

Southern Cotton – Integrated Pest Management (IPM)

Thrips threshold validation (CRDC project DAN 1501 July 2015-June 2017)

Sandra McDougall, Jianhua Mo, Mark Stevens, Sarah Beaumont and Scott Munro

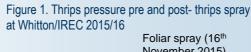
Project aim Results

To validate whether the Australian Cotton Industry thrips threshold (10 thrips/plant) applies in southern NSW cotton production areas. Commercial-scale trials.

Compare species composition of pests in northern and southern cotton growing areas.

Key findings:

- Thrips pressure reached the positive control threshold of 1 thrips/plant in late October when plants were at the cotyledon to 1 leaf stage.
- Thrips pressure reached the industry threshold of 10 thrips/plant in mid-November when plants were at the 4-5 leaf stage.
- Onion thrips were the dominant thrips species observed during monitoring
- Tomato thrips comprised about 16% of thrips monitored
- Western Flower thrips constituted less than 5% of thrips monitored
- There was no yield difference between plots sprayed for thrips and unsprayed plots in 2 seasons of trials.



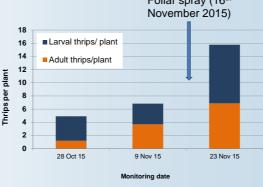


Figure 2. Total thrips numbers per plant 7 days post thrips spray at Whitton/IREC 2015/16

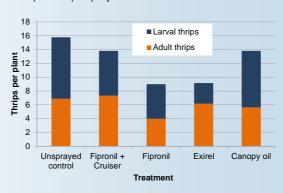


Figure 3. Effects of threshold treatments on lint yield (kg/ha) in the machine harvest data.



See more detailed trial results in:

Southern NSW research results 2014 and Southern NSW research results 2015 http://www.dpi.nsw.gov.au/content/agriculture/broadacre/guides

www.dpi.nsw.gov.au





hrips damage to cotton seedlings



mato thrips and onion thrip



Sarah Beaumont collecting seedlings for monitoring (L)



Commercial thrips spray trial being harvested

NSW Department of Primary Industries
Yanco Agricultural Institute
2198 Irrigation Way East YANCO 2703
02 6951 2611
Contact:

Sandra.McDougall@dpi.nsw.gov.au Sarah.Beaumont@dpi.nsw.gov.au