# INFLUENTA FERTILIZARII CU UNELE PRODUSE NECONVENTIONALE ASUPRA ACTIVITATII BIOLOGICE A SOLURILOR CULTIVATE CU PAJISTI PERMANENTE
# INFLUENCE OF FERTILIZATION WITH UNCONVENTIONAL PRODUCTS ON BIOLOGICAL ACTIVITY ON SOILS CULTIVATED WITH PERMANENT GRASSLAND

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The actual orientation towards new protection measures for the agricultural systems requires, among other, the utilization of some unconventional elements in the agricultural technologies.
From all these, the by-product Vinasse, resulted in the yeast obtaining technology process, can be a good fertilizer for agricultural crops and a factor for maintaining the balance between the microorganisms populations from the soil.
The paper presents the results obtained from an experiment placed on a permanent pastureland from the zone of Buza u department. We observed the influence of Vinasse applications on the activity from the variants, which were treated with organic, chemical or combined fertilizers.
There were determined the main groups of microorganisms from the soil (G+ bacteria, G- bacteria, fungi, and nitrogen fixing microorganisms), establishing their participation ratio, the main fungus genres which activate in soil and their activity level for each variant.
The results underline a different microbiological activity and a various spectrum of micromycetes, caused by a different fertilization.
Regarding the influence of the Vinasse fertilization, we observed that the number of the microorganisms from the variants fertilized with organic, chemical or combined fertilizers, without registering negative effects of this product.
The structure of the recorded micromycetes is similar to the spectrum of the variants fertilized with manure and superior, as genres number, to the variants fertilized with mineral products.
In what regards the nitrogen-fixing bacteria, they were also recorded in the variants treated with Vinasse and this underlines the fact that the product does not affect the nitrogen fixation by the microorganisms.
These results obtained from testing the by-product Vinasse as fertilizer allows the replacement of the mineral fertilizers used on the pasturelands, with this product, which offers multiple advantages from the economical and the environment's protection point of view.