

**DYNAMICS OF THE ACIDITY OF SOD-PODZOLIC SOIL DEPENDING ON THE LIME
AMELIORANT DOSE**

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The influence of doses of dolomite flour (DM) increasing in the range of 0–1,5 of hydrolytic acid on the dynamics of pH_{KCl} and hydrolytic acidity of sod-podzolic light loamy soil has studied in a microfield experiment for six years. A close correlation between the reaction of the soil and the dose of lime ameliorant was traced throughout the observation period. In the control variant (without ameliorant), in the period from 0 to 2191 days after the start of the experiment, the soil pH_{KCl} decreased linearly from 4,65 to 4,20 ($r = -0,839$) at a rate of $1,44 \cdot 10^{-4}$ pH units per day. The character of the dependence of the soil pH_{KCl} on the time of the ameliorant interaction with the soil changed significantly in the range of DF doses of 0,2–1,5 of hydrolytic acid. Six years after the application of DF, the need for liming according to the variants of the experiment was characterized as follows: strong – variants 1–2; medium – variants 3–6; weak – variants 7–9; very weak – variant 10. A close correlation between the dose of dolomite flour and the hydrolytic acidity of the soil was observed in the range of DM doses of 0–1,5 of hydrolytic acid throughout the entire observation period: the correlation coefficients were $-0,935$ and $-0,955$ on the 841st and 2191st days, respectively.

Keywords: sod-podzolic soil, liming, dolomite flour, ameliorant dose, soil reaction, soil acidity dynamics.