ABSTRACT

Fish farming in Indonesia is a job that is widely done and is a source of income for the Indonesian people. Fish farmers in Indonesia still use traditional and manual methods in providing fish food. With the APIOFISH robot that can move dynamically towards the front, turn right and left, as well as feed it automatically with a throwing technique that can be a solution to this problem. The fish feed robot system that is made consists of aluminum which functions as the material for making propellers and APIOFISH robot boats, Arduino/NodeMCU functions as a microcontroller, one channel relay as an on or off switch, a dc motor to drive the ship, a 20 ampere module to control speed dc motor. The dc motor also throws fish feed which will be spread around the fish pond or pond according to the schedule automatically. Based on the test results of the apiofish robot, it is known that the APIOFISH robot can carry a maximum load of 15.30 Kg with a sinking height of 18 Cm. Based on the test results of the APIOFISH robot thrower, it is known that the APIOFISH robot by using the throwing technique to spread fish food can produce a throw with a distance of 532 cm using fish food with a diameter of 5 mm. Both of these can provide convenience in the form of robots that can move dynamically and make it easier to spread fish food to fish ponds, so that the quality of fish cultivation is better.

Keywords: Apiofish, Fish feed Scheduling, DC Motor, Mechanical Robot.