PENGENDALIAN HAMA BURUNG PADA PERTANIAN DENGAN LASER LIGHT SYSTEM BERBASIS ANDROID

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ABSTRACT

Indonesia is an archipelagic country that has been awarded with a lot of natural wealth, one of which comes from agriculture. Currently Indonesia is one of the countries with the largest rice production in the world, so it requires high consistency in caring for rice. In addition to difficult rice maintenance, there are external factors that can affect crop yields, for example, sparrows that can damage rice by eating young rice seeds. Farmers have tried to drive away the birds such as using bells and nets. The effort was successful but wasted more farmers' time, even though this time could be put to good use by focusing on water and rice nutrition. Therefore, the researcher is trying to provide a solution in the form of a bird pest control system with a laser that can be activated at certain hours with a scheduling system. System design is divided into two, namely hardware and software design. The hardware design is used as an automatic control system that will be active when the sensor detects an object. To apply for software used to receive notifications from the system, besides that notification recipients also act as remote manual monitoring of surroundings. The system used ESP8266 as a microcontroller, Arduino IDE to be programmed, and Blynk as an application to receive notifications and monitor via an Android smartphone. In the Blynk application, there is an interesting feature, namely the scheduling feature, which functions to turn on and off the hardware system.

Key words: Bird Pest, ESP8266, Blynk, Automation