



Fayoum University



Faculty of Agriculture

# **Effect of some medical herbs or their extracts as a natural feed additives on Japanese Quail Performance**

BY

**Somaya Ibrahim Ragab Soliman**

B.Sc. Agric. Sci. (Poultry Production), Fac. Agric. Fayoum,  
Fayoum University, 2018

**THESIS**

**Submitted in Partial Fulfillment of the  
Requirements for the Degree of Master  
In**

**Poultry Nutrition  
Poultry Production Department  
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**2024**



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## ABSTRACT

The current work aimed to study impacts of feeding on thyme (TLP) (Trial 1), and basil leaves powder (BLP) (Trail 2) on growth performance, blood biochemistry, carcass characteristics, antioxidant parameters, immune statues, digestive enzymes, thyroid hormones, panel test and economic efficiency in growing Japanese quail. A total number of one hundred ninety two 9 – day-old unsexed birds with an average weight of **52.60± 0.21 g** was assigned to four equal treatments for each trail. Each treatment containing forty eight birds in six replicates of eight birds each. Chicks were reared in cages with dimensions 20 × 20 × 25 <sup>cm</sup><sup>3</sup>. The first trial was given 4 dietary treatments; the first control diet (24% CP, 2900 Kal, ME /kg diet), 0.5% TLP, 1.0%TLP and 1.5% TLP containing diets as the second, third and fourth treatments; respectively. Besides, there were also 4 experimental treatments for the second trail, the first control group, the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> supplemented with 0.5% ,1% and 1.5% BLP ; respectively.

Quails fed diets containing TLP or BLP levels had better growth performance, carcass, quality, improved antioxidant and immune statues, better digestive enzymes (trypsin, amylase and lipase), all acceptability of quail meat and economic efficiency ratio (EEfR).

In conclusion, growing quails fed diet containing 0.5% TLP had the greatest value of EEfR (145.83%), as the first trail, while the EEfR value was 140.91%, for 1.5%BLP in the second trail.