

**EFFECT OF FOLIAR APPLICATION BY ASCORBIC AND SALICYLIC  
ACIDS IN ACTIVITY OF NON-ENZYMATIC ANTIOXIDANTS OF C<sub>3</sub> AND  
C<sub>4</sub> PLANTS UNDER SALT STRESS**

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**ABSTRACT**

The experiment was conducted in fields of college of Agriculture \_ University of Diyala during spring season 2013 to study the impact of exogenous application of ascorbic acid (AsA) and salicylic acid (SA) at concentration 2 and 0.2 mM respectively on sunflower (C<sub>3</sub>) and maize (C<sub>4</sub>) plants after exposure them to salt stress using the salt of NaCl were: control, 50 and 100 mM respectively. The results of this experiment were significantly increasing in content of total phenols and  $\alpha$ \_tocopherol, however the content of  $\beta$ \_carotene and H<sub>2</sub>O<sub>2</sub> were decreased under salt stress. Foliar application of AsA and SA on C<sub>3</sub> and C<sub>4</sub> plants which grow under salt stress induction the non-enzymatic system. The content of total phenols,  $\alpha$ \_tocopherol and  $\beta$ \_carotene increased with foliar application of ascorbic acid and salicylic acid, however the content of H<sub>2</sub>O<sub>2</sub> was decreased.