

# دراسات فسيولوجية وبيولوجية علي نبات الأراولا

رسالة ماجستير  
في العلوم الزراعية  
(زينة)

مقدمة م

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ب الوريوس في العلوم الزراعية (زينة) - لية الزراعة - جامعة القاهرة، ٢٠٠٢

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رسالة مقدمة من

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ب.الوريوس في العلوم الزراعية (بساتين الزينة) - لية الزراعة - جامعة القاهرة، ٢٠٠٢

للا ل عل درجة

ماجستير

في

العلوم الزراعية  
(بساتين الزينة)

قسم بساتين الزينة  
لية الزراعة  
جامعة القاهرة  
م —

٢٠٠٩

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/ / التاريخ

**PHYSIOLOGICAL AND BIOLOGICAL  
STUDIES ON CHRYSANTHEMUM PLANT  
(*Chrysanthemum indicum* L.)**

**By**

**IMAN MOHAMED EL-SAYED**

**B.Sc. Agric. Sci. (Ornamental Horticulture), Fac. Agric., Cairo Univ., Egypt, 2002**

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## DEDICATION

*I would like to dedicate this work to my parents and brothers for their encouragement and support through out this work.*

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WITH MY GRATITUDE AND LOVE  
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#### **ABSTRACT**

The objective of this study was to evaluate the effect of using Putrescine at the levels of, 100 200and 300ppm and Uniconazole at the levels, 20 40and 60ppm in addition to control (distilled water) on vegetative growth, chemical composition and endogenous hormones of Chrysanthemum plant during 2004 2005 and 2005 2006 Folier application of Putrescine significatly increased plant hiegh, No.of branches/plant, No.of leaves/plant, leaf area, fresh and dry weight of plant,flowering period, flower yield, diamter of flower, pedicel length, length of flower stalk, vase life and D.W of flowers, photosynthetic pigments, endogonus hormoes, carbohydrote and mineral content. The best results were found when plants treated with 200ppm Putrescine followed by 300and 100ppm .

On the other hand,Uniconazoe treatments decreased plant hight as compared with control plant, while other characters were increased by there treatments the best results were found when plants treated with 20 ppm followed by 40then 60ppm Uniconazole .

**Key words:** Chrysanthemum, Putrescine, Uniconazole, Flowers, Chemical Composition, Endogenous hormones.

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### المستل العربي

أجريت الدراسة بهدف دراسة تأثير استخدام مذمي النمو الحيويين البتروسين بتر يزات ١٠٠-٢٠٠ - ٣٠٠ جزء في المليون، واليوني ونازول بتر يزات ٢٠-٤٠-٦٠ جزء في المليون علي النمو الخري ومحتوي النبات من الربيهدرات الالية والبروتين والعناصر المعدنية و- ل من الهرمونات الداخلية خلال موسم النمو ٢٠٠٤ / ٢٠٠٥ و ل موسم النمو ٢٠٠٥ / ٢٠٠٦ .

ويمن تلخي أهم النتائج المتحصل عليها ف النقاط الاتية:

أد الرش بالبتروسين ال حدوث زيادة معنوية ف ارتفاع النبات، عدد الأفرع، عدد الأوراق، الوزن الطازج والجاف للأوراق، فترة التزهير، محصول الأزهار، قطر النور، طول عنق النور، طول الحامل الزهرة، طول حياة الزهرة ف الفازة، والوزن الطازج والجاف للأزهار، الصبغات ال وئية، محتو النبات من الهرمونات الداخلية و- ل الربيهدرات والعناصر.

وانت أف ل النتائج عند استخدام البتروسين بتر يز ٢٠٠ جزء ف المليون يليه ٣٠٠ جزء ف المليون ثم ١٠٠ جزء ف المليون.

ومن ناحية آخر فقد أدت معاملة النباتات باليوني ونازول ال انخفاض ف طول النباتات مقارنة بالنباتات غير المعاملة بينما زادت جميع الصفات المورة سابقا باستخدام هذة المعاملة وانت أف ل النتائج عند استخدام اليونو ونازول بتر يز ٢٠ جزء ف المليون.

اللمات الدالة: الأراولا، البتروسين، اليوني ونازول، الهرمونات الداخلية، المربات اليمائية، الأزهار.

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