# Hoverfly (Diptera: Syrphidae) research in the past 25 years - a bibliometric analysis

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## Abstract

Hoverflies are known as pollinators, bioindicators, and some species are used as biological control agents. Due to these invaluable functions in the ecosystem, hoverfly research has seen a recent rise in the previous years.
Bibliometric analysis represents a type of statistical analysis used to summarize academic literature in a quantitative way. This analysis encompasses scientific journals, authors, countries and institutions and enables grasping the basic information and development of a certain research topic in literature quickly.

In this study, we aim to give an overview of hoverfly research in the past 25 years, by inspecting publication characteristics of papers, analyzing source and author impact and assessing main research themes. For this purpose, Web of Science, one of the leading databases of research publications and citations in academia, was used for the acquisition of the hoverfly-related research, in the period 1996-2021. Analyses were conducted using R package bibliometrix and R Shiny app biblioshiny.

In total, 1843 original research articles related to hoverflies were published in the past 25 years in scientific journals, authored by 4594 persons. Top author based on the number of publications was Ante Vujić, while most relevant journal based on the same criterion was Zootaxa. USA had highest country production, while University of Novi Sad, Serbia was the most relevant affiliation. Five most frequently used keywords in articles were Syrphidae, hoverflies, Diptera, pollination and biological control.

**Keywords:** bioindicators, biological control agents, insects, literature, pollinators, research trends, quantitative analysis

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