

## **THE INFLUENCE OF CERTAIN HEAVY METALS ON SEEDS GERMINATION OF *AGERATUM HOUSTONIANUM* MILL.**

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### **Abstract**

The paper presents the results of a study regarding the influence of treatment with lead nitrate and zinc sulfate on the seeds germination of *Ageratum houstonianum*. We analyzed the following indicators: the percentage of germinated seeds in different intervals (24 - 96 hours); the length of root and hypocotyl (at 96 hours). The results underline the specific variations of the analysed indicators, depending on the nature of metals and their concentrations used for the seed treatments. The treatments with lead nitrate (with concentration of 100mg/l; 300 mg/l and 500 mg/l) and zinc sulfate (with concentration of 400mg/l; 600mg/l și 800 mg/l) delay the seeds germination and the growth of the root and hypocotyl. After 96 hours the beginning of the experiment, the percentage of germinated seeds has value between 82 % and 75,33 %, in the case of lead treatment and between 80,66 % and 66 %, in the case of zinc treatment. In the control variants, the percentage of germinated seeds has a value of 86,66 %. The delay effect on the hypocotyl and root length growth is very pronounced in the case of variant treated with high lead nitrate and zinc sulphate concentrations.

**Key words:** lead, zinc, germination, *Ageratum houstonianum*

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