# دراسة مقارنة لإنتاج اللحم و البيض و بعض المظاهر الفسيولوجية في بعض سلالات الدجاج المحلى

## رسالة مقدمة من

أيمن رزق حسن حبيب بكالوريوس العلوم الزراعية (إنتاج الدواجن)- كلية الزراعة- جامعة القاهرة (٢٠٠٠)

للحصول على

درجة الماجستير

في

العلوم الزراعية (علوم دواجن)

قسم الإنتاج الحيوانى كلية الزراعة جامعة القاهرة مصر

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بكالوريوس في العلوم الزراعية ( إنتاج الدواجن)- كلية الزراعة- جامعة القاهرة ٢٠٠٠

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تاريخ المناقشة: 7/ 7/ 2007

كلية الزراعة- جامعة القاهرة

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**Title of Thesis:** A Comparative Study of Meat and Egg Production and Some Physiological Aspects in Some Local Strains of Chickens

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**Department:** Animal Production

**Branch:** Poultry Science

**Approval:** 7 / 7 / 2007

#### **ABSTRACT**

This study was carried out to evaluate and compare some productive, reproductive and physiological aspects of a recent developed local strain, (Inshas) with one of the former developed local ones, (Matrouh). A total number of 500 sexed – one –day old chicks of each strain (200 males and 300 females) was used in this experiment. The birds were reared under the same managerial and environmental conditions until 48 weeks of age .

Chicks of Matrouh strain were significantly heavier than those of Inshas, and each sex in Matrouh was heavier as compared with its counterpart in Inshas at 4, 8 and 12 weeks of age. Significant strain and sex differences were found in body weight gain during the period from 0-4,4-8 and 0-12 weeks of age. No significant differences were observed in feed intake between Inshas and Matrouh strains during growth. Matrouh strain significantly converted feed to growth more efficiently than Inshas one only during the early period from 0-4 weeks of age.

Inshas pullets significantly reached sexual maturity 7 days earlier than Matrouh ones. However, body weight of Matrouh pullets at sexual maturity was significantly heavier than that of Inshas ones. The differences between Inshas and Matrouh strains in first egg, first 10 eggs and total egg weight during the first 90 days of production were not significant. Inshas strain was significantly superior to Matrouh one in egg number, rate of laying and egg mass during the first 90 days of egg production .On the other hand, Matrouh laying hens were significantly higher in body weight at 28, 32, 36 and 40 weeks of age .

Eggs of Inshas strain had significantly higher absolute and relative shell weight and shape index at 36 weeks of age .Also, absolute and relative albumin weight of these eggs were significantly higher than those of Matrouh one .Conversely, yolk weight and percentage of Matrouh eggs were significantly higher than those of Inshas one.

Inshas strain recorded slightly higher values in each of fertility and hatchability percentages as compared with Matrouh one. In addition, Inshas cocks had significantly higher semen volume and lower sperm abnormalities .

Inshas strain was significantly higher than Matrouh one in the plasma phosphorus level at only 12 weeks of age. Matrouh strain was significantly exceeded Inshas one in liver weight, carcass and dressing percentages and small intestine length at 12 weeks of age.

## ACKNOWLEDGMENT

Deep appreciation and much thanks and gratitude to **Dr. SHOUKRY. M. T. ELTANTAWY**, Assistant Professor of Poultry production, Faculty of Agriculture, Cairo University for his contribution in research proposal, close supervision, considerable interest and father hood guidance throughout the life span of this work.

Sincere deep thanks and gratitude are also due to **Dr. ALY. A. M. BAKIR,** Head of Research Emeritus, Poultry Physiology,

Animal Production Research Institute, Agricultural Research

Center, Dokki, Cairo, for suggesting the problem, continuous supervision and fruitful discussions during this study and revising the thesis.

My deep thanks to **Dr. ABD ELRAHMAN. M. ATTA**, Professor of Poultry Physiology, Faculty of Agriculture, Cairo University, for his scientific guidance and comments during the preparation and revising the thesis.

Grateful appreciation is also extended to all staff members of both Poultry breeding Department, Animal Production Research Institute and Poultry Production Department, Faculty of Agriculture, Cairo University.

I would like to thank my family for giving me their whole-hearted support and for showing great patience during this study.

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## A COMPARATIVE STUDY OF MEAT AND EGG PRODUCTION AND SOME PHYSIOLOGICAL ASPECTS IN SOME LOCAL STRAINS OF CHICKENS

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#### **THESIS**

Submitted in Partial Fulfillment of the Requirements for the Degree of

### MASTER OF SCIENCE

In

Agricultural Sciences (Poultry Science)

Department of Animal Production Faculty of Agriculture Cairo University EGYPT

2007

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