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

THE USE OF CERTAIN NATURAL ORGANIC BY-PRODUCTS AS FOLIAR SPRAY TO CORRECT MICRONUTRIENTS DEFFICIENCY IN PLANTS

By

Mohammed Ibrahim Al Said Kandil

B.Sc. Agric. Sci., (Soil Sci.)., Ain Shams Univ., 1989

A thesis submitted in partial fulfillment

of

the requirements for the degree of

MASTER OF SCIENCE

in

Agricultural Science
(Soil Science)

Department of soil science
Faculty of Agriculture
Ain Shams University

2001

APPROVAL SHEET

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ABSTRACT

Mohammed Ibrahim Al Said Kandil. The Use of Certain Natural Organic by-Products as foliar spray to correct Micronutrients Deficiency In Plants. Unpublished Master of Science Thesis Department of Soil Science, Faculty of Agriculture, University of Ain Shams 2001.

The current work was carried out to explore the possibility of using certain natural organic by-products such as sugarcane and sugar beet molasses and commercial synthetic chemical solution "Gruna" or methanol solution (10 %, v/v) as foliar fertilizers for cotton and faba bean plants.

Anaerobic fermentation of sugarcane and sugar beet molasses by using Saccharomyces cerevisiae was done to produce methanol (0.02 – 0.03 %) and some organic acids as a chelating agents for micro elements.

Field experiments using spilt plots (3x4m) was carried out at Ain Shams Agric. experiment station, Shalakan to evaluate the fermented molasses solutions and chemical synthetic " Gruna" as foliar fertilizers for cotton and faba bean plants. Data estimated the increasing of macro (N, P and K) and micro elements (Fe, Mn, Zn and Cu) in cotton and faba bean leaves as well as the growth characteristic. Foliar spray with methanol solution (10%, v/v) failed to enhance the growth parameters in plants.

Key wards:
Cotton plant - Faba bean plant - foliar spray – methanol – molasses – yeast – plant growth -nutrient concentration.

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