

RANCANG BANGUN SISTEM PENYIRAMAN DAN PENGUSIR HAMA OTOMATIS PADA TANAMAN CABAI BERBASIS INTERNET OF THINGS

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ABSTRACT

The water requirement is one of the important things in plant growth, besides that protection of plants from pests/insects is also important so that the quality of plants can grow perfectly until harvest. To support this, automatic watering and midges are the solution. Automatic watering uses RTC as a determination of the schedule for watering chili plants and PIR sensors to detect the movement of pests / insects that are approaching the plants. The purpose of making this tool is the design of hardware, software, and to know the performance of the automatic watering and midges system based on the Arduino Uno microcontroller. The manufacture of this tool is based on the Arduino Uno microcontroller combined with an RTC (Real Time Clock) sensor and a PIR (Passive Infrared) sensor. Here arduino uno functions as the main microcontroller, relay as a pump switch, RTC as a regulator of the watering schedule, and PIR sensors to detect the movement of pests / insects that approach chili plants.

Keywords: Arduino, Chilli, Plant, PIR, RTC