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بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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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 الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

BOTANICAL STUDIES ON GROWTH AND GERMINATION OF MAGNOLIA "*Magnolia grandiflora* L." PLANTS.

By

Tarek Ramadan Mahmoud
B. Sc. High Agric. Co-OP. Institute, 1987

Thesis

Submitted in Partial Fuifillment of the requirements
For the Degree of

Master of Agric. Science
IN
(Plant Physiology)

Department of Agricultural Botany,
Faculty of Agriculture, Moshtohor

ZAGAZIG UNIVERSITY
(BENHA BRANCH)

2001

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Name: Tarek Ramadan Mahmoud

Title: BOTANICAL STUDIES ON GROWTH AND GERMINATION OF MAGNOLIA "*Magnolia grandiflora* L." PLANTS.

Abstract

Pot experiments were carried out at the Experimental Station of the Agricultural Botany Department, Faculty of Agriculture Moshtohor, Zagazig University during 1997/98 and 1998/1999 seasons to study the effect of any of Gibberellic acid (GA_3), Yeast extract preparation (YE) and Naphthalene acetic acid (NAA) preceded with or without cold stratification on Magnolia seeds germination and seedling growth. Magnolia seeds were divided into two groups.

Since, in the first group seeds were stratified then treated with the growth regulators meanwhile in the second, seeds were only treated with the growth regulators.

The following are considered as main results:

1- NAA gave the highest germination %.
2- YE gave the highest growth rates regarding different aspects.
3- YE also increased minerals absorption by roots and its translocation to other organs.
4- YE also increased carbohydrates and sugars biosynthesis and translocation.
5- YE improved dry matter accumulation in different plant organs.

Therefore, present study strongly admit the use of YE preceded with stratification to enhance Magnolia seed germination and improve of seedling growth as well as shortening the vegetative growth period being required before plants be able to from flowers.