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EFFECT OF MOLYBDENUM TRATMENTS ON GROWTH AND MOLYBDENUM UPTAKE OF GREEN PEA

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Abstract. *The main aim of the present study was to examine whether increasing molybdenum (Mo) concentration affects on the growth and Mo uptake of green pea plants (Pisum sativum* L.*) in pot experiment. In addition it was determined how much percent of the soil's total Mo content can be utilized for plants (soluble element content). In this experiment three types of soil were applied (calcareous chernozem soil, carbonate humus sandy soil, humus sandy soil) and Mo was used in form od sodium molybdate dissolved in distilled water.*

In this study we have found that there is a close connection between the acidity of different types of soil and the Lakanen-Erviö's soluble Mo concentration. According to our results 30 mg kg^{-1} Mo treatment affected positively on growth of plants in case of calcareous chernozem and acidic humus sandy soil however, in the case of carbonate humus sandy soil this Mo-treatment caused significant reduction in plant growth. Furtheremore we observed, molybdenum concentration in green peas were significantly elevated with increasing the concentration of Mo treatment in comparison with control.

Keywords: molybdenum, green pea, soil, dry weight

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