سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

سامية محمد مصطفى

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

سامية محمد مصطفى

شبكة المعلومات الجامعية

بعض الوثائق الأصلية تالفة

سامية محمد مصطفى

بالرسالة صفحات لم ترد بالأصل

B ١٣٧٤٨

EFFECT OF BACTERIAL INOCULATION FERTILIZATION AND INTERCROPPING ON YIELD AND NITROGEN CONTENT OF SOME FORAGE CROPS

By

HANY SABRY SADIEK EL GENDY

B.Sc. Agriculture (Soils), Assiut Univ., 1973

M.Sc. Soil Science, Assiut Univ., 1987

A THESIS

Submitted in Partial Fulfillment of

the Requirement for the Degree

of

Doctor of Philosophy

from the

Department of Soils and Water

University of Assiut

1994

Supervised by:

Prof. Dr. Farida H. Badawy

Dr. S.M. Mahmoud

Dr. M.A. Gameh

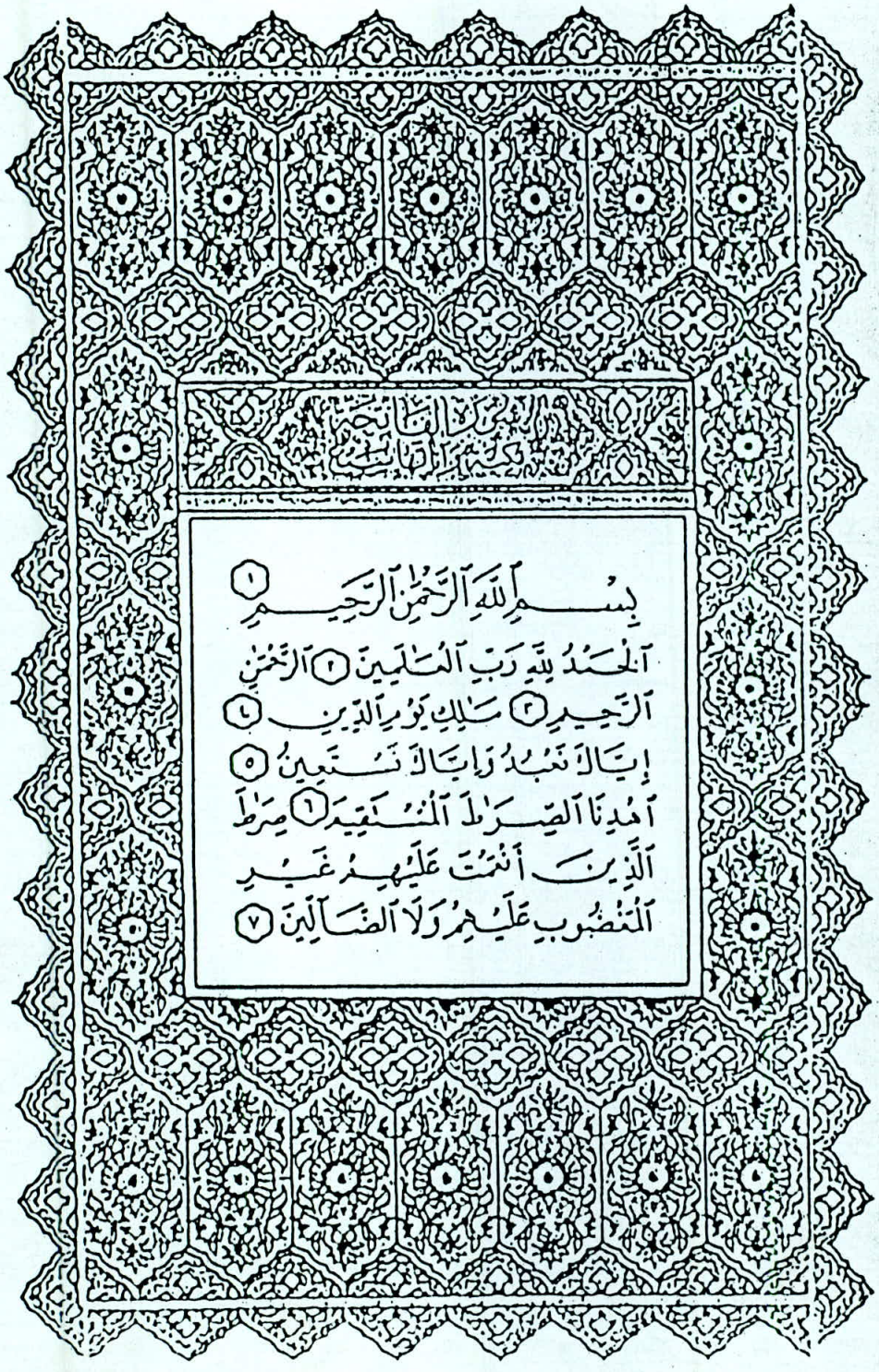
Examined by:

Prof. Dr. Y.A. Hamdi

Prof. Dr. M.F. Ghoneim

Prof. Dr. Farida H. Badawy

Dr. S.M. Mahmoud



سورة الفاتحة مكية وآياتها سبع

بِسْمِ اللَّهِ الرَّحْمَٰنِ الرَّحِيمِ ١

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ ١ الرَّحْمَٰنِ
الرَّحِيمِ ٢ مَالِكِ يَوْمِ الدِّينِ ٣
إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ ٤
اهْدِنَا الصِّرَاطَ الْمُسْتَقِيمَ ٥ صِرَاطَ
الَّذِينَ أَنْعَمْتَ عَلَيْهِمْ غَيْرِ
الْمَغْضُوبِ عَلَيْهِمْ وَلَا الضَّالِّينَ ٦ ٧

APPROVAL SHEET

Name : Hany Sabry Sadiek El-Gendy

Title : Effect of bacterial inoculation fertilization and intercropping on yield and nitrogen content of some forage crops.

This Ph.D. Dissertation has been examined, reviewed and approved as of style and contents by the following committee in charge:

1- Prof. Dr. Y.A. Hamdi ---Y.Hamdi----------

2- Prof. Dr. M.F. Ghoneim ---M.F.Gh----------

3- Prof. Dr. Farida H. Badawy ---Farida H. Badawy---

4- Dr. S.M. Mahmoud ---Salah M. Mahmoud---

Date: 26 / 6 /1994

ACKNOWLEDGEMENTS

ACKNOWLEDGEMENT

The author wishes to express his sincere gratitude and appreciation to ***Dr. Farida H. Badawy***, Professor of Soil Microbiology, Department of Soils and Water, Faculty of Agriculture, Assiut Univ. for her efforts, continuous help, keen supervision, helpful advice and valuable suggestions in all phases of this study.

Deep thanks are also due to ***Dr. S.M. Mahmoud*** and to ***Dr. M.A. Gameh***, Associate Professors of Soils, Dept. of Soils and Water, Assiut Univ. for their guidence and kind help during this work.

The author wishes also to express his gratefulness to ***Dr. M.M. El-Dsouky***, Dept. of Soils and Water, Faculty of Agriculture, Assiut Univ. for his help in the statistical and computer analysis.

The author is indebted to engineer ***M. Hamdi Tolba***, the Chairman of the High Dam Lake Authority for his great encouragement and facilities he offered.

Thanks are also due to all staff members of the Dept. of Soils and Water , Faculty of Agriculture, Assiut Univ. for offering valuable advices, and to my colleagues at the Agriculture Research Center of the High Dam Lake Authority for their cooperation during this work.

CONTENTS

CONTENTS

****

LIST OF TABLES