شبكة المعلومات الجامعية

بسم اللّه الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

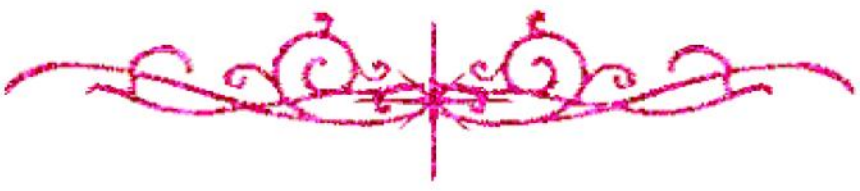
نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

شبكة المعلومات الجامعية

بعض الوثائق الأصلية تالفة



بالرسالة صفحات
لم ترد بالأصل

GENE EXPRESSION, HORMONAL AND METABOLITES LEVEL IN RELATION TO EGYPTIAN SHEEP GROWTH

By

AYAT ALLA-ELDEEN KASSEM SAYED FAYED

B.Sc. Agric. Sci. (Animal Production), Fac. Agric., Cairo Univ., Egypt, 2009
M.Sc. (Animal Physiology), Fac. Agric., Cairo Univ., Egypt, 2015

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APPROVAL SHEET

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APPROVAL COMMITTEE

Dr.MONA ABDELTAWAB EL-KHASHAB .....
Professor of Animal Physiology, Fac. Agric., Fayoum University.

Dr.SALEH ABDEL HAMID KANDEAL .....

Professor of Animal Physiology, Fac. Agric., Cairo University.

Dr. GAMAL ASHOUR HASSAN.....
Professor of Animal Physiology, Fac. Agric., Cairo University.

Date: 21 / 4 / 2020

SUPERVISION SHEET

Gene Expression, Hormonal and Metabolites Level in Relation to Egyptian Sheep Growth

Ph.D. Thesis
In
Agric. Sci. (Animal Production)

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AYAT ALLA-ELDEEN KASSEM SAYED FAYED

B.Sc. (Animal Production), Fac. Agric., Cairo Univ., Egypt, 2009
M.Sc. (Animal Physiology), Fac. Agric., Cairo Univ., Egypt, 2015

SUPERVISION COMMITTEE

Dr. GAMAL ASHOUR HASSAN
Professor of Animal Physiology, Fac. Agric., Cairo University

Dr. NEAMA AHMED ASHMAWY
Professor of Animal Physiology, Fac. Agric., Cairo University

Name of Candidate: Ayat Alaa-ElDeen Kassem Fayed **Degree:** Ph.D.
Title of Thesis: Gene Expression, Hormonal and Metabolites Level in Relation to Egyptian Sheep Growth
Supervisors: Dr. Gamal Ashour Hassan
Dr. Neama Ahmed Ashmawy
Department: Animal Production **Branch:** Animal Breeding
Approval: 21 / 4 / 2020

ABSTRACT

This study aimed to compare growth performance, blood metabolites and expression of *IGF-1*, *GH*, and *Leptin* genes in three different Egyptian sheep breeds across age. Thirty Egyptian sheep males (Barki, Ossimi, and Rahmani) were divided into three age categorize (7 – 9, 10 – 12, and 13 - 16 months). Blood plasma was isolated (3000 rpm /20min) to determine (IGF-I, and leptin) hormones, blood metabolites (glucose, total protein, and total lipids). In addition, 2 ml of blood samples were used for genetic assay for three genes related to growth (GH, IGF-1, and leptin). The results showed that there was a significant increase in sheep's live body weights toward advanced ages, the highest values of linear body measurements were observed in Ossimi breed. There were no significant differences in blood metabolites levels in all sheep breeds. The Barki breed showed a significant up-regulation of GH compared to the Ossimi breed in 7-9 months age category, while Rahmani breed showed a significant up-regulation of GH compared to the Ossimi breed in the 13-16 months age category. Moreover, Barki breed showed a significant down-regulation of IGF-1compared to the Ossimi breed in 7-9 months. Meanwhile, leptin's expression showed significant differences in Ossimi breed between 10-12 months age category and two other age categories. According to age categories, Barki breed showed a significant up-regulation of GH compared to the Ossimi breed in 7-9 months age category. However, Barki breed showed a significant down-regulation of IGF-1 compared to the Ossimi breed in 7-9 months. Meanwhile, Leptin expression showed significant differences in Ossimi breed between 10-12 months age category and two other age categories.

Key words: *Egyptian sheep, Growth performance, Linear body measurements, Gene expression.*

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