SYSTEM DESIGN CONTROL TEMPERATURE AND HUMIDITY ON THE CHILI PLANT WITH FUZZY LOGIC BASED MICROCONTROLLER

ABSTRACT

Temperature and humidity control applications has been found in various areas of technology let alone in the field of agriculture. Control of temperature and, humidity is used to control the temperature of the house chili plant and the plant can grow to produce good quality of the chili.

Based on the problem, so in this thesis I make the engine temperature and humidity control using a microcontroller based senssor SHT11 as temperature and humidity sensors and implement methods of fuzzy logic in the system house chili plants to avoid mistakes in achieving the desired setpoint for chilli plants can well developed. and the process is done by using RTCDS1307 aeration that serves to accelerate the process of pollination in chilli plants at the time of her flowering.

the use of a microcontroller by using fuzzy method is able to keep the temperature and humidity required by the chili is stable so it can produces fresh chili and robust against pest attack from the surrounding environment.

Keywords: SHT11, RTCDS1307 microcontroller, fuzzy logic control