# MONITORING PERTUMBUHAN TANAMAN HIDROPONIK MENGGUNAKAN NODEMCU DAN BLYNK BERBASIS IOT

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**ABSTRACT**

*The Internet of Things (IoT) has developed rapidly starting from the convergence of wireless technology, micro-electro mechanical systems (MEMS) to the Internet. The Internet of Things (IoT) can be utilized in various forms of control devices, for example, an Internet of Things (IoT) based hydroponic system. Hydroponics can be used to overcome the problem of land shortages which are getting narrower every year. This IoT-based hydroponic system is expected to help hydroponic farmers to remotely control and monitor their hydroponic plantations. The design and manufacture of this tool uses the NodeMCU ESP8266 as the brain of the control device and the DHT22 sensor which is used to measure temperature and also humidity and the DFRobot ph sensor which is used to measure solution and acidity of Ph. NodeMCU sends commands to the DHT22 and DFRobot ph sensors via the Arduino IDE program and then sends notifications to the blynk application, so that hydroponic plants can be monitored remotely using a smartphone.*

*Keywords: Internet Of Things, NodeMcu, Dht22, Hidroponic*