ABSTRACT

Many requests for quail eggs and meat are not worth the amount of quail populations. This is due to the difficulty breeders incubate quail eggs because it is difficult to obtain the ideal temperature and humidity in the hatching. New quail breeders very difficult to incubate eggs of quail egg incubator despite taking an existing tool. Egg incubator tools that are on the market still use lamp so that the temperature spread is uneven, still need discipline to reverse the eggs every day and change the water in the container to get moisture.

In this final project will be realized tool egg incubator that can reverse eggs every day, spread evenly temperature and humidity. This egg incubator tool designed a servo motor to reverse the every eggs, heating, cooling, fan and water spray systems in order to control the temperature and humidity can be spread evenly. Microcontroller as a regulator of the ordered system heating, cooling, fan and water spray. Microcontroller to control the system to get the data from SHT11 sensor and servo motor for reversing ordered eggs each day of data obtained from RTCDS1307.

Spread of temperature and humidity in the incubator egg has evenly by setting PWM values and also the data are subsequently Zero Crossing Detector programmed by the microcontroller with ANFIS method.

Keywords : Microcontroller, RTC DS1307,sensor SHT11, ANFIS