

ABSTRACT

The present experiment was designed to study some physiological, productive and reproductive parameters of Japanese quail under heat stress. At the beginning of the seven weeks of age five hundred and forty six Japanese quail birds were assigned randomly into four equal groups each group containing 90 female and 45 male . Four groups were housed in four environment temperature were 25, 30, 35°C and room temperature. The heat stress was significant decreased in body weight, body weight gain , feed intake and egg production and insignificant decreased in slaughter parameter the heat stress led significant to decreased physical parameters of bloods (packed cell volume, hemoglobin %, red blood cells, white blood cells count and some differential count of white blood cells).

Heat stress was decreased significant of calcium, phosphorus and Ca/P ratio.

The heat stress was increased significant of T_3 and T_3 / T_4 ratio and corticosterone but caused significant decreased in (T_4).

The heat stress was decreased the primary, growing and mature follicles in ovary and effect of lumina in creased of seminiferous tubule of Japanese quail

key words: Poultry, Japanese quail, egg production Haugh units, slaughter parameters, physical and chemical Parameters of blood, Hormones and Histological parameters.

الخلاصة

تم إجراء التجربة لدراسة أداء السمان اليابانى تحت تأثير الإجراء الحرارى - تم تربية ١٠٠٠ كتكوت سمان عمر يوم فى بطاريات حتى عمر ٦ أسبوع بعد ذلك تم توزيعها إلى ٤ مجاميع داخل بطاريات التربية كل مجموعة تحتوى على ٩٠ سمانة انثى + ٤٥ سمانة ذكر تم التجربة بحيث تشمل تأثير ٤ درجات مختلفة من الاجهاد الحرارى (٣٥ - ٣٠ - ٢٥ درجة حرارة الغرفة) وجد أن هناك تأثير واضح حيث يقلل من (وزن الجسم - معدل التغير فى وزن الجسم - عدد البيض وكتلة البيض معدل استهلاك الغذاء وكفاءة التحويل) ليس هناك تأثير واضح على صفات الذبيحة - كما وجد أن هناك تأثير للاجهاد الحرارى بالانخفاض على القياسات الطبيعية للدم (نسبة المواد الخلوية - الهيموجلوبين - كرات الدم الحمراء - كرات الدم البيضاء) كما وجد أن الاجهاد الحرارى يقلل من الكالسيوم والفوسفور كما يقلل من محتوى البلازما من T4 والكورتيزون ويزيد من محتوى البلازما من T3 كما بأثر على الصفات الهستولوجية للمبيض والخصبة والغدة الدرقية وغدة قشرة فوق الكلية للسمان اليابانى.

الكلمات الدالة:

(السمان اليابانى - قياسات الإنتاجية - قياسات الذبيحة - القياسات الطبيعية والكيميائية للدم - الهرمونات - القياسات الهستولوجية):

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List of abbreviation

B. W.	Body weight
H. U.	Haugh unit
E. P.	Egg production
E. N.	Egg numbers
E. M.	Egg mass
E. Q.	Egg quality
B. T.	Body temperature
R. R.	Respiration rate
R. B. Cs.	Red blood cells
W. B. Cs.	Leukocytic count
P. C. V.	Packed cell volume
H.	Heterophil
L.	Lymphocyte
A.	Albumin
G.	Globulin
T3	Triiodothyronine
T4	Thyroxine
M. C. H.	Mean corpuscular hemoglobin
M. C. V.	Mean corpuscular value
M. C. H. C.	Mean corpuscular hemoglobin concentration