



بِسْمِ اللَّهِ الرَّحْمَنِ  
الرَّحِيمِ



## بحث رقم ( ٤ )

طبيعة البحث: بحث مشترك و منشور.

سابقة التقييم: تم تقييمه في تخصص تغذية دواجن في اللجنة العلمية الدائمة للإنتاج الحيواني (٤١) بتقدير مقبول (٦٥.٣%) وعدد نقاط (٦.٤).

عنوان البحث:

# TURMERIC AS AN EFFECTIVE ALTERNATIVE TO ANTIBIOTICS FOR PROMOTING GROWTH OF JAPANESE QUAIL

الكركم كبديل فعال للمضادات الحيوية المحفزه للنمو في السمان الياباني النامي

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مكان النشر:

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## ABSTRACT

Four groups of 360 quail at one day-old distributed at equal body weights and classed to four groups (control and three treatments) the first treatment antibiotic (control diet+ sub-therapeutic dose of avilamycin 8 mg/kg diet), the second and the third Turmeric powder 1% and 3% (control diet +1%

and 3% turmeric powder) respectively, and used to test the possibility of using turmeric as natural alternative to antibiotics growth promoters on Japanese quail. The obtained results were summarized as follows: Growth performance was improved through appending quail diets with both 1 and 3% turmeric expressing as heavier LBW38d, BWG10-38, lower FI10-38, better FC10-38 and PI10-38 compared with either the avilamycin treatment or un supplemented group (control) and favoring the 1 % turmeric group which exceeded the 3% turmeric group, however adding turmeric did not affect the carcass, the antibiotic group had the highest dressed meat%. All serum biochemical indices tested at slaughter except HDL and Tri G significantly affected by either treatment or sex effects. The diets supplemented with turmeric showed lower total Cholesterol, LDL, RBS and AST than both avilamycin supplemented and un supplemented groups. Both antioxidant parameters and immune responses significantly affected by treatment effect. Conversely, sex had no effect on these parameters. The increase in turmeric rate of supplementation increased GPx and immune responses (IgG, IgA and IgM) and decreased TBAR. Useful intestinal bacteria (Lactobacillus) in growing quails significantly increased with added turmeric to quail diet and both Salmonella and E. coli (harmful intestinal bacteria) reduced significantly than the control group. The lowest intestinal bacteria counts either useful or harmful were obtained by the avilamycin supplemented group. In conclusion, supplementing quail grower diets with Turmeric 1% may be act as an effective antibiotic alternative (avilamycin) for promoting quail growth.