

Effects on the metal-contaminated soils on the accumulation of heavy metals in the different parts of centella asiatica: A laboratory study.

Abstract

Centella asiatica is widely used as a medicinal plant in Malaysia and other parts of the world. In the present study, the growth and uptake of heavy metal by *C. asiatica* were determined based on the plant exposure to different treatment of metal-contaminated soils under laboratory conditions. Heavy metals uptake in different parts of the plants namely roots, stems and leaves were determined. In general, it was found that the metal uptake capacity followed the order: roots > stems > leaves. Since a close positive relationship was established between the concentrations of metal accumulated in different parts of the plant and the metal levels in the most contaminated soil, *C. asiatica* has the potential of being used as a biomonitoring plant for heavy metal pollution in the polluted soils.

Keyword: Centella asiatica; Laboratory study; Metal-contaminated soils.