UTILIZATION OF HEDGE LUCERNE MEAL (DESMATHUS VIRGATUS) AS PROTEIN SUPPLEMENT IN LAYER DIETS

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Abstract:

The present experiment was conducted to determine the effect of hedge lucerne meal on the laying performance and egg quality of laying hens. Three hundred 22 week-old Hisex brown pullets were randomly divided into 5 groups of 60 hens each. Each group was fed a ration containing 0, 2, 4, 6 and 8% hedge lucerne meal. All diets were isonitrogenous and were fed to the layers continuously for five 28-day periods. The results demonstrated that feeding 8% hedge lucerne meal decreased egg production. No significant differences among the dietary treatments were found in feed intake, body weight gain, egg weight, egg mass, egg composition and general health of the laying hens. In terms of egg quality, it was found that there were no significant differences in specific gravity, shell thickness, albumin height and Haugh units between dietary treatments. However, egg yolk color was significantly affected, with the control group having a yolk color much paler than the other groups, while hens fed 8% hedge lucerne meal in the diet had the highest egg yolk color score (p<0.01). The results of this experiment clearly indicate that 6% hedge lucerne meal can be added in the diet of laying hens without any adverse effects on the laying performances and egg quality.

Keywords: Hedge lucerne meal, Desmanthus virgatus, layer, feed intake, egg production, egg volk color