

ABSTRACT

Spinach has several benefits, one of which is as an antioxidant that can protect the body from free radicals. The application of technology in agricultural monitoring is very important. The monitoring and automation system for controlling soil moisture, air humidity and air temperature on spinach plants with technology is a solution to existing problems, through the use of the internet of things will be able to bring the world of agriculture into a more advanced and efficient industry because farmers do not have to continuously monitor their crops. from agricultural land but can monitor remotely using LoRa. The purpose of this study was to determine the performance of LoRa. This research method uses the LoRa design method and is tested to measure the distance and soil moisture. From the results of research that has been done LoRa technology can be used indoors and outdoors. However, LoRa will be maximized if used outdoors because it can be reached approximately 600 m.

Keywords: *Spinach, IoT, LoRa*