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## **SIMULATED IMPACT OF ACID RAIN ON ORGANIC MATTER, PHOSPHORUS AND OTHER SOIL COMPONENTS**

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### **Abstract**

*Acid rain* is a general term used to describe acid depositions, *i.e.* rain, fog and snow (known as *wet deposition*), as well as acid gases and particles (known as *dry deposition*). Acid rain is of particular environmental concern in Romania, as many soils have lately become acidic, causing serious damages to plants, animals and human beings. The purpose of this study is to evaluate by simulation the impact of acid rain on a podzol sample taken from the Retezat National Park, a Romanian protected area situated in Hunedoara County. Laboratory experiments were performed by leaching soil columns with simulated acid rain (prepared in volumetric flasks) at different pH levels, and then soil cation concentration was characterized at all these pH levels. The results suggest that acid rain generates serious problems for the agricultural and environmental management.

*Key words:* acid rain, atomic adsorption spectrophotometry, cations, pH, soil

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