

New Agriculturist, 22(1) : 63—67, 2011

## **Effect of zinc on the uptake of cadmium in lettuce**

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Received December 12, 2010 and Accepted March 22, 2011

**ABSTRACT:** A pot experiment was arranged to study the effect of Zinc on the uptake of cadmium in lettuce. The soil used was alluvial collected from experimental farm of Sheila Dhar Institute of Soil Science. (Texture: Silty clay loam, Clay: 36.4%, CEC: 20.7 Cmol (p<sup>+</sup>)/kg, Organic C:0.50% and DTPA-Cd 0.36 ppm. Initial pH the soil was 7.6 which increased to 7.8 after irrigation. Plastic pot (each containing 5 kg of soil) were used. Lettuce was grown as test crop. Zinc was applied as ZnSO<sub>4</sub> to provide Zn at the rate of 0, 40, 60 and 80 mg/kg. Cadmium was as CdCO<sub>3</sub> at the rate of 0, 5, 10 and 15 mg/kg soil with three replication of each treatment. A lesser absorption from plant treated with Cd x Zn clearly indicates that there is a competition between Cd and Zn as the absorption of Cd is reduced in presence of Zn. Such antagonism can also be predicted from their ionic size and similar valency.

**Key Words:** Cadmium, zinc, interaction, accumulation, lettuce.