ABSTRACT

Banana is one fruit that is favored by the people. Banana is also one of the main non-oil commodities, announced by the government. But one of the causes may decrease the production of bananas is a post-harvest techniques. Bananas after harvest will still carry on respiration that still emit heat to reach the state of ripe bananas. Banana storage system using ZigBee is intended to reduce production loss and maximize existing results. Zigbee is a wireless sensor network that flexible for a variety of network topologies and have low bandwidth so it can save power that makes ZigBee durable.

Bananas storage systems using ZigBee can classify banana's temperature into a condition of maturity. Placement of the sensor position has no effect because the differences in the average temperature at each position has nearly equal value and has no effect on classification result. Temperature sensor has precision almost same with thermometer and have responses time to standard shipping.

Keywords: banana, zigbee, wireless sensor networks