





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.

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| Adult (15mm) | 1st instar nymph (2-3mm) | 3rd instar nymph (6-8mm) | 4th instar nymph (9-11mm) |

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 of water |
| Steward | Indoxacarb 150 EC | 850 |
| Steward | Indoxacarb 150 EC | 400 |
| Steward + Salt | Indoxacarb 150 EC + Table Salt | 400+ 10 g/L of water |
| Regent | Fipronil 200 SC | 125 |
| Regent | Fipronil 200 SC | 60 |
| Regent + Salt | Fipronil 200 SC + Table salt | 60 + 10 g/L of 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. The application was done 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 400 ml was poor & the full rate of Steward gave 64% kill at 7 DAT.

Regent full rate, 60 and 60 ml plus salt gave 71, 63 and 73% kill at 3 DAT & 74, 80 and 92% kill at 7 DAT, respectively.

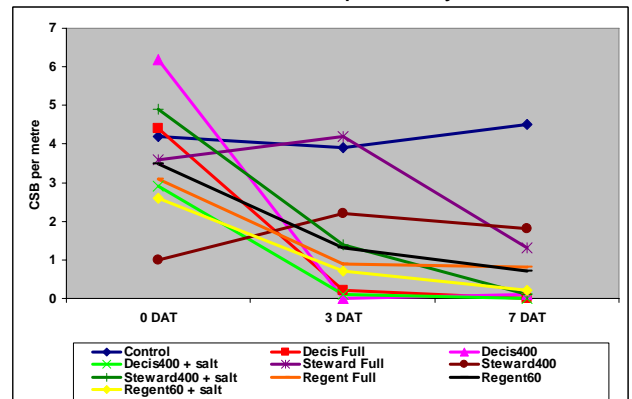


Figure 1. Effect of different chemicals on CSB showing % kill (A) and kill over time (B)

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**. In this **preliminary trial** only 2 groups of beneficials were present. The risk of flaring other secondary pests such as whitefly should be considered when using broad spectrum chemicals. **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/0b8ff5f6-38c5-44bb7b-9a5400d35b02/Cotton Stainer.pdf](http://www.cottoncrc.org.au/files/0b8ff5f6-38c5-44bb7b-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/PestandBeneficials/SuckingPestPublications/Mirid Predation by Lynx Spiders.aspx](http://www.cottoncrc.org.au/content/Industry/Publications/PestandBeneficials/SuckingPestPublications/Mirid%20Predation%20by%20Lynx%20Spiders.aspx)