



*Food,  
Timber,  
Biomass &  
Energy in  
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## **ABSTRACTS**



P5

## **BIODIVERSITY OF MACROFUNGI ASSOCIATED WITH CHESTNUT IN THE NORTH EAST OF PORTUGAL**

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*The northeast of Portugal (Trás-os-Montes) is a region where chestnut tree (Castanea sativa Mill.) is one of the most important species in social and economical terms. Macrofungi associated with chestnut tree is of key importance for the knowledge of the biodiversity associated with soil and the equilibrium of the plant soil interactions and also as a complementary resource of these agroforestry ecosystems. The study of the biodiversity and of the relative abundance of mycorrhizal and nonmycorrhizal species and of edible vs non edible mushrooms was under survey for 4 years. Ecological and economical impacts of edible fungi collection, including the impact on mycorrhizal and nonmycorrhizal species, are also under evaluation.*

*Field work took place from October 2004 to October 2007. Total macrofungi were collected weekly during autumn and spring and monthly during the rest of the year, in three plots of 100 m<sup>2</sup>. Identification and quantification of carpophores were made according to identification manuals and macro and microscopic characters.*

*In this ecosystem 27 confirmed species of macrofungi were gathered, belonging to 18 genera. The most represented genera were Russula, followed by Inocybe, Amanita and Cortinarius. The lowest number of collected species occurred in 2004 and 2005. 2006 registered a significant raise of precipitation increasing occurrence of macrofungi (both production and biodiversity), decreasing again in 2007.*

*The distribution of species by functional groups shows a dominance of mycorrhizal species. The number of edible species is generally higher than nonedible ones, being lower in the mycorrhizal fungus group than in nonmycorrhizal. Occurring edible species are of great economical value (Amanita caesarea, Amanita rubescens, Cantharellus cibarius, Hydnum rufescens).*

*The macrofungi biodiversity here shown is discussed in relation to climatic conditions in the northeast of Portugal during the main growing seasons of the current study.*

## **BIODIVERSITÀ DEI MACROMICETI ASSOCIATI AL CASTAGNO NEL NORD EST DEL PORTOGALLO**

Il lavoro presenta i risultati di uno studio di 4 anni sulle specie fungine micorrizanti e non in castagneto. La grande biodiversità rilevata è analizzata in relazione all'andamento delle condizioni climatiche durante il periodo di studio.

