

Day Degree accumulation to the 28th Oct 08

District	Season 08/09	Season 07/08	Season 06/07	Cold Days	Hot Days
Emerald (from 15/09/08)	488	532	499	2	0
Theodore (from 25/09/08)	338	413	380	4	1

Crop Stages Vs Day Degree Accumulation

Emerg	5 th leaf	1 st Sq	1 st Flow	Peak Flow	Crack ed Boll	60% open
80	330	505	777	1302	1527	2050

Mirid Biology

Thanks to Dr Moazzem Khan (QDPI&F) for help with this article. Parts of this article are from the new mirid fact sheet.

Being able to identify mirids correctly and understanding their biology can help in making spray decisions.

Of the two species of mirids commonly found in cotton, the green mirid is the dominant species, particularly in a cotton monoculture, (>95% of the mirid population). The proportion of brown mirids on cotton is higher in mixed cropping (soybean, mungbean, pigeon pea, cotton) systems, though it is still less common than green mirid.

Both green & brown mirids have an egg and 5 nymphal stages before moulting to adult. Under summer conditions, a generation of green and brown mirids (egg to adult) can be completed in about 2 & 3 weeks respectively. Adults of both mirids can live for 3-5 weeks and a female can lay up to 80 eggs in her life time.

Temperature is an important driver of mirid development. Optimum temperatures for both green & brown mirids are 30 to 32°C. At these temperatures, the development from egg to adult takes 15.6 & 18 days in green & brown mirids respectively. When the weather remains cloudy & temperatures are around 32°C for a few days, green mirid populations will explode within a short time frame, faster than when temperatures are cooler or hotter.

Though warmer conditions generally lead to faster development, temperatures much beyond the optimum tend to reduce survival, and prolonged periods of very hot weather (>35°C) can reduce mirid abundance. Heavy rain & strong storms can also reduce mirid numbers.

During winter mirids development slows down, however mirids are able to overwinter on a wide range of alternate hosts, including many common weeds.

Know your pest - Adult green & brown mirids may be confused with adult broken backed bugs & crop mirids. Nymphs of the green mirid may be confused with nymphs of broken backed bugs, apple dimpling bugs, aphids & predatory black mirids.

For further information a new fact sheet on "Mirid Biology and Identification" is available on the cotton CRC website and includes pictorial identification at different stages.

http://web.cotton.crc.org.au/content/Industry/Publications/Pests_and_Beneficials/Sucking_Pests.aspx

New Thresholds for Mirids

The new action threshold for beat sheeting for mirids is:
For irrigated cotton:

- Squaring stage: 4 mirids/metre and/or <60% retention
- Early boll stage: 3 mirids/metre and/or 60-70% retention

For dryland cotton

- 3/m and/or <60-70% retention throughout the season

Divide visual count by 3 to convert to an equivalent beat sheet count

For more information please see the 08/09 Cotton Pest Management Guide which should be out soon.

Rice in CQ

If you were unable to attend the rice meeting in Emerald last week, and are interested in the minutes let me know and I can forward them on.

QDPI&F and rice industry are currently investigating the possibility of having a two planting date variety trial at the QDPI&F plot at the Emerald Ag College. More information will be made available as it comes to hand.

Cotton Field to Fabric Training Course 25nd – 27th November 2008

Managing for quality through the production chain

This training course is designed to give participants an overview of the entire cotton pipeline from the farm to predicting fabric performance. It is recommended for people involved in any part of the cotton industry from growers to technologists and aims to give a better understanding of how segments of the industry operate and how each related to one another.

The course recently won the Cotton CRC 'Impact in Adoption' Award and comes highly recommended.

The next course will be held on the 25nd – 27th November 2008 at the CSIRO Textile & Fibre Technology Centre, Belmont, Victoria and costs \$550 pp for the three days, including lunch each day and dinner on the Tuesday.

Application forms can be downloaded from <http://www.csiro.au/resources/pfzt.html> or contact me and I can send one out. For more information please contact Rene van der Sluijs on 03 52 464738 or Rene.vandersluijs@csiro.au.

Disease Survey

Dr Stephen Allen, CSIRO, and a team of pathologists will be conducting the annual early season disease survey next week and will be in CH 4th & 5th November and in Dawson 6th November. If you have a crop you would like inspected please contact Stephen on (02) 67991530, or me (07) 49837403.

This survey will also include monitoring for Tobacco Streak Virus (TSV). If you have parthenium or crown beard growing in close proximity to where cotton is currently being grown and would like it to be included in the TSV surveys, please let me know (07) 49837403.