7th European Ecological Congress

Ecological Processes: Current Status and Perspectives

ABSTRACTS

Edited by A. Demeter & L. Peregovits

URECO.S.

Hungarian Biological Society Budapest, 1995

Decomposition processes and soil mesofauna groups in post-fire successional *Pinus halepensis* forests of Greece

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The rate of weight losses of cellulose and the dynamics of saprophagous arthropod populations have been studied in three burned Mediterranean pine forests with *Pinus halepensis* Mill for a period of eight months. The above forests constitute a gradient of both fire intensity and post-fire successional stages. Gathering of data is realized by the use of litterbag method and by the collection of soil samples. Several differences in the weight losses of cellulose and the temporal distribution of saprophagous arthropods have been occurred in the studied areas possibly reflecting an effect of microclimatological conditions and the sites' history.

Acknowledgments: The authors express their acknowledgments to the European Union for funding under the project PROMETHEUS (EV5V-CT94-0482).

Ecofaunistical investigations in the Ócsa protected landscape area (Kiskunság National Park, Hungary)

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The Ócsa Protected Landscape Area belongs to the Kiskunság National Park. The study was carried out in a strictly protected swamp forest with alders and ashes (*Fraxineto pannonicae-Alnetum*), which was overflooded from November to July because of autumn rains and the melting of snow in spring. Depending on the water level, samples were taken either from the trunks (these were outstanding trunks of alder trees and the surrounding dry area, the size of which changed during the year) or between the trunks (the area among the trees temporarily covered by a varying amount of water), or from both sites. The quadrate method was used with a size of 25×25 cm. The studied animal groups: Diplopoda, Isopoda (Oniscidea), Chilopoda. Altogether 16,275 specimens, 8,751 isopods, 7,302 diplopods, 222 chilopods were found. The faunal assemblage was found to be diverse but within all three taxa examined, those species which are adapted to the wet and cool microclimate of swamp-habitats were found to be the most abundant ones, from Diplopoda: *Polydesmus schassburgensis* Verh., from Isopoda: *Armadillidium zenckeri* Brandt, from Chilopoda: *Monotarsobius baloghi* Loksa. The animals migrated during the year among the tree trunks and other dry areas according to the water level. Both diversity and abundance were higher on the trunks than in samples between the trunks.