

ABSTRACT

Vaname shrimp is a type of shrimp that has a natural habitat in the Pacific Coast and Mexico. It was introduced to Indonesia in 1996 when tiger shrimp experienced a decline in production due to disease attacks caused by the White Spot virus. Demand for these shrimp immediately increased rapidly, so innovation was needed to keep the shrimp yields in line with market demand. The problem in vaname shrimp farming is water quality, especially water temperature conditions where shrimp live. These shrimp prefer water conditions that are around 26-29°C.

A water quality control system was developed to maintain water conditions in accordance with the best conditions for *P. Vaname* shrimp so as to increase yields due to reduced mortality rates. The system can also monitor water turbidity conditions that can cause stress to the shrimp.

In the test results, it was found that the mortality of Vaname shrimp in the aquarium can be significantly reduced with the use of the system. There was an average reduction in shrimp mortality of 52.74% when compared to conditions without the system. This result shows that the system can reduce the mortality rate compared to when no system is used. compared to when no system is used.

Keyword: Aquaculture, Blynk, IoT, Mikrokontroler, Vanname