



بِسْمِ اللَّهِ الرَّحْمَنِ
الرَّحِيمِ



بحث رقم (٨)

طباعة البحث: مشترك ومقبول للنشر (مستخلص من رسالة) .

عنوان البحث:

**EFFECT OF ADDING POMEGRANATE PEELS TO
LAYING JAPANESE QUAIL DIET ON PERFORMANCE,
BLOOD, IMMUNITY PARAMETERS AND ECONOMICAL
EFFICIENCY.**

تأثير إضافة قشر الرمان إلى علائق السمان الياباني على الأداء الإنتاجي وبعض
صفات الدم والمناعة ومقاييس مضادات الأكسدة والكفاءة الاقتصادية خلال مرحلة
إنتاج البيض.

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مكان النشر:

Egyptian J. Nutrition and Feeds (2019), 21(3):.

المجلة المصرية للتغذية والأعلاف (٢٠١٩) ٢١ (٣): .

ABSTRACT

Recently, there are increasing in used traditional medicine such pomegranate peel due to its therapeutic properties according to its high content of total phenolic content and antioxidant activity which related to the management of many disorders. So, this search was commanded to investigate the effect of addition with varying levels of pomegranate peel

(pp) on performance, egg quality, fertility and hatchability percent, blood parameters, immunity and microbial content in laying Japanese quails. A overall of 180 birds randomly allocated into five experimental groups each in three replicates, 12 birds each (8 female and 4 male), the first fed basal control diet without any additives (control group), the second fed control diet plus sub-therapeutic dose of oxytetracyclin, 1g/kg diet. While, third, four and five groups fed on basal control diet with 0.5 %, 1.0 % and 1.5 % from pp. Results demonstrated showed that dietary PP levels significantly improved egg number, egg production and egg mass with lower feed intake and better feed conversion ratio especially pp at levels 1.0 % and 1.5 %. Except egg weight there were no significant effects of either dietary PP levels or antibiotic on albumin, yolk and shell weights %. Feeding diet containing 1.5 % PP significantly increased egg weight, Haugh units and yolk color, but decreased yolk cholesterol significantly. Dietary PP had significant improvement on fertility or hatchability of fertile eggs and caused significant reduced the populations of intestinal *E. coli* and *Salmonella* and increased the intestinal beneficial *Lactobacilli* bacteria. Different dietary PP did not significantly affect blood plasma HDL, VLDL and triglycerides. However, birds fed PP had significantly less AST, ALT, TG, cholesterol and LDL as compared with the control. Also, Quail fed the diet supplemented with PP had suitably the highest GPx, IgG and the lowest TBAR with the highest economical efficiency as compared to other groups. In conclusion, PP addition by 1.0% can improve productive, physiological parameters and economical efficiency and also a good alternative to antibiotic for laying quails.