

# Dance flies from the shore zone of Lake Krivoe, Northern Karelia (Diptera: Empididae, Hybotidae)

A.A. Przhiboro & I.V. Shamshev

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A list of 12 species collected or reared from the shore zone of an oligotrophic lake in Northern Karelia is given. *Platypalpus rossicus* Kovalev is for the first time recorded from Northern Europe and reared. *P. nonstriatus* (Strobl) and *Hemerodromia raptoria* Meigen are for the first time recorded from northern European Russia; the latter species is shown to develop in the lake littoral zone.

A.A. Przhiboro, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia. E-mail: dipteran@mail.ru

I.V. Shamshev, All-Russian Institute for Plant Protection, Podbel'skiy shosse 3, Pushkin, St.Petersburg 189620, Russia. E-mail: shamshev@mail.ru

In this paper, we give an annotated list of dance flies collected as adults or reared from the shore zone of Lake Krivoe (66°21'N 33°35'E; Loukhi Distr. of Karelia) in 1996-2005. The lake under study is an oligotrophic water body characterized by the littoral vegetation poorly developed and the zone of water margin almost entirely represented by type 1, according to Przhiboro (2001, 2003): 10-20 cm wide, with steep profile, covered mainly with mosses and liverworts. The water margin zone is considered in the borders: from 5 cm below the water level to 10 cm above it. For details of the lake and study sites, see Przhiboro (1999, 2001). The techniques of sampling and rearing were described by Przhiboro (1999, 2003, 2004). All the material is collected by A. Przhiboro and deposited at the Zoological Institute, Russian Academy of Sciences, St.Petersburg.

## EMPIDIDAE

### *Chelipoda albiseta* (Zetterstedt, 1838)

*Material.* 1 ♀, net sweeping, 1.IX.1996.

### *Hemerodromia raptoria* Meigen, 1830

*Material.* Over 50 adults, net sweepings, since early July till early August 1996-1997. Littoral zone: over 200 larvae, since June till October, 1996-2005; 16 pupae, since mid-June till mid-July, 1996-2004; 1 ♀, reared 3.VII.1997 from larva collected 14.VI.1997 on site 2; 1 ♂, 1 ♀ reared 26.VI.2002, 1 ♀ reared

29.VI.2002 from pupae collected 16.VI.2002 on site 1; 2 ♂, 1 ♀, site 1, emergence trap, 21.VII.1997; 1 ♂, site 2, emergence trap, 7.VII.1997.

*Notes.* This widespread species is recorded from the northern part of European Russia for the first time. *H. raptoria* is the only species of Empidoidea found to develop in the littoral zone of Lake Krivoe. Larvae and pupae are common at depths of 0.1-0.8 m, mostly on sites with stands of *Carex rostrata* Stokes (site 1: 100 ind./m<sup>2</sup>, 0.025 g/m<sup>2</sup>, 9.VI.1997). At the same time, they do not occur in the water margin zone. Mature larvae were collected mainly in June; adult emergence period lasts since late June till late July.

*H. raptoria* was recorded with certainty from running waters (e.g., Silina & Chalaya, 1996; Meyer & Filipinski, 1998; Poepperl, 1999). However, we failed to find any published rearing records of *H. raptoria* from other lakes.

### *Hilara longifurca* Strobl, 1892

= *Hilara monedula* Collin, 1927.

*Material.* 1 ♀, net sweeping, 6.VIII.1996.

## HYBOTIDAE

### *Bicellaria pilosa* Lundbeck, 1910

*Material.* 1 ♀, net sweeping, 6.VIII.1996.

### *Bicellaria spuria* (Fallén, 1816)

*Material.* 2 ♀, net sweeping, 8.VII.1997.

**Crossopalpus curvipes** (Meigen, 1822)

*Material.* 3 ♀, net sweeping, 4.IX.2005.

**Hybos grossipes** (Linnaeus, 1767)

*Material.* 1 ♂, 4 ♀, net sweeping, 6.VIII.1996; 2 ♀, net sweeping, 4.IX.2005.

**Platypalpus nonstriatus** (Strobl, 1901)

*Material.* 1 ♀, net sweeping, 8.VII.1997.

*Note.* This is the first reliable record of *P. nonstriatus* from the northern part of European Russia. The species was mentioned for Finland, Estonia, Austria, Italy, and Northwestern Russia (Chvála, 1989, 2005; Chvála & Kovalev, 1989).

**Platypalpus rossicus** Kovalev, 1977

*Material.* Site 1, water margin zone: 1 ♂ reared 28.VII.2004 from substratum collected 28.VI.2004.

*Note.* New record for Northern Europe. The species was known with confidence only from the central part of European Russia (Kaliningrad, Kaluga, Moscow, and Voronezh provinces), and also recorded from Latvia (Kovalev, 1977; Chvála, 1989, 2005; Chvála & Kovalev, 1989; Chalaya, 1994). The larval habitat of *P. rossicus* is recorded for the first time.

**Platypalpus stigmatellus** (Zetterstedt, 1842)

*Material.* 3 ♂, 2 ♀, net sweeping, 8.VII.1997.

**Tachypeza nubila** (Meigen, 1804)

*Material.* 1 ♀, net sweeping, 8.VII.1997.

**Trichina elongata** Haliday, 1833

*Material.* 1 ♂, net sweeping, 8.VII.1997.

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