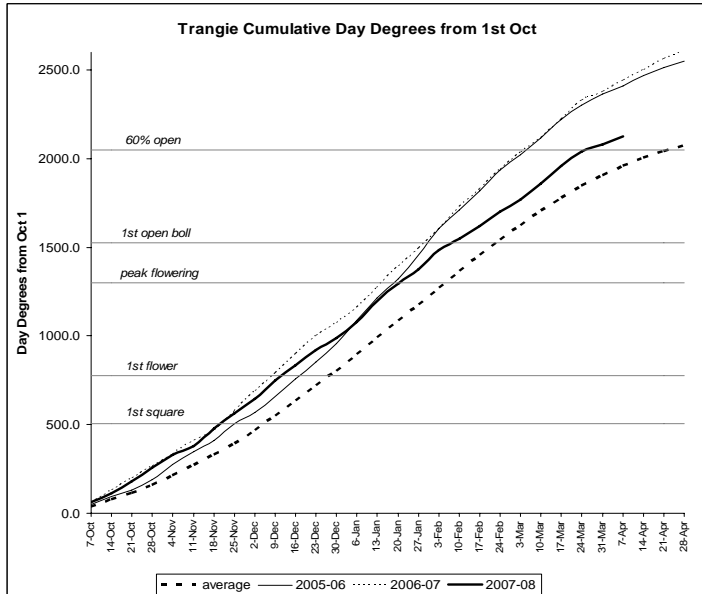
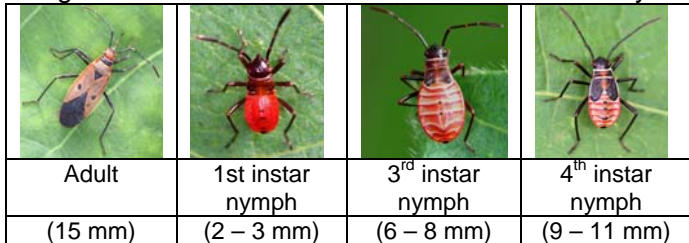


### Day Degrees



### Pale Cotton Stainer Bug (CSB) Preliminary Trial

Reports of infestations of Pale Cotton Stainer Bugs (CSB) have prompted a preliminary trial to be conducted using common chemicals to determine their efficacy.



Researchers Moazzem Khan, Adam Quade (DPI&F), & Murray Boshammer (Total Ag. Services) ran a preliminary trial in dryland cotton crop assessing different control options.

**Table 1.** Treatments and rates used in the trial

Treatment	Formulation (g/L)	Rate (mL/ha)
Control	Untreated	0
Decis	Deltamethrin 27.5 EC	700
Decis	Deltamethrin 27.5 EC	400
Decis + Salt	Deltamethrin 27.5 EC + Table Salt	400+ 10 g/L water
Steward	Indoxacarb 150 EC	850
Steward	Indoxacarb 150 EC	400
Steward + Salt	Indoxacarb 150 EC + Table Salt	400+ 10 g/L water
Regent	Fipronil 200 SC	125
Regent	Fipronil 200 SC	60
Regent + Salt	Fipronil 200 SC + Table salt	60 + 10 g/L water

**Pre-treatment** CSB No's were moderate, ranging from 1 to 9/m (adults). The main beneficials were spiders (59%) & brown smudge bug (BSB) (37%).

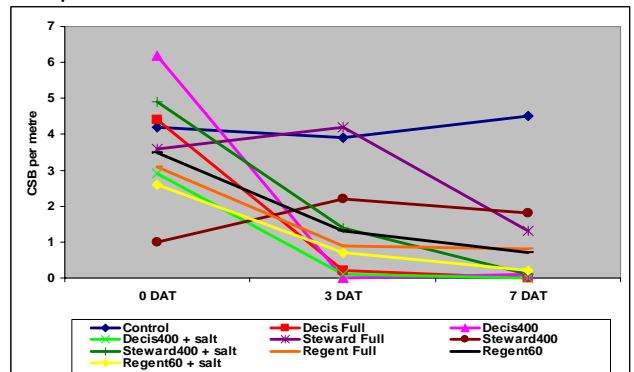
**Trial** - The treatments are presented above in Table 1. There were 3 treatments replicated 3 times. Application was with a ground rig. Pre-treatment counts, 0 days after treatment (0 DAT), were made the day before application. Post-treatment counts were made at 3 & 7 DAT.

#### Effect on Cotton Stainer Bugs

- **Decis** full rate & 400ml + salt reduced the numbers of CSB below 95% of the original population 3 DAT & 100% after 7 days.
- **Steward** 400 ml plus salt reduced CSB population by 71% & 98% at 3 & 7 DAT. Efficacy of Steward 400ml was poor & the full rate of Steward gave 64% kill at 7 DAT.
- **Regent** full rate, 60ml and 60ml plus salt gave 71, 63 and 73% kill at 3 DAT & 74, 80 and 92% kill at 7 DAT, respectively

**Impact on beneficials** - The population of BSB & spiders increased for all treatments except for Decis full rate & Decis 400 ml plus salt at 3 DAT where spider population reduced by 8% & 20%, respectively.

The results should be **considered as a guide & not as a recommendation**. The risk of flaring other secondary pests such as mites should be considered when using broad spectrum chemicals.



**Figure 1.** Effect of different chemicals on CSB showing % kill (A) and kill over time (B)

Please refer to the April edition (out soon) of the Australian Cotton Grower magazine for full trial results. The Cotton CRC has a fact sheet on Cotton Stainers that can be downloaded from their website:

[www.cottoncrc.org.au/files/0b8ff5f6-38c5-44b8-bb7b-9a5400d35b02/Cotton Stainer.pdf](http://www.cottoncrc.org.au/files/0b8ff5f6-38c5-44b8-bb7b-9a5400d35b02/Cotton%20Stainer.pdf)

#### Mirid Predation by Lynx Spiders

David Larsen and Mary Whitehouse have put together some fantastic video clips on mirid predation. The movies illustrate behaviours of Lynx spiders that have been observed in the field. Under laboratory conditions a hungry Lynx can eat 7 adult mirids in 24 hours.

[http://www.cottoncrc.org.au/content/Industry/Publications/PestsandBeneficials/SuckingPestPublications/Mirid Predation by Lynx Spiders.aspx](http://www.cottoncrc.org.au/content/Industry/Publications/PestsandBeneficials/SuckingPestPublications/Mirid%20Predation%20by%20Lynx%20Spiders.aspx)