

Review of: "The Growth Performance of Nile Tilapia (Oreochromis Niloticus) Fed Low-Cost Fish Feeds Formulated From Fish By-Products, Fishery By-Catch and Pig Blood-Meal"

Manh Hoang Nghia¹

1 Hue University

Potential competing interests: No potential competing interests to declare.

The manuscript was presented relatively clearly, including all the parts of a scientific paper. However, a major revision needs to be considered before publication (if it meets the journal's requirements).

- The initial size of the experimental fish needs to be reviewed. In the abstract, it is stated as 0.6 g/fish, but in Table 6, a different size is presented. The authors note: the initial size is calculated from the start of the experiment (it should not be measured during the adaptation phase).
- The experiment consists of 8 diets, with 3 replications (1 aquarium/time); fingerlings were stocked at 20 fish per aquarium. Thus, the total number of fish should be 480, not 160, as mentioned by the authors.
- The authors mention using fishery by-products, fishery by-catch, and fig blood meal to replace soybean meal.

 However, the feed ingredients did not include soybean meal, so what is the basis for this statement?
- The size of the experimental fish is very small (only 0.6 g). How is it possible to create feed pellets suitable for the fish's mouth size? The authors need to specify the size of the feed pellets produced.
- The formula for calculating Protein Efficiency Ratio (PER) needs to be reviewed (Protein Efficiency Ratio (PER) was determined by the ratio between the weight gain of fish (WG) and protein intake (PI)).
- The specific content of each ingredient to create the 7 experimental diets needs to be addressed.
- Commercial fish feed for fingerlings usually has a high protein content (normally, 38-40%). Why did the authors choose feed with only 35% protein?
- Calculating production costs is totally different from the cost of 1 kg of feed of each type. Therefore, it's not accurate.
 For example, 1 kg of commercial feed may cost 1.70 USD but can produce 900 g of tilapia, while 1 kg of blood meal costing 0.53 USD can only produce 200 g of fish. Therefore, using commercial feed still results in lower production costs.

Qeios ID: IYT071 · https://doi.org/10.32388/IYT071