Physiological responses of annual halophyte *Kochia scoparia* to Cd and Na in present of EDTA and Mg

Ali masoumi
faculty member, Faculty of Agriculture, Payame Noor University

Abstract
Heavy metals are omnipresent environmental contaminants in industrialized societies. This experiment carried out in Greenhouse and laboratory of Physiology Group, University of Louvain-La-Neuve, Belgium in May ۲۰۱۰. Experiment was arranged based on a completely randomized design, with ٤ replications with ۲ sample and ۱۲ soil treatments, which included soil without another product (control) and soil mixed with EDTA, Mg, Na, EDTA & Na, Na & Mg, Na & Cd, Na & Cd & EDTA, Na & Cd & Mg, Cd, Cd & EDTA and Cd & Mg. some physiological and morphological parameter were assayed at the beginning of anthesis. Results showed that stress treatment caused a significant increase on proline, soluble sugar and Photosynthetic pigment compared with control conditions. It seems that these parameters may play a role in minimizing the damage caused by dehydration. According to the results, kochia could tolerate heavy metal but this plant wasn't Hyperaccumulator for Cd. Na and Cd treatment were increased some lateral effects rather than other treatments. EDTA treatment was increased the mobility of metal in this plant.
Key Word: kochia, heavy metal, Cd, photoremediation