INTRODUCTION

INTRODUCTION

The figs $(Ficus\ carica)$, Rissc , is one of the deciduous fruit trees in this genus , which grow successfully in Egypt and their fruits are one of the major fruit for local consumption . More than 90 % of the total fig area is located along the Northern Western Coast of Alexandria .

Land reclamation projects in Egypt occupy a very important sector in the Agricultural development programmes. The existance of water available for irrigation is of great importance in this respect. As long as there is an obvious shortage in Nile water especially under the conditions of the new reclaimable areas , the projects of reclamation depend on another sources of water such as: Wells, sanitory drainage, diluted sea water... etc.

Generally , the problem of soil salinity and saline water used for irrigation is considered as a limiting factor for the success of such projects.

In addition, the physiological and chemical conditions of the soil, climate and farming practices are also reported as factors affecting the salinity — yield relationship. Plant growth is adversely affected in saline soils by the presence of high concentrations of soluble sodium as well as certain soluble cations, due to increase in osmotic pressure and reduction in water availability to plants. The effect of soluble sodium on plant growth varies with the plant species as well as with the mature of sodium salt(Richards , 1954).

Since the fig cultivar plantations may be located principally in the new reclaimed lands (arid and semi-arid zones) their will arise some problems connected with salinity of soil and or / the sources of irrigation.

Generally, the present investigation was designed to study the growth behaviour of two fig cultivars under different salinity levels and two levels of sodium adsorption ratio (S.A.R.) in water used for irrigation in order to get use of such characters in obtaining a fig cultivar relatively tolerant to salinity.

* * * * * * * * * * * * * * * * * *