

Effect of Different Levels of Seaweed in Starter and Finisher Diets in Pellet and Mash Form on Performance and Carcass Quality of Ducks

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Abstract :

Two trials were run to assess the nutritional value of seaweed as a feedstuff in starter and finisher diets for ducks. The first trial (starter period): 96, one-day old commercial ducks were weighed, wing banded and randomly distributed to battery brooders into 8 treatment groups (3 replicates x 4 ducks each). The ducks were fed the experimental diets contained 0, 4, 8 and 12% seaweed, the diets were offered ad-libitum in pellet and mash form from one day to 5 wks of age. The second trial (finisher period): 160 commercial ducklings (35 days of age) were weighed; leg banded and distributed to 16 treatment groups of ten ducks each. The ducks were fed the experimental diets contained 0, 5, 10 and 15% seaweed, the diets were offered ad-libitum in pellet and mash form from 35-63 days of age. Results of trial 1 indicate that there were no significant differences in Feed Intake (FI), Feed Conversion Ratio (FCR) due to inclusion of seaweed up to 12% in starter diet either in mash or pellet form. In general, ducks given pelleted diets utilized feed more efficiently than those given the mash one. Results of trial 2 reveal that seaweed can be included up to 15% into ducks finisher diets either in pellet or mash form without adversely affecting growth and FCR. The relative weight of dressing, liver, gizzard, thigh muscles and breast muscles were not significantly affected by including up to 15% of seaweed in finisher duck diets. Seaweed at 5 and 10% in the finisher duck diets significantly increased the relative weight of breast muscles. Seaweed up to 15% in duck diet significantly improved the texture of breast muscles and 5 and 10% seaweed improved the texture of thigh muscles. There were no significant differences in the aroma, taste, juiciness and color of meat due to seaweed up to 15% in duck diets. In conclusion, seaweed can be used in starter and finisher duck diets up to 12% and 15%, respectively, without adversely affecting growth performance and carcass quality.

Key Word :

Seaweed, ducks, productive performance, carcasses, meat quality

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