



FINAL REPORT EXECUTIVE SUMMARY

For Public Release

Part 1 - Summary Details

CRDC ID: FLUR1901

Project Title: The platform for monitoring and analysis of cotton canopy nitrogen status and yield projection using calibrated aerial and satellite imagery (Phase 2, incorporation of NutriLOGIC)

Project Start Date: 1/11/2018

Project Completion Date: 30/06/2019

Research Program: 1. Increase productivity and profitability on cotton farms

Part 2 – Contact Details

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Signature of Research Provider Representative:

Date submitted: 31-July-2019

Part 4 – Final Report Executive Summary

Provide a one-page summary of your research that is not commercial in confidence, and that can be published on the internet. Explain the main outcomes of the research and provide contact details for more information. It is important that the Executive Summary highlights concisely the key outputs from the project and, when they are adopted, what this will mean to the cotton industry.

FluroSense crop analytics and decision support platform has been enhanced with work-ready nutrient mapping and recommendation workflows, accessible for cotton grower via data integrations with major farm management systems.

The nutrient recommendations combine the science from widely accepted in Australian cotton industry tool NutriLOGIC/CottAssist with remote sensing imagery and sampling data from grower's won fields. The growers' data is used for additional calibration of the nitrogen recommendation to achieve higher accuracy through model localisation. The workflows for generation of management zones, suggested sampling points and derivation of the machinery-ready shape file with nitrogen recommendations are near-real-time, and are highly automated providing growers with the timely, tailored decision support, that has not been available to date. The evident benefits for the growers and advisors are in the easy of use, shorter turnaround for generation of recommendations and savings on inputs from early detection and crop stress mitigation.

The case studies with progressive Australian cotton growers and agronomists demonstrate the willingness of the industry to adopt science based decision support tools, such as FluroSense, and the benefit that can be achieved from variable rate input application and improved yield through more accurate timely management.