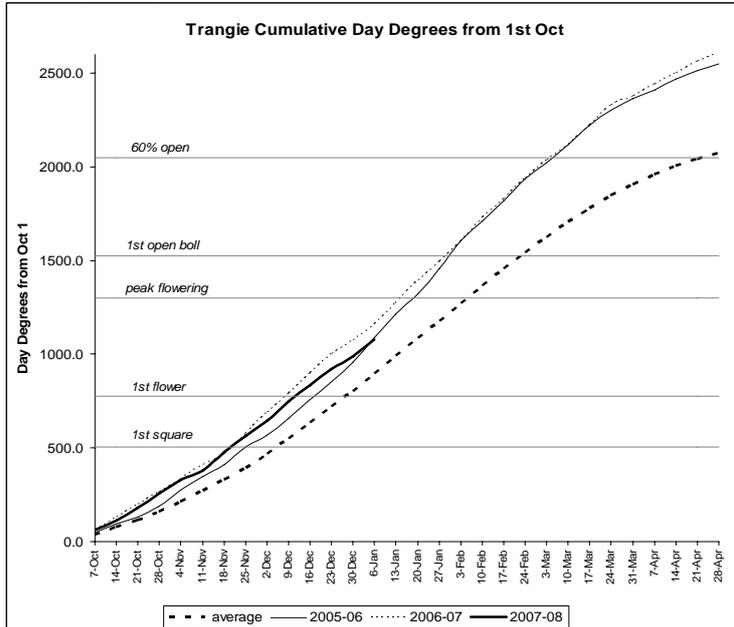


## Day Degrees



Hot days (>36°C) up until 10/01/08 - 5

### Reminder: 2,4-D Damage in Cotton Crops

There have been reports of 2,4-D damage in cotton crops across the valley this season. 2,4-D damage in cotton crops can result in delays in maturity and yield reductions. When considering using 2,4-D formulations to control weeds the following should be taken into account:

- Know what sensitive crops are in your area and communicate with your neighbours.
- Use only in appropriate weather conditions.
- Use appropriate nozzle selection to produce coarse droplets.

More details on these points can be found on the label of any of the 2,4-D formulations.

### Farm management that affects fibre quality

It is important to manage for quality throughout the season. Fibre development responds directly to the environment, management & stresses. Correct variety choice for the growing region combined with reduced stress management will optimise fibre quality. Stress at one point in a season may have indirect consequences on fibre quality. For example, excess nitrogen rates or events which cause late regrowth, can reduce fibre quality by having fibre development occurring in cooler weather (& reducing micronaire).

#### Irrigation

Good plant moisture status is critical in the first 20 days after flowering to allow potential fibre elongation rates. With about five weeks of effective flowering & another three weeks to complete fibre elongation, a total of eight weeks without stress is required to have uninterrupted fibre length in all bolls. Healthy soil & irrigation scheduling to take account of soil water holding capacity

& evaporative demand are key approaches to managing plant moisture status.

#### Crop Growth Habit

A uniform set of bolls is more likely to provide uniform fibre. Late flowering & especially regrowth will cause problems in fibre properties & indirectly with grade, so agronomy should aim to produce a crop which optimises plant size & sets bolls when possible. The application of large quantities of mepiquat chloride (Pix) at the last effective square has become a common practice in many regions. The aim is to reduce top growth of the plant & minimize plant resources going into fruit that is unlikely to be mature at harvest time. Pix is unlikely to have a negative effect on fibre quality & may help reduce neps in late crops that are going to produce bolls outside the normal harvestable range.

Okra leaf varieties are known to cause an increase in trash content. Approximately half a grade decrease can result. A balance between okra varieties positive attributes & the potential for a small downgrade need to be taken into account.

#### Defoliation

The type of defoliation product is unlikely to impact on fibre quality. However, the timing of defoliation can have a big impact on the fibre quality of cotton. Early defoliation can cause a significant reduction in all desirable fibre properties (predominantly in the upper top quarter of bolls) & significantly increases the number of neps.

#### Transgenic/IPM Era

The widespread adoption of Bollgard II varieties coupled with more selective *Helicoverpa* targeted sprays & increased resistance to aphicides has the potential to increase late season aphid infestations. This plus the increase in whitefly could result in an increase in sticky cotton. Sticky cotton is a highly undesirable quality characteristic and could incur penalties as well as impact on spinner's confidence in the quality of Australian cotton.

Thanks to Susan Maas and Dr Michael Bange for this article.

### Reminder - Benchmarking Water Use in the Cotton Industry

It is not too late to be come part of the Cotton CRC Water Team benchmarking process.

To be involved you just need to have grown cotton in the 2006/07 season. Growers who participate will receive reports detailing their on farm water use and be able to benchmark their farms data against the rest of the region and industry.

If you are interested in helping to establish water use benchmarks for the cotton industry and looking at the water use benchmarking tool WATERtrack RAPID or to gain more information please contact me.