Researches on the edaphic mesofauna from some grassland ecosystems from the inferior section of Prut riverside (Romania)

Adina CĂLUGĂR - Institute of Biological Researches Iaşi

In the present study are pursued some quantitative and qualitative aspects of the edaphic mesofauna in a series of grassland ecosystems and agro-ecosystems of the Prut inferior riverside in order to highlight how the habitat transformations as a result of human actions are reflected on the communities. Inventory and analysis was done in the case of mites (Gamasida, Oribatida, Actinedida, Acaridida), insects (order Collembola and other insects) and other groups of microartropodes (pseudoscorpiones, myriapods, etc.). Our analysis showed higher densities of microarthropods in grasslands, comparatively with agricultural crops. The most populated grasslands are those located in the flood zone. Between the annual crops, soil cultivated with wheat provides the most favourable conditions for the development of the edaphic microarthropods. The results showed also an abnormally weak population of the lucerne culture. It was established that the qualitative and quantitative features of the edaphic microarthropods communities depends on biopedoclimatic stationary conditions, particularly on humidity factor. The climatic factors from the period before sampling, particularly rainfall affect the communities' features. The results of these researches were compared with the data obtained previously in similar type of ecosystems in North-Eastern Romania.