



INTRODUCTION

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Undoubtedly, salinity is one of the most serious and oldest environmental problems affecting approximately one third of earth's irrigation land. There are many factors affecting the salinity - yield relationship such as the physical and chemical conditions of the soil, climate and farming practices.

It is well known that plants absorb the constituents ions of a saline substrate in varying degrees, this may result in harmful accumulation of a particular ions or in decreasing the absorption of some essential nutrients beside the depressive effects on the activity of the endogenous growth hormones. **Hayward and Bernstein (1958) Sinel'nikova et at (1972), Makhija et at (1980).**

Also plant growth, yield and its composition .are negatively affected in saline soils through the presence of high concentrations of soluble sodium as well as certain soluble cations, which due to increasing soil osmotic pressure and limiting water and nutrient availability to plants **El-Gazzar et at (1979) and Sweidan et at (1982).**

The expansion agricultural lands need a great amounts of suitable irrigation water which already is not sufficient to meet all the expected demands in this respect. Adding to this, the limited amounts of water is an ever-growing crisis that may face us in Egypt in future, due to the natural aridity of the region, the increasing population and land reclamation projects which

represented a very important sector in the agricultural development programmes for increasing the cultivated area.

Moreover, kaki (*Diospyrud Kaki*) is botanically belonging to family Ebonaceae. It is a deciduous tree that growing well with good production under the native temperate and subtropical areas where soils are well drained with low salt concentration.

In addition, there is a lack of available information for fruit growers about the probability of commercial kaki production under conditions of new reclaimed lands particularly those irrigated with saline water.

Therefore, the present study was planned and carried out to investigate the influence of irrigation with prepared salinized water, at different concentrations of; SAR and Cl: SO₄ ratios on some vegetative growth measurements; leaf pigments content and mineral constituents of different plant organs of Trablos persimmon (*Diospyrus Lotus*) rootstock seedlings.