بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــســـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

EFFECT OF PROSTAGLANDINS ON SOME PHYSIOLOGICAL AND REPRODUCTIVE CHARACTERS IN SOME BIRDS

BY

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B. Sc. Agric. Sci. (Poultry production), Ain Shams Univ., 1987
M.Sc. Agric. Sci. (Poultry Physiology), Ain shams Univ., 1992

Thesis submitted in partial fulfillment
of
the requirements for the degree of
DOCTOR OF PHILOSOPHY

in

Agriculture Science
(Poultry Physiology)

Department of Poultry Production
Faculty of Agriculture,
Ain Shams University

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APPROVAL SHEET

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Date of examination: 11 / 2 /1998

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ABSTRACT

NEMAT ALLAH GAMAL EL-DIEN MOHAMMED ALI.
Effect of prostaglandins on some physiological and reproductive characters in some birds. Unpublished Doctor of philosophy, Dept. of Poultry Production, Fac. of Agric., Univ. of Ain Shams, 1998.

Three experiments were conducted. The first experiment dealt with the effect of dietary oils on fertility, hatchability and productive potential in female in Japanese. A total of 140 female quail were assigned randomly to one of five treatment groups and fed on basal supplemented with 3% of one of the following oils; olive (T1), soybean (T2), palm (T3), corn (T4), and control group. Eggs were incubated, and their fertility and hatchability were calculated.

Birds were sacrificed and autopsied, ovaries and oviducts were weighed. The results showed that: body weight of quail were significantly higher in treatments than control. The weight of second and third follicles were significantly higher in treatments than control. However, the weights of ovary, oviduct and shell gland were not significantly affected by different oil treatments. Egg production, fertility and hatchability were higher in all treatments compared to control.

In the second experiment, the levels of saturated and unsaturated fatty acids as precursors of prostaglandins were measured in plasma of 16 days embryo by GLC. The results of this study showed that the levels of prostaglandins precursors to control.

In the third experiment, the effect of prostaglandins injections and their inhibitors *in ovo* on hatchability was examined. One thousand fertile quail eggs were incubated and at 16 days of incubation, eggs were injected with PGE1, PGF2α, indomethacin, aspirin, ethanol, sham and control with no injection.

Hatchability percentages were calculated after 18 days of incubation. PGE1 and PGF2α resulted in highly significant increase in hatchability

percentages as compared to the other treatments ($P<0.01$). While the anti-prostaglandins, aspirin and indomethacin resulted in reduction in hatchability percetages.

These results suggested that prostaglandins and their precursors (saturated and unsaturated fatty acids) played an important role in the physiological processes of Japanese quail.

Key Words: PGE1- PGF2α - Egg production - Saturated and unsaturated fatty acids - Fertility - Hatchability - Aspirin - Indomethacin - Embryos.

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