

Uptake and transport of Cadmium in soybean plants

(3) The relationship between Cd and elemental concentrations in leaves

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Abstract

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

The analysis result of 82 elements from Na to U by PIXE, Mg, Si, P, S, Cl, K, Ca, Mn, Fe, Cu, Zn, Br, Sr were determined. The concentrations of these elements in soybean leaves did not affected by the addition of rice stubble (40 g pot⁻¹). The addition of rice stubble resulted in the specifically increase in the Cd concentrations in soybean leaves.