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The first record of the shore-fly *Nostima semialata* (Collin, 1913) for the fauna of Russia

Первая регистрация мухи-береговушки *Nostima semialata* (Collin, 1913) в фауне России

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КЛЮЧЕВЫЕ СЛОВА: Ephydridae, *Nostima semialata*, новая регистрация, Россия

ABSTRACT. The shore-fly *Nostima semialata* (Collin, 1913) is registered in Russia for the first time. The imago was found in late March in Naro-Fominsk, Moscow region. A key to genera of the subfamily Ilytheinae and a key to species of the genus *Nostima* Coquillett, 1900 of Russian fauna are provided.

РЕЗЮМЕ. Вид мухи-береговушки *Nostima semialata* (Collin, 1913) впервые регистрируется в фауне России. Имаго были найдены ранней весной в Наро-Фоминском районе Московской области. Приводится определительная таблица родов подсемейства Ilytheinae и определительная таблица видов рода *Nostima* Coquillett, 1900 фауны России.

The genus *Nostima* Coquillett, 1900 is a rather large genus of Ephydridae involving 51 species widely distributed in the world. However, the majority of species occurs in the New World (38 species) [Edmiston & Mathis, 2007]. Three species are known from the Palaearctic region, these are *Nostima picta* (Fallén, 1813) with 2 subspecies, *picta picta* (Fallén, 1813) and *picta nigripes* (Strobl, 1880), widespread in the Holarctic and Mexico, *Nostima semialata* (Collin, 1913), recorded from Great Britain, Germany, Hungary, Italy and Switzerland, and *Nostima versifrons* Miyagi, 1977, described from Japan (Honshu) and known only from the type locality. The only species of *Nostima*, *N. picta*, was previously known from Russia [Nartshuk, 1970].

Specimens of *Nostima* are uncommon in collections and in nature, and discovery of single specimens during sweeping is typical. Adults of *Nostima*, as a rule, occur in grassy habitats. As for larvae, it is reported that they develop in semiaquatic habitats and feed on blue-green algae [Foote, 1983].

Imagoes of most species of *Nostima* are very small, with body length about 1 mm, yet very attractive having distinctive wing patterns and bright silvery-white or paler stripes of dense microtomentum.

The genus *Nostima* together with the genus *Philygria* Stenhammar, 1844, which were previously assigned to the tribe Philygriini, now are treated within the tribe Hyadinini, subfamily Ilytheinae [Edmiston & Mathis, 2005].

Key to genera of Ilytheinae Cresson, 1943 (after Edmiston & Mathis, 2005)

1. Posterior notopleural seta inserted near ventral margin of notopleuron and at about same level as anterior seta . 2
— Posterior notopleural seta inserted at conspicuously higher level than anterior seta 10
2. Vein R_{2+3} short, costal section II about 1/3 length of section III, and with a stump vein. A single, proclinate, fronto-orbital seta ..... *Parydroptera* Collin
— Vein R_{2+3} long, costal section II at least half length of section III, lacking a stump vein. Usually a reclinate and proclinate fronto-orbital setae 3
3. Costa short, extended at most to slightly beyond vein R_{4+5}. Tergite 4 at least 3 times as long as tergite 5 .... *Axysta* Haliday
— Costa long, extended to vein M. Tergite 4 at most twice as long as tergite 5 4
4. Wing with vein R_{2+3} long; costal section II nearly 3 times as long as section III. Face flat or weakly carinate, not prominent medially. Flagellomere 1 rounded at apex above 5
— Wing with vein R_{2+3} short; costal section II less than twice length of section III. Face with low conical medial prominence. Flagellomere 1 usually angulate at apex above 7
5. Both an inner and outer vertical setae well developed; fronto-orbital setae usually moderately well to well developed, lateroclinate (Holarctic) ..... *Pelina* Haliday
— Only an inner vertical seta present, outer seta lacking; lacking well-developed fronto-orbital setae (Neotropical) ..... *Pelinoides* Cresson
7. Wing brown with about 14 distinct white spots .... *Pseudohyadina* Clausen

Fig. 1. *Nostima picta*, imago.
Рис. 1. Имаго *Nostima picta*.

