ABSTRACT

Water quality alteration can take effect on quality dan quantity toward freshwater fish produce especially can take effect on fish spawning dan gonad maturation or reproduction organ. Main measurement to determine water quality in freshwater fish cultivation as follows: degree of acidity about 5-9, ideal water temperature about 20-29^{0}C, and tehe salinity level about 0-30%. The main purpose to made water quality monitoring and control are to ease for water quality monitoring. With microcontroller as main data processor such as pH, temperature, sanlinty, water purity and radiance. Every data pH, purity, and radiance is used for pH and purity control and lamp. And every data will be sent from ESP8266 wifi module to android smartpHone. The result after tool are testing is the difference between pH meter and pH sensor os 0,1. Purity deference between purity and turbidity is 41,728%, whereas the pH point after pH and purity control are 6,65-6,75. And 1% of salinity level on 100 ml NaCl is 1,903 volt, whereas in 10% of salinity level is 3,348 volt. With salinity level on aquarium water is 25,8%.;

Key word: purity, pH, temperature, Salinity