



MAJOR CAPITAL ITEM REPORT

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: DAN1706

Project Title: Capital Item: Precision Planter

Project Commencement Date: 14/6/2017 **Project Completion Date:** 14/6/2018

CRDC Research Program: 1 Farmers

Part 2 – Contact Details

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**Signature of Research Provider Representative: Approved as per Tracey MacDonald,
Director Water & Irrigation via CM9 – OUT18/11275 on 27/7/18**

Date Submitted: _____

Part 3– Capital Item Final Report

1. Background

The cotton industry is rapidly expanding in southern NSW. The purchase of a four row cotton precision planter will significantly enhance the ability of NSW DPI Plant Systems Branch and other research organisations to deliver accurate results from existing cotton research projects in the southern connected systems.

Research experiments established on Yanco Agricultural Institute in the 2016/17 season were planted using a two row planter that has a seed delivery system suited to grain systems with significantly greater plant density and where spacing is less critical.

The inability to control seed spacing and placement using the existing equipment has resulted in variable plant establishment in past experiments. Experiments on commercial farms in the 2017/18 season used grower's equipment to overcome these issues.

2. How does the Capital Item meet expectations and specifications?

The purchase of the four row cotton precision planter is for the establishment of cotton experiments in southern NSW. CRDC and NSW DPI have co-invested in the purchase of this four row precision planter which will run on the bed surface, eliminating variable plant establishment issues in seed spacing and placement that have occurred through the use of other equipment.

This capital investment project significantly reduces the risk of poor establishment of cotton trials by providing control over plant density, plant spacing and seed placement relative to the soil surface. The four row planter will also mean easier movement of the equipment between the research stations Yanco Agricultural Institute and Leeton Field Station.

3. How is the Capital Item being utilised to support your research or intended application?

The planter will be used for field experiments in the 2018/19 cotton growing season.

4. Describe the benefits of this Capital Item in supporting your research?

Currently there is no precision planting equipment available for experimental work in southern NSW. Contractor equipment is now too large to fit within the infrastructure confines of the research stations (e.g. gateways and channel crossing). Timing for the use of contractor equipment is also hard to schedule and plan for as it is required by research scientists at the same time as commercial growers are requiring the equipment.

With regular maintenance this equipment will continue to service cotton research in southern NSW into the foreseeable future. NSW DPI will be responsible for any and all required maintenance on this equipment. Any project undertaken in southern NSW will be able to utilise this equipment in their research activities.

5. Are there any Extension/Communications opportunities?

No

Part 4 – Capital Item Final Report Executive Summary

(This will be included on CRDC's website of final reports.)

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