

**EFFECT OF SALINITY OF IRRIGATION WATER AND SPRAYING  
AMINO ACIDS (PROLINE, ARGININE) IN SOME QUALITIES  
VEGETATIVE GROWTH AND PLANT YIELD OF POTATO  
*Solanum. tuberosum* L.**

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**ABSTRACT**

The experiment in the field of Scholastic my family in the province of Diyala - Mandal conducted for the Fall 2012 season and which planted the potato *Solanum tuberosum* L. Cv. Riviera class Elite the aimed of this experiment to see study the effect of the type of irrigation water used and the amino acids added by spraying and interaction in recipes vegetative growth and yield traits of potato. Experiment has included the effect of three concentration of irrigation water salinity (1.6, 3.2 and 4.3) dS.m<sup>-1</sup> and irrigation was by drip irrigation method, and added amino acid Proline and Arginine, and in three concentration

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of 0, 200 and 250 ppm. The experiment carried out according to the design of a skateboard dissident Split Plot as represented salinity levels of irrigation water under the President the amino acids in the main concentrations below under three replicates has been tested differences between the averages by test LSD at the 5% level of probability. The results can be summarized as follows:.

1. Increased salinity of irrigation water from 1.6 to 4.3 dS.m<sup>-1</sup> to reduce the number of stems and total leaf area per plant and the total number of tubers per plant and holds.

2. Marked by spray treatment Proline concentration of 200ppm and interfere with irrigation water salinity 1.6dS.m<sup>-1</sup> to give the largest number of stems per plant and the highest area of paper and the number of tubers per plant holds compared to their treatments.

**Keywords:** potatoes, salt stress, amino acids