FEEDING SYSTEM AND WATER QUALITY CONTROL FOR THE GROWTH OF PINCTADA MAXIMA SHELL SEEDS BASED ON IOT

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ABSTRACT

There are so many marine potentials in Indonesia, pearl cultivation is one of the livelihoods of people around the coast. One of the pearl-producing biota is the Pinctada maxima species and has been tracked in Indonesian waters. Therefore, the survival of pearl oysters is very important, especially for seedlings that are very susceptible to disease and die suddenly due to decreased water quality such as temperature and salinity. Generally, for feeding and controlling water quality, it requires manual labor and takes a long time. So in this study the authors developed an IoT (Internet of Things) tool with a platform, namely Blynk for real time feed scheduling and water quality control and monitoring water quality using temperature and salinity sensors in the pearl oyster nursery container. The results of this study are expected to facilitate the process of enlargement of pearl oyster seedlings. Based on the tests that have been carried out, the comparison accuracy value between the temperature sensor value and the thermometer is 99%. Then it was found that the salinity sensor worked well.

Keywords: *Pearl Shells, Feeding, Water Quality Control, Temperature, Salinity.*