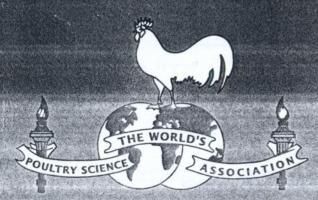
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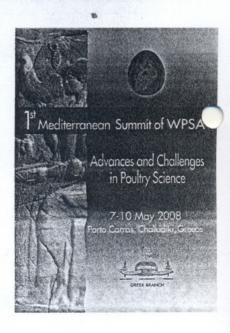
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EFFECT OF TURMERIC RHIZOME POWDER (CURCUMA LONGA) ON PERFORMANCE, EGG QUALITY AND SOME BLOOD SERUM PARAMETERS OF LAYING HENS

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This experiment was conducted to evaluate the effect of turmeric rhizome powder (TRP) on performance, egg quality and some serum parameters of laying hens (240 Hy-Line hens, 100 wk old) in a completely randomized block design. Four groups of hens of 60 birds each, received five levels of TRP (0.0, 0.5, 1.0, 1.5, and 2.0 g/kg of diet) in wheat-soybean meal based diets for 4 weeks. The result showed that increasing levels of TRP decreased (P<0.05) feed conversion rate (FCR) during the last 3 weeks of experiment. There was no significant effect (P>0.05) for different levels of TRP on specific gravity, egg shell thickness, egg shell weight and egg shell weight to egg weight ratio. The increasing levels of TRP significantly (P<0.05) increased the yolk colour index. The hens fed with 0.0 level of TRP had higher (P><0.05) triglyceride (TG), Total cholesterol, and LDL-cholesterol in blood serum compared with the others, while the HDL-cholesterol was higher (P><0.05) for TRP levels of 1.0 and 1.5. Results of this experiment suggest that TRP in the diets of layers had no adverse effect on egg quality and performance and may have reduced cholesterol and triglyceride in blood serum.

Keywords: Turmeric, egg quality, serum metabolites, laying hens