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USE OF CAPSULAR MINERAL FERTILIZERS FOR THE REDUCTION OF ANTROPOGENIC PRESSURE ON GROUND MICROFLORA

The results of the study of the influence of various types of mineral fertilizers on the soil microflora are presented. The research was carried out in two systems of research: "soil – fertilizer", where we isolated the weather factors of influence on microorganisms, and "soil – plant – fertilizer". The research was conducted on the 3 most current of the soil types in the Lviv region: dark-gray podzolic, light-gray forest and sod-podzolic. The influence of different types of newly created capsulated fertilizers (KD № 1, KD № 2, KD № 3) in comparison with the usual granulated (GD) on the change of the quantity of the total and nitrogen-fixing microflora of the soil during application of significant amount of nutrients has been determined.

The obtained results in the system "soil - fertilizer" testify to the positive influence of fertilizers on the microbiological activity of soils. The best of these conditions was capsular fertilizer number 2, which released the nourishment elements stable and did not cause abrupt changes in the number of microorganisms.

The results of our study performed in system soil – fertilizer – plant, indicate that at the initial stage of the study in all variants was decreased in the total number of soil microflora, only in the variant with capsular fertilizer number 3 their number increased from 3×10^8 to 7×10^8 KUO/1 g of soil.

Thus, the increased application rate of capsulated fertilizer that was 1000 kg/ha do not harm the general and nitrogen-fixing soil microflora and positively affected on the number of microorganisms in separate variants. In particular variant with capsulated fertilizer № 2, in which was established the greater impact on change of the total quntity of soil microflora studied in two systems. In the best conditions for the development of nitrogen-fixing soil microflora in two systems research were established in variant with capsulated fertilizer № 3.