

DIVERSITY AND DISTRIBUTION OF THE EDAPHIC MITES (*ACARI: GAMASINA, ORIBATIDA*) IN SOME FOREST PLANTATIONS FROM THE CENTRAL MOLDAVIAN PLATEAU

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Abstract

This study is devoted to the knowledge of two representative groups of edaphic microarthropods from the organic horizon of some forest plantations placed in the Central Moldavian Plateau. Examination of faunistic material sampled from forest plantations resulted in identification of 21 species, 12 genera and 9 families belonging to the suborder *Gamasina* Leach, 1815, and 59 species, 41 genera and 28 families of the order *Oribatida* Dugès, 1834. There were recorded two new species for Romanian fauna: *Hypoaspis heselhausi* Oudemans, 1912 and *Oribatella (O.) similesuperbula* Weigmann, 2001, beside a number of rare, less cited species. Oribatid mites are the dominant group in all analyzed stands, especially in terms of abundance, a situation often encountered in natural forest ecosystems. Concerning the autecological features the analyzed fauna get together in close proportions grassland and euryplastic species, while the preferential sylvicolous species are less represented. In mixed plantations with an age over 10 years, mites' fauna is more diversified and the average abundance is higher than in very young ones. Comparative analysis of communities' structure revealed that anthropogenic pressure and any limiting factors from some stands (most forest plantations were established on degraded lands) are reflected at the edaphic coenosis level by reducing the global abundance and number of species, with consequences to stability and functionality of the ecosystem as a whole.

Key words: mites, *Gamasina*, *Oribatida*, plantations, diversity