



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

EFFECT OF CROSSING ON BROILER PRODUCTION

By

MOHAMMED FUAD MAKKI ABDULLA

B.Sc. Agric. Sci. (Animal Production), Fac. Agric., King Suod Univ., 1990

M.Sc. Agric. Sci. (Poultry Production), Fac. Agric., Cairo Univ., 1999

THESIS

**Submitted in Partial Fulfillment of the
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DOCTOR OF PHILOSOPHY

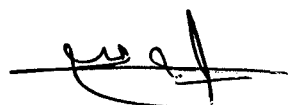
In

**Agricultural Sciences
(Poultry Breeding)**

**Department of Animal Production
Faculty of Agriculture
Cairo University
EGYPT**

2011





APPROVAL SHEET

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Name of Candidate: Mohammed Fuad Makki Abdulla **Degree:** Ph.D.
Title of Thesis: Effect of Crossing on Broiler Production
Supervisors: Dr. Farid Kamal Ramzi Stino
 Dr. Abdel-Rahman Mohamed Atta
Department: Animal Production
Branch: Animal Breeding **Approval:** 12 / 12 / 2011

ABSTRACT

The present experiment was carried out at the Poultry Research Center and the Laboratory of Biotechnological Methodology for Poultry Improvement, Department of Animal Production, Faculty of Agriculture, Cairo University, Giza, Egypt, during 2009. This experiment was conducted to determine the effect of crossing on different production traits such as body weight, growth rate, feed conversion, carcass characteristics, and immune response. Two commercial broiler strains, Arbor Acres and PureLine, were used in this experiment. PureLine grandparent males and Arbor Acres commercial parents males were crossed with the fourth generation of local female broiler line (B-2), which was selected to increase body weight at 6 weeks of age to produce the crosses AA•B-2 and PL•B-2. All chicks of the two strains and the crosses were raised under the same conditions until 6 weeks of age. The productive efficiency of those chicks were evaluated through body weight, growth rate, feed conversion, mortality, meat production, immune response against sheep red blood cells (SRBC) antigen, and delayed type hypersensitivity against bovine serum albumin (BSA) antigen.

The results indicated that the Arbor Acres strain had significantly higher live body weights, growth rates, blood, feather, proventriculus, gizzard, liver, giblets, carcass, front and rear parts, pectoralis major and breast meat weights compared to the PureLine strain and the two crosses. Also, the PureLine strain had significantly higher keel length and lungs weights. No significant differences were observed between the two strains Arbor Acres and PureLine in head, neck, abdominal fat pad, shanks with feet, wings, pectoralis minor, thigh with drumstick meat weights and dressing percentages. Also, no significant differences were observed between the two crosses, (AA•B-2) and (PL•B-2), in all carcass characteristics, and offal and carcass parts. The crosses (AA•B-2) and (PL•B-2) had significantly higher immune responses against (SRBC) 3 days post immunization. While the cross (AA•B-2) had significantly the lowest response 6 days post immunization. At 9 days post immunization no significant differences were observed between the two strains or the two crosses. Also, no significant differences were observed between all the strains or the crosses in their immune response to (BSA) antigen at all times studied.

The results of this study indicated that the crosses AA•B-2 and PL•B-2, were similar in most of the traits studied. It was conclude that crossing the local female broiler line (B-2) with Arbor Acres or PureLine males resulted in a similar local broiler.

Key words: Broiler crosses, body weight, feed conversion ratio, mortality, immune response, breast meat, carcass measurements, carcass parts, giblets.

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