

## MOBILITY OF FLUORINE UNDER AMELIORATION OF ACID SOILS WITH FLUORINE-CONTAINING WASTE INDUSTRY

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Migration of fluorine in the sod-podzolic soil without liming and with the use of a fluorine-containing ameliorant was studied in the laboratory experiment on funnels. It was found that repeated washing of the soil, regardless of the treatment of the experiment, resulted in the removal of some part of the water-soluble fluorine from the soil, which was 0.6 mg. Soil enrichment with fluorine as a result of fluorine-containing ameliorant application increased migration losses. Total losses increased to 0.8 mg. With the increase of the irrigation water volume, the concentration of fluorine in a separate portion of the filtrate was increasing. Regardless of the treatment of the experiment, a statistically significant increase of the studied indicator for the entire period of study was established. In the treatment without liming the average rate of fluorine concentration change in a single portion of the filtrate was 0,018 mg l<sup>-1</sup>. In the treatment with the ameliorant it was 0,023 mg l<sup>-1</sup>. In any portion of the filtrate the permissible concentration set for drinking water was not exceeded. Developed empirical model was adequately describing the processes of fluorine migration with the irrigation water through the soil.

**Key words:** fluorine, migration mobility, soil, irrigation, fluorine-containing ameliorant.

