

***Psylla kotejai* sp. n., a new species from Yakutia
(Hemiptera: Psylloidea)**

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ABSTRACT. A new species – *Psylla kotejai* is described from Yakutia. The pictures of head, forewing, male and female genitalia are presented.

KEY WORDS: entomology, taxonomy, new species, *Psylla*, Psylloidea, Hemiptera, Yakutia.

INTRODUCTION

The genus *Psylla* GEOFFROY, 1762 is a very large taxon having a worldwide distribution on a wide variety of host plants (HODKINSON & WHITE 1979). Species of this genus are distributed in almost all regions: from arctic and subarctic part of Northeast Russia, Chukotka (HODKINSON & MACLEAN 1980) and Alaska (HODKINSON et al. 1979), through Holarctic Region (KLIMASZEWSKI 1973, GEGEČKORI & LOGINOVA 1990) and Oriental Region (HODKINSON 1986), to the hot zones of South America (TUTHILL 1959). Psyllids collected in Yakutia by SUBNIKOVA were provisionally identified by KLIMASZEWSKI as *Psylla betulaenanae* OSS. A more detailed analysis has shown that 9 specimens display a set of characters which are markedly different from the other jumping plant lice described as *Psylla betulaenanae*. Moreover, these characters have not been found in any other known psyllid species. They represent a new species which description is given below.

TAXONOMY

Order Hemiptera LINNAEUS, 1758

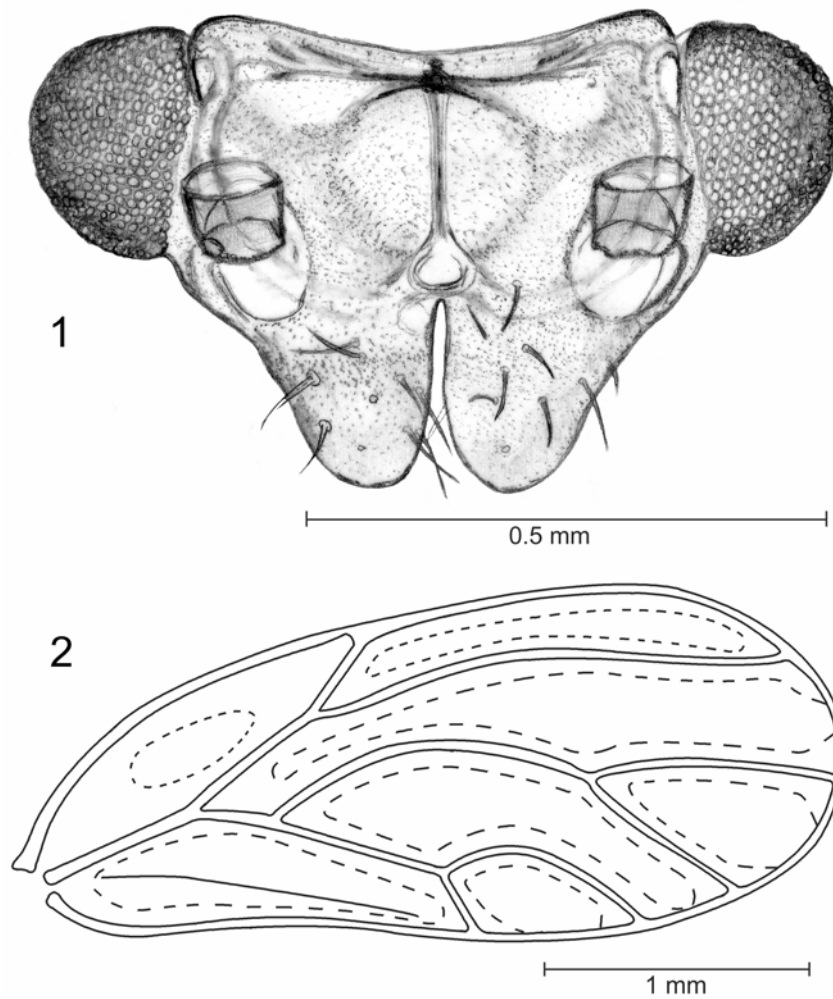
Suborder Sternorrhyncha DUMÉRIL, 1806

Family Psyllidae LATREILLE, 1807

Genus *Psylla* GEOFFROY, 1762

Type species: *Chermes alni* LINNAEUS, 1758

Psylla kotejai sp. n.
(Figs 1–6)



Figs 1–2. *Psylla kotejai* sp. n. 1 - head, 2 - forewing.

Etymology

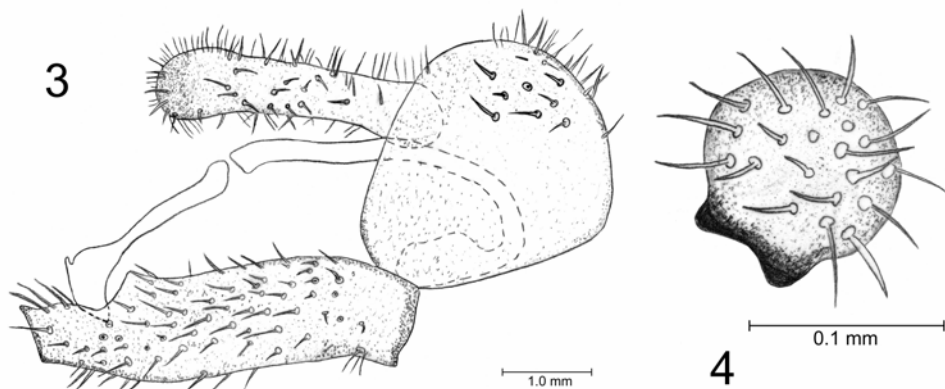
This species is named in honour of the late Professor JAN KOTEJA, world's eminent specialist in recent and fossil coccids.

