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BIODIVERSITY AND SPATIAL STRUCTURE OF EPIGEIC GROUPS IN AGROECOSYSTEMS

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Abstract: *The aim of the work was to evaluate the biodiversity of epigeic groups within a conventional management system in the Helianthus annuus crop during the 2022 growing season.*

• **Introduction**

Many authors believe that soil biodiversity is a key resource for ecosystem functioning. Biodiversity loss is currently a global problem, as the reduction of soil biodiversity negatively affects ecosystem performance

• **Material and method**

The method of ground traps was used to collect epigeic material (these are glass jars with a volume of 1 l, which are exposed at ground level and filled with 4% formaldehyde, while they are protected from above by a roof). The vegetation period of 2022 was monitored in the southwestern part of Slovakia.

• **Results and discussions**

The soil environment is the largest complex of biological communities. All present soil edaphic groups such as Coleoptera, Collembola, Acarina, Opilionida, Formicoidae, but also minorly represented in the form of Chilopoda, Diplopoda, Dermaptera, Lumbricidae and others, contribute to increasing the quality and fertility of the soil, while their great asset is adaptability to any changes in the environment.

• **Conclusions** In conclusion, it can be stated that agroecosystems as specific forms of ecosystems are largely influenced by human activities. Nevertheless, agroecosystems contribute to the protection and maintenance of the biological diversity of the landscape.

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