



***MALLOTA FUCIFORMIS* (FABRICIUS, 1794) (DIPTERA: SYRPHIDAE),  
A NEW HOVERFLY SPECIES IN SLOVENIA**

Maarten DE GROOT<sup>1</sup> & Dejan JANEVIĆ<sup>2</sup>

<sup>1</sup>Department of Forest Protection, Slovenian Forestry Institute,  
Večna pot 2, 1000 Ljubljana, Slovenia, maarten.degroot@gozdis.si

<sup>2</sup>Levec 22, 3301 Petrovče, Slovenia

**Abstract** – The hoverfly species *Mallota fuciformis* (Fabricius, 1794) was recorded in Slovenia for the first time. It was found in Ponikva pri Žalcu, Grče on the 13th of April 2020. One specimen was found on a flowering cherry laurel (*Prunus lauro-cerasus*) in the vicinity of a forest stand with deciduous and coniferous trees. This is the first record of the genus *Mallota* in Slovenia.

KEY WORDS: Diptera, Syrphidae, fauna, Slovenia, first record

**Izvleček** – *MALLOTA FUCIFORMIS* (FABRICIUS, 1794) (DIPTERA: SYRPHIDAE), NOVA VRSTA MUHE TREPETAJKE V SLOVENIJI

Nova vrsta muhe trepetavke je bila zabeležena v Sloveniji: *Mallota fuciformis* (Fabricius, 1794). Vrsta je bila najdena na Ponikvi pri Žalcu, Grče, dne 13. 4. 2020, na cvetočem lovorikovcu (*Prunus laurocerasus*) v bližini mešanega gozda. Gre za prvo najdbo muhe trepetavke iz rodu *Mallota* v Sloveniji.

KLJUČNE BESEDE: dvokrilci, muhe trepetavke, živalstvo, Slovenija, prva najdba

In the last few years several new species of hoverflies (Diptera, Syrphidae) have been recorded for Slovenia (Janević and de Groot, 2018; Šebić, et al., 2019). This group of flies has become more and more popular as they are very conspicuous – they look like bees or wasps, and are important pollinators. They fulfill also other functions in the ecosystems, for example by feeding on aphids and plants, and they are also indicators for the status of dead wood in forests (Speight, 1989; Reemer, 2005; Rotheray and Gilbert, 2011).

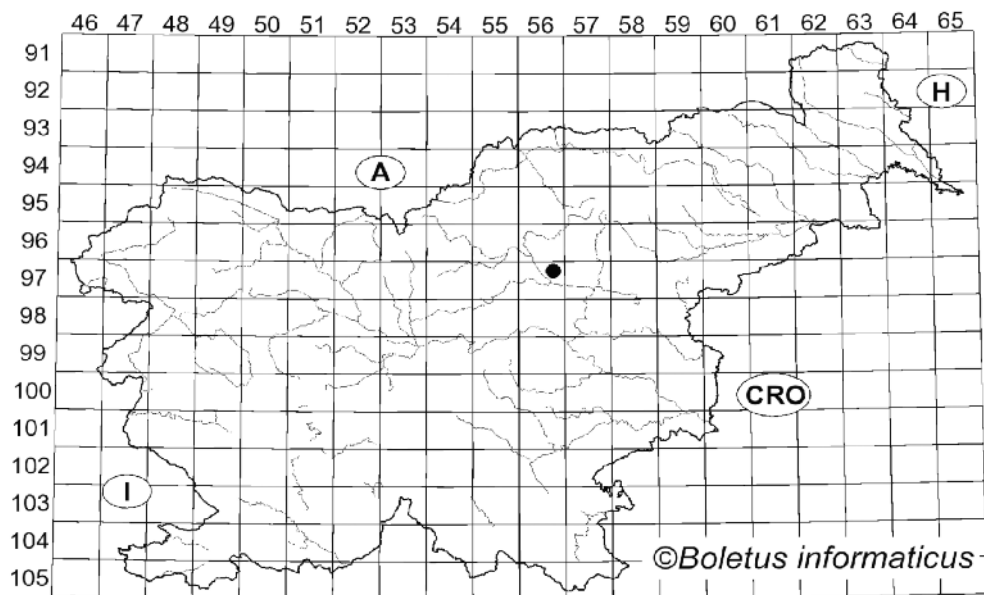
Slovenia is a diverse country in many ways. This is mainly due to its unique location, namely at the meeting point of the Alpine-, Submediterranean-, Subpanonian-