Diagnosis

This species resembles *Psylla betulaenanae* OSSIANILSSON, 1970 in general appearance but can be distinguished by the smaller size of surface spinules in cell c+sc, circumanal pore ring strongly narrowed in the distal part, and parameres with rounded apex and only two big teeth on the inside.

Description

Coloration. Head and genal processes yellow, antennae greenish-yellow, apices of segments 4–7 dark brown, segments 8–10 all black. Thorax orange-yellowish, pronotum yellow, mesopraescutum and mesoscutum yellowish with orange patterns, mesoscutum yellow. Forewings transparent, more or less yellowish, with light, yellow-greenish veins. Legs yellow, only second segment of hind tarsus brownish. Abdomen in male yellowish, in female light green with orange apex of genitalia.

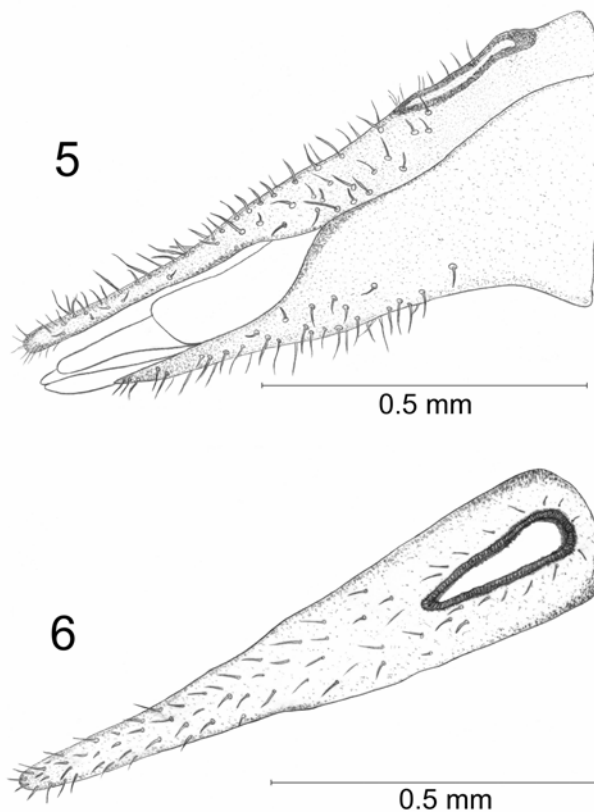


Figs 3–4. *Psylla kotejai* sp. n. 3 - male genitalia in profile, 4 - apex of paramere.

Structure

Head (Fig. 1) including eyes slightly wider than thorax, in profile weakly inclined up to about 45° to longitudinal body axis. Vertex much wider than long, genal processes big and thick, covered with hairs. Antennae ten-segmented. Legs short; metatibiae with 6 apical

spurs. Forewings (Fig. 2) hyaline, elongate, rounded apically; surface spinules present in all cells, spaced regularly, usually leaving spinule-free stripes along the veins; cell m1+2 big, cu1 small.



Figs 5–6. *Psylla kotejai* sp. n. 5 - female genitalia in profile, 6 - female proctiger in dorsal aspect.

Male proctiger tubular (Fig. 3), distal portion of proctiger strongly narrowed, covered with dense, long setae; subgenital plate subglobular; parameres shorter than proctiger, densely covered with spines, apex of parameres strongly sclerotized, with two, big teeth on the inside, without any additional processes (Fig. 4); aedeagus two-segmented, distal segment with large dilatation which bears a small hook.

Female terminalia long, slender (Fig. 5), female proctiger longer than four times circumanal ring length, straight, rounded apically, setae dense, regularly spaced. Circumanal ring (Fig. 6) slim, strongly narrowed distally; subgenital plate almost straight, in the basal portion flattened;

Measurements in mm (3 males, 6 females): head width 0.7–0.8; vertex width: 0.43–0.52; vertex length: 0.2–0.28; length of flagellar segments of antennae: 1.68–2.08; forewing

length: 2.6–2.9 (male), 3.2–3.4 (female); forewing width: 1.1–1.3 (male), 1.3–1.44 (female); length of vein R: 0.47–0.72; length of vein R₁: 0.28–0.44; length of vein M₁₊₂: 0.84–1.04; coefficient of cell Cu₁: 1.8–2.0; hind leg length: 1.49–1.96; length of male genitalia: 0.585–0.798; height of paramere: 0.226–0.382; length of female genitalia: 0.718–1.01; width of female genitalia: 0.212–0.345.

Type material

Holotype (male) Central Yakutia, 1958, ukos Alas suhoy, leg. Subnikova. Paratypes (2 males, 6 females) same data as holotype. Holotype and five paratypes are housed in the collection of Department Zoology, University of Silesia, Katowice, Poland. Three paratypes are deposited in Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw.

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