سامية محمد مصطفى



شبكة المعلومات الحامعية

## بسم الله الرحمن الرحيم



-Caro-

سامية محمد مصطفي



شبكة العلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





سامية محمد مصطفى

شبكة المعلومات الجامعية

### جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

### قسو

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار



سامية محمد مصطفي



شبكة المعلومات الجامعية



المسلمة عين شعور المسلمة عين شعور المسلمة عين شعور المسلمة عين شعور المسلمة ا

سامية محمد مصطفى

شبكة المعلومات الحامعية



بالرسالة صفحات لم ترد بالأصل



# PHYSIOLOGICAL BASIS CONTROLLING EGG SHELL QUALITY IN DIFFERENT BREEDS OF LAYING HENS

BY

#### Zeinab Mohammed Farouk

B. Sc. Agric. (Poultry Production)

Faculty of Agriculture

Cairo University

(1996)

#### **THESIS**

Submitted in partial fulfillment of the requirements

for the degree of

M. Sc.

IN

(Poultry Physiology)

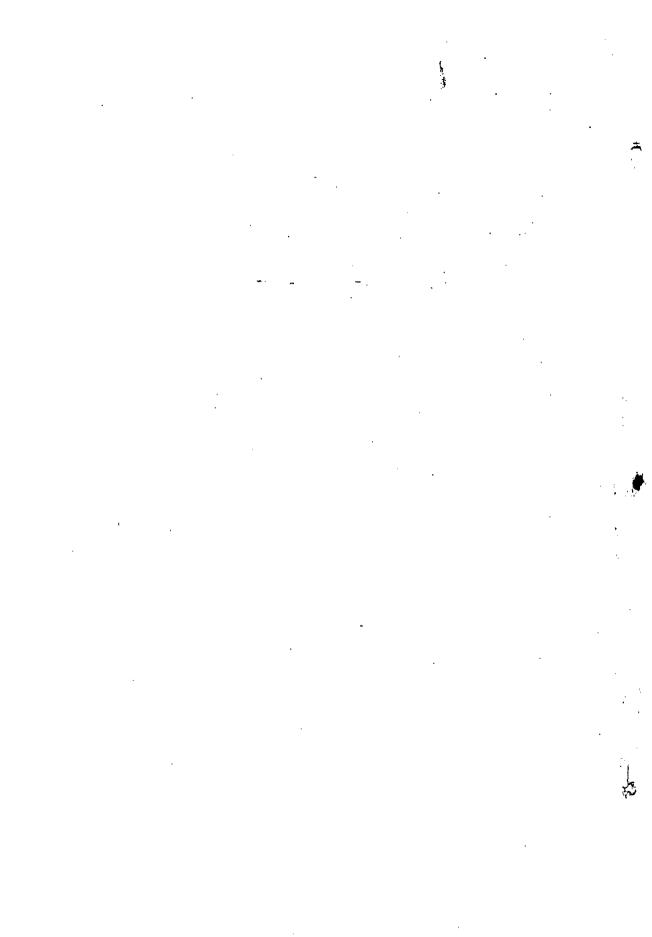
**Animal Production Department** 

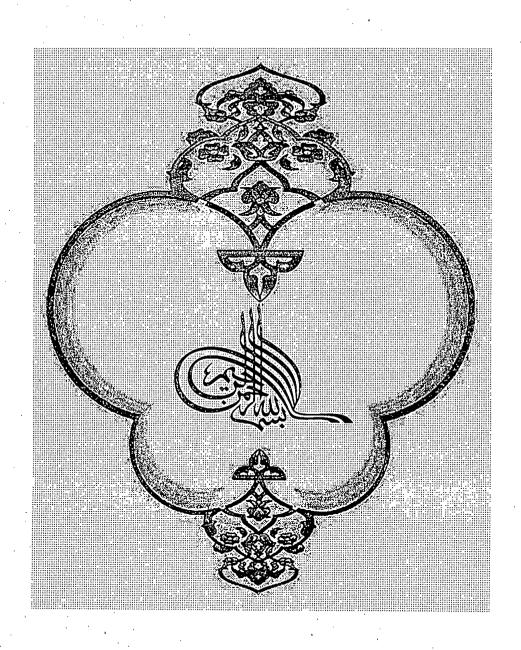
Faculty of Agriculture

Cairo University

(2004)

10 EKJ





. , . 

Name of Candidate: Zeinab Mohammed Farouk

Degree: M. Sc.

