



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
على هذه الأفلام قد أعدت دون أية تغييرات



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 %



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بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل

B1.492

**STUDIES ON THE EFFECTS OF GENOTYPIC VARIABILITY,
SOURCE OF EXPLANT, AND CULTURE MEDIUM ON
CALLUS GROWTH AND ORGANOGENIC
CAPACITY OF *Cucumis sativus* L. PLANTS**

BY

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B.Sc. in Botany

Suez Canal University

**A Thesis Submitted in Partial Fulfillment
of the Requirements for
The Degree of Master of Science**

In Botany

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Botany Department

Faculty of Science

Suez Canal University

2000

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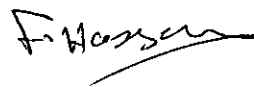
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Botany Department

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APPROVAL SHEET

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Dedicated to

My family,

ABBREVIATIONS

+R	Presence of root
+S	Presence of shoot
2,4,5-T	2,4,5 Trichlorophenoxy acetic acid
2,4-D	2,4 dichlorophenoxy acetic acid
ABA	Abscisic Acid
B	Base of cotyledonary leaf
B5	Gumborg medium
BAP	Benzyladenine Purine
CIM	Callus induction medium
Cm	Centimeter
cv.	Cultivar
DNA	Deoxyribonucleic Acid
EIM	Embryo induction medium
Fig.	Figure
FW	Fresh Weight
g/l	Gram per Liter
GA	Gibberellic Acid
GLM	General Linear Model
H	Hour
HS	Hypocotyl Segment
IAA	Indol acetic acid
K or kin	Kinetin (6- furfuryl- amino Purine)
LSD	Least Significant Difference
M	Middle of cotyledonary leaf
Mg	Milligram

mg/l	Milligram per Liter
Min	Minute
mm	Millimeter
MS	Murashige and Skoog medium (1962)
MS+GA	Murashige and Skoog medium + Gibberellic Acid
NAA	α -naphthalene acetic acid
RCB	Randomized Complete Block
SAS	Statistical Analysis System
ST	Shoot Tip
T	Tip of cotyledonary leaf
μ	Micron
μ M	Micromolar
v/v	Percent (volume in volume)
w/v	Percent (weight in volume)
2ip	6- γ γ – dimethylallylaminopurine (2ip)
IPA	Isopentyl adenine
VAR.	Variety

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INTRODUCTION