Gallus gallus Domesticus Flock Performance with Dietary Herb Supplementation

Hollingshead, Lincoln (School: Success Academy DSU)

Supplemental herbs have been linked to improved layer performance in Gallus Gallus Domesticus studies. However, as these studies mainly focus on standard chickens, the relation between such herbs and bantam chickens remains largely untested. Thus, the diet of a mixed-breed backyard chicken flock (n=6) was gradually supplemented with an herbal mixture of garlic, oregano, rosemary, and thyme to test hypothesized improved laying performance. Over three months, the birds received a feed containing 0%, 0.125%, and 0.25% herbal content, with a 0.125% increase per month. The experimental outcome was measured in terms of egg count, egg mass, and feed conversion ratio (FCR) one week out of every month. After experimentation, data from months 1 and 3 were compared using 3 2-Sample T-tests at the 0.05 level of significance. Analysis showed a higher egg count in the first month (p-value < 0.0001), a higher egg mass in the third month (p-value < 0.0001), and a more efficient FCR in the first month (p-value of 0.0009). Additional research suggests that differences in temperature and sunlight exposure between months caused these unexpected results. Despite attempts to mathematically account for these environmental factors, the results did not change significantly. These findings contrast with standard chicken studies and indicate that supplementing the diets of bantam chickens with herbs is not an effective practice; thus, the hypothesis cannot be accepted. However, using an improved experimental model with a better-controlled environment could yield more accurate results.

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