

ABSTRACTION

In this day, people needs something simple, fast and efficient. Humans demanded to be able to minimize the time in a variety of things and activities. Including in the field of agriculture. Treat and take care of the plants difficulty is the one of the most factor in the lack of a green environment surrounding human settlements. Moisture content and adjustment to the contours of the land also causes the maintenance problem, because each plants needs different kind of humidity and water levels.

This tool is made with a system that can facilitate the public or the users to take care of the plants they planted. Moisture sensors will be used to read the humidity of soil moisture where the plants are located and inform the sensor reading result to users via Bluetooth. With this information the user can knowing the circumstances of the plant that shown in the android devices. Then the watering mechanical,automatically watering plants which are drought,with a timing method for 5 seconds on the solenoid to open the water tube, then micro sensors transmit information in the form of results and state that plants needs water and it watered. Thus,drought of the plants can be solved easily without the user having to flush manually. These systems use some variant of the plant in its implementation, so that the user can specify the moisture of each plants

From the test results,known that the tool can work according to the requirements and specifications. The tool able to read the moisture content and expressed in drought water level in the soil and transmit moisture values to android devices. Tool reads the drought water levels on average by 72%. Tool are also able to efficiently the use of the water for approximately 50% from the manual watering which use of water about 500ml whereas with the tool it is only need 300ml.

Keywords: Moisture Sensor, Microcontroller, Android, Plant, Bluetooth.