



بسم الله الرحمن الرحيم

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**STUDIES ON THE EFFECT OF SOME CITRUS
ROOTSTOCKS ON GROWTH AND PRODUCTIVITY
OF SOME MANDARINS CULTIVARS**

By

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Thesis

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1999

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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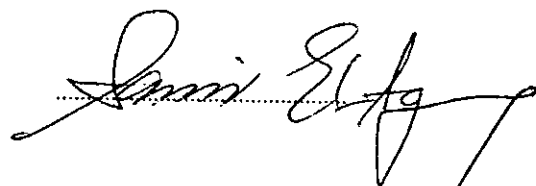
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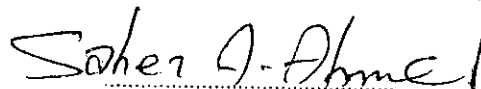
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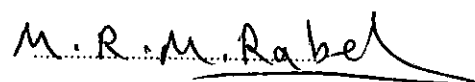
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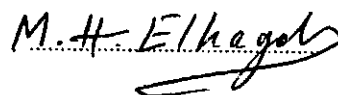
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1. INTRODUCTION

1. INTRODUCTION

Citrus is one of the most important yield in the world. World production of citrus fruits continues on up word trend. Total world citrus production in 1961 amounted to about 24 MMT (69% oranges, 11% lemon and lime and 9% grapefruit) and is profect in 1990 at about 71 MMT (69% oranges, 14% tangerines, 10% lemon and limes and 7% grapefruit). More than 125 countries and territories produce some type of citrus fruits, in 1983 was accounted for by the ten large products: Viz., United State (22.2%) Brazil (18.6%), Japan (6.6%), Spain (5.5%), Haly (4.8%), Mixico (4.0%), Argentina (2.8%), Israel (2.6%), Turkey (2.6%) and Egypt (1.8%) (Wardowski *et al.*, 1986).

In Egypt, the total area under citrus cultivation in 1997 was 340,429 Feddan amounted to about 2, 242, 520 tons, the average yield / feddan 7.2 ton. While, the total export tradition for the same year was about 181926 tons (MTI – ATUT, 1997).

In Behera Governorate, in 1997, total citrus area was 44, 217 feddan, yielded about 325, 749 ton, average yield/feddan was 7.44 ton.

It has been stated that fruit growing is essentially photosynthesis management. This management must recognize the importance of the trees's roots, particularly when a specific rootstock.

Kolesnikov (1971) stated that the root of fruit plants is as active as the leaves and that root system as a whole interacting with the above ground system, plays an important role in growth, development and