

Plain English Summary

Project Title: Maintenance of Cotton Industry Weather Station Network

Principal Researchers: Dr M.P. Bange, Ms. D. Johnson, Mr G. Rapp

Project Aim: To replace the aging automatic weather station at the Australian Cotton Research Unit

Summary:

This project requested assistance to fund a new weather station at the Australian Cotton Research Unit at Narrabri. Essentially the problem was that the collection of weather data at the institute was at risk because of aging instruments and dataloggers.

Collection of weather data at the institute is a vital activity because of the numerous research projects conducted at or around the station requiring this information for comprehensive data analyses. The practice at the station has been to maintain two independent weather stations to collect information. The reason for the two stations is to enable continuous data collection in case one station was to fail, which can regularly happen during the season especially when electrical storms are present.

Like all the other weather stations funded by the CRDC they are getting old. Our primary station is requiring much more maintenance to enable it to function properly. The other backup station is over 10 years old, moreover it is not year 2000 compliant. The request for assistance was to help purchase a new high quality automatic weather station to serve as the primary station, and to use the existing functional station as backup.

The purchase and installation of a new high quality automatic weather station was completed in September 2000. The station collects the following information which is made freely available to all personnel at the Institute:

- Maximum and Minimum Temperature
- Relative Humidity
- Rainfall
- Solar Radiation
- Soil Temperature
- Wind Speed and Direction