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## Season Summary

### Day Degree accumulation to the 31st January.

District	Season 06/07	Season 05/06	Season 04/05	Hot Days	Hot Day Percentile
Emerald (from 15 <sup>th</sup> September)	1907	2166	2055	34	30 <sup>th</sup> (35/50)*
Theodore (from 25 <sup>th</sup> September)	1727	1924	1776	44	90 <sup>th</sup> (6/50)*

### Crop Stages versus Day Degree Accumulation.

Emerg.	5 <sup>th</sup> leaf	1 <sup>st</sup> Sq	1 <sup>st</sup> Flow	Peak Flow	Cracked Boll	60% open
80	330	505	777	1302	1527	2050

\*Refers to the No. of years in the last 50 that we have had the same number or more hot days within the same period.

What a turn around in our weather patterns! Emerald has had one of its mildest seasons, in terms of temperature, in the last 10 years. Compared to last year we are at least 250 Day Degrees behind last season (approx. 2 weeks) and at least 150 Day Degrees (approx. 1 week) behind the 04/05 season. The 04/05 season was reputed to be a milder season then normal and the reason why yields were so much better in CQ that year. It will be interesting to see how this season's temperatures will affect yields.

The Dawson Valley has also experienced some slowing down of Day Degree accumulation compared to last year (nearly 200 Day degrees behind). However, in terms of number of hot days it is still in the top 10% of years. This would seem a little contradictory, except for the fact that the Dawson valley has a much lower long term average for the number of hot days over the last fifty years compared to Emerald (29 versus 51). It is surprising that that this season the Dawson Valley seems to have been hotter than Emerald (44 versus 34).

## Nutrition Management

Around this time of year people are generally busy getting harvesting equipment ready for picking, putting last irrigations on and counting down to defoliation. Before you defoliate it is perhaps a good time to assess your crop's health and well being so far. It is a perfect time to review your nutrition programme for the season and try to work out what went right and what went wrong.

Areas of crop that look like they have senesced prematurely might be good areas to ear mark (or use a GPS) for soil tests after harvest. Nutrition may not be the problem, however, at least you can cross it out as an issue when trying to find out why areas of your crop did not perform.

One of the best tools for assessing nutrient status and for checking fertiliser recommendations is the updated version of **NutriLOGIC** now currently available on the

CRC website

([www.cotton.crc.org.au/CottonLOGIC/NutriLOGIC](http://www.cotton.crc.org.au/CottonLOGIC/NutriLOGIC)).

This programme allows you to plug in your test values for all the nutrient elements for either soil, petiole or leaf tests and give you recommendations for fertiliser applications. All the calculations are done for you. On the other hand if you like to do your own interpretations, **NutriLOGIC** has the critical levels of all elements displayed. This information has been based on the latest research data. This sort of more specific data can help indicate where soil sodicity and salinity can affect crop performance.

Nitrogen fertiliser recommendations from this programme have also been fine tuned to allow for cropping history, soil compaction and crop response to Nitrogen inputs.

The NutriLOGIC tool also has links to information on typical nutrient removal levels for specific yields. It is quite useful for building a fertiliser recommendation when you have no actual test data. The site has some concise information on sampling protocols for soil, leaf and petiole testing.

Typically, leaf tests should be done at the start of flowering and at cut-out. Petiole testing should be done across a range of Day Degrees. The most common recommendation is to do 3 petiole tests approximately 10 days apart or take the samples at 600DD, 750DD and 900DD.

Quite often decisions on nutrient management are made at the last minute, (just as your calibrating your fertiliser rig in some cases). Assessing your crop now may give you an idea of which paddocks need some better nutrient management for next season. Now is the time to start thinking about a structured testing regime for your fields and future crops so that you have some information on which to base future nutrient management decisions.

## Disease Survey

Stephen Allen and the disease survey team will be in the district next week (Emerald – Wednesday, Theodore – Thursday). If there are any issues concerning plant diseases or plants exhibiting symptoms that you do not recognise; it is a perfect opportunity to get some experienced plant pathologists to inspect the problem in field. Please let me know on the above numbers by COB Monday if you require their services.

## Welcome to New Staff

Lance Pendergast has taken on the Water Use Efficiency job based in Emerald. This position will be secured for the next 3 years. Lance commenced on the 9<sup>th</sup> of January. Anybody wishing to contact Lance about irrigation matters, can be contacted on 0749 837 416, 0448 601 842, [Lance.Pendergast@dpi.qld.gov.au](mailto:Lance.Pendergast@dpi.qld.gov.au).

## Date Claimers

**February 20 – 22<sup>nd</sup>**. Growers invited to inspect the Farming Systems trials at the Emerald Ag College. From 4 – 5pm each afternoon.