

MYENNIS OCTOPUNCTATA (COQUEBERT, 1798) – NEW TO THE FAUNA OF LITHUANIA (DIPTERA: ULIDIIDAE)ERIKAS LUTOVINOVAS¹, ALGIS DAVENIS²

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E-mails: ¹wohlfahrtia@gmail.com, ²algis.davenis@gamtc.lt**Introduction**

The picture-winged flies (Ulidiidae) is the small family that could be spotted in the field by usually dark colored bodies, patterned wings and the sword-like ovipositors in females, like those in the closely related families of the signal flies and the fruit flies (Korneyev, 1999). The genus *Myennis* Robineau–Desvoidy can be recognized by the absence of facial keel and the middle of wing bearing two very oblique cross-bands (Greve-Jensen, 1998). The genus with four registered species is distributed in the Palaearctic region, but most of these species are recorded in the East Palaearctic (Krivosheina & Krivosheina, 1997; Kameneva & Korneyev, 2006). Species of this genus are associated with poplars and the few other deciduous trees, with their larvae being found under the bark of dead trees (Kameneva & Korneyev, 2006). Sometimes flies of these species are unintentionally introduced with the logs sent from the remote countries, thus unusual records should be treated with a caution (Kameneva, 2008; Kameneva *et al.*, 2013b).

Only one species of this genus was previously known in the European fauna, except northern parts of our continent (Kameneva *et al.*, 2013a). The second species from the East Palaearctic was recently introduced to Ukraine with the wood shipment and has been successfully established (Kameneva *et al.*, 2013b). The genus has never been recorded from neither Scandinavia nor the Baltic States or adjacent parts of Russia, and the first observation from Northern Europe is presented in this publication.

Material and methods

The research was carried out in the Sapiegos Park, Antakalnis, Vilnius munic. (54.698611, 25.311111), which include the maintained old trees, surrounded by the urban areas. The material was collected using a window trap, baited with the pheromone-kairomone – γ -Decalactone (=gamma-Decalactone, >98%, FCC, FG, C₁₀H₁₈O₂, W236004-1KG-K, Sigma-Aldrich®, St. Louis, USA) – for collecting female specimens of *Osmoderma* spp. (Coleoptera: Scarabaeidae: Cetoniinae). The list of the picture-winged flies (Ulidiidae) of Lithuania was compiled from Pakalniškis *et al.* (2006) and Lutovinovas & Petrašiūnas (2013). The taxonomy and general distribution followed Kameneva (2008) and Kameneva *et al.* (2013a). The single specimen of the fly is deposited in the entomological collection of Nature Research Centre (Vilnius, Lithuania).

The Record

Myennis octopunctata (Coquebert, 1798)

Sapiegos Park, Antakalnis, 30 06 2019, 1♂, window trap, inserted to the trunk of the dead lime tree (*Tilia cordata* Miller); attracted to γ -Decalactone (leg. A. Davenis; Fig. 1 [A–B]).



Figure 1 (A–B). *Myennis octopunctata*, recorded from Sapiegos Park, Antakalnis (Vilnius munic.): A – dorsal, and B – lateral views (photos: Ž. Pūtys).

Discussion

The collected species is distributed in Western, Central and Southern parts of Europe, the Middle East, Southern Siberia and Far East of Russia, while the records from Central Asia have been considered erroneous (Kameneva, 2008). The first record from Northern Europe provided in this publication expands knowledge about the distribution of this species (Kameneva *et al.*, 2013a). Many species are spreading northwards because of the changing climate, but it would not be possible to speak about this species in the same way, because this tendency has not been documented. The introduction of this species with the logs received from the other countries might also be doubtful. The record of this species

from the urbanized area has some sense, because the white poplar, and possibly also the black poplar – where these flies develop (Morris, 1991) – are not native trees in Northern Europe (EUFORGEN, 2015), most often occurring in city parks and suburban areas. The poplars are popular urban trees (also present in the Sapiegos Park, where the insect was collected), but the parks where they are grown are usually the maintained greeneries, where dead trunks rarely occur, what also may explain the rarity of these flies in our country. Generally, it is a thermophilous species, usually observed in hornbeam oakwoods and littoral habitats of Central Europe (Martinek, 1999).

The newly recorded species for the Lithuanian fauna was attracted with the chemical for collecting female specimens of *Osmoderma* spp. – γ -Decalactone – the volatile aroma compound of the peach flavour, originally acting as a pheromone for this genus of beetles (Svensson *et al.*, 2009). This chemical is also presented in many fruits and fermented products, serving them to attract animals, and in these cases functions as a kairomone (Barševskis & Nitcis, 2011). The picture-winged flies of the genus *Myennis* Robineau-Desvoidy may also be attracted to fermented products, and most often to the sap runs of deciduous trees in the original habitat for these species (Kameneva *et al.*, 2013b).

Altogether, the number of species of the picture-winged flies of the Lithuanian fauna has increased to thirteen (Pakalniškis *et al.*, 2006; Lutovinovas & Petrašiūnas, 2013), but this number stays incomplete, and several more candidates of the other genera are suspected to be added to the species list in the future.

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***Myennis octopunctata* (Coquebert, 1798) – nauja Lietuvos faunos rūšis (Diptera: Ulidiidae)**

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Santrauka

Pateikiama informacija apie pirmą šios juostasparnės musės (Ulidiidae) registravimo atvejį mūsų šalyje, o taip pat Šiaurės Europoje, kuri praplečia duomenis apie bendrą šios rūšies paplitimą. Vabzdys buvo pagautas langine gaudykle, viliojant *Osmoderma* spp. vabalų (Scarabaeidae: Cetoniinae) feromonu – γ -Decalactone – kuris taip pat yra daugelio vaisių ir fermentuotų produktų sudedamoji dalis, pritraukianti kai kuriuos gyvūnus, todėl, taip pat veikia ir kaip kairomonas. Lietuvos faunos juostasparnių musių skaičius išaugo iki trylikos rūšių; keletas nerastų rūšių, paplitusių gretimose šalyse, lieka ieškotinos.

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