IMPLEMENTASI *FEEDING ALGORITHM* UNTUK IKAN BERDASARKAN *FISH BEHAVIOR* DENGAN METODE *FUZZY LOGIC*

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Abstract

Aquaculture continues to grow and fish farmers face many challenges, one of which is the declining quality of fish. Due to improper maintenance, the quality of fish decreases. One result of the declining quality of fish is fish feeding, because fish feeding is not a trivial matter, because if fish feed is given too much it will make a lot of fish food wasted in the pond, consequently the quality of the water will decrease, which makes growth from fish will be hampered because of poor water quality. In addition, uneven feeding makes some fish do not get to eat, this makes the welfare of the fish decreases, it can even make cannibalism in fish because the feed received by the fish is not enough. With the development of information technology at this time that supports things like this can be understood, namely by studying fish behavior. A smart fish behavior has been implemented with the fuzzy logic method. Which can analyze how much fish feed is needed by fish, where is the right place to distribute fish feed in the aquarium area, and when is the right time for fish to eat. That way can minimize wasted food, maximize food conversion ratio (FCR), increase fish growth because there is no competition for food and wasted food scraps will reduce, making good water quality last longer and can improve the quality and welfare of fish.

Keywords: Fish Behavior, Fuzzy Logic, Food Conversion Ratio