Effect of Cadmium and Zinc on Growing Barley

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ABSTRACT

The accumulation of metals, in particular of metals known as heavy in the plants poses problem. However, so with the state of traces, these metals are essential to the life, they can with stronger concentrations appear toxic. So to limit the risks, we have to study the effects of these pollutants on the living organisms. Among the techniques of phytorehabilitation, we find the phytoextraction. So, we are interested in the phytoextraction in the barley (Hordium vulgare) of a soil contaminated artificially by zinc and cadmium and the influence of these metals presence on the barley growth. The results show that the barley is tolerant in the zinc and the cadmium; it presents no sign of stress after 4 weeks of culture in soil contaminated by these metals. The accumulated zinc arrests at the level of roots and it is not transferred towards the air parts. On the other hand, the barley accumulates more cadmium compared to zinc.

Cadmium, Zinc, Plants, Barley, Phytoextraction