

MACROFUNGI FROM APUSENI MOUNTAINS, TRANSYLVANIA, ROMANIA

Nagygombák az Erdélyi-szigethegységből

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The Apuseni Mountains are one of the oldest mountains in the Carpathian Basin with medium-height character, but also with high plateau and peaks. However, from the mycological point of view it is less well studied. Present work's aim was to start a systematic mycological investigation, as well as to raise the mycologist's interest to this territory. The documented taxa were collected in August 2017 during a four day field trip by 30 participants. The investigated forest stands belong to mixed deciduous-coniferous and spruce associations. A total number of 131 macrofungi taxa were documented during the 4 days. The functional distribution shows 69 (52,67%) ectomycorrhizal, 32 (24,43%) wood inhabiting saprotrophic, 18 (13,74%) soil saprotrophic, 7 (5,34%) necrotrophic parasite, 2 (1,53%) moss-associated, 2 (1,53%) coprotrophic and 1 (0,76%) herbaceous saprotrophic species. Ascomycetes were represented by only two species, respectively *Elaphomyces granulatus* and *Peziza badia*. The richest genus was *Russula* with 16 species. Several common species were found, which are characteristic to the examined habitats, such as *Amanita fulva*, *Amanita muscaria*, *Calocera viscosa*, *Cantharellus cibarius*, *Gloeophyllum sepiarium*, *Laccaria amethystina*, *Lactarius deterrimus*, *Lactarius turpis*. Others, like *Cortinarius caperatus* and *Lactarius rufus* were the species characteristic to mountainous coniferous forests, while *Cantharellus amethysteus*, *Climacocystis borealis*, *Pholiota flammans* and *Pseudohydnum gelatinosum* were characteristic to mountainous spruce stands. Interesting species fructifying in the spruce stands were the saprotrophic *Pleurocybella porrigens* living on spruce trunks, and *Xeromphalina campanella* living on mossy conifer trunks. Among rare species *Amanita submembranacea* can be mentioned, which was fructifying in mountainous conifer stands with acidic soil, more rarely in acidic beech forests; *Amanita battarrae* was living in acidic deciduous and coniferous forests in the high mountains, as well as a species with typical colour, *Gliophorus psittacinus*, characteristic to grassy and mossy forest edges and clear forests. The Romanian Red List of Macrofungi contains the vulnerable (VU) *Volvariella murinella* and *Phylloporus pelletieri*, and the near threatened (NT) *Amanita regalis* and *Lactarius picinus*. Besides, it should be mentioned that *Lactarius helvus*, *Russula decolorans* and *Russula paludosa* are becoming rare because of their habitat retraction. Some species with indicative value were also documented, like *Ischnoderma resinosum* and *Mucidula mucida* in deciduous, *Pluteus atromarginatus* in coniferous stands, all of them indicating old, undisturbed forests. Besides, species indicating human disturbance were also collected, like *Macrolepiota procera*, *Bovista plumbea* and *Inocybe rimosa*. Further investigation of this territory is recommended, because the occurrence of several other interesting macrofungi is expected. That is why we plan to continue this investigation in close future.