THE INFLUENCE OF CITIZEN SCIENCE IN REVEALING THE BIODIVERSITY OF MACROFUNGI IN HUNGARY: A CASE STUDY OF VOLVARIELLA BOMBYCINA

A közösségi tudomány jelentősége a hazai nagygombák biodiverzitásának kutatásában: Esettanulmány a *Volvariella bombycina* példáján keresztül

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Volvariella bombycina is a widely distributed lignicolous fungal species that forms agaricoid basidiomata, easily recognizable based on its distinctive morphological features. This edible fungus was designated as a protected species in Hungary in 2005 due to the low number of recorded locations and the decreasing amount of old, decayed woody material required for its growth. Despite Hollós having reported *V. bombycina* from the Kiskunság in 1896, only 26 additional occurrences were observed from Hungary until 2005 based on literature data and samples preserved in herbaria. In recent years, the interest in macrofungi has increased in Hungary, which has been demonstrated by the activity of mushroom hunting groups on social media. Consequently, rare and protected species are also increasingly photographed and shared on these platforms. For V. bombycina, we have been collecting data from such shared information since 2019. Following the validation of posted photos, we contacted collectors to refine details such as the precise location, collection date, and host plant information. These data were used to construct a database, which currently contains 251 new validated records from Hungary. Based on our data, V. bombycina is frequently found in urban environments, and it has been identified on a total of 16 different genera of deciduous trees, with the majority of records originating from Populus and Quercus species. Gathering data through citizen science acquired have facilitated a more comprehensive understanding of the distribution, and ecological role of V. bombycina in Hungary.

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