

**EFFECT OF INCREASING RATES OF DOLOMITE SCREENINGS LARGE FRACTIONS ON THE TOTAL CONTENT AND DISSOLUBLE FORMS OF HUMUS OF RECLAIMED LIGHT LOAMY UMBRIC ALBELUVISOL**

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In the microfield experiment, laid on the field of the Menkovo branch of the Agrophysical Institute, the changes in the total content of humus and water-soluble organic substances (WWS) in soil have been tracked. The soil has been limed with increasing rates of dolomite screening fractions 5–7 and 7–10 mm in size. For 3 years of experiment, in all treatments a decrease of the total humus content has been revealed. The losses ranged from 6.3 to 9.8% of initial values. The content of water-soluble organic substances extracted with distilled water at  $t=200^{\circ}\text{C}$  from the soil with different treatments at different sampling dates was small and did not exceed  $25,5 \text{ mg } 100 \text{ g}^{-1}$  of soil. The concentration of water-soluble organic substances extracted with water by boiling in the treatments with dolomite was higher than in the control. It had a positive impact both on the number and the functional activity of microbiocenoses. The organic matter of soil limed with 7–10 mm dolomite particles in the rate of 5 Hy had the highest compliance to leaching. The value of the index  $E_c^{\text{mg/ml}}$  of percolating moisture depended on the treatment and the length of leaching. Optically dense organic matter was the most compliant to leaching. It was present mainly in the water of the first irrigation. More optically dense organic matter was present in the second and third portions of the eluates. The value of  $E_c^{\text{mg/ml}}$  in the water after harvesting mustard was higher than after harvesting peas, regardless of the leaching period. In the most of the studied solutions, the optical density values were within the range of values typical for fulvic acids.

**Key words:** chemical melioration of soils, gravel and crushed rock production, humus, water-soluble organic matter, migration.