



بسم الله الرحمن
الرحيم



بحث رقم (8)

طبيعة البحث: بحث مشترك و منشور

عنوان البحث:

Influence of dietary supplementation of Eucalyptus leaves extract (*Eucalyptus globulus*) on performance, lipid profiles, digestive enzymes, microbial content, antioxidant indices and immune responses of growing Japanese quail.

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ABSTRACT

This investigation was initiated to evaluate the impact of an extract made from eucalyptus leaves (*Eucalyptus globulus*) (ELEX) on the quail's physiological state, growth performance, some blood parameters, and intestine bacterial numbers. Three hundred and sixty Japanese quail chicks, aged ten days, were split up into four groups, each with six cages and every cage containing fifteen chicks. While the initial treatment was treated with a basal diet (considered the control treatment), the following groups were administered the basal diet supplemented with ELEX at concentrations of 250, 500, and 750 mg ELEX/kg diet, correspondingly. Findings revealed significantly LBW and BWG, along with notable improvements ($p<0.001$) in feed conversion ratios with lowest feed intake for groups subjected to ELEX levels, notably the ones receiving 750 mg ELEX followed by 500 mg ELEX in comparison to the control group. Quails consuming a diet enriched with ELEX exhibited

substantially heightened levels of digestive enzymes in contrast to the control group. The presence of intestinal *Lactobacillus sp.* was markedly augmented, while *Escherichia coli* and *Salamonella* populations were significantly reduced by the dietary incorporation of ELEX levels ($p < 0.001$). Also, parameters such as ALT, AST, lipid profiles, antioxidant status, and immunity were significantly influenced by varying ELEX concentrations in compare to the basal ($p < 0.001$). To summarize, the incorporation of ELEX at 750 mg followed by 500 mg ELEX/kg diet of quail exhibited the perfect growth performance, some microbial numbers, and blood biochemical constituents in growing quail.