

SOIL MOISTURE NOTIFICATION SYSTEM ON AGLONEMA PLANT THROUGH WHATSAPP MEDIA

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ABSTRACT

Aglonema plants need balanced water to live because if there is too much water in the planting medium it will bring in a lot of bacteria and make the roots rot quickly, but these plants also shouldn't be in a dry state for too long which makes it difficult for the plants to thrive and makes the leaves slightly gradually wither away. Therefore it is advisable for aglonema plants to have a growing medium that is not too wet and not too dry, so it would be very helpful to have a tool that can tell us via social media such as Whatsapp when to water the aglonema plants in a timely manner. The aim of the research is to design a soil moisture notification system for aglonema plants via WhatsApp media. Using the Arduino Uno microcontroller as a Soil Moisture sensor reader and DHT22, NodeMCU as an intermediary for connecting the Internet. The system will provide notifications when the Aglonema soil moisture is less than 20%, by sending data from the sensor values taken from Arduino Uno and then continued by NodeMCU to the Ngarduino server to be forwarded to the user's Whatsapp number so the user can know when to water the plants. In addition, users can request real-time soil moisture data by sending messages to the Ngarduino number.

Keywords: *Aglonema, System, Humidity, Arduino Uno, NodeMCU.*