

A new species of Lonchaeidae (Diptera: Schizophora) from Russia

Новый вид двукрылых семейства Lonchaeidae (Diptera: Schizophora) из России

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ABSTRACT. Examination of recently captured Lonchaeidae specimens from Russia revealed an undescribed species in the genus *Lonchaea*, *L. vikhrevi* sp.n. The new species is described and its relationship to other species of European Lonchaeidae is discussed.

РЕЗЮМЕ. Изучение недавно пойманных экземпляров семейства Lonchaeidae из России позволило выявить новый вид рода *Lonchaea*, *L. vikhrevi* sp.n. Приведено описание нового вида и обсуждается его положение среди других европейских видов семейства Lonchaeidae.

Introduction

The Lonchaeidae are a relatively small family of Diptera with approximately 500 species known worldwide and with 100 species in Europe [MacGowan & Rotheray, 2008]. Confirmation of identification to species level is in many cases only possible by examining the male genitalia, or in the specific case of the genus *Dasiops* Rondani, 1856 by comparison of the broad female aculeus. Although, in world terms, the European fauna is the best known new species continue to be discovered, especially as a result of rearing adults from larvae. Almost all species in the genus *Lonchaea* Fallén, 1820 have larvae which are associated with decaying wood and this is most probably the larval habitat of the new species described here.

The Russian Lonchaeidae has been the subject of previous taxonomic work by Vladimir Kovalev who published a number of papers between 1973 and 1984 which introduced twenty new species of Lonchaeidae from material collected in Russia. This new species is a further addition to the Russian and European fauna.

Species description

Lonchaea vikhrevi sp.n.

Figs 1–3

TYPE MATERIAL. Holotype male. RUSSIA: Moscow city, park, 26.V.2009, leg. N. Vikhrev (Zoological Museum, Moscow

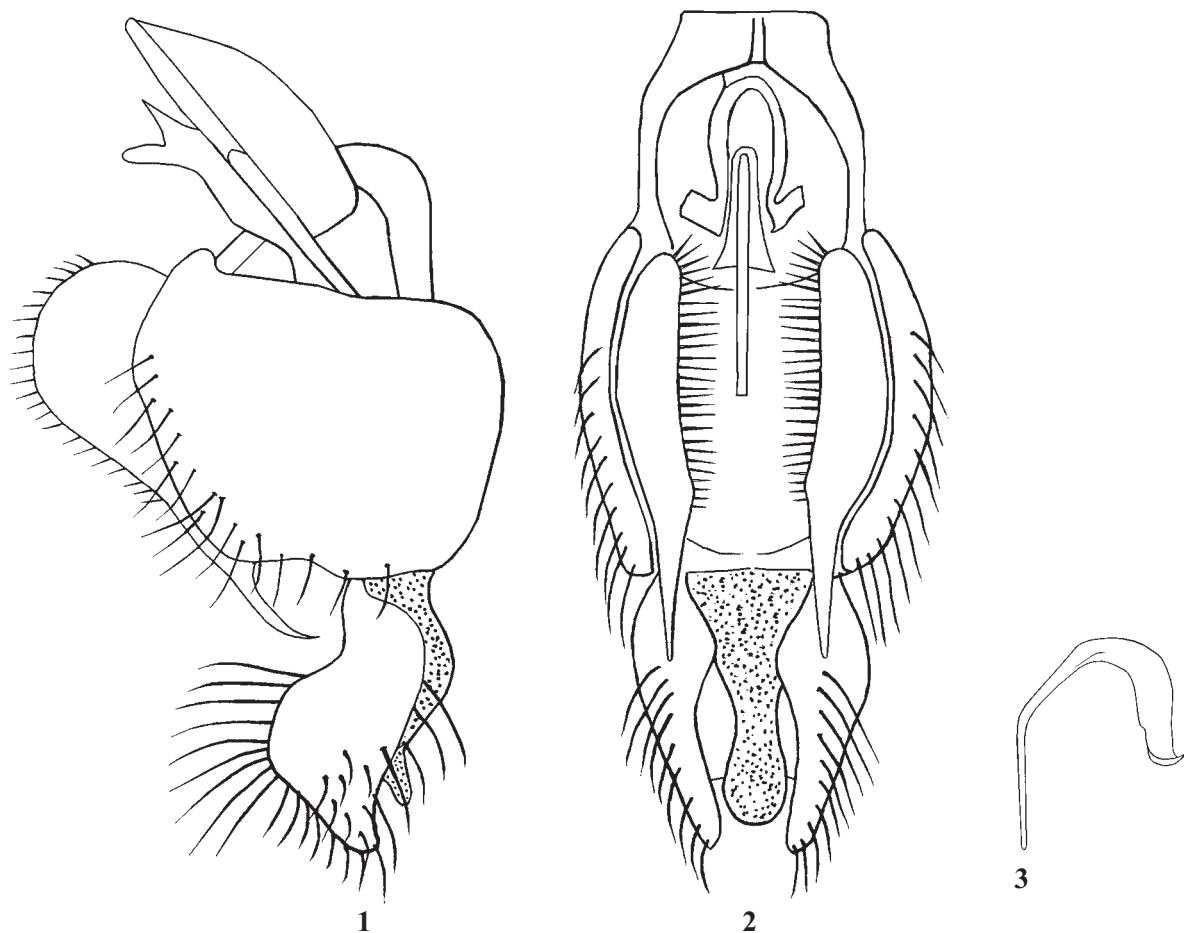
University: ZMUM). Paratype: male with the same data (ZMUM).

