

COTTON RESEARCH AND DEVELOPMENT CORPORATION

# PROGRESS REPORT

“Operational costs for Cotton Experiments-II

DAN 101 C

July 1997- June 1998

Australian Cotton Research Institute

Myall Vale Mail Run

NARRABRI NSW 2390

PH 02 67991500

Mr B Reddan, Manager

Dr S J Allen, Senior Plant Pathologist

Dr S Putcha, Plant Pathologist

Mr G W Charles, Research Agronomist

Dr N W Forrester, Special Entomologist

Dr N R Hulugalle, Soil Chemist

Dr R K Mensah, Entomologist

Dr P K Wright, Research Agronomist

Dr D Nehl, Research Officer(Plant Pathology)

Mr G Roberts, Weeds Agronomist

Dr J Holloway, Research Entomologist



NSW Agriculture

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**PROJECT TITLE: OPERATIONAL COSTS FOR COTTON EXPERIMENTS**

**Aims:** To ensure the viability of cotton research into the areas of agronomy, entomology and pathology by NSW Agriculture staff at the Australian Cotton Research Institute.

**Industry**

**Significance:** This project will ensure that the research program currently undertaken by NSW Agriculture continues. The contribution by local staff in areas such as agronomy, entomology, and pathology has been widely accepted by the cotton industry. New and existing programs aim to improve the agronomic and entomological management of cotton and will be of direct benefit to the industry.

**Research****proposal  
summary:**

NSW Agriculture has a number of research projects which involve field experiments at the Australian Cotton Research Institute, Narrabri. The area of cotton varies, but may rise to 45 hectares depending on expanded research programs and water allocations.

Research programs covered by this project include the management packages for high yields, diseases of cotton, entomological research on insecticide resistance and weed management.

Additional programs on Bt cotton and early season insect control strategies are underway, together with an expansion in weeds and disease research.

**Objectives to be  
achieved in each  
year of the grant:**

The objective each year is to successfully conduct field experimental work on cotton ( and other rotational crops) in the areas on agronomy, entomology and pathology.

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OPERATIONAL COSTS FOR COTTON EXPERIMENTS II

DAN 101 C

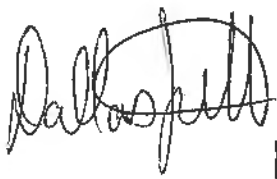
PROGRESS REPORT  
1997-1998

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A successful experimental cotton crop of 40.7 ha's was grown providing an average yield of 5.7 bales /ha. This yield is considered to be a good result for small area experimental plots. There were no irrigation water restrictions with all fields receiving liberal applications. Weed infestations became a problem in the summer due to difficulties in obtaining chipping contractors this however did not affect experimental outcomes as infestations were eradicated in time by a combination of chipping, aerial and ground spray applications. The amount of spraying of pesticides was minimised and varied to avoid resistance build-up. Insect counts throughout the season were regarded as low and consequently damage to plants was slight.

This project assisted in achieving successful outcomes for the following DAN 094C, DAN 095C, DAN 105C, DAN 098C, DAN 107C, DAN 108C DAN 091C. In providing support to these other projects best mangement practices were applied as much as possible and will continue to be applied. Integrated Pest Management practices are still being developed on ACRI but problems exist where spray Vs non-spray trials are in close proximity to one another. This is a logisitical problem on site which will improve when crops are rotated.

Revenue received from cotton sales will be directed to redeveloping several fields which have developed ponding problems. Next January contractors will be employed to lazer level fields. In addition several channel gates are being upgraded and replaced. One major river pump has also been fully rebuilt and another major pump will also be rebuilt in the spring.

  
Dallas J. Hill  
PC.