



## FAVNISTIČNI ZAPISKI / FAUNISTICAL NOTES

***CRIORHINA RANUNCULI* (PANZER) (DIPTERA: SYRPHIDAE), A NEW HOVERFLY SPECIES FOR SLOVENIA**Dejan JANEVIĆ<sup>1</sup> & Maarten DE GROOT<sup>2</sup><sup>1</sup> Levec 22, 3301 Petrovče, Slovenia<sup>2</sup>Department of Forest Protection, Slovenian Forestry Institute,  
Večna pot 2, 1000 Ljubljana, Slovenia

**Abstract** - A new hoverfly species is recorded for Slovenia, *Criorhina ranunculi* (Panzer, 1805). This species was found on the Mrzlica Mt. on the 26th of May 2018. We propose its Slovenian name »čmrljelika trepetavka«.

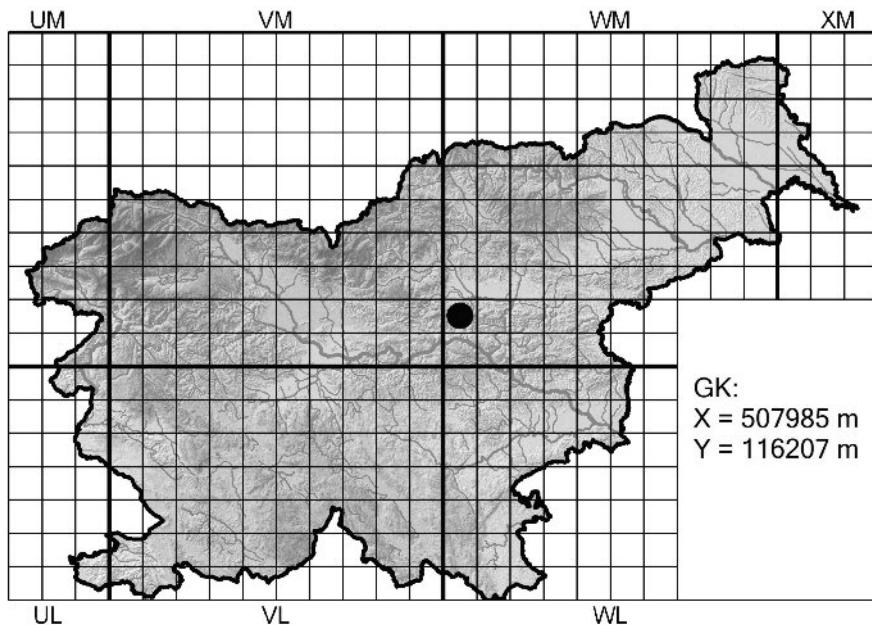
KEY WORDS: Diptera, Syrphidae, fauna, Slovenia

**Izvleček** - *CRIORHINA RANUNCULI* (PANZER) (DIPTERA: SYRPHIDAE), ZA SLOVENIJO NOVA VRSTA TREPETAVKE

Nova vrsta muhe trepetavke je zabeležena v Sloveniji: *Criorhina ranunculi* (Panzer, 1805). Vrsta je bila najdena pod samim vrhom hriba Mrzlica, dne 26. 5. 2018. Predlagano slovensko ime za to vrsto je čmrljelika trepetavka.

KLJUČNE BESEDE: Diptera, Syrphidae, fauna, Slovenia

Hoverflies are very diverse in species and larvae have different niches (Rotheray & Gilbert, 2011). Larvae of many species are predating on aphids, feeding on plants or micro-organisms. Several species are known as saproxylic species which are good indicators of the status of the forest (Speight, 1989; Reemer, 2005; Rotheray & Gilbert, 2011). 309 hoverfly species are known for Slovenia so far (De Groot & Govedič, 2008; De Groot et al., 2010; Van Steenis et al., 2013). One of the genera of which the species have saproxylic larvae is the genus *Criorhina* (Reemer et al., 2009). *Criorhina* species are middle sized to large hoverflies and resemble bumblebees or



