

ABSTRACT

In Indonesia, the easiest livestock to produce is boiler chickens because boiler chickens have the advantage that in a relatively fast time, boiler chickens can produce meat in large quantities with large relevant weights. However, at the harvest age of chickens, namely 16-23 days, chickens are likely to die due to the large weight of the chickens and making the chicken coops cramped with hot rooms, causing heat stress for the chickens. With this fan automation tool, it is easy for chicken breeders to maintain temperature stability so that boiler chickens do not experience heat stress. In this research, a DHT22 temperature sensor is used to detect temperature and humidity, an ESP8266 NODE MCU to send data to an IoT-based mobile blynk app platform and a fan to reduce the temperature of the chicken coop. The parameters tested in this research were accuracy and error, where there were 3 tests, namely 10 sensor tests, 27 tool tests carried out from 07.00 to 17.00 WIB, and 27 tool monitoring tests. The results obtained were an average error of 1.38% and an average accuracy of 98.63%. The working system of this tool can be seen from the accuracy and error values obtained, so far the working system of this tool is working well and can be used on a small scale and focuses on temperatures that exceed the normal limits of chickens only. This research can help the public and boiler chicken entrepreneurs to easily and maintain stable temperature in the coop and minimize heat stress in boiler chickens which can cause death in chickens.

Keywords: *ESP8266 MCU node, mobile blynk app, DHT22 sensor, accuracy, and error.*