DESCRIPTION. Male. *Head*: Eyes bare. Frons matt black, half the width of an eye narrowing only slightly from the level of the ocelli to the antennal bases, bearing long frontal and interfrontal setulae many of which are more than 50% the length of the orbital setae. Orbital plate shining black, bare apart from the orbital setae. Lunule black with numerous setulae. Face and parafacials subshining, lightly grey dusted. Anterior genal setulae all relatively short, the anterior three forming a single row along the mouth edge. Antennal postpedicellus long, approximately 2.75 times as long as it is deep, entirely black apart from a rather obscure orange area at the base on the inner surface. Arista bare.

Thorax. Thoracic dorsum and pleurae shining black, dorsum covered with setulae which are half as long as the orbital setae. Anepisternum with three strong anterior and posterior setae. Katepisternum with one strong setae situated near the dorsal margin, no setulae situated posterior to it. One propleural and one stigmatal setae. Scutellum shining black, bare apart from on margin between the lateral and apical setae with four setulae on one side and two on the other (some may be missing here due to damage) five setulae between the apical setae. Calypteres brownish with dark fringes. Wings clear with yellow veins, intercostal space three times the length of crossvein r_m . Wing length 3.5mm. Legs black, all metatarsi and second tarsomeres clear yellow, other tarsomeres becoming darker apically.

Male genitalia, Figs 1–3; in lateral view epandrium almost square bearing setulae along the posterior and ventral margins. Cerci large, diamond shaped, height almost equal to that of the epandrium, bearing a row of long setulae along the ventral margin, other shorter setulae present at apex and dorsally. Surstyli projecting ventrally from the shell of the epandrium as a large semicircular process, this extended posteroventrally towards the base of the cerci as a long, slightly curved, spine. In ventral view surstyli with numerous dense black spinules on inner surface. Phallus a rather simple U-shape although somewhat angular on the apical half.

DIFFERENTIAL DIAGNOSIS. With bare eyes, a single row of anterior genal setae, partly pale tarsi, dark fringed calypteres, bare scutellar disc and a single stigmatal setae this species belongs to the '*mallochii*'-species group within the genus *Lonchaea*. This group contains



Figs 1–3. Epandrium and associated structures of *Lonchaea vikhrevii* sp.n.: 1 — lateral view; 2 — ventral view; 3 — phallus.
Рис. 1–3. Эпандриум и прилежащие структуры *Lonchaea vikhrevii* sp.n.: 1 — сбоку; 2 — сверху; 3 — фаллос.

some nine European species many of which can only be definitely identified from examination of the male genitalia. Within that group the presence of more than one yellow tarsomere and, in the genitalia, with the surstylus projecting beyond the shell of the epandrium and having an obvious recurved postero-ventral projection this species shows greatest similarity with *L. helvetica* MacGowan, 2001 [MacGowan, 2001]. It can however be easily distinguished from that species by the structure of the phallus which in *L. helvetica* is two segmented with the apical segment long and sinuous whilst in *L. vikhrevii* sp.n. it is not segmented.

ETYMOLOGY. The specific epithet refers to Nikita Vikhrev who captured the holotype.

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