

Entry No. IRRC-0173

Category	: International Rice Research Conference
Select Theme	: Sustainable and equitable farming systems
Endorsement email	:
Keyword 1	: Pest management
Keyword 2	: Disease management
Keyword 3	: Advisory systems
Title of Entry	: An e-agriculture advisory and monitoring system to empower farmers in managing rice pests and diseases in Sri Lanka
Presenting author	: J Ponnampereuma Arachchi
Presenting author email	: jponnamperuma@yahoo.com
Co author 1	: D M B N Bandara
Co author 2	: S P M G N H Perera
Co author 3	: L Nugaliyadde
Co author 4	:
Co author 5	:
Co author 6	:
Co author 7	:
Co author 8	:
Co author 9	:

Co author 10	:	
Co author 11	:	
Co author 12	:	
Co author 13	:	
Co author 14	:	
Affiliation presenting author	:	Rice Research Station, Department of Agriculture, Labuduwa, Akmeemana, Sri Lanka
Affiliation 1	:	Independently Affiliated
Affiliation 2	:	Independently Affiliated
Affiliation 3	:	Sri Lanka Organization of Agriculture Professionals, Sri Lanka
Affiliation 4	:	
Affiliation 5	:	
Affiliation 6	:	
Affiliation 7	:	
Affiliation 8	:	
Affiliation 9	:	
Affiliation 10	:	
Affiliation 11	:	
Affiliation 12	:	
Affiliation 13	:	

Affiliation 14

:

Select only one type of presentation

: 15 minute oral presentation

Abstract

: An e-Agriculture advisory and monitoring system was developed aiming to enable rice farmers in Sri Lanka to receive instructions on correct identification and recommended solutions for their pest and disease problems of rice in time, to facilitate relevant authorities for monitoring of pest and disease incidents to identify potential outbreaks and to form a data base for forecasting. Many farmers are not competent to identify pests and diseases related issues and decide the correct management practices themselves. They expect the assistance of the field officers of government agriculture extension services for this purpose. However, lack of officers and the knowledge gaps that exist among them hinder the achieving these expectations. The system developed is composed of a web application and a mobile application called “Govi Vedaduru”, compatible with Android 4.0+ version and can be installed to an Android device from the Google play store. A user friendly mobile interface was designed in local languages (initially Sinhala) to upload data about the pest and disease problems by the farmer. An expert from the Rice Research Stations of Department of Agriculture analyses the data and send back tailored solution to the farmer account in Sinhala language. Data base was designed to record each pest and disease incidences in Agriculture Instructor division wise. Data analysis and reporting module was developed to display classified incidents of pests and diseases and Google mapping of incidents on Agriculture Instructor division wise. In minor season (Yala) of 2017, “Govi Vedaduru” mobile application was introduced in selected five areas (yaya) of rice cultivation representing two agro-ecological zones in Galle district as a pilot project and 60 farmers were registered to the system. During the period of June to October 2017, 19 inquiries on pest and diseases were received and correctly identified by the scientists at the Rice Research Station, Labuduwa and solutions in Sinhala language were sent back to the farmer accounts. A follow up survey of the participant farmers indicated that they received timely, useful and trustworthy advice that helped them with correct remedial measures.

[Read Less»](#)

Uploaded Files »

No files found.