

EFFECT OF ADDING BLACK BEAN SEEDS POWDER (*Nagella sativa*) AND ANISE SEEDS POWDER (*Pimpinella anisum*) TO LAYING HENS DIET (LOHMANN BROWN) IN PRODUCTIVE PERFORMANCE AND SOME BLOOD BIOCHEMICAL TRAITS

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ABSTRACT

One hundred and forty four Lohman brown hens (43 weeks old) were randomly distributed in to 4 treatments with 3 replicates (12 hen / per replicate) . Fed birds during the experiment for eight weeks on standard laying hens diet and the treatments were as follows: T0 (standard diet without any addition) T1 (0.1% black bean seeds powder added to standard diet) T2 (0.5% black bean seeds powder and 0.5% anise seeds powder added to standard diet) T3 (1% anise seeds powder added to standard diet) and on two periods ,the first period from 43-46 weeks and second period 47-50 weeks, and studied productive performance and some biochemical characteristics of serum of laying hens . The results showed at the end of the experimental period which continued eight

weeks, no significant differences between treatments in egg production, egg weight, egg mass, feed daily consumption of the bird and feed conversion efficiency, while appear reduced a highly significant ($p<0.01$) in level of cholesterol and uric acid in birds blood serum of the second and third treatment, and superiority of a highly significant ($p<0.01$) in level of glucose in the bird's blood serum at the first treatment compared to the standard treatment.

We conclude from this study possibility of adding (0.5% black bean powder and 0.5% anise seeds powder) or 1% of the seeds of anise powder in a diet of laying hens to decrease the cholesterol and uric acid in blood serum of the bird , and increasing glucose level when adding 0.5% black bean powder in a diet of laying hens during the period 43-50 weeks of the age .

Key words : black bean seeds , anise seeds , hybrid Lohmann brown