Geoecological Condition of the Soil Cover of the Volga-Don Interfluve Agrolandscape

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Abstract: The assessment of the state of the soil cover of the Volga-Don interfluve agrolandscape using the example of the experimental farm "Oroshayemoye" (Volgograd region) is presented. Agrolandscape is a territory whose well-being depends on rational human activities. According to geomorphological indicators, this territory is distinguished by a complex relief with developed water erosion of soils. The study was conducted on the following components: the presence of heavy metals, soil moisture, elements of mineral nutrition in soil extracts. To check the deviations of the indicators from the optimal, conventional methods and indicators of the maximum permissible concentrations of the corresponding elements to their background content were used. Based on the results of annual analyzes of soil and environmental components, one can trace the dynamics of their changes and the degree of balance of indicators and, based on the data obtained, develop a methodology for agrotechnical measures for the conservation and improvement of soils. The applied methods and techniques should be based on scientific grounds and combined with reasonable and operational management.