

ABSTRACT

UV technology have been a topic of interest to botanist and gardener alike. UV technology is generally used as a means of killing fungus and parasite from plants. However, in crop plants, there are evidence that a significant increase in crop yield can be seen when using UV treatment.

This study focusses on constructing such device that is able to radiate UV rays, specifically UV-A and UV-B, that is able to light up automatically when the UV measurement is below requirement and integrating to an IoT platform that enable the user to access the recorded measurement.

The device was able to perform as intended with a certain limitation to its number of measurements that is able to record due to the IoT platform. Therefore, further study with using a better IoT platform can be done.

Keyword: IoT, UV Treatment, ESP32, UV Dosage, VEML6075, Ubidots, UV LED Lamp