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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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بالرسالة صفحات
لم ترد بالأصل

**IMPROVEMENT OF SOME NUTRITIONAL
AND PRODUCTIVE TRAITS IN
SINAI FOWL**

by

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THESIS

**Submitted in Partial Fulfillment
of Requirements for the
DEGREE**

of

Master of Science

in

**Agricultural Science
(POULTRY PRODUCTION)**

**University of Menoufia
Faculty of Agriculture
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SHEBIN EL-KOM, MENOUFIA**

1996

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ACKNOWLEDGEMENTS

My greatest personal indebtedness to Dr. Atef M.H. Abou-Ashour, Professor of Nutrition, for his interest, guidance, supervision and encouragement throughout the duration of the graduate program. I wish to thank him for his effort, unfailing patience and marvelous understanding throughout the investigation and during the preparation of this dissertation.

The author wishes to express his sincere appreciation and personal gratitude to Dr. Farouk H. Abdou, Professor of Poultry Breeding and Head of Poultry Production Department. His kind guidance, valuable suggestions and encouragement during all stages of this study are gratefully acknowledged.

My deep thanks and gratefulness is due to Dr. Mohamed E. Soltan, Professor of Breeding, for his kind supervision, continuous interest, valuable help and competent assistance with the statistical analysis during all stages of preparation of this thesis.

I wish to extend thanks to the members of the faculty, staff and graduate students of the Department of Poultry Production and of the Poultry Research Farm for their help and cooperation.

I am especially grateful to the members of my family for their constant encouragement and moral support.

Shebin El-Kom, April, 1996

Battaa A. El-Neney

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INTRODUCTION

Indigenous Egyptian breeds of chickens have the advantages of being well adapted to local environment conditions and genetic resistance to some severe diseases such as Marek. Moreover, Egyptian consumers prefer the taste and flavor of native local chickens and eggs.

There is no detailed information about the productive performance of Sinai fowl with the exception of studies conducted in Israel during the occupation period in Sinai Peninsula (Arad *et al.*, 1975, Arad and Marder, 1982 a, b and c) which have proved that Sinai fowls have the ability of producing higher quality eggs compared to the egg quality of the high producing breeds such as Leghorn. However, these studies showed that the Sinai fowl produces fewer and smaller eggs resulting in a decreased egg mass output compared to Leghorn layers.

Studies conducted by Soltan *et al.* (1985) indicated that means of egg number, egg weight, feed consumption (g/bird/day) and feed efficiency (g/g egg mass) were 20.7 eggs, 47.2 g, 67.47 g and 6.34 g, respectively. Soltan and El-Nady (1986) found that average body weights were 357.6, 486.6 and 711.6 g for Sinai selected at 12, 16 and 20 weeks. Corresponding values for control line were 347.7, 510 and 717.7 g in the same respective order. They added that viability of Sinai

selected chickens were 94.2, 92.9, 92.5, 89.3, 83.6 and 83.3% at 8-12, 12-16, 16-20, hatch-12, hatch-16 and hatch-20 weeks of age, respectively. Soltan (1991b) stated that, in general, selection is a very important tool for breeders to select Sinai strains on the basis of partial records.

Soltan and Ahmed (1990) showed that means of egg number, age at sexual maturity and egg weight of Sinai-selected were 34.5 eggs, 186.6 days and 41.1 g, respectively. Corresponding values were 31.6 eggs, 211.9 days and 42.0 g for the control line. Soltan (1991a and 1992) investigated some phenotypic and genetic parameters of body reactions in Sinai fowl in order to utilize experimental data in breeding programs. He reported that Sinai fowl laid heavier eggs (43.3 g) compared to both Fayoumi (37.3 g) and Baladi (39.2 g).

The present work was conducted to study the existing productive traits for Sinai breed as basic information for planning selection programs to increase the rate of egg production and to improve egg quality.