

Low-cost Handheld Plant Health Monitoring Device for Resource Limited Regions

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Vision

- ◎ Low-cost plant health monitoring
- ◎ Management of nutrients and irrigation
- ◎ Disease detection and forecasting



Aims and Objectives

- ◎ To detect the chlorophyll content of the leaves
- ◎ To diagnose the disease(s) of rice plant
- ◎ Creating high-dimensional GIS database using mobile phone network.



Field testing and experimental plan

- **Phase I**
 - Initial testing and validation in agricultural field of Dept. of AgFE, IIT Kharagpur (*underway*)
 - For validation, data collection and observation in a 2nd rice season
- **Phase II**
 - Wider testing with upto 200 farmers with help of NGOs.
 - Based on Phase I success an extended grant application will be submitted.

Collaborations

- Collaboration with EE and E&ECE departments at IIT Kharagpur (Student project/internship offered)
- Collaboration with NGOs
- Collaboration with Government organizations and departments.

