سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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سامية محمد مصطفى

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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بعض الوثائق الأصلية تالفة

سامية محمد مصطفى

شبكة المعلومات الجامعية

بالرسالة صفحات لم ترد بالأصل

Alexandria University
Faculty of Agriculture
Saba Basha
Plant Production Dept.

EFFECT OF DATES AND SOURCES OF NITROGEN FERTILIZATION ON YIELD AND QUALITY OF SUGARBEET UNDER SURFACE AND SPRAY IRRIGATION METHODS IN NEWLY RECLAIMED AREAS

A THESIS

Submitted on Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF PHILOSOPHY

IN

AGRICULTURAL SCIENCES

IN

AGRONOMY

BY

SAHAR FAYEZ TAWFIK

2000

ALEXANDRIA UNIVERSITY
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SAHAR FAYEZ TAWFIK

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Doctor of Philosophy in Agricultural Sciences
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(AGRONOMY)

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Contents

INTRODUCTION

1. INTRODUCTION

Sugarbeet (*Beta vulgaris*, L. var. Saccharifera) is an important sugar crop in many countries allover the world. Sugarbeet needs less water requirements and well-known to be adapted to poor saline, alkaline and calcareous soils. So, its future is realy promising in the newly reclaimed soils (as Al-Bustan and Western Nubariya).

Owing to the increasing gap between production and consumption of sugar in Egypt, there was a necessity to cultivate sugarbeet in a suitable area to increase sugar production which depended for many decades or even centuries only on sugarcane (*Saccharium officinarium*, L.). Sugarcane is a perennial sugar crop of highly requirements and needs extra fertile soils.

In Egypt, cultivated area of sugarbeet increased markedly during the last two decades. Such area reached 103 thousand feddans in 1998, with an increase of 86 thousand feddans than in 1982. This increase is due to cultivating sugarbeet in new reclaimed soils in five governorates, viz, Souhag, Qeena, El-Menia, El-Fayoum as well as El-Behera (especially desert area at Al-Bustan and Western Nubariya regions).

The climate in Egypt differs from one area to another, and according to the available meteorological data Egypt is divided into the following nine agroclimatic zones as distinguished by Rijtema and Abu-Khalid (1975):

1. Coastal area.
2. Central Delta area.