شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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 الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

VITAMIN C SUPPLEM NTATION AND ITS EFFECT ON THE PERFORMANCE OF JAPANESE QUAIL

BY

NAGLAA MOHAMED EL-SAID ABO OUF

B. Sc. Agric. (Poultry Production) Tanta Univ. (1994)

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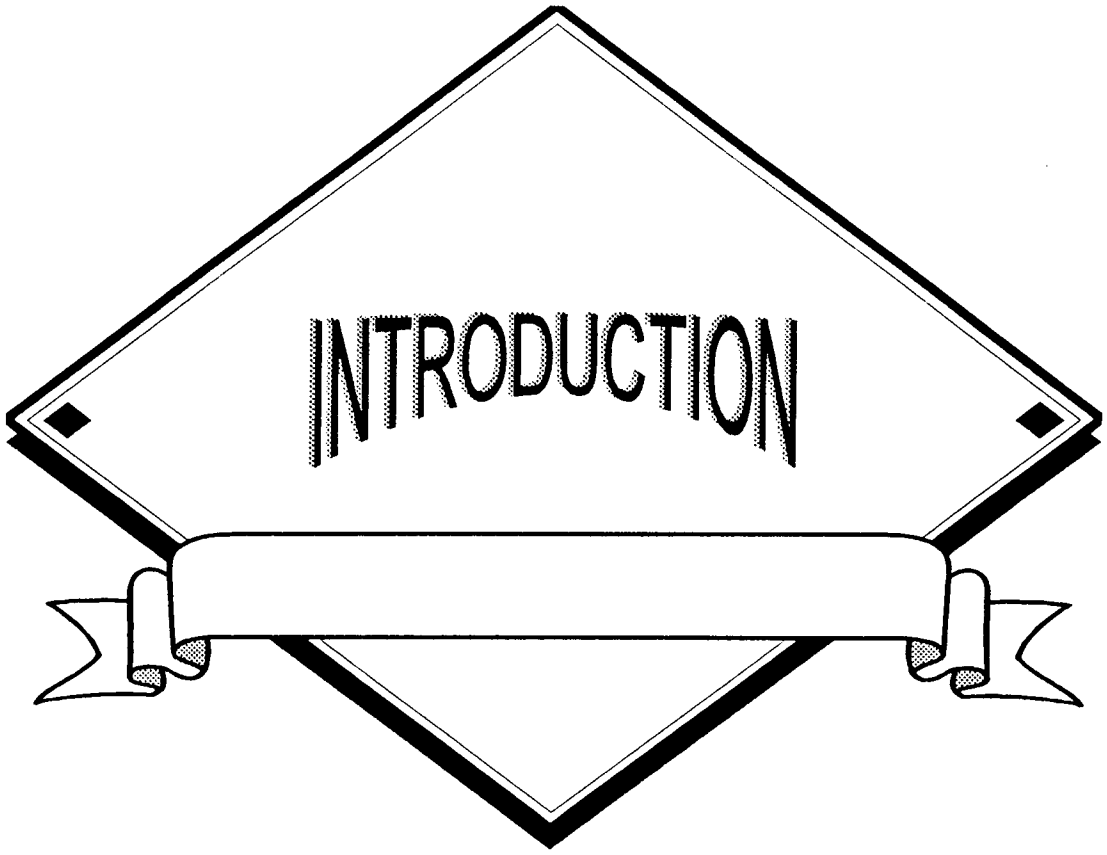
INTRODUCTION

1. INTRODUCTION

Vitamin C is not regarded as a dietary requirement for poultry because it can be synthesized at a sufficient rate to meet the needs under usual conditions. Therefore, it is not the practice to add vitamin C to poultry diets. However, particular environmental, nutritional and pathological conditions increase metabolic need for vitamin C beyond the innate synthetic ability of the bird.

Vitamin C is a powerful reducing agent and is of general importance as an antioxidant influencing many oxidation-reduction reaction in biological systems. Vitamin C also acts as a co-factor for some enzymes such as prolyhydroxylase and play an important role in the synthesis of collagen in tissues and bone. Vitamin C functions as regulator of the catabolism of cholesterol bile acid in the guinea pigs and has been demonstrated to be a factor in lipid regulation of guinea pig, rabbit and rat. Supplemental vitamin C influenced body energy stores that are used for energy purposes during periods of reduced energy intake **(Mckee *et al.*, 1997).** It has been reported that supplemental vitamin C in guinea pigs not only enhanced carnitine biosynthesis in cultured hepatocytes but also, via the synthesized carnitine, induced the partitioning of fatty acids towards B-oxidation **(Ha *et al.*, 1994)**. A negative correlation between rat adrenal vitamin C concentrations and the

rate of steroid synthesis were observed by **(Kitabchi and West 1975).** Vitamin C inhibits the 11-hydroxylation and 21-hydroxylation step in beef adrenal steroid synthesis.

Vitamin C increased iron bioavilability by retarding ferritin degradation **(Hoffmann *et al.*, 1991)** and enhanced iron absorption from gastrointestinal tract which plays an important role in erythropoiesis **(Swenson, 1982).** Vitamin C also had a beneficial effect during egg incubation and after hatch on embryonic development **(Zakria and Al-Latif, 1998).**

The present work aimed to shed more light on the efficacy of supplemental vitamin C on performance of Japanese quail, internal organs weight, biochemical analysis of plasma, hematological picture and histological traits.


REVIEW OF LITERATURE