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# DIVERSITY OF THE GENUS *TUBER* FROM THE WEST BALKAN AREAS USING MOLECULAR CHARACTERISATION

*Tine Grebenc*<sup>1</sup>, *Ivan Ratoša*<sup>2</sup>, *Andrej Piltaver*<sup>3</sup>, *Maria P. Martin*<sup>4</sup>, *Hojka Kraigher*<sup>1</sup>,  
*Miroljub Milenković*<sup>5</sup>, *Aleksa Glišić*<sup>6</sup>, *Žaklina Marjanović*<sup>5</sup>

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<sup>1</sup>Slovenian Forestry Institute, Večna pot 2, SI-1000 Ljubljana, Slovenia, tine.grebenc@gozdis.si

<sup>2</sup>Ivan Ratoša, Goriče 3a, SI-6230 Postojna, Slovenia

<sup>3</sup>Institute for Systematics of Higher Fungi, Zofke Kvedrove 24, SI-1000 Ljubljana, Slovenia

<sup>4</sup>Real Jardín Botánico, Plaza de Murillo 2, 28014 Madrid, Spain

<sup>4</sup>Institute for Multidisciplinary research, Kneza Viseslava 1a, 11030 Beograd, Serbia

<sup>5</sup>Institute for Biological Research "Siniša Stanković", Bulevar Despota Stefana 142, 11000 Beograd, Serbia

<sup>6</sup>Hajduk Veljkova 51/9, 14 000 Valjevo, Serbia

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The area of SE Europe, particular the Balkan area, has only recently been more extensively explored for the presence and diversity of hypogeous fungi, compared to several other well characterized European areas, despite the suitable climate and vegetation conditions of the region. Several surveys have been performed in last decade generating substantial collection of hypogeous fungi, particular from the genus *Tuber*, in official herbaria. The latter material, mainly identified by regional specialists, was subjected to molecular diversity assessment and identification. We attempted to characterize selected collections at the molecular level and to explore them for potential new molecular variants as expected due to known high endemic characteristic and diverse ecosystems composition of the Balkan region.

Molecular approach supported morphological identification results and confirmed the presence of all commercially important species including *Tuber magnatum* Pico, *Tuber melanosporum* Vittad., and *Tuber aestivum* Vittad. We have also observed high diversity (polymorphism) within few other morphological species (*Tuber rufum* Pico, *Tuber brumale* Vittad.), which partially confirmed up to date scientific literature. The presentation aims to show point out selected results, new for science and present the high biodiversity aspect of hypogeous fungi in the Balkan region.

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