

Abstract: Because of the effect of heavy elements on food chain and health kinds, to study the effect of these elements, especially cadmium in soil, water and plant is very important. For searching the effect of salinity, nitrogen and zinc on cadmium Phytoremediation by zagross wheat a greenhouse study in a completely factorial design with three replications had been done. Treatment sampels consist of tow salinity levels (0, 4 mg.kg⁻¹), three zinc levels (0, 10, 20 mg.kg⁻¹), three nitrogen levels (0, 75, 150 kg.ha⁻¹)and three cadmium levels (0, 25, 50 mg.kg⁻¹). Firstly, tow kilogram pots pulled with farm soil, then zagross wheat seeds cultivated in. After forty five days aerial organ, roots and pot soils seprately packed and send to lebaratory. All experimented based on water and soil organ0ization standards. Facts had been analized by MSTATC software. Analizing reasults variance showed salinity goes to a meaningful reduction of seeds growth, plant height, stem diameter, wet and dry aerial and a meaningful increasing wet and dry roots, concentration of Cd and absorption in the aerial organs. Reasults showed N and Zn decreas seed growth and increasing plant, height stem diameter, aerial organs and roots, concentration of Cd. Cadmium decreased seed growth, plant height, steam diameter, aerial organ and roots, dry and wet weight and increasing concentration Cd in aerial organ and roots. In general the aim of this study was due to cadmium phytoremediation by zagross wheat because of its heigh uptake, enviromental tolorange and its usable straw in heavy comperesed and covered woods like NEOPAN and PVC industry. For a better understanding of heavy elemnts behaviuor in soil and food chain, futher researches could be useful in polluted field conditions and is heighly recomanded.

Keyword: contamination, contaminants, concentration, yield



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**The Effect of Nitrogen, Salinity and Zinc
on Cadmium Phytoremediation by
Zagross Wheat (*Triticum Sativum*)**

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