

First records of the bat fly *Phthiridium biarticulatum* (Diptera: Nycteribiidae) in Crimea

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Abstract. The bat fly *Phthiridium biarticulatum* was recorded for the first time from the territory of Crimea. Eight specimens were collected from five individuals of *Rhinolophus hipposideros*. These records extend the known distribution range of this parasite species in Europe to the east. *P. biarticulatum* is the third species of the family Nycteribiidae confirmed from the area of the peninsula.

Pupipara, ectoparasite, fauna

Phthiridium biarticulatum Hermann, 1804 is a cave-dwelling bat fly and it is one of three West-Palaearctic species of the genus *Phthiridium* Hermann, 1804 (Hürka & Soós 1986). Among known species of the genus it has the largest distribution range and remains the only species of the genus that occurs also in Europe. Its range covers North Africa, Europe and Central Asia (Hürka & Soós 1986). We collected several individuals at two sites in Crimea, representing the first evidence of this bat ectoparasite from the peninsula.

Records

(1) Kujbyševo (Bahčisaraj Dist., 44° 37' N, 33° 53' E), 12 September 2009, two males and two females taken from four females of *Rhinolophus hipposideros* (Borkhausen, 1797). The bats were caught using a mist net at the entrance of their roost situated between concrete blocks under a bridge above a small stream.

(2) General'skoe, above the Ulu-Uzen' river at the Džur-Džur waterfall (Alušta Dist., 44° 48' N, 34° 28' E), 18 September 2009, two males and two females taken from an adult female of *R. hipposideros*. The bat was mist-netted above the river in a beech forest.

The parasite specimens are stored in 70% alcohol in the collection of the first author (nos. cMŠ 4286–4289, 4360).

Our records of *Phthiridium biarticulatum* from the Crimean peninsula extend the known distribution range of this species in countries of Eastern Europe (Hürka 1962, 1984).

Previous records of bat flies of the family Nycteribiidae Samouelle, 1819 from Crimea are very scarce, only two references are available. *Nycteribia (Acrocholidia) vexata* Westwood, 1835 was reported by Pli-ginsky (1927) in his list of the cave fauna of Crimea from a host *Vespertilio murinus* Linnaeus, 1758 [most probably *Myotis blythii* (Tomes, 1857)]. A record of *Basilina nattereri* (Kolenati, 1857) with no data on the host was given by Theodor & Moscona (1954) and referred to also by Theodor (1967).

In the whole distribution range of *Phthiridium biarticulatum*, the horseshoe bats (*Rhinolophus* Lacépède, 1799) are the principal host species. *R. hipposideros*, the only confirmed host bat from Crimea, reaches the northern margin of its East-European range in the area of the Ukrainian Carpathians, along the Dniester and in southern Crimea (Dietz et al. 2007, Bashta 2009). *R. ferrumequinum* (Schreber, 1774), the most frequently

parasitized bat species by this fly in Europe (Húrka 1964), has a more limited range in western Ukraine (Dietz et al. 2007, Bashta 2009). Thus, the margins of distribution range of *R. hipposideros* probably represent the limits for occurrence of *Phthiridium biarticulatum* in Eastern Europe.

Súhrn

Prvé záznamy muchy *Phthiridium biarticulatum* (Diptera: Nycteribiidae) na Kryme. *Phthiridium biarticulatum* je z územia Krymu uvádzaný po prvýkrát. Nálezy ôsmich jedincov z *Rhinolophus hipposideros* rozširujú známy areál rozšírenia druhu vo východnej Európe a predstavujú tretí druh z čeľade Nycteribiidae potvrdený z územia Krymského poloostrova.

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