

**ORELLIA FALCATA (SCOPOLI, 1763) – NEW TO THE FAUNAS OF LITHUANIA AND ESTONIA (DIPTERA: TEPHRITIDAE)**ERIKAS LUTOVINOVAS<sup>1</sup>, VAIDA PAZNEKAITĖ<sup>2</sup><sup>1</sup>Nature Research Centre, State Research Institute, Akademijos 2, LT-08412 Vilnius, Lithuania.

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**Introduction**

*Orellia* Robineau–Desvoidy is the small genus of the fruit flies (Tephritidae), closely related to the more diverse genus *Terellia* Robineau–Desvoidy (Smit *et al.*, 2013), and in the earlier taxonomic concept has been treated in the wider sense (Foote, 1984), but usually easily recognized among the other genera of the tribe Terelliini Hendel by presence of the prominent black spots on the transverse suture of the mesonotum, reminiscing those spots at the bases of the dorsocentral setae (White, 1988; Merz, 1994). Immature stages of these flies are associated with several genera of herbaceous plants of the subfamily Cichorioidea (Asteraceae), initially feeding on the seeds in the capitula, but eventually descending through the receptacle and stem to live as borers in the rootstock of these plants (Baugnée, 2006; Smit, 2010).

There are four species of this genus presently known in Europe (Korneyev, 2003), though only three of them are treated in some of the recent sources (Merz, 1994; Korneyev *et al.*, 2013). One of these species has been also recorded in the Baltic States (Korneyev *et al.*, 2013; Pakalniškis *et al.*, 2006). The species different from the one previously recorded in the Baltic States is presented in this publication.

**Material and methods**

The material was photographed in two different countries (Estonia, Lithuania). The identification was consulted with Merz (1994) and Korneyev (2003). The taxonomy and general distribution followed those by Korneyev *et al.* (2013), Gammelmo & Søli (2011) and Norrbom *et al.* (1999). The lists of Lithuanian and Estonian species of the fruit flies was compiled from Korneyev *et al.* (2013), Pakalniškis *et al.* (2006) and the later contributions (Lutovinovas, 2014; Stalažs, 2014; Stalažs & Balalaikins, 2017).

## List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Pilpakūla, Vālgī Nature Pres.	Tartu county	58.557217, 26.903835;
Tartokas	Kaišiadorys district	55.023738, 24.449455.

## Result

### *Orellia falcata* (Scopoli, 1763)

EE: Pilpakūla, 23 06 2020, 1♀; roadside in the forest, on *Tragopogon pratensis* flowers (photo V. Runnel); LT: Tartokas, 12 06 2015, 1♂; middle part of the meadow, on *Tragopogon pratensis* flowers (photo V. Paznekaitė; Fig. 1).

West and Central Palaearctic species; larvae are recorded from *Tragopogon* spp. as borers in the stem base and rootstock of these plants (White, 1988; Merz, 1994).



Figure 1. *Orellia falcata* from Tartokas village, feeding on the flowering Goat's Beard

## Discussion

The faunas of Lithuania and Estonia have been supplemented by a second species of the genus *Orellia* Robineau–Desvoidy. This species is widely distributed in the continent from the southernmost fringes of Spain, Italy and Greece throughout Central Europe to Norway, Sweden and Finland (Korneyev *et al.*, 2013; Gammelmo & Søli, 2011), as well as in the Middle East and Central Asia (Norrbom *et al.*, 1999), and may be considered more widespread than the closely related *O. scorzonerae* (Robineau–Desvoidy, 1830), which occurs only in salty meadows (Korneyev, pers. comm.), and has been recorded in both Lithuania and Estonia (Korneyev *et al.*, 2013).

The previously recorded *O. scorzonerae* (Robineau–Desvoidy) is absent in all countries bordering the Baltic States (Korneyev *et al.*, 2013), suggesting fragmentary distribution of this species. Recent studies from the Polish Baltic coast did not detect this

species in the neighbouring country (Klasa *et al.*, 2011). However, both records of this species from Lithuania take place from the continental part of our country (Podėnas & Pakalniškis, 2000), indicating some doubt about correct identification of the specimens and need of revision. One must observe *Scorzonera* plants on the Baltic seashore with wet, slightly saline meadows to detect this species (Korneyev, pers. comm.).

Altogether, seventy-two species of the fruit flies are currently known from Lithuania, when two species of the genus *Orellia* Robineau–Desvoidy are included (Pakalniškis *et al.*, 2006; Lutovinovas, 2014; Stalažs, 2014), and about ten species are known from Estonia (Korneyev *et al.*, 2013; Stalažs & Balalaikins, 2017). More than a dozen of species of the other genera of this family are suspected to be added to the species list of Lithuania and about seventy species to the species list of Estonia in the future.

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***Orellia falcata* (Scopoli, 1763) – nauja Lietuvos ir Estijos faunų rūšis (Diptera: Tephritidae)**

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**Santrauka**

Lietuvos ir Estijos faunos papildytos antrąja *Orellia* Robineau–Desvoidy genties rūšimi. Pateikti duomenys apie margasparnės musės radvietes ir mitybinių augalų. Ši rūšis yra plačiau paplitusi, negu anksčiau Baltijos šalyse skelbta rūšis, kuri nėra įtraukta į kaimyninių šalių faunų sąrašus ir yra būdinga pajūrio buveinėms. Suabejota anksčiau Lietuvoje skelbtos rūšies teisingu apibūdinimu, kurios radvietės paminėtos žemyninėje Lietuvos dalyje yra laikomos nebūdingom šiai rūšiai. Šiuo metu Lietuvos faunoje yra minimos 72 margasparnių musių rūšys, o Estijos faunoje – apie dešimt šios šeimos rūšių. Dar daugiau kaip dešimt rūšių iš kitų genčių yra ieškotinos Lietuvos margasparnių musių faunoje ir apie septynesdešimt šios šeimos rūšių yra ieškotina Estijos faunoje.

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