

DETERMINATION OF PROLINE AND PROTEIN CONCENTRATION IN TWO CORNS (*ZEA MAYIS L*) CULTIVARS IN RESPONSE TO SALINITY

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Abstract

salinity stress is considered as global concern in agricultural development. In order to investigate the effect of salinity stress on proline and protein accumulation as two main herbal compatibility mechanisms recent experiment was performed on *Zeamays L.*, (Sc.704 and 604) in Greenhouse Agricultural Research Center located in Arsenjan city, Fars, Iran during summer 2013. Two corn cultivars were compared at 6 salinity levels [0 (control), 50, 100, 150, 200,250 mM] for their leaves proline and protein in a completely randomized design with 3 replications. In the following the accumulative contents of proline and protein were determined in plant leaves. At different growth developments a significant increase in the contents of protein and proline was observed. As a conclusion, accumulation of proline and proteins is considered as osmotic adjustment in response to salinity stress condition.

Keywords: Corn, proline, protein



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