



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية
@ ASUNET



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
علي 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 الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

INTEGRATED WEED MANAGEMENT IN PEANUT

By

HESHAM MOHAMED ALI EL-SAYED ELIAN

B.Sc.Co-operative Agric. Sci., High Inst. Agric. Co-operation, Cairo, 2000
High Diploma (Agronomy), Fac. Agric. Al-Azhar Univ., 2003.

عليان

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE

In

الزراعة

**Agricultural Sciences
(Agronomy)**

**Department of Agronomy
Faculty of Agriculture
Cairo University**

EGYPT

2011

عليان

APPROVL SHEET

INTEGRATED WEED MANAGEMENT
IN PEANUT

M.Sc. Thesis
In
Agric. Sci. (Agronomy)

By

HESHAM MOHAMED ALI EL-SAYED ELIAN
B.Sc.Co-operative Agric. Sci., High Inst. Agric. Co-operation, Cairo, 2000
High Diploma (Agronomy), Fac. Agric. Al-Azhar Univ., 2003.

APPROVAL COMMITTEE

Dr. Mohammed Shams Mekky *M.S. Mekky*.....
Head of Research of Weed, Agric. Res. Center, Giza.

Dr. Shaban Abd EL-Hady Mohamed Shaban..... *Shaban*
Professor of Agronomy, Fac. Agric., Cairo University

Dr. Nagah Mohamed Abu-Hagaza *N.M.A. Abu-Hagaza*.....
Professor of Agronomy, Fac. Agric., Cairo University

Dr. Mahmoud Hussein Farahat El-Deek *M.H. El-Deek*.....
Professor of Agronomy, Fac. Agric., Cairo University

Date: 13 / 12 /2011

SUPERVISION SHEET

**INTEGRATED WEED MANAGEMENT
IN PEANUT**

MASTER OF SCIENCE

In

**Agricultural Sciences
(Agronomy)**

By

HESHAM MOHAMED ALI EL-SAYED ELIAN

**B.Sc.Co-operative Agric. Sci., High Inst. Agric. Co-operation, Cairo, 2000
High Diploma (Agronomy), Fac. Agric. Al-Azhar Univ., 2003.**

SUPERVISION COMMITTEE

Dr.Mahmoud Hussein Farahat El-Deek

Professor of Agronomy, Fac. Agric., Cairo University

Dr. Nagah Mohamed Abu-Hagaza

Professor of Agronomy, Fac. Agric., Cairo University

Dr. Moawad Fadel-Allah Ibrahim

Head of Research of Weed, Agric. Res. Center, Giza.



Name of Candidate: Hesham Mohamed Ali El-Sayed Elian

Degree: M. Sc.

Title of Thesis : Integrated weed management in peanut

Supervisors : Dr. Mahmoud Hussein Faraht El-Deek

Dr. Nagah Mohamed Abu-Hagaza

Dr. Moawad Fadi-Allah Ibrahim

Department : Agronomy

Branch :

Approval: 13 / 12 / 2011

ABSTRACT

Two field experiments were carried out at El- Ismailia Agricultural Research Station, ARC, during 2007 and 2008 successive summer seasons to study the effect of the integration between hand hoeing and chemical weed control treatments on associated weeds, growth, yield and yield components, of peanut (*Arachis hypogaea* L) as well as some economic criteria. Treatments were arranged in split plot design with four replicates. Hand hoeing treatments were arranged in the main plots, while chemical weed control treatments were arranged in the sub plots. All herbicides treatments were sprayed with a knapsack sprayer (C P 3) at a volume rate of 200 l water/ fed. peanut cv. Giza 5 seeds (35 kg/fed.) were inoculated with the specific strain of *Bradyrhizobium* sp., then sown in rows (60 cm apart and 10 cm between hills). Sowing took place on the second week of April and harvest on the first week of October in both seasons. Plot area was 21m².

Results indicated that one or two hand hoeings were effective in reducing the dry weight of broad and narrow leaved weeds. One hand hoeing was sufficient for reducing the dry weight of total annual weeds. It was found that one hand hoeing was required for increasing the values of some peanut characters, while two hoeings were needed for increasing others. Peanut hoed once gave the highest and significant yield, while it produced the highest straw and seed yields when hoed twice. Oil percentage was not affected by hoeing. In general, clethodim followed by butralin recorded the highest pod and seed yields in both seasons. Clethodim application gave the highest value of seed yield of 813.10 and 755.90 kg/fed. compared to 154.3 and 373.53 kg/fed. for the unweeded check in both seasons, respectively. Oil percentage was not significantly affected. Adding one hand hoeing to fluazifop-butyl in the first season or to clethodim in the second one recorded the highest seed yield (976.06 and 902.03 kg/fed., respectively).

Key words: Peanut, grassy weeds, broad leaved weeds, herbicides, hoeing



To My Father

Prof. Dr. Mohamed Ali El- Sayed Elia

