

About cadmium and zinc extraction from contaminated soils using EDTA

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Abstract New results concerning Cd and Zn extraction from contaminated soils with disodium salt of EDTA are presented. The treatment was applied on three kinds of soil samples collected from different agricultural sites located in Romania, Constanta district. The efficiency of extraction was evaluated based on the reduction of metals in soil samples. In order to determine metal concentrations in soils the FAAS technique was used after the appropriate soil digestion with hydrogen peroxide and nitric acid. The obtained extraction efficiencies were for naturally occurring metals 8.9-27.7 % for cadmium and 20.4-37.3 for zinc, and for metal-amended soils 20.4-56.1% for cadmium 62.3-80.9% for zinc and on all types of studied soils.

Keywords: FAAS, zinc, cadmium, contaminated soils, wet digestion.
