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For fresh produce marketing in Australia and New Zealand

By Liam O'Callaghan

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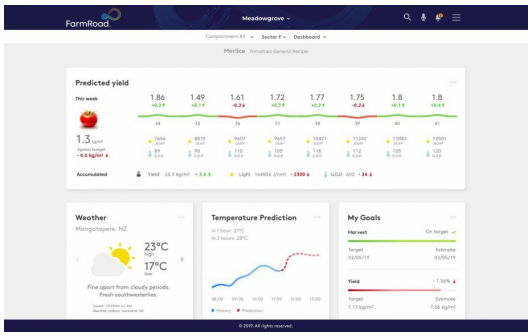

Autogrow cracks the yield prediction code

FarmRoad has been created by Autogrow to accurately predict tomato harvest times and yields

After three years of research, development, lab and farm trials; Autogrow's FarmRoad solution has been able to deliver crop yield predictions with an initial 90 per cent accuracy rate.

FarmRoad's Yield Prediction model has initially been created to service large scale greenhouse tomato producers combining the biophysical understanding of crop varieties, with crop and environmental data and proprietary artificial intelligence (AI)-based models and engines.

The service is built and hosted on AWS cloud, and can be delivered to any enterprise farm operator, anywhere in the world.

Darryn Keiller, chief executive of Autogrow, said the company had been able to achieve a 90 per cent accuracy rate up to six weeks out in its first three farms.

"Accurately predicting harvest time and yield is the holy grail of agriculture. It allows clarity of availability to the entire food chain from the grower to the marketer and on to the consumer," said Keiller.

"Under-production and over-production can financially impact a farm. Under supply brings both less revenue, potential financial penalties from purchasers e.g. supermarket chains and the need to buy off a competitor to meet contractual requirements," Keiller added.

"Over production creates a surplus, which is then sold on the open market, usually at a price less than market value. It's an unpalatable and expensive roller coaster ride."

Keiller explained providing this level of accuracy could provide significant returns for growers and Autogrow has already seen success across a number of countries.

"When you consider the numbers, the ROI (return on investment) of increasing yield prediction of tomatoes by 10 per cent - from 80 to 90 per cent - based on a 30ha grower producing 60kg/sqm could be up to US$1.3m," said Keiller.

"Savings can also be made with regards to labour by automating manual forecasting and through increased efficiency of farming practices," he added.

"Not only do we have on average 90 per cent accuracy but we are achieving that working with three different growers in Canada, Australia and New Zealand, using a mix of hydroponic substrate and soil and utilising three different tomato cultivars - Marnax, Maxeza and Merlice - showing the flexibility of our AI-based prediction."

With yield prediction achieved, Autogrow is currently developing crop registration and crop planning services.

"With their personalised yield model, growers can utilise their prediction and trends to materially improve farm profitability," said Keiller.

"The future is AI and digital farming, and we look forward to working with large scale growers who are looking to utilise their own data and gain a competitive and financial edge."

http://www.fruitnet.com/americafruit/article/1474/parts-of-san-diego-quarantined-as-psyllid-count-mounts

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