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INFLUENCE OF AIR POLLUTION ON FOREST ECOSYSTEMS: ECOLOGICAL IMPACT OF HEAVY METALS

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Abstract

In the last decades, there were carried out numerous studies to determine the causes of forest decline phenomenon, the factors which determined it and the mechanisms of action. One of the factors considered responsible for the current state of health of forests is air pollution. Another potential factor is the soil acidification stress. Air pollutants (gases, acid rain) increase soil acidification and contribute to increase the solubility of many heavy metals. In this regard, the question arises if heavy metals are stressful factors to trees. Growth of roots, water and nutrients absorption processes are influenced by toxics presence and if any change of heavy metals as stressful factor of forest ecosystems within these processes is well studied then the soil quality evolution and processes are well known. Heavy metal pollution of forest ecosystems is an important aspect of pollutants input, especially in areas near emission sources. In this context this article aims to present the impact of air pollution on forest ecosystems from Vaslui County, and to assess the environmental impact the conventional methods are applied.

Key words: forest ecosystems, environmental impact, heavy metals, pollution

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