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EGG QUALITY PARAMETERS OF LAYING HENS FED DRIED TOMATO MEAL IN DIET

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Abstract

An experiment with one hundred MB 402 laying hens (36 weeks of age), the effect of dried tomato meal in diet on egg quality was determined. The hens were allocated into five dietary treatments, being: R₀ = 100% based diet (BD) + 0% tomato meal (TM); R₁ = 98% BD + 2% TM; R₂ = 96% BD + 4% TM; R₃ = 94% BD + 6% TM; and R₄ = 92% BD + 8% TM of 20 birds each and received a diet ad libitum. The control diet (based diet) was formulated to contain 51% corn, 14% rice bran, 7% fish meal, 6% CaCO₃, and 22% commercial diet. Chemical composition of tomato meal were: 16.73% crude protein, 1.53% fat, 30.94% crude fiber, 0.96% Ca, 1.20% P, and 2416 Kcal/kg ME. The study was conducted over a period of 8 weeks. Data were collected on eggs quality: egg weight, egg shell weight, and egg shell thickness. Data were analyzed by one-way analysis of variance (ANOVA). The treatment means were compared using Duncan’s multiple range test. The results showed that no differences (P>0.05) in hen egg weight, egg shell weight and egg shell thickness between treatments R₁, R₂, R₃, and R₄ compared to treatment R₀ (control). It can be concluded that tomato meal can be used as an alternative feedstuff in laying hen diets at inclusion levels up to 8% without negative effects on egg quality.

Keywords: Dried tomato meal, egg quality, laying hens

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