



قسم الدواجن

بِسْمِ اللَّهِ الرَّحْمَنِ
الرَّحِيمِ



بحث رقم (٢)

طبيعة البحث: بحث مشترك و منشور:

سابقة التقييم: تم تقييمه في تخصص تغذية دواجن في اللجنة العلمية الدائمة للإنتاج الحيواني (٤١) بتقدير جيد (٧٤%) وعدد نقاط (٧.٢٥).

عنوان البحث:

ORGANIC ACIDS AS POTENTIAL ALTERNATE FOR ANTIBIOTIC AS GROWTH PROMOTER IN JAPANESE QUAIL

الأحماض العضوية كبدايل محتملة للمضادات الحيوية المنشطة للنمو في السمان
الياباني

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مكان النشر:

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ABSTRACT

A gross of 180 growing Japanese quail at one day age classified into four groups as follows: a control group (with no additives), antibiotic group (control diet + sub-therapeutic dose of avilamycin, 8 mg/kg diet), ascorbic acid group (control diet + 1g ascorbic /kg diet) and citric acid group (control diet + 40g citric/kg feed) to evaluate the use of organic acids as probable alternate to antibiotic as growth promoter

for quail groups. **The most important results were:**

Both ascorbic and citric acids supplemented to diets of growing Japanese quail improved growth performance as compared with avilamycin and control groups, favoring ascorbic acid. Both ascorbic and citric acid groups had significantly better serum biochemical serum blood lipids indices than either avilamycin or control ones.

Organic acids had significantly higher antioxidant parameters and immune response but lower thiobarbaturic acid- reactive substances values than both antibiotic and control groups. Fortunately, Organic acids showed to increase of beneficial (*Lactobacillus*) moreover reduced numbers of harmful bacteria (*E. coli* and *Salmonella*) as compared to the control. Females had better performance than males having heavier body weight at 38d, body weight gain, faster growth rate, better feed conversion, higher performance index during the 10-38 period and surpassed males in giblets absolute. However, sex insignificantly affected all slaughter parameters, carcass chemical composition, serum biochemical indices-except cholesterol, antioxidant parameters, immune response and intestinal microflora count.

Therefore, organic acids seemed to be used as growth promoters alternatives to antibiotics in growing Japanese quail.