
Newly designated hoverfly (Diptera: Syrphidae) species of conservation concern and Prime Hoverfly Areas in Serbia

Marina Janković Milosavljević^{*†1}, Marija Miličić², Snežana Popov¹, and Ante Vujić¹

¹University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology, Trg Dositeja Obradovića 2, 21000 Novi Sad, Serbia – Serbia

²University of Novi Sad, BioSense Institute – Research Institute for Information Technologies in Biosystems, Dr Zorana inića 1, 21000 Novi Sad, Serbia – Serbia

Abstract

Due to limited resources for conservation purposes, conservation efforts have to be precisely directed in a way that would ensure the protection of as many imperilled species as possible. To be able to do that, it is necessary to implement systematic sampling as a basis for conservation. Building on the work of Vujić et al. (2016), in the period from 2016. to 2018, systematic sampling of hoverflies on designated localities on the territory of Republic of Serbia was conducted. The aim of this study was to designate new species of conservation concern (PHA species) and additional Prime Hoverfly Areas (PHAs), based on the new records from recent field work. Methodology of Vujić et al. (2016) was followed, species or area had to meet at least one of the criteria in order to be denoted as PHA species or area. According to our results, 16 species met the requirements to be marked as PHA species, while seven areas met the criteria to be designated as PHAs. Additionally, designated areas where overlapped with Protected Areas, Prime Butterfly Areas and Important Bird Areas to determine the percentage of overlapping between new PHAs and areas which have some form of recognition and/or protection in Serbia. Results of this study can significantly contribute in planning future monitoring activities and creating conservation strategy for the preservation of important hoverfly species in Serbia. They also represent a solid foundation for alteration or expansion of legislative concerning this insect group.

Reference

Vujić, A., et al. 2016. Prime Hoverfly (Insecta: Diptera: Syrphidae) Areas (PHA) as a conservation tool in Serbia. *Biol. Cons.* 198, 22-32.

Acknowledgements

The authors acknowledge financial support of the Ministry of Education, Science and Technological Development of the Republic of Serbia (Grant Nos. 451-03-68/2022-14/200125 and 451-03-68/2022-14/200358), the Science Fund of the Republic of Serbia, project Serbian Pollinator Advice Strategy - for the next normal – SPAS, Grant No. 7737504, and H2020 Project ANTARES, grant no 739570. (<https://doi.org/10.3030/739570>).

^{*}Speaker

[†]Corresponding author: marinaj@dbe.uns.ac.rs

Keywords: Syrphidae, species conservation, key areas