

News

The Response of Mule Ducks when Fed a Different Times of Post Hatch

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Due to genetic advancements and the advent of contemporary technology, duck production in Trinidad and Tobago is on the rise. Backyard systems are being replaced by semi-intensive and intensive systems for commercial uses. Economic pressures are being felt both locally and globally in the chicken industry because of the rising costs of feed ingredients, notably protein. Any effort to lower feed costs may result in a decrease in the overall cost of production since feed costs make up 60-70% of that total. Growth and development are essential characteristics that affect domestic animals raised for food economically. These characteristics affect the animal's value and yield of marketable meat. According to the law of diminishing returns, each extra unit of a variable input creates less and less new output as it is added to units of one or more constant outputs after a certain point. Additionally, the proportion between the input and output changes as units of the variable input are added to units of outputs.

For this experiment, a nearby hatchery was paid \$40 for 48 freshly hatched Mule ducklings. Ducklings were placed in 4 crates, each holding 12 ducklings, before being transported. Three hours after leaving the incubator, one box containing the 12 Mule ducklings received 100 g of the beginning meal, and the ducklings were then taken to the research laboratory at the University Field Station. Using Minitab 18 for Windows, a one-way analysis of variance (ANOVA) was used to evaluate the data. Regression models were used to calculate feed intake as a function of time during the starter and grower phases. Regardless of the time of feeding, the response to the length of post-hatch feeding in the current study displayed a second-degree polynomial curve for both the starter and grower phases.

The goal of regional commercial Mule duck producers is to maximize profit while achieving the ideal carcass weight at slaughter (63 days of age). In the current investigation, interventions had no appreciable impact on the MPP, VMP, or MOFC ($p > 0.05$) in either the starter or grower stages. Feed efficiency, also known as the feed conversion ratio, which is reflected in body weight, MPP, and VMP, is a typical metric for measuring and comparing production efficiency. Thus, the ratio (ME:P) and post-hatch feeding period may affect the MOFC as well. In the growth phase, MOFC was -0.51 and -2.01 at weeks 6 and 7 respectively for birds fed at 3- and 24-hrs post-hatch, whereas it turned negative at weeks 36 and 48.

Without influencing the live weight and financial performance of ducks fed at 3, 24, 36, and 48 hrs post-hatch, starter food can be fed for up to 21 days. Mule ducks should go from grower to finisher



feed after 35 days if they are to be raised for 63 days (9 weeks) (5 weeks).

JOURNALS REFERENCE

M.A. Williams, D.W .Palmer, C.H.O. Lallo and V. Sundaram, 2021. The response of mule ducks and economic implications when fed at different times of post hatch. *Int. J. Poult. Sci.*, 20: 270-277.

KEYWORDS

Cost implications, feed cost, post-hatch, marginal product, poultry feed