Title of Thesis: Physiological basis controlling egg shell quality in different breeds of

laying hens.

Supervisors: Dr. Nagwa Abd El-Hadi Ahmed, Dr. Zeinab Ali Ezzeldin and Dr. Alaa

El-Din Mohammed Abdou.

Department: Animal production

Branch: Poultry production

Approval: 6/6/2004

#### ABSTRACT

Three breeds of chickens were used in the present study (Fayoumi, Rhode Island Red and Golden Montazah).

All birds of each breed (300 birds) were used to determine the productive performance. Blood samples were taken from 30 birds of each breed at sexual maturity and at the peak of egg production.

#### -Major results can be summarized as follows:

- 1- Breed had no significant effect on serum progesterone level at sexual maturity and at the peak of egg production. Productive status had no significant effect on serum progesterone level.
- 2- Breed had significant effect on serum estradiol level at sexual maturity but breed had no significant effect on serum estradiol level at the peak of egg production. Productive status had significant effect on serum estradiol level.
- 3- Breed had no significant effect on serum alkaline phosphatase level at sexual maturity but breed had significant effect on serum alkaline phosphatase level at the peak of egg production. Productive status had significant effect on serum alkaline phosphatase level.
- 4- Breed had no significant effect on serum calcium level at sexual maturity and at the peak of egg production. Productive status had significant effect on serum calcium level.
- 5- Breed had significant effect on serum phosphorus level at sexual maturity and at the peak of egg production. Productive status had no significant effect on serum phosphorus level.
- 6- Breed had significant effect on serum total protein level at sexual maturity and at the peak of egg production. Productive status had no significant effect on serum total protein level.
- 7- Breed had significant effect on serum total lipids level at sexual maturity and at the peak of egg production. Productive status had significant effect on serum total lipids level.
- 8- Breed had significant effect on productive traits (body weight at sexual maturity, first egg weight, first 10 eggs weight, egg number, egg weight, egg mass) and egg shell quality (shell weight, shell thickness and shell calcium percent). Breed had no significant effect on age at sexual maturity and shell weight percent.

Vougn A. Ahrd

AID

#### **APPROVAL SHEET**

## TITLE: PHYSIOLOGICAL BASIS CONTROLLING EGG SHELL QUALITY IN DIFFERENT BREEDS OF LAYING HENS

NAME: Zeinab Mohammed Farouk

This thesis for the degree of M. Sc. had been approved by:

Examiners' committee:

Dr. Abdel-Fattah A. Darwish

Professor of Poultry Physiology and Head of Poultry Department, Faculty of Agriculture (El-Fayoum), Cairo University.

Dr. Abdel-Rahman M. M. Atta

Professor of Poultry Physiology,
Animal Production Department,
Faculty of Agriculture,
Cairo University.

Dr. Nagwa Abd El-Hadi Ahmed

Professor of Poultry Physiology, Animal Production Department, Faculty of Agriculture, Cairo University.

Date of examination: 6/6/2004

Nagro DAL

A.M. M. Atta

A.A.Donlist

. ·

#### **ACKNOWLEDGEMENT**

First and foremost, all praises are to Allah for blessing me with the gift of very good family and made me capable of carrying out this work.

I am most grateful to Prof. **Dr. Nagwa Abd El-Hadi Ahmed.** Professor of Poultry Physiology, Animal Production Dep., Faculty of Agriculture, Cairo University, for her encouragement, direct supervision, valuable advice, guidance in writing the manuscript, extended help throughout the whole work and support during the preparation of this thesis.

I am greatly indebted to **Dr. Zeinab Ali Ezzeldin.** Poultry Breeding Chief Researcher, Poultry Breeding Research Dep., Animal Production Research Institute, Agriculture Research Center, Ministry of Agriculture, for her guidance, support and help during the experimental work, revision the manuscript and support during the preparation of this thesis.

Special deep thanks and gratitude to **Dr. Alaa El-Din Mohammed Abdou.**Assistant professor of Poultry Breeding, Animal Production Dep., Faculty of Agriculture, Cairo University, for his guidance, revision of the manuscript and support during the preparation of this thesis.

I appreciate the help of the staff and workers of El-Fayoum Research Station, Animal Production Research Institute, Ministry of Agriculture, for their help during the experimental work.

Thanks also are due to the staff members and the colleagues of Poultry Breeding Research Dep., Animal Production Research Institute, Ministry of Agriculture for their moral encouragement and support.

Sincere thanks are due to my family for their encouragement, patience and thoughtfulness throughout the study period.