MONITORING THE COMPOSITION OF ATMOSPHERIC AND SOIL WATERS IN FOREST ECOSYSTEMS: ACHIEVEMENTS AND PERSPECTIVES

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The article gives an overview of Russian and foreign studies devoted to the composition of atmospheric deposition and soil waters in forest ecosystems. It is concluded that insufficient attention is paid to the transformation of the chemical composition of precipitation by forest ecosystems, taking into account the influence of the species composition of the stand and the mosaic structure of the biogeocenosis (under-crown, inter-crown spaces, open areas). In European studies, the composition of atmospheric deposition and lysimetric waters is usually studied over many years allowing detection of long-term trends in changes in the composition of atmospheric and soil waters and identification of the factors of these changes. Such long-term (over 10 years) constant observations on the influence of technogenic pollution on the composition and properties of atmospheric and soil waters were not carried out in any Russian publications. This task is very relevant for Russia and especially for industrially developed regions.

Key words: forest biogeocenoses, air pollution, atmospheric deposition, soil water, monitoring, long-term dynamics, critical loads.

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