

LEARNING PROCESS

Despite a few teething issues, CSIRO's Graincast app will return for the 2019 season even easier to use.

The free Graincast smartphone app was released last year with the promise of providing instantaneous soil, water and yield information without the need for substantial user input.

CSIRO scientist Dr Roger Lawes says they were hoping to have 20 farmers sign up to use the app, but ended up with 85 farmers registering across 400 paddocks.

“Early on it swamped our systems because the uptake was so big, and we were running all of the paddocks on a simulator all of the time.”

Uptake of the Graincast app was “remarkably evenly spread” across Australia and included 17 farmers from SA; on the Eyre Peninsula, Yorke Peninsula, Mid North, South East and Mallee.

Graincast draws on information from satellites, climate forecasts and sensors to estimate historical crop yields, yield potential and crop species. Crop models are combined with soils maps to create yield forecasts, in near real-time.

Dr Lawes says there's a very complex crop model behind the app, but they kept the interface simple based on feedback from growers.

“There will be a small percentage that this will not satisfy, and we make no apologies for that. It's designed that you can be driving around your paddock, pull out your phone and see what the soil moisture stats are.”

“Digital tech on its own isn't sufficient, you need a human to engage with the farmers...”

However Dr Lawes says two critical changes are planned for 2019, the first based on feedback about the registration process.

“We're aiming to completely change the registration process to make it more like Google Maps where you just click on the paddock and add it. And we will make it an on-demand thing. When you want to look at it, the app does a simulation for a paddock, rather than always having simulations waiting to be viewed.”

The latter change is based on the costs to CSIRO to run a huge volume of data on their web server.

“We're aiming to streamline it our end and make it cost efficient. With ag tech and ag tech start-ups, you have to understand what it's going to cost you to provide the service, so you can keep costs down for farmers.”

The CSIRO has started offering the backend of the app to interested companies, with the aim of someone licensing it and providing a more complete service to farmers.

“We realise farmers would like support, and that way farmers could get the support they would need to use this much effectively,” Dr Lawes says.

“Digital tech on its own isn't sufficient, you need a human to engage with the farmers, throw around ideas about what it means and answer questions.”

While comparisons of Graincast forecasting against harvest results weren't available when we spoke to Dr Lawes, he says personally he found it pretty accurate. “On our farm we were pretty close; we have a property at Wanilla on the lower Eyre Peninsula, and if anything the close of the season was better than expected so we were slightly above the forecast.”



DR LAWES (LEFT) SAYS THE AIM IS TO OPEN GRAINCAST REGISTRATIONS FOR THE 2019 SEASON DURING MARCH, AND HE WILL BE TWEETING WHEN IT IS AVAILABLE – FOLLOW DR LAWES AT @RALAWES.