

FINREP98

Cotton Research and Development Corporation

# Final Report

“Purchase of autosampler and software for Atomic Absorption Spectrophotometer”

DAN126C

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NSW Agriculture

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Project Title: Purchase of autosampler and software for Atomic Absorption Spectrophotometer

Project No: DAN126C

Research Organisation: NSW Agriculture

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Introduction:

The atomic absorption spectrophotometer (AAS) located in the physiology lab at ACRI is an important analytical tool for measuring plant nutrients and is also now been used in a herbicide tracer experiment and is planned to be used in a tracer study of heliothus. It is the principal instrument used in DAN107C and an important backup instrument in CRC NSW 541. A new autosampler was requested so that the laborious preparation of standard solutions and calculation of out of range samples could be reduced.

Objectives:

To purchase a new autosampler in order to provide faster, more accurate analysis of cotton samples.

Results and Discussion:

A GBC SDS-270 sample delivery system coupled with a PS-270 auto dilutor and appropriate software has been purchased and installed. The estimated time savings have been achieved.

Conclusion:

The instrument has proved to be more reliable, faster and more accurate than the previous autosampler attached to the AAS and as such the project has fulfilled all of its objectives.