

## ABSTRACT

In general, people only know that lobster is a big shrimp that comes from the sea. But actually there are also lobsters that live in freshwater habitats. Freshwater crayfish are animals that live in rivers in swamps and in lakes. These animals are able to live in a wide range of water parameters, are intolerant of low dissolved oxygen content even in turbid water. With the weather related to temperature, humidity, brightness, the weather can change from minute to minute, hour to hour, day to day or season to season. Occurrence of muddy water.

Based on this, in this study a prototype design was made to stabilize the temperature and maintain the water clarity in the lobster aquarium with the Blynk application system to control temperature and water PH. By using the Ds18b20 sensor as detecting water temperature, peltier set chiller as stabilizing water temperature, and PH meter sensor as detecting water turbidity, filters are used to purify lobster aquarium water.

Based on the results of the design, testing and analysis conducted, the writer can draw the conclusion that by using the temperature control and water clarity method in this study, the peltier set chiller can stabilize the temperature and the pH of the water can be maintained properly. Results of analysis of water temperature and water PH.

Keywords: Arduino AT-mega, DS18b20, peltier set chiller