

LOMONOSOV MOSCOW STATE UNIVERSITY
SOIL SCIENCE FACULTY

Tolpeshta I. I.

ALUMINUM COMPOUNDS IN SOILS

Manual

Recommended by the Educational-methodical commission
of the Faculty of Soil Science, Lomonosov Moscow State University
as a manual for students training
in the program track 06.04.02 - «Soil Science»



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The manual presents general information on the chemistry, pedomorphology, and geochemistry of aluminum, considers the main groups of aluminum compounds in the soil solid phase and the soil solution, as well as processes with the participation of mobile aluminum in the soils of humid extratropical regions.

Special attention is given to the toxic properties of aluminum compounds, as well as toxic effects and parameters for the estimation of the toxicity of aluminum compounds. Methods for the determination of toxic aluminum compounds in soil solutions and surface waters.

The manual can be used for the courses of lectures in Soil Science, Soil Chemistry, and Ecology.

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Содержание

Overview of aluminum biogeochemistry	5
Chapter 1. Aluminum compounds in the soil solid phase and methods of their determination	7
1.1. Aluminum compounds in the soil solid phase.....	7
1.2. Methods of determining aluminum compounds in soils (potentials and limitations).....	10
Chapter 2. Aluminum compounds in soil solution and methods of their determination	16
2.1. Classification principles of aluminum compounds in the solution.....	16
2.2. Inorganic aluminum compounds in the solution.....	17
2.2.1. Monomeric aluminum aqua hydroxo complexes.....	17
2.2.2. Polymeric aluminum aqua hydroxo complexes.....	18
2.2.3. Aluminum complexes with phosphates, sulfates, and fluorides.....	24
2.3. Aluminum—organic compounds in the solution.....	26
2.3.1. Aluminum complexes with anions of low-molecular-weight organic acids.....	28
2.3.2. Aluminum complexes with humic and fulvic acids.....	34
2.4. Principles of methods for determining aluminum compounds in solution.....	41

