

ABSTRAK

Indonesia with the majority of livelihoods as rice farmers certainly wants to get good quality and quantity of crops. Farmers are faced with problems that hinder the expected yield of bird pests. Bird pest is one of the problems faced by farmers due to their existence which can cause a decrease in the quality and quantity of birds. The implementation of the Wireless Sensor Network (WSN) in rice fields is an effective solution for monitoring and controlling birds. PIR sensors which are the main sensors in detecting bird pests have a large area that can reach all areas of rice fields and using buzzers for repelling bird pests. The use of mesh topology is used in building the system so that each sensor can communicate in two directions and know each other about the conditions of each sensor. The results obtained were that detection using sensor pir went well and the use of buzzers to repel bird pests decreased from five days.

Keywords: Bird Pest, PIR Sensor, Wireless Sensor Network, Mesh Topology, Rice Fields