BOOK OF ABSTRACTS

II. EUROPEAN CONGRESS ON CHESTNUT

DEBRECEN – BAIA MARE – MODRY KAMEN
Assessment of Literfall in Chestnut Forest Stands: Comparison of Two Sample Methods

Maria S. Patrício¹, Luís Nunes¹, Ermelinda L. Pereira¹

¹Mountain Research Centre (CIMO), ESA – Polytechnic Institute of Bragança
Campus de Stª Apolónia, Apartado 1172, 5301-855 Bragança, Portugal.
sampat@ipb.pt

Abstract
The annual amount of litter returned to the ecosystems and their decomposition processes are vital for sustainable management since that regulates the carbon cycle and soil nutrients pools. However, the methodology used for their assessment can significantly influence the obtained estimates concerning to the produced biomass and the potential return of nutrients to the soil and carbon sequestration. This study compared two common assessment methods of the annual litter fall in three high forest chestnut stands located in the mountains of Bomes, Marão and Padrela, Northern Portugal. The tested litter fall sampling methods were the quadrate method (50 x 50 cm) and the circular 1m² litter traps. The two methods were randomly applied on the same sample area. The harvest was repeated for two consecutive years. The obtained estimates of the amount of litter fall varied significantly with the method used and the interaction method x location was not significant. Estimates obtained with litter traps were lower than that obtained with the quadrate method.