

**Summary:** The present study aimed to contribute to the characterization of the macrofungal cork oak (*Quercus suber* L.) communities and to evaluate how management practices influence the occurrence and fructification of the macrofungal species after an extended drought period. Four sampling areas submitted to different management strategies, namely livestock pressure and shrub control method, were selected. Characterization of the macrofungal communities was based on sporocarp sampling, from October 2005 to April 2006.

During the study period all specimens collected fit into 59 *taxa* in 30 genera. Late autumn was found to be their preferential fruiting period. Also, a significantly positive correlation between species richness and total abundance values was clear during the study period in all analysed areas.

Furthermore, the climate of the two previous years seemed to considerably decreased macrofungal fructification while the different management practices created particular micro-environmental conditions that shaped the colonization and fructification of those macrofungal communities. Mycorrhizal fructified preferentially in areas with higher tree numbers, tree cover and shrub cover, lower soil nitrogen contents and less soil disturbance (clear-cuts) whereas saprobes often occurred in more nitrogen-rich substrata and open areas with higher livestock pressure.