INTRODUCTION

## INTRODUCTION

with essential oil-bearing plants in Egypt due to the increasing demand of these plants for exportation, pharmaceutical industry and local consumption. Cultivation of <u>Jasminum grandiflorum</u> and extraction of its concrete oil is well established in Egypt long ago. However, <u>Jasminum sambac</u> is not so widely spread or cultivated on large scale. It is still cultivated as an ornamental pot plant or in home gardens. Nevertheless, it could be cultivated on large scale for the production of concrete oil.

Jasminum sambac is one of the species of the genus Jasminum belonging to the Family Oleaceae. There are two strains; J\*sambac (single strain) and J.sambac (double strain). This explaining is due to Bailey (1947).

The flowers are characterized with their fine frangrance due to their content of the essential oil. The produced flowers as well as their concrete oil yield rank with those of  $\underline{J}$ . grandiflorum.

However, the difficulty of propagation of the plant by cuttings may be one of the limiting factors in (their production).

The first aim of this work concerned the effect of some growth substances on the rooting of the terminal cuttings from the two strains (single & double).

Also, studying the effects of some growth regulators, as well as the nitrogen fertilization on plant growth, flower yield and concrete oil yield of the single strain, was carried out. It is hoped that the results of this study may help in the establishment of the cultivation of this plant in Egypt as an additional source for the concrete oil production.