

شبكة المعلومات الجامعية







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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 ١٥-٥٠ مئوية ورطوبة نسبية من ٢٠-٠٠% To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%



## بعض الوثائـــق الإصليــة تالفــة



# بالرسالة صفحات لم ترد بالإصل

#### 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.

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#### THESIS

Submitted in Partial Fulfillment of the Requirements for the Degree of

#### MASTER OF SCIENCE

In



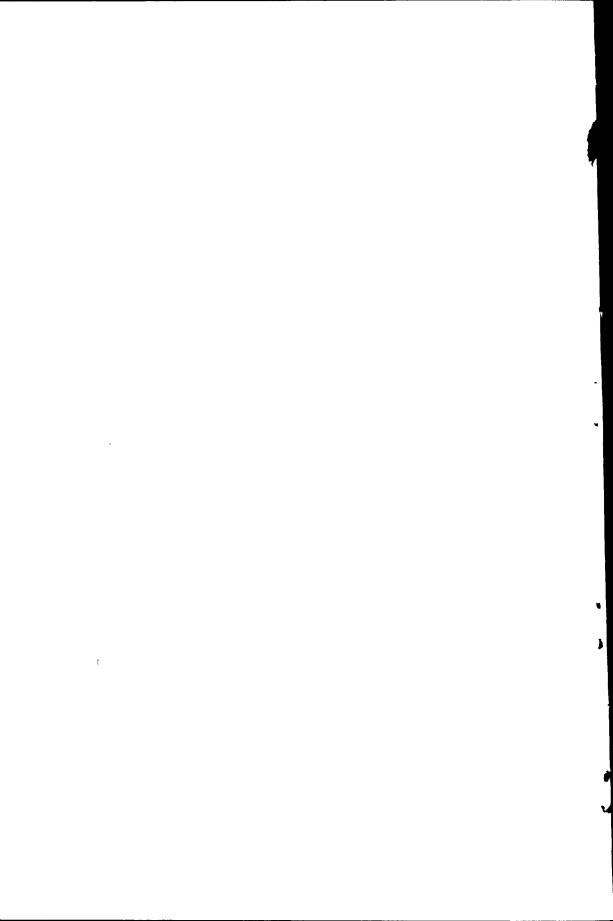
Agricultural Sciences (Agronomy)

Department of Agronomy Faculty of Agriculture Cairo University

**EGYPT** 

2011

As of



#### APPROVL SHEET

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

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#### INTEGRATED WEED MANAGEMENT IN PEANUT

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#### 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 (CP3) 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  $21m^2$ .

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 heighest 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 Elian
