $\[\]$ (Ograzhden Mts), c - *L. bernardi* $\[\]$ (Ograzhden Mts, between Starchevo and Karnalovo), d - *L. bernardi* $\[\]$ (Ograzhden Mts, Starchevo village), e - *L. pedicularia* $\[\]$ (Ograzhden Mts, between Starchevo and Karnalovo).

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References

Georgiev, D. (2020) Two species of Psocoptera (Insecta) as new records to the Bulgarian fauna with a country checklist, *Historia naturalis bulgarica*, 41: 71-75.

Lienhard, C. (1998) *Psocoptères Euro-Méditerranéens*. Faune de France 83. Fédération Française des Sociétés de Sciences Naturelles, Paris, France, 517 pp.

Saville, B. (2008) *National Barkfly Recording Scheme (Britain and Ireland)*. Available at: https://www.brc.ac.uk. (Accessed on 21 June 2019).