



## SMALL GRANT REPORT

**CRDC ID:** DAN 10149

**Project Title:** ACRI Research infrastructure redevelopment

**Start date:** 1 July 2023.

**End date:** 30 June 2024

**Principal**

**Researcher:** Alison Bowman

**Organisation:** NSW Department of Primary Industries

**Project Summary**

The NSW Government through its \$50.8M World Class Food & Fibre 2 program allocated \$5.7M to the upgrade of soil and plant research infrastructure at the Australian Cotton Research Institute (ACRI) based at Narrabri to meet the current and future research capability requirement to underpin food and fibre production in NSW. The project involved the construction and installation of equipment to support the operation of a new Plant Propagation facility and a new Soil and Plant Processing facility. These new facilities will support research into key research areas for the industry in agronomy, entomology, pathology, nutrition and soils.

CRDC provided a capital contribution of \$475,000 to the ACRI program to facilitate the purchase of critical research equipment for the new facilities including:

- Growth Cabinet - Steridum PLEDT-RH500
- Leaf Area Machine - Licor LI-3100C
- Incubator - Steridum i170
- Soil Oven - ODH50
- Bioline Growth Room BDW80, and
- Laboratory Water Purification System, and
- 160KVA Diesel Generator

The equipment has been installed and is being used by research teams in the delivery of current CRDC funded research projects.

The Grains Research & Development Corporations (GRDC) also contributed an allocation of capital funds (\$786,216) to the establishment of the 2 new facilities at ACRI. GRDC acknowledged that many cotton growers are also grain growers and that grain production is component of the cotton farming system.

**Outcomes & Impact for Industry**

The NSW Government through its \$50.8M World Class Food & Fibre 2 program allocated \$5.7M to the upgrade of soil and plant research infrastructure at the Australian Cotton Research Institute (ACRI) based at Narrabri to meet the current and future research capability requirement to underpin food and fibre production in NSW. The project involved the construction and installation of equipment to support the operation of a new Plant Propagation facility and a new Soil and Plant Processing facility. These new facilities will support research into key research areas for the industry in agronomy, entomology, pathology, nutrition and soils. The capital build was completed in March 2024 with practical handover of the facilities to the ACRI site management and researchers in late April 2024. Capital equipment purchased as part of the project has been installed including the items listed below using the CRDC investment, with the exception of the Bioline Growth Room which is scheduled for delivery to ACRI from the USA in

late July 2024. Contractors have been arranged to install the Growth Room during the first week of August.

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**M&E Outcomes: Number of outcomes achieved.**

0

**People Connections**

The capital investment from CRDC (\$475,000) has been used in an equipment capability uplift at the ACRI site to fit out the new Plant Propagation and Soil & Plant Processing facilities. CRDC's investment leveraged the capital investment from NSW Government (\$5.7M) and Grains Research & Development Corporations (GRDC) (\$786,216) to build and equip modern research facilities to support agronomy, entomology, soil and pathology research at ACRI.

Representatives from GRDC (2) have toured the facilities to see their investment.

As this is a capital program no industry events have been held using the facilities to date.

**M&E People: Number of connections achieved.**

0

**Learnings**

The capital investment from CRDC was used to purchase capital equipment for the Plant Propagation building and new Soil & Plant Processing facility. The equipment will support the R&D effort at ACRI that will underpin the delivery of cotton agronomy, nutrition and pathology research for industry.

Current and future research projects will utilise the equipment purchased from the CRDC investment.

Overwhelming positive feedback has been received by the researchers who are now using and plan to use the equipment in the 2 new facilities.

DPIRD, along with GRDC would like to in partnership with CRDC promote the collective investment at ACRI with the erection of dedicated signage on both of the new facilities.

**M&E Learnings: Number of learnings and planned actions for the project.**

0

**Do you have recommendations for CRDC (eg RD&E gaps?)**

The investment from CRDC was used to purchase capital equipment for the Plant Propagation building and new Soil & Plant Processing facility. The equipment will support the R&D effort at ACRI that will underpin the delivery of cotton agronomy, nutrition and pathology research for industry.

**Comment on project expenditure, noting any changes from the application budget.**

The project budget from CRDC was fully expended on the capital equipment items listed above in the report.