



بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
على هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الاصليّة تالفة

بالرسالة صفحات لم ترد بالاصل



ALEXANDRIA UNIVERSITY

Faculty of Agriculture

Saba Basha

Plant Production Dept.

**EFFECT OF NITROGEN FERTILIZER AND
SOME GROWTH REGULATORS ON THE YIELD
AND QUALITY OF SUGAR BEET**

A THESIS

**Presented to the Graduate School
Faculty of Agriculture (Saba Basha)
Alexandria University**

**Submitted on Partial Fulfillment of the Requirements
For The Degree of
Doctor of Philosophy in Agricultural Sciences
in
(AGRONOMY)**

BY

SHAHR-ZAD MOHAMED MORSHDY NEANA

1999

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DEDICATION
TO MY PARENTS,
HUSBAND, SONS,
DAUGHTER,
BROTHERS AND
SISTERS



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INTRODUCTION

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Sugar beet is a specialized type of *Beta vulgaris* L. beet grown for sugar production. About 45% of sugar in the world is normally produced from beet. Since about hundred years sugar beet has been cultivated in Europe, Russia, U.S.A and in some countries in Asia for sugar production. Recently, sugar beet has become an important source for sugar in Egypt.

In order to meet the increase in sugar consumption in Egypt, and the difficulty in extending area under sugar cane in southern part of the country, sugar beet has become the second important crop for sugar production; especially it can be grown in Northern part of the country in the newly cultivated area.

In Egypt, the cultivated area of sugar beet was increased from 38,000 fad. in 1992 season to 103,000 fad. in 1998 season, as well as the total production increased to 1,167 m. ton/sugar in 1998 season*.

The Egyptian Ministry of Agriculture exerting a tremendous efforts to increase the yield and quality of sugar beet plant through improving agricultural practices to face the increasing demand of sugar.

Nitrogen is the most important element of those supplied to sugar beet as fertilizers because few soils contain sufficient amount in an

* جمعية خبراء السكر المصرية - المؤتمر السنوى التاسع والعشرون (٢٤-٢٦ نوفمبر ١٩٩٨).