



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية  
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# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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**ESTIMATION OF SOME PHENOTYPIC PARAMETERS FOR  
GROWTH AND PRODUCTIVE TRAITS IN TWO LINES  
OF FAYOUMI CHICKENS**

**BY**

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1991

***THESIS***

Submitted In Partial Fulfillment  
Of the Requirements

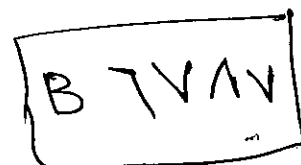
**FOR**

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**IN**

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Department of Poultry Production  
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1999



## ***APPROVAL SHEET***

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***THESIS  
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***HANAN ABDEL-RAHMAN HASSAN EL-GHONEMY***

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**1999**

## ***ABSTRACT***

The experimental work of the present study was carried out at Fayoum Poultry Research Station at EL- Azab, belonging to Animal Production Research Institute, Ministry of Agriculture, during one season of production (1996). Data used in the present study were obtained by using two pedigreed lines of Fayoumi, one was selected for growth (GG), the other was unselected Fayoumi line (RR). Either body weights in grams, or body measurements in millimeters, were recorded from hatch up to 12 weeks (hatch, 4, 8, 12 weeks and at sexual maturity). Egg production was recorded for two lines in the first 90 days. 1- There were highly significant differences between the two lines. The GG line had the heaviest body weight at all ages under study. Similar trend was found for shank and keel length. The RR line had the longest wattle at 8 weeks of age, the highest comb at 4 and 8 weeks of age and the longest comb at 8 and 12 weeks of age. Sex showed highly significant influence being higher for males than females in most cases. 2- Phenotypic correlations, generally, were highly significant and positive for either body weights or body measurements and between them at different ages in most cases. Highly significant and positive correlations for the two lines were observed: 1-Between body weight at 8 weeks and at 12 weeks of age. 2- Between the same character at 8 weeks and 12 weeks of age for length of shank, keel, wattle and comb height and length. 3- Between shank length and keel length at 4 weeks of age. Between traits under study at 12 weeks of age, negative correlations were observed for RR line: 1- Between hatch length and both body weights at 4 and at 8 weeks of age. 2- Between hatch weight and other traits at different ages. GG line reached sexual maturity earlier than RR line. At sexual maturity age, body weight, WAT, SH and KL of GG line were significantly ( $P<0.01$ ) higher than RR line. At the same age, CH and CL of RR line were higher than those of GG line. The difference between the two lines in CL character was significant ( $P<0.05$ ).

In respect of egg production, there were significant difference between GG and RR lines in EN, EM and EW in the third month (GG higher than RR), while there were no significant differences at the first and the second months. The phenotypic correlations between body measurements or between egg production characters or between body measurements and egg production traits were presented and discussed in details.



***Dedication***

***To my mother's spirit, father, husband and  
daughter who gave me hope, confidence and a great  
will to be, to maintain and to resist***

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