شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم باللّه 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

شبكة المعلومات الجامعية

بعض الوثائق الأصلية تالفة

شبكة المعلومات الجامعية

بالرسالة صفحات
لم ترد بالأصل

Minia University
Animal Production Department,
Faculty of Agriculture

STUDIES ON USING SOME GREEN FORAGES IN SHEEP FEEDING

By

Abd El-Raheem Idrees Ali Suliman
B.SC.Agri.(Assuit university 1990)
M.SC.Agri.(Minia university 1994)

Thesis
Submitted to the Graduate Division in Partial fulfillment of the Requirement for Degree of doctor of Philosophy

In
Animal Production
Faculty of Agriculture
University of El-Minia

Supervised by

Dr. S.T.M. Fahmy
Prof.of Anim. Nutrition
Faculty of Agric. Minia Univ.

Dr. M.A.Gabra
Prof .of Anim. Nutrition
Anim. Prod.Res.Institute

Dr. H.A. Hassan
Prof. of Anim. Husbandry
Faculty of Agric. Minia Univ.

Dr. K.M. Marzouk
Ass. Prof of Anim. Husbandry
Faculty of Agric.Minia Univ

2001

Minia University
Animal Production Department,
Faculty of Agriculture

STUDIES ON USING SOME GREEN FORAGES IN SHEEP FEEDING

By

Abd El-Raheem Idrees Ali Suliman
B.SC.Agri.(Assuit university 1990)
M.SC.Agri.(Minia university 1994)

Thesis
Submitted to the Graduate Division in Partial fulfillment of the Requirement for Degree of doctor of Philosophy

In
Animal Production
Faculty of Agriculture
University of El-Minia

Supervised by

Dr. S.T.M. Fahmy
Prof.of Anim. Nutrition
Faculty of Agric. Minia Univ.

Dr. M.A.Gabra
Prof .of Anim. Nutrition
Anim. Prod.Res.Institute

Dr. H.A. Hassan
Prof. of Anim. Husbandry
Faculty of Agric. Minia Univ.

Dr. K.M. Marzouk
Ass. Prof of Anim. Husbandry
Faculty of Agric.Minia Univ

2001

APPROVAL SHEET

Major field: Animal Production
Mainor field: Animal Nutrition
Title of thesis: **STUDIES ON USING SOME GREEN FORAGES IN SHEEP FEEDING**

By

ABD-EL-RAHEEM IDREES ALI SOLIMAN
B.SC. Agric.(Assuit Univesity 1990)
M.SC.Agric.(Minia University 1994)

Approved by

Prof. Dr. : **S. A. Mahmoud** ----------
Prof of animal nutrition
Fac. of Agric Kafr El Sheik.
Tanta , Univ.

Prof. Dr. : **S . M . Suliman** ----S. M. S----
Prof of animal nutrition
Ainm. Nutr. Dept.
National Research Center

Prof. Dr : **H . A . Hassan** ----H. A. Hassan----
Prof of animal Husbandry
Fac. of Agric. Minia - Univ.

Prof. Dr. : **M . A . Gabra** ----M. Gabra----
Prof of Anim. Nutri
Head of Anim. Nutri. Depart.
Anim. Prod. Res. Institute

Date 18/9/2001 **(Committee in charge)**

AKNOWLEDGEMENT

Thanks to Allah, Who enabled me to achieve this work. This work has been proposed, designed and supervised by Professor Dr. **S.T.M. Fahmy,** Professor of Animal Nutrition, Faculty of Agriculture, Minia University. I can hardly express my gratitude and appreciation to him for suggestions during the planing of this work, offering helpful advice, continuous investigation and writing the foreword.

I am deeply indebted to Dr. **H. A. Hassan** Professor Dr. of Animal Husbandry, Faculty of Agriculture, Minia University. For helping me in the investigation, suggestions in planing statistical analysis models and giving his comments.

Thanks are also due to Professor Dr. **M.A. Gabra,** head of Animal Nutrition department, Animal Production Research Institute, Agriculture Research Center, Professor of Animal Nutrition. I do highly appreciate his help, beginning of this work, proposing the research program and through writing the for ward.

Deepest thanks to Dr. **K. M. Marzouk** Associate Prfessor of Animal Husbandry, Faculty of Agriculture, Minia University who carried out the statistical analysis of this data and writing the foreword.

I am really very much obligated to Dr. **A.F. Aly** and Dr. **A.A. Ahmed** for their most kind and help to obtain Guar seeds.

I am deeply indebted to Dr. **M.K. Abd El-Aal**, Prof. of Horticulture, Faculty of Agriculture, Minia University, for his help to obtain the seeds of ***Leucaena leucocephala*** and it's cultivation.

Finally, I would like to express my gratitude to my family especially my wife, uncles **Mohammed** and **Ahmed Mahmoud** for their help and encouragement.

CONTENTS

CONTENTS

LIST OF TABLES