

## I- INTRODUCTION

Land reclamation projects in Egypt occupy a very important sector in the agricultural development programmes for increasing the cultivated area. Beside, agricultural expansion needs a great amount of suitable irrigation water which already is not sufficient to meet all the expected demand 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 such as; wells, sanitary drainage, diluted sea water ... etc.

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

Many studies have been carried out on fruit trees other than mango and apricot and revealed that such fruit trees varied greatly in their tolerance to salinity. Such studies have pointed out that olive, guava and grapevines can tolerate salinity levels between 2000 and 8200 ppm, according to species and cultivars tested, Gorosko, (1969); Alexandrescu and Blamaru (1970); Taha (1972), Sourial *et al.* (1975). On the other hand, some investigators have reported that some fruit trees had no tolerance to the high salinity levels such as Hindy mango cultivar, El-Hefnawy (1978) on apricot seedlings.

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 nature of sodium salt (Richards, 1954).

There is a lack of available information for fruit growers about the probability of commercial mango and apricot production under conditions of new reclaimed lands particularly those irrigated with saline water. Therefore, the present investigation was planned to study the influence of irrigation with salinized water, prepared at different concentrations of salts and two levels of sodium adsorption ratio (SAR) with two levels of chloride (low and high) on growth and mineral content of mango and apricot seedlings.