ABSTRACT

The development of the agricultural world is already very rapid, including the emergence of aquavonic systems that combine crop cultivation and aquavonic aquaculture systems can use large areas for large harvesting purposes and can also use land that is not too large for example on the home page for purposes interior design of a house as well as for picking crops and fish cultivation in private but this conventional aquavonics system has several disadvantages including the maintenance process that must be done manually, namely feeding the fish, testing the pH level, and testing the remperature of the pond, of course this requires more energy and is quite time consuming because it must always be present at the place to process care.

Internet of Things Technology answers the above problems to overcome the maintenance process that to requires more time, with IoT technology will alleviate some of the maintenance processes including monitroing pH levels through the web with the temperature of the fish pond through the web with the temprature to be monitored is 23 to 26 degrees celcius because it is suitable and also good for fish and if the pH and temperature of the fish pond go down ot roo high an alert will appear to notify the owner if the pH and temperature of the pool are not suitable, the web can also control feeding to facilitate the process of feeding the fish.

After the realization of making IoT-based aquavonics system, the first good result is the success of making the system, among others, is the web successfully displays the results of the experiment showing the susceptibility of values 1 to 10 pH and temperature of the fish pond successfully displayed with a vulnerable value 15 to 31 degrees centigrade and also the web managed to carry out the command of feeding fish with an average delay of 1.45 seconds the web is also able to display alerts whe the temperature if the pool temperature is too high of low.