

an effective control option should the mealybug population approach damaging levels.

- Develop reliable monitoring techniques for mealybugs in cotton at different stages of growth, and at varying densities. Being able to detect and monitor mealybug is critical to making decisions about the need for control, or otherwise, during the season.
- Monitoring mealybug populations in Emerald through winter and prior to

the 2010–11 crop. This monitoring, focused on areas where mealybug populations were high in 2010, will provide information on where mealybug reside outside of the cotton season, and possibly what the mealybug pressure will be like during the 2010–11 cotton season.

### SUMMARY

The survey of Emerald farms affected by mealybug highlights that plant stress, weediness (in and around cotton fields), the presence of re-growth cotton and the presence of beneficial insects had a signifi-

cant impact on the likelihood of *Solenopsis* mealybug becoming of commercial significance. These findings support the importance of good farm hygiene and the continued focus on IPM. These practices, in conjunction with the implementation of the industry Come Clean Go Clean protocols, and research stand the industry in good stead to manage this pest.

**For more information about the trial results, Pulse Penetrant permit, 'Go Clean Come Clean' protocols, how to report infestations or where to send mealybug samples, visit the Cotton CRC website at [www.cottoncrc.org.au](http://www.cottoncrc.org.au)**

## Predators control the Burdekin's mealybugs

The newly-discovered *Solenopsis* mealybug may have met its match with early populations being controlled by native Australian predator insects in Burdekin cotton crops.

Speaking on CSD's Web on Wednesday broadcast, DEEDI research scientist, Dr Paul Grundy, said mealybug were present in crops in 2009, and worryingly, were attacking the current crop as it was emerging out of the ground.

"In 2009 it didn't get to the stage where it was uncontrollable, but it was certainly a management difficulty.

"One of the things we found last year was there was very little in the way of natural enemy activity which was associated with those mealybugs, which was a little

strange compared with experiences with mealybugs in other countries."

"This season, when we started seeing the pest on seedling cotton, we were expecting to have major problems early in the crop with mealybugs, but we since have seen really good numbers of natural enemies move in and keep pest numbers at bay – so that's a very different experience to last year where we just could not find any natural enemies.

"The predator species that we're seeing that seem to be quite effective are the three banded ladybirds and lacewings in particular."

Paul said the scenario was typical of a new pest being introduced into an environment – a lag time for the natural predator

populations to adjust to a level where they can suppress the pest.

"Its very early in the season and it remains to see how things unfold, but now we're seeing these natural enemies getting around we're hoping we can take advantage of that – hopefully rely on biological control as far into the season as we can, and with a bit of luck we might get away with minimal spraying for mealybug," he said.

Controlling the insect with insecticides has proven very difficult as they have a waxy coat which protects them from the sprays.

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Early season populations of mealybug in Burdekin cotton crops are being controlled by native predator insects.