

EFFECT OF FOLIAR APPLICATION BY ASCORBIC AND SALICYLIC ACIDS IN SOME PHYSIOLOGICAL AND BIOCHEMICAL ATTRIBUTES OF C₃ AND C₄ PLANTS UNDER SALT STRESS

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ABSTRACT

The experiment were conducted in fields of college of Agriculture_ University of Diyala during spring season 2013 to study the impact of exogenous application of ascorbic acid and salicylic acid at concentration 2 and 0.2 m respectively on sunflower (C₃) and maize (C₄) after exposure them to salt stress using the salt of NaCl were: control, 50 and 100 m respectively. The results of this experiment significantly reduced photosynthesis pigments (chlorophyll a and b), relative water content (RWC), membrane stability index (MSI), but total soluble sugars was increased with increasing salt stress. Foliar application of ascorbic acid and salicylic acid of C₃ and C₄ plants which grow under salt stress was improved photosynthesis pigments (chlorophyll a and b), total soluble sugars water content (RWC), membrane stability index (MSI) were increased with exogenous application of ascorbic acid and salicylic acid.

Key words: Ascorbic acid, Salicylic acid, Chlorophyll a, Chlorophyll b, Relative water content, Membrane stability index, Total soluble sugar.