

THE CHECK-LIST OF FUNGI IN SICILY (SOUTHERN ITALY): CURRENT SURVEY STATUS

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A number of checklists are currently available in several continents, European and extra European countries (Holland, Switzerland, France, United Kingdom, North America, Argentina, Brazil, Uruguay, Venezuela, Bulgaria, Greece, Italy, Norway, Poland, Portugal, Spain, Romania, Russia, Africa, Iran, Oman, Turkey, Asia).

The checklists are modern tools for evaluation of fungal biodiversity and precious documents to obtain ecological data and information for management and exploitation of protected areas, agro- and forest ecosystems.

A checklist of Sicilian fungi was edited by Venturella (1991), followed, in 2009, by a new report (Gargano *et al.*, 2009). At that time the number of macrofungi from Sicily correspond to 1500 taxa. Nowadays the number of fungi in the region is greater than before and equal to 1724 taxa (1406 *Basidiomycetes* and 318 *Ascomycetes*).

Among the class *Basidiomycetes* the most remarkable order is *Agaricales* Underw. (831 taxa) followed by *Russulales* Kreisel ex P.M. Kirk, P.F. Cannon & J.C. David (193 taxa), *Boletales* E.-J. Gilbert (108 taxa) and *Polyporales* Gäum. (104 taxa) while *Pezizales* J. Schröt. (152 taxa) show the higher value of diversity in the class *Ascomycetes*. The most remarkable families are *Russulaceae* Lotsy (159 taxa), *Tricholomataceae* R. Heim ex Pouzar (140 taxa), *Agaricaceae* Chevall. (129 taxa), *Cortinariaceae* R. Heim ex Pouzar (104 taxa), *Boletaceae* Chevall. (102 taxa), *Pyronemataceae* Corda (58 taxa) and *Pezizaceae* Dumort. (102 taxa).

A huge number of ectomycorrhizal fungi (547 taxa) characterize the woods of Sicily with percentage values ranging from 20% to 50% of the total number of fungi. Other important ecological categories are the terricolous saprobes (St, 376 taxa) and the humicolous saprobes (Sh, 224 taxa) which are widely distributed in the different vegetation types of Sicily (3,4). Besides the woods hosts a high number of necrotroph parasites (Pn) corresponding to 46 taxa.

The above-mentioned data are the basis for the upcoming second edition of the checklist of Sicilian fungi.

Venturella G., 1991. A checklist of Sicilian fungi. *Bocconea* 2: 5-221.

Gargano M.L., Lantieri A., Saitta A., Venturella G., 2009. The current state of knowledge of fungal diversity in Sicily (Southern Italy). *Bocconea* 23: 267-271.

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