

EFFECTS OF ACID PRECIPITATION ON ALFISOLS OF THE EAST EUROPEAN RUSSIAN TAIGA

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ABSTRACT

Water suspensions from the O, E and Bt horizons of Alfisols of the European Russian northeast were titrated with acid and the composition of both liquid and solid phases was monitored in the course of a model experiment. Modelled acid influence on organic horizons was equivalent to that experienced by the soils subjected to anthropogenic acidification. An increase in acidity, a decrease in nutrient contents, and Al and Mn immobilization were registered. Such changes in soil properties may cause soil malfunctioning, disturbance and destruction.

Key words: Alfisols, effect of acid precipitation, continuous potentiometric titration.