



Field tour 1

Application of digital technologies in smart farming

SITE: PACIFIC SEEDS FOUNDATION FARM, ALLORA

20TH AUSTRALIAN AGRONOMY CONFERENCE

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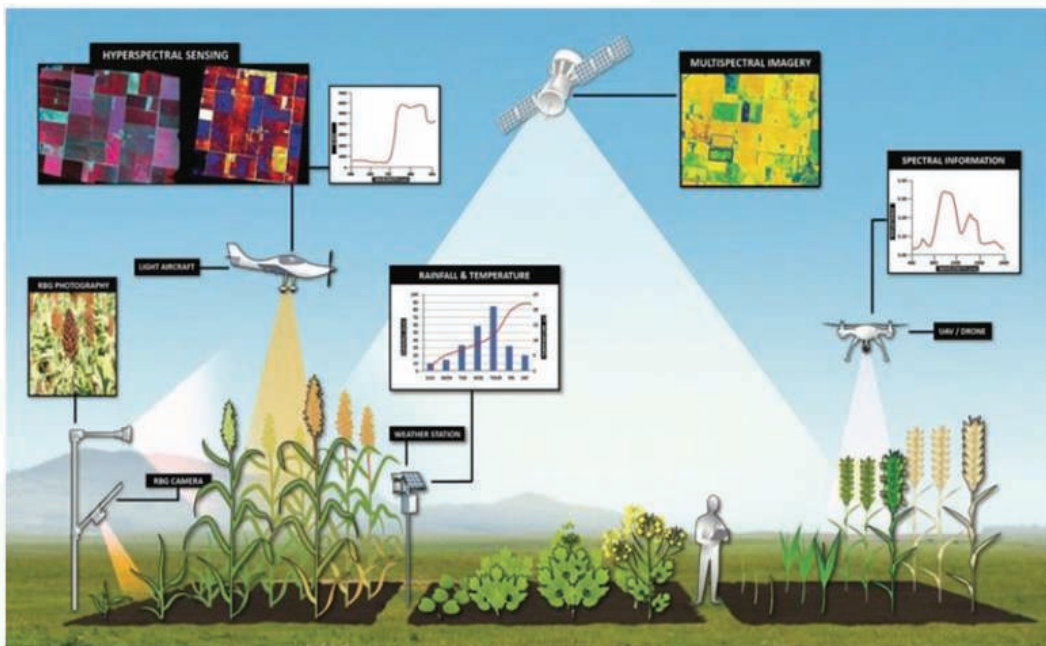
18–22 SEPTEMBER 2022, EMPIRE THEATRE, TOOWOOMBA, QLD
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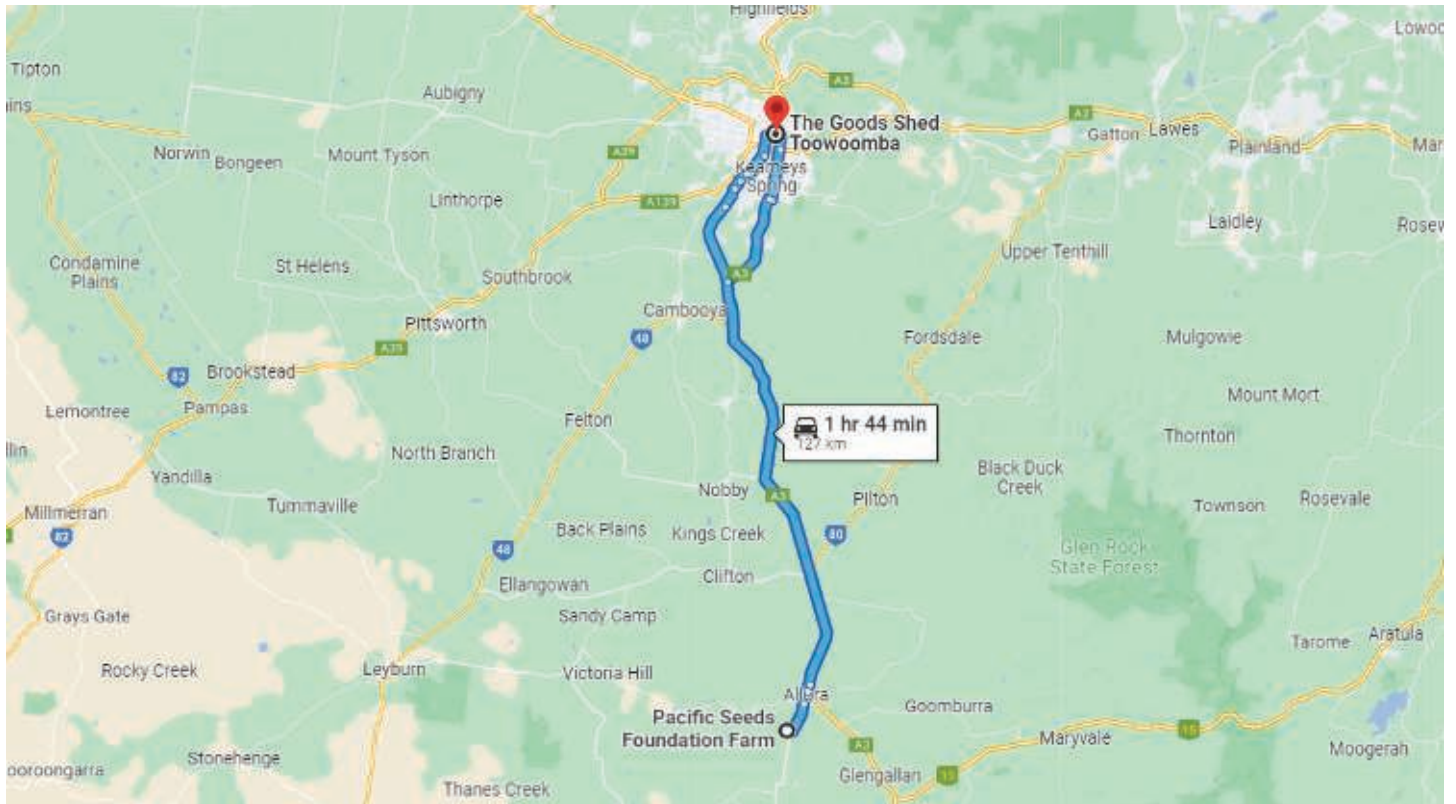
ABOUT

