ABSTRACT

Indonesia has many types of plants, one of which is the chili plant. There are several obstacles to chili farming, one of which is the presence of pests on chili fruit. As technology becomes more advanced, the manual pesticide watering system can be changed to an automatic system. In the sense that this automatic system can minimize the effort involved in caring for chili plants. Apart from being effective, this method will also make it easier for people to spray pesticides on chili plants anywhere and can be controlled via cellphone. Therefore, researchers will create an IoT (Internet of Things) based pesticide watering tool. In this research, researchers will create an automatic pesticide watering device using a PIR sensor and Esp32Cam module as the main components. This system is able to take photos using a camera and send notifications to the user's Telegram application. The way this system works is that when the PIR sensor detects movement in the chili plants, the Esp32Cam module will automatically take a photo and then send it to the user's Telegram and the user will immediately check the photo. Whether pests are detected or not, if pests are detected on the chili plants, the user will water the pesticide by monitoring it via the Telegram application. Then the Relay will be active for 10 seconds and the pump will sprinkle the pesticide. Users can control this system via the Telegram application. With Telegram commands, users can take real-time photos of plant conditions without waiting for movement detection and activate relays to turn on the water pump and spray pesticides.

Keywords*: Esp32Cam, Pir Sensor, Internet Of Things, Pests*