Effect of prebiotic on the behavioral patterns of Mallard ducks

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Abstract:

This experiment was conducted to evaluate the effects of dietary supplementation of prebiotic on behavioral patterns of ducks (Mallard). A total of forty eight 15 days-aged ducks (Mallard) were randomly allotted to three dietary treatments containing 0 (control), 1.5 (low) and 3.00 (high) gkg-1 prebiotic (AGRIMOS®), respectively. Each treatment consisted of four replicates of 4 birds each. Treatment effects on behavioral patterns were recorded using direct observation by instantaneous scan sampling technique. The results indicated that in compare to control, using prebiotic as a feed additive at dose of 1.5gkg-1 for ducks affect on their movement activities as it increased walking and standing activities, while it reduced the resting behavioral activities. Also, regarding the ingestive behavior both 1.5 and 3.00 gkg-1 increased the feeding activities, while, only 3.00 gkg-1 increased the drinking activities in compare to the control. Moreover, the result indicated that prebiotic did not affect on preening activities. However, using prebiotic as a feed additive at dose of 3.00 gkg-1 increased the leg stretching activities. Also, the results reflected that using prebiotic at both dose of 1.5gkg-1 or 3.00 gkg-1 reduced the ground pecking activities. In conclusion the behavioral responses of duck to prebiotic supplementation are needed to be carefully considered in order to obtain maximal growth-promoting effects of prebiotic in duck production.

Keywords:

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