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

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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

STUDIES ON PROPAGATION OF SOME FRUIT SPECIES BY USING TISSUE CULTURE TECHNIQUES

BY

Mohamed Hemdan Mohamed Baaya

B.Sc. Agricultural Science (Horticulture), (1997)

Zagazig University, Benha Branch

THESIS

Submitted in partial fulfillment of
The requirements for the degree of

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(Pomology)

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Zagazig University

(Benha Branch)

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APPROVAL SHEET

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This Thesis for the M. Sc. Degree has been approved by:

Prof. Dr. *Mostafa Atef M. El-Hammady*
Professor of Fruit Science,
Faculty of Agriculture, Kafr El-Sheikh

Prof. Dr. *Issam Azouz Hassaballa*
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University
Benha Branch

Prof. Dr. *Mohamed Gamal El-Din Mogheith*
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University
Benha Branch

Prof. Dr. *Hassan Mansour Gendiah*
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University
Benha Branch

Prof. Dr. *Nabaway Ahmed Ali Hagagy*
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University
Benha Branch

(*Committee in charge*)

Date : Sat. 31/ 8 /2002

SUPERVISION COMMITTEE

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Under the Supervision of:

Prof. Dr.: Issam Azouz Hassaballa,
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University

Prof. Dr.: Mohamed Gamal El-Din Mogheith,
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University

Prof. Dr.: Nabaway Ahmed Ali Hagagy,
Professor of Fruit Science,
Faculty of Agriculture, Moshtohor,
Zagazig University

Horticulture Department
Faculty of Agriculture, Moshtohor
Zagazig University, Benha Branch

2002

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ABSTRACT

Sewi date palm cv and Smooth cayenne of pineapple cv were micropropagated by using different explants. Murashige & Skooge, modified Murashige & skooge and Murashige and Tucker media were tested with different additives and strengths. Also, cold temperature (5°C for 10 days) was pretreated for date palm explants. Also, 6-benzylaminopurine (BAP) and naphthalene acetic acid (NAA) with different concentrations were considered during establishment stage of both date palm and pineapple explants. However, proliferation, rooting and acclimatization experiments were carried out on pineapple only. These include different cytokinin types at 2mg/L and different concentrations of BAP in proliferation stage. However, different medium strengths and concentrations of GA_3 for shoot elongation. Meanwhile, different medium states, auxin types with different concentrations were studied during root formation. Moreover, different agricultural media were evaluated for acclimatization of pineapple.

The obtained results showed that cold temperature pretreatment for date palm explant succeeded in enhancing explant development .Also, culturing of pretreated shoot tip on solidified modified full strength Murashige and Skoog medium supplemented with 2-3 mg/L BAP and 0.5 mg/L NAA as well as glutamin and asparagin additives were the most suitable balanced medium for direct regeneration of date palm and pineapple. The supplementation of the culture medium with 2.0 mg/L BAP enhanced proliferation. Meanwhile, using one-half medium with 3.00 mg/L GA_3 enhanced shoot elongation . In addition, using liquid medium supplemented with 3.00 mg/L NAA were the most suitable for rooting. Moreover, the treatment of agricultural combination media consisted of 3 peat moss + 1 sand was excellent for maximizing acclimatization of pineapple.

Key words: Date palm, Pineapple, Tissue culture, Direct regeneration.