شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

HOSSAM MAGHRABY

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

HOSSAM MAGHRABY

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HOSSAM MAGHRABY

شبكة المعلومات الجامعية

بعض الوثائق الأصلية تالفة

HOSSAM MAGHRABY

شبكة المعلومات الجامعية

بالرسالة صفحات

لم ترد بالأصل

HOSSAM MAGHRABY

Mansoura University
Faculty of Agriculture
Pomology Department

STORAGE LIFE OF THOMPSON SEEDLESS GRAPES AS AFFECTED BY SOME FIELD PRACTICES

BY

MOHAMED ATEF EL-SHOBKY

B. Sc. (Agric.,) Mansoura University (1978)
M. Sc. (Hort.,) Mansoura University, (1989)

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

IN

Pomology

Faculty of Agricultural, Mansoura University

SUPERVISORS

Dr. GHAZI IBRAHIM EL-BANNA
Professor of Pomology
Faculty of Agriculture
Mansoura University

Dr. ABDEL-FATTAH MANSOUR
Professor of Pomology
Faculty of Agriculture
Mansoura University

Dr. FOUAD HASSAN FAWZI
Professor of Pomology
Head of Viticulture Department
Hort. Inst. Ministry of Agriculture

1994

Mansoura University
Faculty of Agriculture
Pomology Department

STORAGE LIFE OF THOMPSON SEEDLESS GRAPES AS AFFECTED BY SOME FIELD PRACTICES

BY

MOHAMED ATEF EL-SHOBKY

B. Sc. (Agric.,) Mansoura University (1978)
M. Sc. (Hort.,) Mansoura University, (1989)

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

IN

Pomology

Faculty of Agricultural, Mansoura University

SUPERVISORS

Dr. GHAZI IBRAHIM EL-BANNA
Professor of Pomology
Faculty of Agriculture
Mansoura University

Dr. ABDEL-FATTAH MANSOUR
Professor of Pomology
Faculty of Agriculture
Mansoura University

Dr. FOUAD HASSAN FAWZI
Professor of Pomology
Head of Viticulture Department
Hort. Inst. Ministry of Agriculture

1994

DEDICATED

TO

THE SOUL

OF

MY DEAR FATHER

Mansoura University
Faculty of Agriculture
Pomology Department

SUPERVISORS

Title: STORAGE LIFE OF THOMPSON SEEDLESS GRAPES AS AFFECTED BY SOME FIELD PRACTICES

The Researcher: MOHAMED ATEF EL-SHOBKY

Thesis supervised by:

No.	Name	Position
1	**Dr. Ghazi Ibrahim EL-Banna**	Professor of Pomology Faculty of Agriculture Mansoura University
2	**Dr. Abdel-Fattah Mansour**	Professor of Pomology Faculty of Agriculture Mansoura University
3	**Dr. Fouad Hassan Fawzi**	Professor of Pomology Head of Viticulture Dept., Hort. Inst. Ministry of Agric.

Mansoura University
Faculty of Agriculture
Pomology Department

APPROVAL SHEET

Title: STORAGE LIFE OF THOMPSON SEEDLESS GRAPES AS AFFECTED BY SOME FIELD PRACTICES

The Researcher: MOHAMED ATEF EL-SHOBKY

Approval Committee:

No.	Name	Position
1	Dr. Awad Mohamed Hussien	Professor of Pomology Faculty of Agriculture Alexandria University
2	Dr. Mohamed Abd EL-Rheem Iraqi	Professor of Pomology Faculty of Agriculture Mansoura University
3	Dr. Ghazi Ibrahim EL-Banna	Professor of Pomology Faculty of Agriculture Mansoura University

Date of discussion: / / 1994

Approved by:

No.	Name	Signature
1	Dr. Awad Mohamed Hussien	A. Hus
2	Dr. Mohamed Abd EL-Rheem Iraqi	M.A Ghaat
3	Dr. Ghazi Ibrahim EL-Banna	Gh-El-Banna

ACKNOWLEDGMENTS

The writer is indebted to ***Prof. Dr. Ghazi I. EL-Banna,*** *Professor of Pomology, Faculty of Agriculture, Mansoura University, for suggesting the problem, supervision and his kind help through the preparation of this manuscript.*

The author also wishes to express his deepest gratitude and sincere appreciation to ***Prof. Dr. Abd EL-Fattah M. Mansour*** *for his supervision and valuable help and criticism during the progress of this study.*

Grate full acknowledgment is also due to ***Prof. Dr. Fouad Hassan Fawzi*** *Prof. of Pomology, Agriculture Research Center and Head of the Viticulture, Research Department for his supervision and great help during this work.*

Deep thanks are due to ***Dr. Seif, EL-Deen Soliman EL-Shahat,*** *Researcher in Viticulture, Research Department in the Hort. Ins. Ministry of Agriculture for his continuous help and encouragement during this work.*

I am also deeply grateful to all members in the same Department and to all the members of the Laboratory of Soil and Plant Nutrition in Mansoura for their valuable help.

CONTENTS

INTRODUCTION

INTRODUCTION

The grape (Vitis vinfera, L.) is the first fruit crop in both area and production all over the world.

In Egypt, grape area increased in the last few years under the new land reclamation. Thus, the total area reached about 137851 feddans producing about 658.061 metric tons according to the last statistics of the Ministry of Agriculture (1992).

Thompson seedless grapes is considered the most important cultivar grown in Egypt. Its acreage reached about 87 397 feddans giving an annual production of about 362 597 metric tons. Therefore, it is imperative to find out the best filed practices to increase its cropping and finally its net income. Moreover, it is very important to give some light on its keeping quality during storage after applying these field practices.

In this respect, gibberellin is one of the growth regulate which obviously increase the yield of Thompson grapes **(Coombe, 1959; Antecliff and May, 1961; EL-Banna, 1981; Tourky, 1983; EL-Shahat, 1992 and Abdel-Latief, 1993).**

Moreover, pruning also plays a vital role in grape production **(Rangelov, 1968; Shrivastav, et al. 1972; EL-Banna and Weaver, 1978; Sarooshi and Roberts, 1978; Huang, 1981; EL-Shahat, 1984 and Al-Dujaili, 1988).**

Concerning the effect on berries quality, it was found by several investigators that ethephon and potassium sulphate produced