

Improved pest management for mites and thrips on cotton.

Project Number: CSP46C

Organisation: CSIRO Division of Plant Industry

Address: Cotton Research Unit
PO Box 59, Narrabri, NSW, 2390

Research Staff: Dr L.J. Wilson (Principal Research Scientist)

Support Staff: Mr L.R. Bauer (Senior Technical Officer, to August 1995)
Ms D. A. Lally (Technical Officer, from Aug. 1995)
Ms Trudy Staines (Technical Assistant, 6 months each year)
Ms Lyn Gett (Technical Assistant, 6 months each year, to April 1995)
Mr Mark Laird (Technical Assistant, 6 months each year, from Oct. 1996)

Collaborators: Dr G. H. Walter (University of Queensland)
Dr Manthana Milne (University of Queensland)
Dr Grant Herron (NSW Agriculture)
Dr Gary Fitt (CSIRO Entomology)
Dr Richard Morton (CSIRO Math and Statistics)
Dr Neil Forrester (NSW Agriculture)

Administrative Contact: Mr Ken Parker, Administrative Officer, ph (02) 67991500

Aims:

- Determine the economic impact of thrips on cotton and evaluate new means of control.
- Evaluate the range and possible mechanisms of plant resistance to thrips and mites.
- Investigate host preferences of thrips and manipulation of hosts to increase thrips predation.
- Investigate further the impact of thrips on mites through predation, induced resistance and effects on plant quality.
- Refine action thresholds for the control of two-spotted spider mites on cotton.
- Evaluate the efficacy of new acaricides and investigate novel technologies for controlling mites.
- Determine resistance levels in mites to acaricides and factors influencing development of resistance.
- Evaluate the effect of early season insecticides on mites and their predators.