

ABSTRACT

Indonesia is a country that is rich in types of plants. One of the plants that is often in demand in Indonesia is Chili Plants, but plantations in Indonesia still use a lot of irrigation systems or traditional watering, which is watering only based on seeing how dry or wet the soil is, so that a lot of occurrences occur. crop failure due to improper irrigation or watering.

This problem can be solved by making a tool to monitor the humidity in the chili cultivator's land, by using this tool the water discharge can be adjusted according to the soil moisture. So that not a lot of water is wasted on the chili cultivator's land. This tool can also monitor the condition of the land for chili cultivators, if the plantation land is dry, the sensor will send a signal to the application that the land is dry and requires water flow, if the humidity on the plantation land is met, the sensor will send a signal to the application so that the water stops flowing, with these parameters in this study apply with fuzzy logic chili irrigation system.

This tool can be used as a guide for chili cultivators, to monitor humidity on the land of chili plant cultivators so that the irrigation system can be monitored accurately and can be done anywhere at any time, without having to make a drain. This results in a high-quality crop.

Keywords: *irrigation. Plantation. tilth. Chili cultivation. Fuzzy logic*