

## DAQ5L Executive Summary

Objectives: To breed cotton cultivars that are adapted particularly to cotton producing areas in Queensland. Specific objectives include the development of cultivars having high yielding ability with yield stability over years, a superior fibre quality (especially fibre strength) and resistance to major insect pests (*Heliothis* and pink spotted bollworm) and diseases (bacterial blight).

At the time this project commenced, statistical analyses of genotype x environment interaction in the strain and cultivar trials indicated that different cultivars were required for Central Queensland, Darling Downs and NSW cotton growing areas. The production of such cultivars will more likely be achieved through a local breeding effort.

The development of cultivars having resistance to insects is a long term project which will ultimately have wide applicability. The immediate objective is to develop a suitable technique to screen breeding strains for resistance to *Heliothis*.