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 IRRIGATION AND FERTILIZATION ON *MATRICARIA CHAMOMILLA* , L. GROWTH AND PRODUCTIVITY IN SANDY SOIL

BY

RABIE MOHAMED MOSTAFA YOUSEF

B. Sc. Agric (Hort.), Fac. Agric. Zagazig University , (1984)

M . Sc. Hort. (Floriculture), Fac. Agric. Zagazig University, 1997

A thesis submitted in partial fulfillment

of

the requirements for the degree of

DOCTOR OF PHILOSOPHY

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Department of Horticulture

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2002

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Approval Sheet

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ABSTRACT

Applying low drip irrigation rate in sandy soil 934 m^3/fed / season (42 L. / plant/ season) to *Matricaria chamomilla* L. plant in sandy soil combined with NPK fertilization or poultry manure, showed that:

1. Using ($N_2P_2K_2$) 300 : 300 : 100 kg / fed of amonium sulphate, calcium , superphosphate and potassium sulphate resulted in about 426.99 kg/fed. dry inflorescences . The same amounts of chemical fertilizers was similar to using 10m^3/fed poultry manure which produced 436.66 kg. / fed. dry inflorescences.
2. Raising poultry manure to 20 , 30 and 40 m^3/fed. resulted in about 514.65, 575.91 and 616.95 kg./fed dry inflorescences , respectively.
3. Applying 40 m^3/ fed. poultry manure resulted in similar yield to using the above mentioned amounts of chemical fertilizers plus 20 m^3/fed. poultry manure which produced 629.47 kg/fed. dry influrescences.
4. The increase of irrigation rate to 2802 m^3/fed / season (126 L. / plant / season) combined with $N_2P_2K_2$, 10, 20 , 30 , 40 m^3 / fed poultry manure or $N_2P_2K_2$ plus 20 m^3 / fed poultry manure increased inflorescences yield by 65.81, 83.55 , 62.00, 74.67, 83.26 and 124.07 kg / fed. dry influorescences , respectively compared to 934 m^3/fed/ season (42 L./plant/ season) .

Thus , the choice of irrigation and fertilization rates will depend upon the profit costs of fertilizers and water. It is worth to mention that all fetilization treatments can be applied safety without increase in nitrate concentration in the dry inflorescences since , it did not surpass the acceptable dose of European Countries .

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