

**TEMPERATURE AND HUMIDITY MONITORING SYSTEM
FOR OYSTER MUSHROOM CULTIVATION BASED ON
INTERNET OF THINGS (IOT)**

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ABSTRACT

Oyster mushroom is a type of mushroom that has high nutritional and nutritional content which is used as medicine. Basically the appropriate temperature for oyster mushroom breeding is to require an air temperature with a temperature range of <25 'C and humidity <70% the conditions produced are normal, if the temperature is 25 'C – 29'C and humidity is 70%-90% then the displayed condition is Normal, and if the temperature is >29% and the humidity is > 90% then the condition that will be displayed is hot. Therefore, a temperature and humidity monitoring system was made for oyster mushroom kumbung using Internet of Things (IoT) technology, the tool needed is the DHT22 sensor which is used to detect temperature and humidity. NodeMCU ESP8266 functions as a microcontroller and a Wi-fi module to connect to the internet which can be displayed at intervals of time through the website. Testing is carried out by comparing the system with the HTC-2 Hygrometer Thermometerter tool which has a KAN certificate as meeting the requirements of ISO 9001 and others to measure the value system error. The results of testing the tool obtained an average percentage of error in the mushroom kumbung 1.19%

Keyword : Technology, Mushroom, Monitoring, NodeMCU ESP8266