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Jumping Plant Lice (Homoptera, Psyllinea) from the Relict Steppes of Central Yakutia

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Abstract—The psyllid fauna of the relict steppes of Central Yakutia is studied for the first time. Among the six species examined, two are new for Yakutia.

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The relict steppes are unique as a type of extrazonal vegetation, widely distributed in the territory of Yakutia as early as in the Pleistocene. At present, the largest pieces of steppe vegetation are preserved in the middle stream of the Lena River and in the basins of the rivers Yana and Indigirka (Ivanova and Perfil'eva, 1972).

Psyllids are one of the less studied insects in the Siberian fauna: until now, there has been no publication on the composition of the psyllid fauna of the region as the whole or of its isolated natural areas. The only exception is the paper on psyllids of the Republic of Altai by Labina (2008).

Previously, 38 species of psyllids were recorded from Yakutia in different publications. The first data on psyllids appeared in papers by Loginova (1961, 1963), dealing with the revision of the genera *Aphalara* Förster, 1848 and *Craspedolepta* Enderlein, 1921 (Loginova, 1961, 1963), in the review on psyllids associated with *Salix* (Loginova, 1967), and also in publications where new psyllid species were described (Loginova 1962a, 1966). Several species were recorded from Yakutia in the faunal lists of other regions: Leningrad Province (Loginova, 1962b) and the Caucasus (Loginova, 1968). In total, 17 species were mentioned from Yakutia by M. Loginova, including 4 described from the material collected in the territory of the republic, with two of them, *Aphalara sibirica* Loginova, 1962 and *Cacopsylla sibirica* (Loginova, 1966) being endemics to the area. Later on, Klimaszewski (1983) presented data on 10 psyllid species from Yakutia; 9 of them were recorded from this territory for the first time. In the later joint publication (Drohojowaska and Klimaszewski, 2006), one more species endemic to Yakutia, *Psylla kotejai* Drohojowaska et Klimaszewski, 2006 was described.

Despite the fact that psyllid fauna of Yakutia is rather well studied as compared to other Siberian regions, currently available data are far from being complete, which is particularly confirmed by the present study.

MATERIALS AND METHODS

The invertebrate fauna of relict steppe communities on the bedrock bank of the Lena River was studied in the summer of 2007. The present publication is based on material collected in model plots by A. Bagachanova and Yu. Ermakova, researchers of the Laboratory of Systematics and Ecology of Invertebrates, Institute of Biological Problems of the Cryolithic Zone, Siberian Branch, Russian Academy of Sciences. Insects were collected by sweeping with a standard entomological net; material was kept in alcohol. A total of 126 psyllids was examined.

Up till now, there were no data on psyllid fauna of relict steppes in Central Yakutia. In the present work, six species belonging to the families Psyllidae and Triozidae are noted, with two of them, *Bactericera curvatinervis* (Förster, 1848) and *B. rossica* (Horváth, 1901) (Triozidae), not recorded from Yakutia earlier.

FAMILY APHALARIDAE

Aphalara borealis Heslop-Harrison, 1949

Material. 9 ♂, 4 ♀; Tabaginskii Cape, 25 km S of Yakutsk, forbs-grass steppe 13.VI.2007; Vladimirovka 23 km SW of Yakutsk, forbs-feather-grass steppe, 28.VI.2007 (Bagachanova); Kapitonovka, 35 km N of Yakutsk, *Artemisia*, 12.VII.2007 (Ermakova).

Biotopical preferenda. Meadows, bogged meadows, banks of water bodies.

Host plants. *Persicaria lapathifolia*, *P. amphibia.*

Distribution. Transpalaearctic boreal species.

Aphalara rumicicola Klimaszewski, 1966

Material. 1 ♂, Vladimirovka, forbs-feather-grass steppe, 28.VI.2007 (Bagachanova).

Biotopical preferenda. Dry meadows, forest glades and outskirts, meadow and sandy slopes, cliffs, waysides.

Host plant. *Rumex acetosella.*

Distribution. Transpalaearctic boreal species.

Craspedolepta discifera Loginova, 1962

Material. 28 ♂, 10 ♀; Kapitonovka, *Artemisia*, 12.VII.2007 (Bagachanova).

Biotopical preferenda. Forests, meadows, steppefied meadows, shrub thickets, and riversides.

Host plants. *Artemisia* spp.

Distribution. Altai-Lena species.

Craspedolepta latior W. Wagner, 1944

Material. 27 ♂, 30 ♀; Vladimirovka, feather-grass steppe with *Artemisia frigida*, 28.VI.2007 (Bagachanova); Kildemtsy, 25 km N of Yakutsk, forbs-grass steppe 4.VII.2007 (Ermakova); near Yakutsk, Chochur Muran, grass-forbs association, 10.VII.2007 (Bagachanova); Kapitonovka, *Artemisia*, 12.VII.2007 (Ermakova); Nikolskoe, 65 km N of Yakutsk, forbs steppe with *Koeleria cristata*, 25.VII.2007 (Bagachanova).

Biotopical preferenda. Forests, meadows, steppefied meadows, shrub thickets, riversides, and fallows.

Host plant. *Artemisia vulgaris*.

Distribution. Central–East-European–Lena polyzonal species.

FAMILY TRIOZIDAE

Bactericera curvatinervis (Förster, 1848)

Material. 2 ♀, Cape Tabaginskii, 25 km S of Yakutsk, 13.VI.2007 (Bagachanova).

Biotopical preferenda. This species was collected by us in the piedmont of the steppe slope from grasses. However, the habitats of the species are rather diverse within its distribution range spreading from forest tundra to steppes: it was recorded from forests, outskirts, river banks, forest and flood-plain meadows, slopes with shrub thickets, edges of flowing marshes, and waysides.

Host plants. *Salix caprea, S. viminalis*.

Distribution. Transpalaearctic polyzonal species, recorded from Yakutia for the first time.

Bacteriocera rossica (Horváth, 1901)

Material. 39 ♂, 14 ♀; Vladimirovka, forbs-feather-grass steppe, 28.VI.2007; Kildemtsy, forbs-grass steppe, 4.VII.2007; near Yakutsk, Chochur Muran, feather-grass steppe with *Artemisia frigida*, 10.VII.2007 (Bagachanova).

Biotopical preferenda. The species occurs in forests, meadows, steppefied meadows, shrub thickets, and along river banks.

Host plants. *Artemisia* spp.

Distribution. A East-European–Transasian subboreal species; recorded from Yakutia for the first time.

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