Digital Technologies, including proximal, remote sensing and modelling systems, have a critical and significant role to play in enhancing food production, sustainability and profitability of production systems. This field tour will mainly focus on how the plethora of data available in agriculture today can be transformed into information and actionable knowledge for informed decision-making utilising digital and Ag technologies. The application of digital technologies has rapidly grown over the last five years within agriculture, with the prediction of a growth in production to at least 70% at farm level, and to a total value of US\$1.9 billion.



LOCATION

Pacific Seeds Foundation Farm, Lot 14/16 Logging Road Allora (Old Allora-Warwick Road)
Queensland, Australia



ITINERARY

TIME	Departure/arrivals
8:15am	Bus departing from The Goods Shed, Toowoomba
9:15am	<ul style="list-style-type: none"> • Arriving at Foundation Farm Allora • Morning Tea
10:00am-10:30am	<p>Welcome</p> <ul style="list-style-type: none"> • Acknowledgement of Country • Facilities & Housekeeping <p>Trevor Philip, Pacific Seeds Foundation Farm Manager</p> <ul style="list-style-type: none"> • Outline of the day <p>A/Prof Andries Potgieter, The University of Queensland</p> <ul style="list-style-type: none"> • Overview of Ag Tech Logistics Hub: A partnership model of open innovation and technology adoption <p>Owen Williams, The University of Queensland</p>
10:30am-11:00am	<p>The Field</p> <ul style="list-style-type: none"> • Using historical remote sensing technologies to determining yield potential <p>Yash Dang, The University of Queensland (PhD)</p> <ul style="list-style-type: none"> • Measuring soil variability from proximal sensing technologies <p>Dongxue Zhao, The University of Queensland (PhD)</p> <ul style="list-style-type: none"> • Questions
11:00am-11:40am	<p>The Crop</p> <ul style="list-style-type: none"> • Sensing pipelines to screen crop canopy traits in breeding programs <p>Dr Barbara George-Jaeggli, The University of Queensland</p> <ul style="list-style-type: none"> • UAV-based technologies to reveal the secrets of mungbean yield <p>Dr Millie Smith, The University of Queensland</p> <ul style="list-style-type: none"> • Enhancing durum wheat yield through proximal sensing technologies <p>Yichen Kang, The University of Queensland (PhD)</p> <ul style="list-style-type: none"> • Questions
11:40am-12:10pm	<p>From ACCESS to ACTION</p> <ul style="list-style-type: none"> • The digital gateways to access satellite information <p>Tim Neale, CEO, Data Farming</p> <ul style="list-style-type: none"> • From Data to action – implementing digital ag in the paddock. <p>Christian Capp, Precision Ag expert Data farming</p> <ul style="list-style-type: none"> • Questions
12:10pm-12:50pm	<p>Robots – Drones – Planes – Satellites</p> <ul style="list-style-type: none"> • UAV deployment and applications <p>Loren Otto, Director, Airborn Insight</p> <ul style="list-style-type: none"> • Predicting phenology from plant to plot to field <p>Yan Zhao, The University of Queensland (PhD)</p> <ul style="list-style-type: none"> • Integration of high-res satellites and crop modelling to forecast wheat yield <p>Yuval Sadeh, PostDoc, NASA-Harvest</p> <ul style="list-style-type: none"> • Questions
12:50pm-1:30pm	<p>Lunch & Field walk</p> <ul style="list-style-type: none"> • Overview of CropPhen trial site <p>Celso Cordova, The University of Queensland</p> <ul style="list-style-type: none"> • Demo of spray drone <p>Trevor Philp, Manager, Foundation Farm, Pacific Seeds</p>
1:30pm-2:15pm	<p>Decision-making: Integrating of technologies for smarter decisions.</p> <ul style="list-style-type: none"> • High throughput phenotyping in wheat variety trials <p>Daniel Smith, The University of Queensland (PhD)</p> <ul style="list-style-type: none"> • Application of Digital technologies to enhance on farm decision making <p>Prof Scott Chapman, The University of Queensland</p> <ul style="list-style-type: none"> • Questions
2:15pm-2:30pm	Wrap up
2:30pm-3:30pm	Depart for The Goods Shed, Toowoomba

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