

News & Comments

Sapu-Sapu Fish can Substitute up to 20% of Commercial Feed

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Freshwater fish called sapu-sapu fish (*Hypostomus plecostomus*) may survive in contaminated waters. The population of sapu-sapu fish is fairly large. According to studies duck, farmers harvest roughly 272 kg each day. Ducks may be able to get their daily requirements of protein and energy from Sapu-Sapu Fish (SSF).

For duck farmers in Lombok Island who utilize rice bran as a key feed element, the availability of fibre-digesting enzymes in SSF is highly advantageous. It is anticipated that the enzymes will increase the rice bran's ability to be digested, which will boost egg production.

A study was done to determine the impact of substituting sapu-sapu fish (*Hypostomus plecostomus*) for commercial feed on the productivity and quality of Mojosari duck eggs.

This study was performed on a local farm in Mataram city of Lombok Island, Indonesia. On the island of Lombok, 100 4–5-month-old Mojosari laying ducks were purchased from local farmers. Bamboo partitions were used to create twenty cages. Each unit is 1.5 meters long and 1 meter wide. In each unit, feeding and drinking equipment was available. In the morning and the evening, food was provided. The amount of food supplied to the duck each day less the amount that was left in the feed container was used to calculate the amount consumed. A completely randomized methodology was used to assign the ducks at random to four dietary regimens (CRD). Daily observations of feed consumption and egg production were made, and the start and end of the observation period saw the measurement of body weight. SPSS-17 software was used to tabulate and analyse the data.

The amount of food consumed by the ducks given a diet containing SSF was comparable to that of ducks given commercial feed ($p > 0.05$). The amount of feed that chickens eat is influenced by numerous factors. The metabolizable energy and protein contents are the main factors. The higher dietary protein content in both diets has allowed for higher protein deposition, as demonstrated by higher body weight gain, even if their feed consumption was not considerably different. This suggests that substituting 20% SSF for conventional feed is sufficient for Mojosari laying ducks. The egg weight indicated in this study was greater than that of different studies, which discovered that the egg weight of Mojosari duck at initial laying was 53.69 g.

To substitute a comparable amount of commercial feed, the diet of Mojosari ducks' layer can be designed using 20% sapu-sapu fish and 80% rice bran. In comparison to commercial feed, the diet that included sapu-sapu fish produced eggs of higher quality. The egg yolk hue, though, was paler. Ducks



fed a diet including sapu sapu fish had lower cholesterol levels in their yolks and flesh than ducks fed commercial feed.

JOURNAL REFERENCE

Asnawi, A.S. Dradjat and K.G. Wiryawan, 2021. The use of sapu-sapu fish (*Hypostomus plecostomus*) as substitute of commercial feed to improve production performance of Mojosari ducks. *Int. J. Poult. Sci.*, 20: 129-135.

KEYWORDS

Egg production, egg quality, Mojosari duck, sapu-sapu fish, poultry feed

