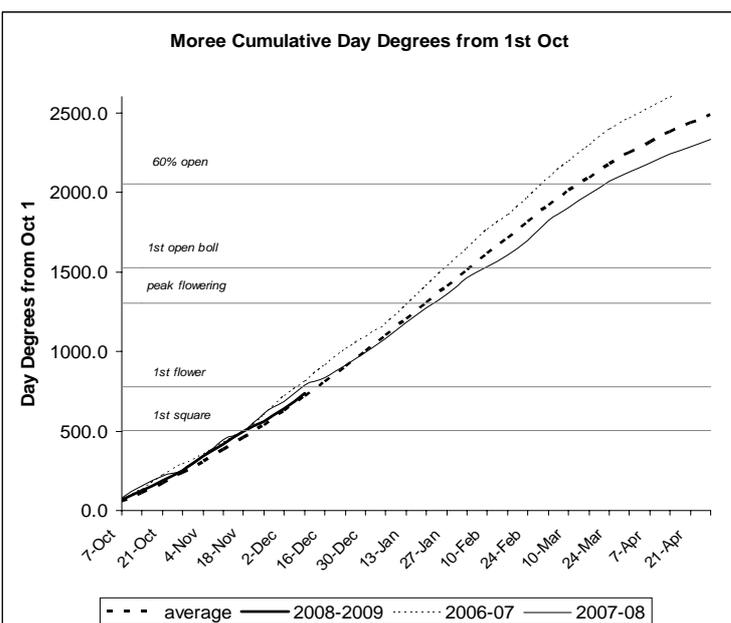


## Day Degrees Accumulation to 9<sup>th</sup> December 2008.

Moree Aero	Season 08/09	Season 07/08	Hot Days	Cold Days
15/09/08 – 30/09/08	126.8	117.5		8
01/10/08 – 09/12/08	734.4	789.2	3	7

## Crop Stages vs Day Degree Accumulation

1 <sup>st</sup> Square	1 <sup>st</sup> Flower	Peak Flower	Open Boll	60% Open
505	777	1302	1527	2050



## Evaluating In Crop Nutrient Status

Both petiole and leaf tissue can be used to evaluate crop nutrient status. Petioles are ideal for monitoring nitrate N and potassium concentrations until mid-flowering. Beyond flowering, leaf tests are a better method of monitoring crop nutrition.

Leaf samples can be used to monitor all nutrients including micronutrients. Micronutrients are most accurately assessed with leaf blade samples. Sampling twice (at flowering and boll opening) produces the most useful information although leaves can be sampled at any time. Leaf tissue tests can identify nutrient imbalances, deficiencies and toxicities more precisely than soil testing and assist in optimising fertiliser programs.



This table is from NutriLOGIC and outlines ideal, high and low leaf tissue levels of each major nutrient at 2 stages during the season. Requirements for nutrients change as the crop matures.

	Days after sowing	Ideal	High	Low
<b>Macronutrients (%)</b>				
N %	70	4.49	4.99	3.99
	120	4.01	4.51	3.51
P %	70	0.34	0.39	0.29
	120	0.31	0.36	0.26
K %	70	1.66	1.69	1.64
	120	1.35	1.37	1.32
S %	70	0.88	0.91	0.85
	120	1.10	1.113	1.07
Ca %	70	3.16	3.08	3.24
	120	3.70	3.78	3.78
Mg %	70	0.7	0.71	0.68
	120	0.81	0.82	0.79
<b>Micronutrients (ppm or mg/kg)</b>				
Na	70	<1050	1900	
	120	<1200	2100	
Cu	70	7.39	8.39	6.39
	120	6.43	7.43	5.43
Zn	70	28	34	22
	120	23.3	29.3	17.3
Fe	70	225	305	145
	120	155	235	75
Mn	70	104	134	74
	120	111	141	81
B	70	69	89	49
	120	88	108	68

Late season options for alleviating deficiencies are limited, particularly for macronutrients. After cut out, crops should be able to fill bolls with the nutrients already taken up. Applying more nutrients may encourage vegetative growth rather than enhance yield. Late season micronutrient deficiencies could be alleviated through foliar applications.

## Merry Christmas

I would like to wish everyone a happy and safe Christmas and New Year. The Moree DPI office will be closed from the 25<sup>th</sup> December to the 7<sup>th</sup> January 2009. I will be out of mobile service from the 22<sup>nd</sup> – 27<sup>th</sup> December 2009. I will be back in Moree and available on mobile for the remainder of the break, and if you have any queries or concerns please do not hesitate to call. Look forward to seeing you all in the New Year.