**Fig. 1:** Adult male of *Mallota fuciformis* found in Ponikva pri Žalcu, Slovenia

and Dinaric regions (Ciglič and Perko, 2012). From the ecological point of view, Slovenia boasts numerous highly diverse habitats. In total, 315 hoverfly species have been recorded for Slovenia (De Groot and Govedič, 2008; De Groot, et al., 2010; Van Steenis, et al., 2013; Janevič and de Groot, 2018; Šebić, et al., 2019). One of the genera that have not yet been found in Slovenia is *Mallota* (Meigen 1822). There are five species of *Mallota* hoverflies in Europe. *M. cimbiciformis* and *M. fuciformis* can be found throughout Europe, *M. megilliformis* is found in the Central- to Northern Europe, *M. tricolor* in the Central Europe and *M. dusmeti* only on the Iberian Peninsula. Other *Mallota* species can be found in other parts of the world (Reemer, et al., 2009). Adult *Mallota* hoverflies have a very short flying period and often fly high in the canopy. Their larvae are rat tailed maggots and live in moisty rot holes in trees (Reemer, et al., 2009). In this paper, we present a new species for Slovenia: *Mallota fuciformis*, which is also the first record of the genus in Slovenia.

The field work took place in Ponikva pri Žalcu, Grče in Central Slovenia. The specimen was only photographed. The species was identified with Bot and van de Meutter (2019).



**Fig. 2:** Distribution of *Mallota fuciformis* in Slovenia (de Groot M. 2020. Karta razširjenosti za *Mallota fuciformis*. Podatkovna zbirka gliv Slovenije *Boletus informaticus.*, Ogris N. (ur.) (16.04.2020))

*Mallota fuciformis* (Fabricius, 1794)

Material examined (Fig 1). Slovenia, Ponikva pri Žalcu, Grče (GKX: 510346, GKY: 127739, Fig 2), 13.04.2020, altitude: 450 m asl., 1♂, photo D. Janevič.

The specimen was found resting on a leaf of the cherry laurel (*Prunus laurocerasus*) (Figure 1) that was in full bloom. *M. fuciformis* is often found on flowering trees and bushes in other parts of Europe (Reemer, et al., 2009; Bot and van de Meutter, 2019; Speight, 2020). The specimen was found in a forested area with deciduous and coniferous trees. In other parts of Europe it is found mainly in deciduous forests and parks with old trees (Reemer, et al., 2009; Bot and van de Meutter, 2019). The larvae are found in rot holes of old trees (Bot and van de Meutter, 2019). Forests in Slovenia are relatively old, and many rot holes can be found which are potential breeding sites for this species.

This is the first species of the genus *Mallota* in Slovenia. According to Fauna Europaea, *M. cimbiciformis* was found in Austria, Italy and Hungary. So, it would not be surprising to find this species in the coming years in Slovenia.

### Acknowledgments

We would like to thank John Smit for the second opinion of the identification of this species and an anonymous reviewer and dr. Andreja Kavčič for comments on a previous version of the manuscript.

## References

- Bot S., van de Meutter F.**, 2019: Veldgids Zweefvliegen. Utrecht, KNNV Uitgeverij: 388 str.
- Ciglič R., Perko D.**, 2012: Slovenia in geographical typifications and regionalizations of Europe. *Geografski vestnik*, 84: 23-37
- De Groot M., Govedič M.**, 2008: Checklist of the hoverflies (Diptera: Syrphidae) of Slovenia. *Acta Entomologica Slovenica*, 16: 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: 77-86
- Janevič D., de Groot M.**, 2018: *Criorhina ranunculi* (Panzer) (Diptera: Syrphidae), a new hoverfly species for Slovenia. *Acta Entomologica Slovenica*, 26: 257–260
- 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 str.
- 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 str.
- Speight M.C.D.**, 2020: Species accounts of European Syrphidae (Diptera). Dublin, Syrph the Net publications: 314 str.
- Šebić, A., de Groot, M., Radenković, S., Vujić, A.**, 2019: New records to the Slovenian hoverfly fauna (Diptera: Syrphidae). Programme and book of abstracts. 10th International Symposium on Syrphidae. 8th-10th September 2019. Mytilene, Lesvos, Greece.
- Van Steenis W., de Groot M., Van Steenis J.**, 2013: New data on the hoverflies (Diptera: Syrphidae) of Slovenia. *Acta Entomologica Slovenica*, 21: 131-162

*Received / Prejeto:* 17. 4. 2020