شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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

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يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

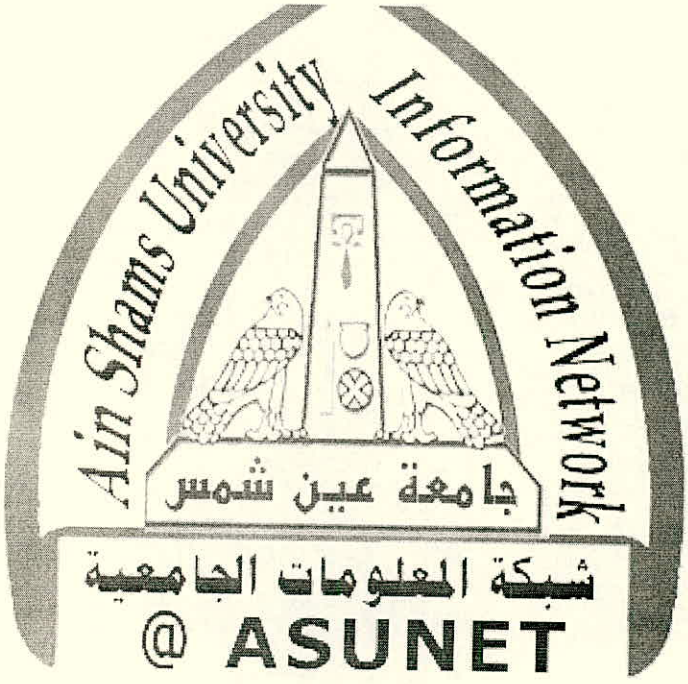
في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

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

بالرسالة صفحات

لم ترد بالأصـــل

شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة

USING OF GREENHOUSE WASTES AS SOIL SUBSTRATE

BY

AMIN OMAR MOHAMED MOHY EL-DIN

B.Sc. in Chemistry, Fac. of Science, Cairo University 1970

Thesis submitted in partial fulfillment

of

the requirements for the degree of

master of science

in

ENVIRONMENTAL SCIENCES

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INSTITUTE OF ENVIRONMENTAL

STUDIES AND RESEARCH

AIN SHAMS UNIVERSITY

1997

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ABSTRACT

Amin Omar Mohamed Mohy El-Din. Using of greenhouse waste as soil substrate unpublished master of science in Environmental Agricultural Science, Ain shams University, Institute of Environmental Studies and Research, Agriculture Department 1997.

This Work was conducted to evaluate some physical and chemical properties of different soil substrates and substrate mixtures including bulk density, total pore space, available water, available air, pH value and cation exchange capacity. Also the effect of substrate composition on germination percentage, germination rate, seedling height, dry weight, fresh weight micronutrients and macronutrient concentration in cucumber seedlings were studied.

Four greenhouses were used to evaluate the impact of different organic wastes application on cucumber growth, yield, plant height, leaf area, number of leaves and number of fruits per plant, concentration of some macro and micro nutrients in cucumber shoots and fruits, uptake of macro and micronutrients by cucumber shoots and fruits.

Results showed that mixing greenhouse waste with peatmoss and vermiculite improved physical and chemical properties of the media and germination rate percentage, seedling height, fresh and dry weight and macro nutrient concentration.

The results also showed that application of different organic wastes (compost and chicken manure) increased cucumber shoots and fruits yield . The highest yield was fluctuated between chicken manure and compost application . Macro and micronutrients concentration and uptake increased with application of organic wastes. Although concentration and uptake of heavy metals have been increased due to application of different organic wastes, yet it did not exceed the acceptable limits yet .