

## **B-62: Zinc adsorption by upcountry ultisols of Sri Lanka**

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Zinc adsorption characteristics of 2 upcountry vegetable growing soils were investigated. Soil samples were collected from fallow and cultivated fields.

In a laboratory experiment, zinc adsorption was studied after equilibrating soil samples in different concentrations of zinc solutions. The zinc adsorption data were fitted to the Langmuir and Freundlich models.

Irrespective to the fallow and cultivated, both soils were best fitted to the Freundlich isotherm. However, the adsorption data did not follow Langmuir isotherm. Generally, low adsorption of zinc was observed in all soils. However, at low concentrations of zinc, Bandarawela soils showed relatively high adsorption compared with Sita Eliya soils. At higher concentrations of zinc, the adsorption of zinc was high in organic matter rich Sita Eliya soils.