

IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

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ABSTRACT

Modern farming is considered a revolution in agriculture because of its capability to produce surplus food in a limited region. An intelligent crop protection system helps the farmers in protecting the crop from the animals and birds which destroy the crop. This system also helps farmers to monitor the soil moisture levels in the field and also the temperature and humidity values near the field. The motors and sprinklers in the field can be controlled using the mobile application. People do not have enough time to monitor their plants. Thus, an automated farm with real-time monitoring is highly essential.

LITERATURE SURVEY:-

Iot based smart agriculture monitoring system.

Rajalakshmi.P and S. Devi Mahalakshmi, "IOT Based Crop Field Monitoring and Irrigation Automation", 10th International conference on Intelligent systems and control (ISCO), 2016.

The recent study on modern farming expounds on the need for improving automation and ease of use. The object detection of unhealthy region of plant leaves using Image Processing and Genetic Algorithm was studied. Studied on implementation of the light spectrum for plants grown in various parameters. Setting up and calibration of the sensors such as pH sensor, DHT11 sensor, TDS sensor, and RaspberryPi setup is studied.

Getting started with Agriculture IoT (ThingSpeak + Matlab)https://www.hackster.io/Ninety99/getting-started-with-agriculture-iot_thingspeak-matlab-ce6ce highlights the need and methodologies that could be incorporated to improvise agriculture

LIMITATIONS

1. Need for internet connectivity
2. Parameters such as weather conditions could not be predicted with accuracy
3. If there are faulty data processing equipment or sensors, then it will lead to a situation where the decisions are taken wrong.

