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RURAL INDUSTRY RESEARCH FUNDS FINAL REPORT

Authorised

Body: COTTON RESEARCH COUNCIL

Project Number: DAN 22L

Project Title: THE ADDITION OF TEMPERATURE CONTROL TO A

NEWLY CONSTRUCTED GLASSHOUSE

Field of Research: Plant Pathology Field Code: 5

Organisation: NSW Department of Agriculture

Address: P.O. Box K220

Haymarket, NSW 2000

Project Dr C D Green, Director of Biology (02) 6300251

Supervisor: Dr E C Wolfe, Regional Director of Research (067) 679300

Principal

Researcher: Dr S J Allen, Plant Pathologist.

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Administrative

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Commencement Completion

Date: 1/7/85 Date: 30/6/86

Project Objectives:

To install a controlled heating and cooling system in an existing glasshouse at the Agricultural Research Station, Narrabri and to supply a 2250 litre water tank for the provision of fresh water to humidifiers to be used in the glasshouse.

The completed glasshouse with temperature control was required to facilitate more effective cotton disease research by allowing work on cotton and its diseases to continue during cooler months of the year and to provide a support facility for the growth chamber in the bacterial blight strain identification programme.

BUDGET Allocation \$19,500.00

Expenditure \$19,431.00

Balance \$ 69.00 to be refunded.

Funds from other sources:

The Department of Agriculture provided the concrete slab, paths and surrounds and erected the glasshouse complete with hailguard and tankstand.

Estimate cost: \$25,500

Attachment C

FINAL REPORT: The Addition of Temperature Control to a Newly Constructed Glasshouse (DAN 22L)

The controlled heating and cooling system has been installed and the glasshouse is now in full operation.

Using the facilities provided by the glasshouse we have been able to triple the rate at which isolates of the bacterial blight pathogen are being processed for race identification in the growth chamber.

We are also now able to test seed for bacterial blight infestation and over 9000 seedlings have been screened in the last two months.

Currently the glasshouse is also being used to compare isolates of Verticillium dahliae from cotton and to evaluate the reaction of several cotton cultivars to infection by Verticillium sp.

S.J. Allen

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Plant Pathologist