

## عنوان مقاله:

Effect of compost and humic acid in mobility and concentration of cadmium and chromium in soil and plant

## محل انتشار:

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## نویسندگان:

A Chaab - Department of Soil Science, College of Agriculture, Shahid Chamran University of Ahvaz, Ahvaz, Iran

A.A. Moezzi - Department of Soil Science, College of Agriculture, Shahid Chamran University of Ahvaz, Ahvaz, Iran

G.A. Sayyad - Department of Soil Science, College of Agriculture, Shahid Chamran University of Ahvaz, Ahvaz, Iran

M Chorom - Department of Soil Science, College of Agriculture, Shahid Chamran University of Ahvaz, Ahvaz, Iran

## خلاصه مقاله:

The effect of compost and humic acid in mobility and concentration of cadmium and chromium in contaminated soil were investigated. Experiment was carried out with three levels of soil cadmium and chromium and two organic matters (compost and humic acid). The study was performed in a randomized complete block design with 3 replicates. Results indicated that application of organic substances enhanced movement of cadmium and chromium in soil column. Humic acid is more effective than compost on the mobility of cadmium and chromium in soil. Mobility of cadmium and chromium in the lower depths of soil column were increased. Cadmium and chromium concentration in shoots and roots enhanced due to increasing those concentration in soil and application of organic substances. Increase in cadmium in shoots can be attributed to the high mobility of this element in maize plant. Maize root chromium concentration was greater than shoot chromium concentration. Humic acid was more effective than compost as cadmium and chromium concentration in root and shoot was concerned. Low mobility of chromium in plant and accumulation of chromium in roots can be reasons of decreasing of chromium concentration in shoot of plant and its bioaccumulation.

## کلمات کلیدی:

Cadmium; Chromium; Compost; Humic acid; Mobility

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/589300>

