ABSTRACT

Feeding fish is one of the important things for fish farming. Currently, feeding

in general still depends on manual human resources and can lead to overfeeding.

Therefore, a fish feeder is designed that works automatically based on the feeding

schedule and the feed dose. The provision of automatic fish feed uses hardware in

the form of an Arduino Mega 2560 microcontroller which is the main controller,

a load cell as a feed weight gauge, four servo motors as a place to open and close

the feed placed in each hole in the feed storage container, a DC motor as a feed

spreader propeller. and RTC as a real timer to make it easier for users to feed on

a scheduled basis. The design of the load cell in the system is used so that the

falling feed is based on the right amount and is not excessive.

Feeding according to the purpose of this tool. With a weight sensor accuracy

value of 99.3%. The calibration of the four servo motors results in a range error

value of 0.8-6.67%. And the maximum distance that can be reached when

throwing feed is from 20.97 - 331.53 cm. Therefore, the feeding will be more

regular and accurate to reduce the clean feeding.

Keywords: load cell, fish feed

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