

ترشيح استخدام مياه الري والتسميد في الأراضى الرملية لإنتاج بعض نباتات الزينة الاقتصادية

رسالة مقدمة من الطالبة

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لاستكمال متطلبات الحصول علي درجة الماجستير
في العلوم البيئية

قسم العلوم الزراعية البيئية
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**RATIONALIZING THE USE OF IRRIGATION WATER AND
FERTILIZATION RATES TO PRODUCE SOME ECONOMICAL
ORNAMENTAL PLANTS IN SANDY SOIL**

Submitted By

Shimaa Hassan Ghanem Mahmoud

B.Sc. of Agric. Sci. (Horticulture), Faculty of Agriculture,

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Diploma of Environmental Sciences, Institute of Environmental Studies & Research Ain

Shams University 2007

A thesis submitted in Partial Fulfillment
Of
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Department of Environmental Agricultural Science
Institute of Environmental Studies and Research
Ain Shams University

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ABSTRACT

A field experiment which included three treatments of irrigation level (main plot) and three treatments of kristalon fertilizer (1,2,4gm) (sub plot) was carried out on plants of both seasons (tuberose bulbs) subjected to different levels of irrigation as follows (75, 100, and 125 %ET₀), during the two seasons of 2011 and 2012. Locally produced bulbs were lifted from the soil on April 1st, before being divided and cleaned. Results obtained indicated that the low rate of irrigation (75%ET₀) significantly increased plant height to 69-53 cm, when it was combined with kristalon at 1g. While increasing the kristalon rate to 4g. combined with the high rate of irrigation (125%ET₀), it still gave significant increase in plant height comparing with the low rate (75% ET₀) during the first and second seasons. However data of the kristalon treatments gave non-significant effect in the second season, comparing the all cases with each other. Probably, the low rate of irrigation gave the best value on number of leaves in both seasons .The increase of kristalon rate to 4g. resulted in increased of both the tallest leaf and the main number of leaves The two levels of irrigation (75and 100% ET₀) had a non-significant effect on number of leaves. However, application the two levels of irrigation combined with the 2g of kristalon treatment gave the tallest spike of flowers,and significant increase in the florets number/ spike resulted with