Fig. 2. *Nostima semialata*, imago.
Рис. 2. Имаго *Nostima semialata*.

— Wing unmarked or with at most faint spots or clouds at apex of vein R1 and on crossveins 8
8. Tergite 4 from 1.3 to 2 times as long as tergite 5, both conspicuously punctate. Inner vertical seta present, outer vertical seta absent. Lateral margin of scutellum not densely microtomentose, not appearing velvety .... *Lytogaster* Becker
— Tergite 4 subequal in length to tergite 5, neither conspicuously punctate. Usually both vertical setae present, if outer absent then lateral margin of scutellum densely microtomentose, appearing velvety 9
9. Dorsocentral seta 1. Lacking well-developed fronto-orbital setae ..... *Hyadina* Haliday
— Dorsocentral setae 2. One well-developed fronto-orbital seta ..... *Parahyadina* Tonnoir & Malloch
10. Fronto-orbital setae either lateroclinate and inconspicuous or lacking; prescutellar acrostichal setae lacking 11
— Fronto-orbital setae conspicuous, well developed, mostly reclinate or proclinate or both; prescutellar acrostichal setae present, well developed (Ilytheini Cresson) 13
11. Outer vertical seta lacking; fronto-orbital setae lacking ..... *Garifuna* Mathis
— Both inner and outer vertical setae usually present; fronto-orbital seta present, sometimes reduced 12
12. Arista bare or minutely branched; 2 rows of facial setae. Presutural or sutural dorsocentral seta present .... *Philygria* Stenhammar
— Arista with short to long branches; 1 row of facial setae. Presutural or sutural dorsocentral seta lacking .... *Nostima* Coquillett
13. Dorsocentral setae 3 (1+2) ..... *Donaceus* Cresson
— Dorsocentral setae 2 (1+1)..... 14
14. Vein R_{2+3} long, subparallel to C; costal section II more than 2 times as long as section III ..... *Ilythea* Haliday
— Vein R_{2+3} short, running almost straight to C; costal section II subequal to section III ..... *Zeros* Cresson

KEY TO SPECIES OF *NOSTIMA* COQUILLETT OF RUSSIA

1. Scutellum velvety-black, scutum brown. Bright silvery-white stripes of dense microtomentum present on frons along eyes and on thorax. Wings of normal length (Fig. 1) ..... *picta* (Fallén)
— Scutellum and scutum unicolorous brown. No bright, only pale light stripes of dense microtomentum present on frons along eyes and on thorax. Wings shortened (Fig. 2) ..... *N. semialata* (Collin)

Nostima semialata (Collin, 1913)

MATERIAL. 1 ♀, RUSSIA: Moscow region, Naro-Fominsk, 28.III.2010, coll. D.I. Gavrushin (kept in Moscow Zool. Museum).

REMARKS. A single female was collected on March 28, 2010 at the outskirts of Naro-Fominsk, Moscow region, approximate coordinates 55.38939°N, 36.773666°E, elevation 182 m. The day was mostly cloudy, with moderate to strong southern wind and temperature of around +10°C. The habitat was an edge of a pine forest with an old dirt track nearby, some of its parts representing more or less permanent small pools of stagnant water; there was still a lot of snow. Handfuls of dry plant material (twigs and leaves of *Calamagrostis*, pine needles, etc.) were carefully examined over a sheet of white paper, revealing adults of hibernating dipteran species typical for the region, those included Sphaeroceridae, *Aphanotrigonum* and *Elachiptera* (Chloropidae), Sciaridae, Mycetophilidae, Drosophilidae, *Lonchoptera* (Lonchopteridae), *Geomyza tripunctata* (Opomyzidae), *Pachycerina* (Lauxaniidae). The pictures were taken indoors under controlled lighting conditions with a piece of wood as a substrate. The fly was hopping instead of flying, and it's very probable it couldn't fly at all because of reduced wings.

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