بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

EFFECT OF SOME TREATMENTS ON WEEDS AND YIELD OF SUGAR BEET UNDER KAFR EL-SHEIKH GOVERNORATE CONDITIONS

BY

ALY AHMED ALY SHALABY

B. Sc. Agric., (General) Menoufia University, 1977
High Diploma (Agronomy), Al-Azhar University, 1985
M. Sc. Agric., Al -Azhar University, 1993

THESIS

Submitted in Partial Fulfillment of the Requirements For the Degree

OF

DOCTOR OF PHILOSOPHY

IN

AGRICULTURAL SCIENCES
(Agronomy-Crop Production & Physiology)

Department of Agronomy
Faculty of Agriculture
Al-Azhar University

B ١٧٨٩

1422 A.H.
2001 A.D.

APPROVAL SHEET

NAME: ALY AHMED ALY SHALABY

TITLE: EFFECT OF SOME TREATMENTS ON WEEDS AND YIELD OF SUGAR BEET UNDER KAFR EL - SHEIKH GOVERNORATE CONDITIONS

THESIS

Submitted in Partial Fulfillment of the Requirements
For the Degree
OF
DOCTOR OF PHILOSOPHY
IN
AGRICULTURAL SCIENCES
(Agronomy- Crop Production & Physiology)

Department of Agronomy
Faculty of Agriculture
Al-Azhar University
1422 A..H.
2001 A..D.

APPROVED BY:

Prof. Dr. HASSAN AHMED RABIE ----------
Professor of Agronomy and Dean of Agriculture Faculty,
Zagazig University.

Prof. Dr. GAD ALLA ABD EL-MAKSOUD MORSHED
Professor of Crop Breeding, Faculty of Agriculture,
Al-Azhar University.

Prof. Dr. ABD EL-HAMID MOHAMED HASSANEIN
Professor of Crop Production & Physiology,
Faculty of Agriculture, Al-Azhar University

Prof. Dr. MOHAMED AL-ASMAR EL-HAWARY
Professor of Crop Production & Physiology,
Faculty of Agriculture, Al-Azhar University.

TITLE: EFFECT OF SOME TREATMENTS ON WEEDS AND YIELD OF SUGAR BEET UNDER KAFR EL - SHEIKH GOVERNORATE CONDITIONS

NAME: ALY AHMED ALY SHALABY

THESIS

Submitted in Partial Fulfillment of the Requirements
For the Degree
OF

DOCTOR OF PHILOSPHY

IN

AGRICULTURAL SCIENCES
(Agronomy- Crop Production & Physiology)

Department of Agronomy
Faculty of Agriculture
Al-Azhar University
1422 A..H.
2001 A..D.

Supervision committee:

Prof. Dr. ABD EL-HAMID MOHAMED HASSANEIN
Professor of Crop Production & Physiology.
Faculty of Agriculture, Al-Azhar University.

Prof. Dr. GAD ALLA ABD EL-MAKSOUD MORSHED
Professor of Crop Breeding, Faculty of Agriculture,
Al-Azhar University.

Prof. Dr.EL-HASSANEIN EL-SHERBINI HASSANEIN
Head of Weed Control Section, Field Crop Research Institute,
Agriculture Research Center.

ABSTRACT

Two field experiments were carried out during 1995/1996 and 1996/1997 winter seasons at Sakha Agriculture Research Station, Kafr EL-Sheikh Governorate, to study the effect of sowing dates and weed control treatments on weeds, growth, yield, yield components and juice quality of sugar beet (*Beta vulgaris saccharifera*).

The experimental design was split-plot with four replications. Three sowing dates (15 September, 15 October and 15 November) were arranged at random in the main plots, and 12 weed control treatments were randomly arranged in the sub plots. The main findings were as follow:

The earliest sowing through September is the optimum sugar beet sowing dates for sugar beet production under Kafr El-Sheikh Governorate conditions to avoid the unsuitable weather conditions (low air temperature in early growth stages and higher temperature at maturity stage) and great competition of total weeds, which increase with delaying sowig for one or two months after September and to achieve the highest sugar beet yield and quality as compared with October and November sowing dates.

The suitable weed control program to manage the changes in weed competitive ability particularly weed population and its growth rates relative to the crop due to these weather variations and consequently to achieve the highest sugar beet yield and quality are : Applying hand hoeing for three times at 20, 40 and 60 days after sowing (DAS), as long as weather is allow, labor is available and cost-effective. Or using Goltix 70 % WP at 2 kg/fed plus one hand hoeing at 60 DAS (particularly under heavy weed infestation or under sowing in late dates) followed by the

use of Pyradur 58.6 % WP at 3 kg/ feddan and Betanal progress 18 % EC at 2 L/fed in its combinations with one hand hoeing at 60 DAS. (paricularly under September or October sowing dates). These treatments were the best treatments for controlling most weeds, while the post-emergence application of Fusilade super 12.5 % EC at 2 L/fed alone or followed by one hoeing at 60 DAS were the best treatments against grassy weeds.

CONTENTS