شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات 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 أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

Propagation of pear rootstock *Pyrus communis* by tissue culture technique.

By

El-Sayed Farag Osman Fayed

B.Sc. Agricultural Sciences
Tanta University, Tanta Faculty of Agric., 1998.

M.Sc. THESIS

SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN POMOLOGY

Horticulture Department

Tanta Faculty of Agriculture

Tanta University

2006

APPROVAL SHEET

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2006

Acknowledgment

All thanks are due to **ALLAH**

I am indebted to **Prof. Dr. Ahmed Attia El-Aidy** Professor of pomology and head of Horticulture Department, Tanta Faculty of Agriculture, Tanta University for suggesting the research problem, his supervision on this work, his continuous guidance throughout the courses of research and writing the thesis.

I also present my deepest gratitude to **Prof. Dr. Mohamed Ahmed Hamoud** Professor of Genetics and Cytology, Department of Botany, Faculty of Science, Tanta University for his supervision on this work and his helpful and continuous guidance throughout writing the thesis.

I also present my deepest gratitude to **Dr. Usama Kamal El-Abbasy** Ass. Professor of pomology, Horticulture Department, Tanta Faculty of Agriculture, Tanta University for his supervision on this work and guidance throughout statistical analysis and writing the thesis.

Many thanks for all the staff members of Horticulture Department for their valuable guidance.

Many thanks also are due to all the staff of Biotechnology Laboratory at Faculty of Science for their help and support.

I am very obligate to all my family for their encouragement specially my wife.

Abstract

This work was conducted at the biotechnology laboratory, Faculty of Science, Tanta University, throughout the period of 2002/04 to provide a reproducible tissue culture techniques for mass production of *Pyrus communis* rootstock. Nodal segments of *Pyrus communis* rootstock were sterilized and two experiments (100 mg/L ascorbic acid plus 150 mg/L citric acid with or without 2.5 g/L activated charcoal and effect of two periods of incubation 7 and 14 days and two incubation temperatures 5 and 25 °C) were conducted for eliminating browning. Effect of Benzyladenine or kinetin (0.0, 0.5, 1.0 and 2.0 mg/L), BA (0.5, 1 and 2 mg/L) with IBA (0.1 and 0.2 mg/L) and MS strengths (half, three quarter and full-strength) on shoot multiplication were studied. Various concentrations of IBA and MS strengths were studied for adventitious root formation. The highest survival percentage and the lowest browning were obtained by culturing the explants on MS medium supplemented with 100 mg/L ascorbic acid plus 150 mg/L citric acid and 2.5 g/L activated charcoal and incubated for 7 days at 5 °C. BA was more effective than Kin and 1 mg/L BA + 0.2 mg/L IBA was the best treatment for multiplication. MS medium at half strength supplemented with 2 mg/L IBA was the best medium for rooting of shoots.