

Uptake and transport of Cadmium in soybean plants

(1) The relationship between Cd and elemental concentrations in roots

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Abstract

A pot (1/5,000a) soil experiment with soybean plant (*Glycine max*) was performed. Soybean plants were sampled at the full maturity (R8) growth stage, and concentration of Cd in each part was determined by ICP-MS. The concentrations of some other elements in roots were determined by PIXE.

The addition of rice stubble (40g pot⁻¹) resulted in the increase in the concentrations of Na, Mg, Si, S and Ca, and the decrease in the concentrations of Mn, Fe and Cd in soybean roots. The concentrations of Al, P, K, Cu and Sr did not affected by the rice stubble.