Received date: 20-04-2023 | Accepted Date: 23-04-2023 | Published Date: 16-10-2023

Challenges in fish nutrition in pay-to-fish farms: Objectives and solutions

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The creation of fish in pay-to-fish facilities is a growing activity worldwide, and nutrition is one of the main challenges faced by producers. Proper nutrition is essential to ensure the growth, health, and quality of cultivated fish, which in turn affects the profitability of production. The aim of this study is to discuss the main challenges in fish nutrition in pay-to-fish facilities and present possible solutions to overcome these challenges. From a review of the scientific literature, the main factors that cause fish nutrition in pay-to-fish facilities were identified, such as water quality, food supply, fish size, and feed composition. Water quality is fundamental to fish nutrition and health and should be constantly monitored by producers. In addition, food supply should be adjusted according to the size and nutritional needs of the fish, avoiding both food shortage and excess. The use of commercial feed is the main form of feeding in pay-to-fish facilities, but natural feeding, such as offering worms and grains, can also be an option. The choice of commercial feed should consider nutritional composition and digestibility by fish. In conclusion, fish nutrition in pay-to-fish facilities is a complex challenge that involves various factors. The adoption of management and nutrition practices is essential to ensure the success and profitability of production.

Fish Species	Water Temperature	Water Quality	Feeding Frequency	Feeding Quantity	Feeding Type	Growth Rate
Tilapia	26-30°C	pH 6.5-8.5	2-3 times/day	2-3% body weight	Commercial feed	1.5-2.5 cm/month
Carp	16-22°C	pH 7.0-8.5	Once a day	1-2% body weight	Worms and grains	1-1.5 cm/month
Pacu	26-30°C	pH 6.5-8.0	2-3 times/day	2-3% body weight	Commercial feed	2-3 cm/month
Tambacu	24-28°C	pH 7.0-8.0	2 times/day	3-4% body weight	Commercial feed	2-3 cm/month
Catfish	22-28°C	pH 6.5-8.0	2-3 times/day	2-3% body weight	Worms and pellets	1-2 cm/month

Note: Water temperature and quality, feeding frequency and quantity, and feeding type may vary depending on the region and specific conditions. The feeding type used by the servers may also vary.

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