

VÝSKYT ZÁKLADNÝCH EPIGEICKÝCH SKUPÍN V ZÁVISLOSTI OD MNOŽSTVA ORGANICKEJ HMOTY

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ABSTRACT

Petřvalský V. a kol. **Occurrence of Elementary Epigeic Groups in Dependence on The Organic Matter**

The aim of the research was to discover the dependency by the incidence of basic epigeic groups at the same time individual species on lashings input of organics substances to soil. Gathering of epigeic-biological material was realized on the Koliňany locality during the years from 2001 to 2003. Modelling territory is situated not far off Nitra city (south-western part of the Slovak Republic) in altitude 175–180 m in warm (mean annual temperature 9.7 °C) and very dry climatic region (annual precipitation 631 mm). The locality have been categorised into the agroecosystems over land to occur – consist of sand-clayey bottom – brownsoil.

Gathering of epigeic material was realized in the years from 2001 to 2003 during of growing season (from April to October) in monthly intervals. In the modelling territory about distance of 9000 m² was following carried five treatments of fertilizers (everyone with surface area by particular treatments 1800 m²):

- A – variant – nonmanure control,
- B – variant – 25 T farmyard manure.ha⁻¹,
- C – variant – 50 T biosludge.ha⁻¹,
- D – variant – 50 T farmyard manure.ha⁻¹,
- E – variant – 100 T biosludge.ha⁻¹.

On the everyone variants was ostensibled generally 4 soil's traps. Biological materials we were evaluated by dominant's abundance of fundamentally epigeic groups and designated of individual family *Coleoptera* order (beetles). We were generally caught 59 046 exemplars of soil edaphon. Dominant abundance was account *Coleoptera* order (beetles). These determinant rates show on the respectable homeostatic conditions of specific environment, where supplied energetic inputs have been favourable influences on the occurrence of environment bioindicators, which was observed.

Key words: *Coleoptera*, bioindicator, environment, biosludge, farmyard manure