

INTISARI

SISTEM PENETAS TELUR DENGAN DATA RECORDING BERBASIS DATABASE DAN WEB SERVER - INTERNET OF THINGS

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Sistem penetas telur manual konvensional memiliki beberapa kendala, diantaranya adalah presentase fertilitas yang tidak terlalu baik, sistem yang tidak praktis, dan keterbatasan alat dalam proses penginformasian terkait suhu dan kelembapan. Dalam mengatasi permasalahan tersebut maka dibuatlah sistem monitoring dan pemantauan kondisi suhu dan kelembapan pada sistem penetas telur berbasis IoT.

Sistem perekaman data pada penetasan telur merupakan sebuah sistem yang dibuat untuk memonitoring suhu dan kelembapan pada penetas telur menggunakan sensor DHT11 yang akan diproses dengan mikrokontroler Arduino UNO dengan modul WiFi ESP8266 yang akan terintegrasi dengan internet melalui sebuah halaman web yang dapat diakses darimana saja. Data suhu dan kelembapan akan tersimpan dalam database server.

Sistem perekaman data ini dapat menampilkan temperatur aktual secara langsung, suhu yang ditampilkan adalah 37°C-39°C dengan kelembapan antara 45%-58%. Sistem ini dapat diakses melalui berbagai perangkat yang terhubung dengan jaringan internet.

Kata Kunci : Arduino UNO, ESP8266, DHT11, web server, database

ABSTRACT

EGG HATCHING SYSTEM WITH DATA RECORDING DATABASE AND WEB SERVER INTERNET OF THINGS BASED

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Manual and conventional egg hatching system have low fertility percentage on egg, other than that manual and conventional system have complicated way compared with automatic system which is more modern and simple. In manual and conventional egg hatch system cannot see the humidity and temperature with specific and detailed because humidity and temperature it's a important factor in egg hatching process. To solve that problem a automated egg hatching system has been made up with data recording system on it which can be monitored on through a web page.

Data recording system on egg hatching machine it's a system that is been made for humidity and temperature monitoring on the egg hatching machine using a DHT11 sensor which is will be processed with Arduino UNO microcontroller with ESP8266 WiFi Module that integrated with internet through a web page that can be accessed from everywhere. Humidity and temperature data not just showed through web page but it is stored on database server too. The web page have security system too it's just the registered user which granted with special right only can access for data from the recording result.

This data recording system can show actual temperature real time, showing temperature its between 37°C-39°C with humidity between 45%-58%. This system can be accessed from various device which connected to the internet network.

Keyword : Arduino UNO,ESP8266,DHT11,Web Server,Database