

Influence of anthropogenic and natural factors on the enzymatic activity of soils pistachio and walnut forests of Kyrgyzstan

Z. I. Sakbaeva^{1*}, Zh. T. Pirmatova², M. J. Asanova³, Zh. A. Abdykalykov¹

¹*Department of Natural and Scientific Education, Jalal-Abad State University named B. Osmonov, Jalal-Abad, Kyrgyzstan*

²*Zh. T. Pirmatova - International University named after K.Sh. Toktomamatov, Jalal-Abad, Kyrgyzstan*

³*M. J. Asanova - Economics and Law college of Jalal-Abad State University named after B. Osmonov, Jalal-Abad, Kyrgyzstan*

**Email: sakbaevazulfia11@rambler.ru*

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ABSTRACT

The article presents the results of a study of the influence of anthropogenic and natural factors on the enzymatic activity of soils pistachio and walnut forests. The situation of production and immobilization of the enzymatic pool of microbiological activity of soils under various conditions of economic use of typical sierozem soils of the Fergana Range and the valley of the same name is a genetic diagnostic indicator of fertility and is used in planning agrotechnological measures to increase soil fertility. Among the soils studied, the enzymatic activity of mountain-forest black-brown soils is very high. This is related to the soil organic matter content because forest litter plays a key role as a precursor for the synthesis and stabilization of enzymes. The enzyme activity indicators presented in the article can be used as diagnostic indicators of soil fertility in this territory.

Key words: walnut-fruit forest, pistachio forest, sierozem soils, mountain-forest black-brown soils, humus, enzymes