ABSTRACT

MONITORING AND CONTROL THE HUMIDITY AND TEMPERATURE OF CHILI PLANT IN VESSEL USING FUZZY LOGIC

Watering is an important thing to do so that the moisture level and plant level are maintained. The optimal temperature for cultivating chili is 24 ° C - 28 ° C with a soil moisture of around 80%. Monitoring plant watering is one way that can be used in terms of monitoring humidity and soil temperature and keeping agar in good condition. You can facilitate the restaurant owner in terms of caring and supervision, and can make time efficient.

In this final project the authors develop technology that helps plant owners automatically water plants and monitor soil humidity and temperature. By using a controller as the main controller to determine the humidity and temperature of the soil of the plant through the humidity sensor and the soil temperature that is plugged into the ground and the value of humidity and soil temperature of the plants obtained will be displayed on the cellphone of the plant owner.

In the test results, the system can work properly. It can be shown that the system can maintain soil temperature and humidity in a temperature range of 24 ° C - 28 ° C and humidity of 75% - 95%. In addition, sensor reading data can be monitored through the user interface on a computer or cell phone.

Keywords - Soil humidity and temperature sensor, User interface, Mobile phone, FuzzyLogic