PHYTOREMEDIATION ABILITY OF *Brassica chinensis* (BRASSICACEAE) TO LEAD-NITRATE TREATED SOIL

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ABSTRACT

Phytoremediation is the ability of plants to accumulate heavy metals. Plants species like *Brassica chinensis,* a member of Brassicaceae, is a good phytoremediant because it has a good ability to accumulate heavy metals like lead. Lead-nitrate is highly toxic and carcinogenic when exposed to organisms like humans and plants.

Test organisms were exposed to different concentrations of lead nitrate namely, T_0=untreated, T_1=25mg/kg, T_2=50mg/kg and T_3=75mg/kg with three replicates each. At each lead nitrate concentration, plants were grown in soil to know if the plants will accumulate the lead. One-way ANOVA is the statistical tool used to determine the effects of lead to the plants. Results showed that the growth of the plants varies as the concentration is increased. In addition, biomass was determined in order to know if plants accumulated lead concentration. Results proved that as the concentrations increases,the height of the plants decreases. Atomic absorption Spectrometry was used to determine the lead concentration absorbed by the plant. Bioconcentration factor was also determined and this proved that plants were able to accumulate the lead present in soil. This is the other way to compare the phytoremediation ability of *B. chinensis.*

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