



Gymnopus trabzonensis sp. nov. (Omphalotaceae) and *Tricholoma virgatum* var. *fulvoubonatum* var. nov. (Tricholomataceae), two new white-spored agarics from Turkey

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Abstract

Gymnopus trabzonensis (section *Impudici*) and *Tricholoma virgatum* var. *fulvoubonatum* (section *Tricholoma*) from Turkey are described as new taxa based on both morphological and molecular characters. Colour photographs of fresh basidiomata and of the main micromorphological features are provided.

Key words: Basidiomycota, Agaricomycetes, Agaricales, ITS, new taxa, taxonomy

Introduction

East Black Sea Region which includes Trabzon Province is quite different in terms of vegetation and climate from the other regions of Turkey and therefore has a very rich fungal diversity. We have focused on this area in recent years and collected some unusual agarics during September 2014 (Sesli & Helfer 2013, Sesli 2014, Sesli *et al.* 2015a,b).

The genus *Gymnopus* (Pers. 1801: 302) Roussel (1806: 62) is represented by about 325 taxa worldwide (Robert *et al.* 2015) and 13 species occur in Turkey to date (Sesli & Denchev 2008). The new species described in this study (*Gymnopus trabzonensis* Vizzini, Antonín, E. Sesli & Contu) belongs to the section *Impudici* Antonín & Noordel. (Antonín & Noordeloos 2010).

More than 1300 taxa (Robert *et al.* 2015) in *Tricholoma* (Fr.) Staude (1857: 125) have been described worldwide and this genus is represented by about 55 taxa (Sesli & Denchev 2008) in Turkey. According to the classification by Christensen & Heilmann-Clausen (2013) the new variety [*Tricholoma virgatum* (Fr.) P. Kumm. (1871: 134) var. *fulvoubonatum* E. Sesli, Contu & Vizzini] belongs to the sect. *Tricholoma* (Fr.) Staude (1857: 125).

Materials & Methods

Collecting and microscopical studies

Basidiomata were collected from Akçaabat and Maçka districts in Trabzon, Turkey, on September 2014 and were photographed by a Canon EOS 600-D camera equipped with macro lens. Taste, smell, colours of basidiomata and their mycorrhizal partners were noted in the field. Five to fifteen basidiomata of each collection were sampled, carried to the laboratory and dried for further studies.

Microscopical studies were performed at the Karadeniz Technical University (Trabzon, Turkey) and the Moravian Museum, Department of Botany (Brno, Czech Republic). Some molecular studies were performed in ALVALAB, La Rochela, Santander, Spain, and the others at the University of Turin, Italy. During the studies in Turkey, a Zeiss Axio Imager A2 trinocular microscope was used to observe and measure microscopical elements and to take microphotographs. Dried basidiomata were sectioned with a razor blade under stereo microscope, and obtained sections were mounted