

CHRYSOMYA ALBICEPS (WIEDEMANN, 1819) – NEW TO THE FAUNA OF LITHUANIA (DIPTERA: CALLIPHORIDAE)ERIKAS LUTOVINOVAS¹, RADVILĖ MARKEVIČIŪTĖ²

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E-mails: ¹wohlfahrtia@gmail.com, ²radvile.mark@gmail.com**Introduction**

Thick-bodied shiny green blowflies of the genus *Chrysomya* Robineau–Desvoidy are bearing darkened transverse stripes on posterior edges of abdominal tergites, what helps to recognize them in the field. Species of this genus possess synanthropic tendencies, often showing a potential sanitary risk, when present in food markets, restaurants and cafeterias (Maldonado & Centeno, 2003; Chaiwong *et al.*, 2014), but also were found to be effective flower visitors and pollen carriers of some exotic fruit crops (Sung *et al.*, 2006; Nurul-Huda *et al.*, 2015). Larvae develop in animal carrion, faeces of carnivorous animals, and several species may cause facultative or obligatory myiases in mammals (Chan *et al.*, 2005; Wang *et al.*, 2008). However, only young larvae of most species may feed upon decaying carcass or only diseased tissues of the host, but the second and third instars become predatory upon larvae of other insects, including their congeners, eradicating other colonizers (Faria & Godoy, 2001; Faria *et al.*, 2004). These feeding habits have important implications for their utilization in forensic entomology and maggot debridement therapy (Grassberger *et al.*, 2003; Pinheiro *et al.*, 2015).

The genus is represented by two species in Europe, both originally known as elements of the South Palaearctic and Palaeotropical faunas. *Ch. megacephala* (Fabricius, 1794) was only recently discovered in Europe, with its distribution still restricted to the South of Iberian Peninsula (Martínez-Sánchez *et al.*, 2001; Prado e Castro & García, 2009). The second species, *Ch. albiceps* (Wiedemann, 1819) is widely distributed in the Southern Europe, and recently was also detected in Central Europe (Povolný, 2002; Szpila *et al.*, 2008). Furthermore, the last species has become detected in the Baltic region as it is documented in this publication.

Material and methods

The material was collected in Sužionys, Vilnius district (54.988888, 025.508055) using a conventional entomological net. The list of Lithuanian species was compiled from Pakalniškis *et al.* (2006). The taxonomy and general distribution followed Baumgartner & Greenberg (1984), Schumann (1986), Minelli *et al.* (1995), Rognes (1997), Povolný (2002), Verves (2004) and Szpila *et al.* (2008). The single specimen is deposited in the entomological collection of Nature Research Centre (Vilnius).

Species***Chrysomya albiceps* (Wiedemann, 1819)**

Sužionys, 28 08 2016, 1♀, ruderal grassland, on *Solidago canadensis* flowers, near a corpse of a hen (leg. E. Lutovinovas; Fig. 1).



Figure 1. *Chrysomya albiceps* from Sužionys, Vilnius district (photo R. Markevičiūtė)

Discussion

The Lithuanian fauna is supplemented by a new species of the blowfly, representing a new genus for the country. This moderate blowfly (Fig. 1) is originally distributed in the Southern Palaearctic, Oriental and Afrotropical regions, and was also found in Central and Southern Americas, where it is believed to be introduced (Baumgartner & Greenberg, 1984; Schumann, 1986). In the checklist of Italian fauna of past decades (Minelli *et al.*, 1995) this species is only listed for the Southern peninsular regions and for Sicily; later, however, it was also recorded for Switzerland (Rognes, 1997), Austria, Hungary, Slovakia, the Czech Rep., Germany (Povolný, 2002), Ukraine (Verves, 2004) and Poland (Szpila *et al.*, 2008). The chronology of publications demonstrates how fast this species has expanded its distribution area northwards, and this tendency is also documented in North America (Rosati & VanLearhoven, 2007). However, Povolný (2002) strictly opposed to this opinion as he presented very old records of this species from the Central Europe. Having in mind a synanthropic habit of this species, there is a possibility that this blowfly was regularly introduced to this region, creating temporary populations also in the past; insufficient temperatures extend the development of this species, thus it is regarded as an ephemeral element of the Central European fauna (Michalski & Szpila, 2016).

The record presented in this paper is the first observation of *Ch. albiceps* in Northern

Europe; nearest records are from rather far in Central Poland and Northern Ukraine (Verves, 2004; Michalski & Szpila, 2016), so we cannot exclude that the species could have been introduced, and additional data on its establishment in Lithuania should be obtained. The number of recorded blowfly species in Lithuania now reached 26 (Pakalniškis *et al.*, 2006), but this number is still incomplete and might be supplemented by more than a dozen of additional species in the future.

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***Chrysomya albiceps* (Wiedemann, 1819) – nauja Lietuvos faunos rūšis (Diptera: Calliphoridae)**

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Santrauka

Pateikiami duomenys apie pirmą šios rūšies stebėjimą Lietuvoje, Vilniaus rajone. Lavonmusė aptikta ruderalinėje pievoje, besimaitinanti nuo kanadinės rykštenės žiedų, netoli vištos lavono. Tai yra vienintelė šios rūšies radvietė Šiaurės Europoje, nes artimiausios radvietės yra Centrinėje Lenkijoje ir Šiaurės Ukrainoje, o pagrindinis arealas apima Pietų Europą, Afriką ir Pietų Aziją, o taip pat Centrinę ir Pietų Ameriką, kur ji yra laikoma žmogaus įvežta rūšimi. Rūšis galėjo būti introdukuota, ir reikėtų sulaukti papildomų duomenų jos įsitvirtinimui Lietuvoje pagrįsti. Tai yra tolerantiškiausia temperatūrai šios genties rūšis, ir tikėtis aptikti daugiau rūšių mūsų šalyje negalime. Šiuo metu Lietuvoje yra rastos 26 lavonmusių rūšys. Dar daugiau kaip dešimt rūšių lieka ieškotinos.

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