**Fig. 1:** Distribution of *Criorrhina ranunculi* in Slovenia.

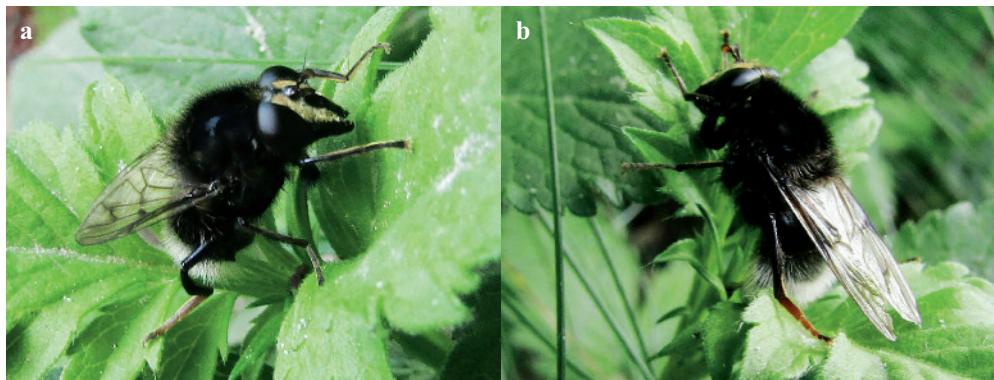
bees (Reemer et al., 2009; Speight, 2017). They are often found near old trees where their larvae live in rotting heartwood of various tree species, particularly in *Fagus* (Rotheray, 1993; Reemer et al., 2009). They also occur deep in the root system and in rot holes (Rotheray, 1993). In total there are six species found in Europe: *Criorrhina asilica* (Fallen, 1816), *C. berberina* (Fabricius, 1805), *C. brevipila* Loew, 1871, *C. floccosa* (Meigen, 1822), *C. pachymera* (Egger, 1858) and *C. ranunculi* (Panzer, 1804) (Speight, 2017). Except for *C. brevipila*, the other species are observed in the Balkan peninsula (Vujic & Milankov, 1999). Till now four species of the genus *Criorrhina* were found in Slovenia: *Criorrhina asilica*, *C. berberina*, *C. floccosa* and *C. pachymera* (De Groot & Govedić, 2008). In this paper the fifth species of *Criorrhina* in Slovenia, *C. ranunculi*, is presented.

Fieldwork for this study took place in the Mrzlica Mountain, central Slovenia. The species was identified with the key of van Veen (Van Veen, 2004).

#### *Criorrhina ranunculi* (Panzer, 1805)

Material examined (Figs 2a, b). Slovenia, Mrzlica Mt. (GKX: 507985, GKY: 116207, Fig 1), 26.05.2018, 1020 m a.s.l., 1♀, leg. D. Janević.

*Criorrhina ranunculi* is a bumblebee lookalike (Van Veen, 2004). It is the only species in the genus with black hairs on the mesonotum and tergite 2 (Vujic & Milankov, 1999). The species is known to visit flowers of different tree and shrub species like *Cornus sanguinea* and *Prunus cerasus*, but also feed on herbs like *Car-*



**Fig. 2:** *Criorhina ranunculi* (Panzer, 1805), ♀. Photo: D. Janević: a) habitus in antero-lateral view, b) habitus in lateral view.

*damine pratensis* (Speight, 2017). The flight period is from the beginning of March to mid May and on higher altitudes to the end of June. The larvae live in the base of tree trunks, in fungus-infested, wet-rot cavities of several deciduous tree species. The species occurs across Europe from north to south and west to east (Speight, 2017). Therefore, it was to be expected in Slovenia. Although some hoverfly species in Slovenia have Slovenian names, most of the species, including *C. ranunculi*, haven't got one yet. Therefore, we propose that this species is called "čmrljelika trepetavka" (in English: bumblebee-like hoverfly), which indicates that the species is a bumblebee lookalike. *Volucella bombylans* (Linnaeus, 1758) has the Slovenian name "čmrljasta gozdna trepetavka" and therefore the name "čmrljelika trepetavka" is still available.

### Acknowledgments

We would like to thank Tim Faasen and an anonymous reviewer for comments on a previous version of the manuscript.

### References

- De Groot M., Govedič M.**, 2008: Checklist of the hoverflies (Diptera: Syrphidae) of Slovenia. *Acta Entomologica Slovenica*, 16, 1: 67-87.
- De Groot M., Luštrik R., Faasen T., Fekonja D.**, 2010: Additions and omissions to the list of hoverfly fauna (Diptera: Syrphidae) of Slovenia. *Acta Entomologica Slovenica*, 18, 2: 77-86.
- Reemer M.** 2005: Saproxylic hoverflies benefit by modern forest management (Diptera: Syrphidae). *Journal of Insect Conservation*, 9: 49-59.
- Reemer M., Renema W., van Steenis W., Zeegers T., Barendregt A., Smit J.T., Van Veen M.P., van Steenis J., van der Leij L.J.J.M.**, 2009: De Nederlandse zweefvliegen (Diptera: Syrphidae). Leiden, Natuurhistorisch Museum Naturalis, KNNV uitgeverij, European Invertebrate Survey - Nederland: 442 pp.

- Rotheray G.**, 1993: Guide to Hoverfly Larvae (Diptera, Syrphidae). *Dipterist digest*, 9: 1-155.
- Rotheray G., Gilbert F.**, 2011: The natural history of hoverflies. Ceredigion, Forrest texts: 333 str.
- Speight M.C.D.**, 1989: Saproxylic invertebrates and their conservation. Strasbourg, Council of Europe: 79 pp.
- Speight M.C.D.**, 2017: Species accounts of European Syrphidae (Diptera). Dublin, Syrph the Net publications: 296 pp.
- Van Steenis W., de Groot M., Van Steenis J.**, 2013: New data on the hoverflies (Diptera: Syrphidae) of Slovenia. *Acta Entomologica Slovenica*, 21, 2: 131-162.
- Van Veen M.**, 2004: Hoverflies of Northwest Europe, Identification keys to the Syrphidae. Utrecht, KNNV Publishing 247 pp.
- Vujic A., Milankov V.**, 1999: New data for the tribes Milesiini and Xylotini (Diptera, Syrphidae) on the Balkan Peninsula. *Dipteron*, 2, 6: 113-132.

*Received / Prejeto:* 5. 6. 2018