

August 13, 2015 - Volume XXIII - Number 13

Crop Management Newsletter

News about Crop Management for producers in Dawson and Lynn Counties.

Thanks to the sponsors and the gins who support the Dawson/Lynn IPM Program
(found on page 2)

Current Conditions

- Insect activity is extremely light to non-existent,
- cotton is still progressing nicely - all fields are blooming with many having reached cutout,
- SCA is here.

Our current average plant structure

Remember - these average plant structures are "averages" of the fields I am scouting - regardless of inputs and varieties. It's just to give you an idea of the overall picture.

	Dryland	Pivot Irrigated
Plant Height	20.1	20.6
Total nodes	16.0	17.6
1st fruiting node	8	
% square set	87.6	90.4
% boll set	85.5	84.1
NAWF	3.6	5.1
% of fields cutout	80%	50%

IPM Program

Should you make an insecticide application to a field being scouted by the IPM Scouting Program, PLEASE give me a call.

Cutout

Cutout is the final stage of cotton plant growth prior to boll opening and characterized by predominance of more mature fruit, general absence of squares and blooms through shedding and cessation of new terminal growth. Cutout is also the last effective flowering date for blooms to develop into **bolts with adequate size and fiber properties.**

There are two types of cutout, physiological and seasonal. Physiological cutout occurs when there are less than 5 nodes-above-white-flower (NAWF). When NAWF reaches 5, fruiting growth will overpower vegetative growth and the plant is going to go ahead and mature what it can on the plant. Make sure the field has dropped below the 5 NAWF and remains below 5 NAWF; a field can hang around 5 NAWF for several weeks.

Seasonal cutout is a calendar date in which based on historical records, there is a chance for accumulating enough heat units (between 800 - 850 HU) to mature a white flower. For our area, August 6 is the date in which there is an 85% chance to accumulate enough HU's to mature a white flower and August 12 is the date in which there is a 50% chance to accumulate enough HU's to mature a white flower. It is these dates that most individuals have a hard time

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accepting. Based on two years of bloom tag work I conducted, it was concluded that between August 20 and 25 was the last date in which a white flower contributed significantly to yield and quality. It is not being said that you can not produce lint from white blooms that occur after these dates. What is being said is that after these dates, any white blooms are not of the best quality and that to attempt to mature them out completely you are risking the yield and quality of the bolls that are already fully mature.

Once cutout (physiological or seasonal) is achieved, HU's are then calculated for each day and accumulated. Once 450 HU's past cutout have been accumulated, the bolls that will contribute to the final yield are relatively safe from insect damage. Once 850 HU's past cutout have been accumulated, that field can be scheduled for harvest aide applications. The 850 HU is used because that is the number of HU needed to produce a "normal mature" boll. (This is why I spend the time providing the charts below).

I know that with a young crop we need these late season blooms to make but we also need to be realistic on what we can achieve and base our management decisions on these factors.

Now these rules need to be used with some common sense. In fields last of the fields to start blooming, they will need as much season as possible to produce as much as they can. In these fields, we will disregard the seasonal cutout date and HU accumulation and let the end of the season take over; using a killing freeze to terminate the crop.

Sugarcane Aphid

The SCA is present and has been treated in many fields. Fields that have been treated are borderline for needing another treatment.

There are many questions facing us about the SCA which we do not have answers. We, the Extension Service, are trying to devise a strategy for managing the SCA as we go based on experience with other pests.

Here on the High Plains, the SCA infests our milo at a different physiological stage (post boot) than it does in South Texas (whorl stage - pre-boot) where they have been dealing with the pest for a couple years. So, we are basically on our own at this time.

In newsletter #6 (July 1) and #10 (July 17), information concerning the SCA is presented.

Special THANKS to those who support
Agriculture and the Lynn/Dawson IPM
Program

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Lamesa Cotton Growers

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Major Sponsorship Level



Lytegar Electric Coop

Many Thanks to the Gins who participate and support the Lynn/Dawson IPM Program

Adcock Gin

Farmers Association Coop - O'Donnell

Flower Grove Coop

King - Mesa Gin

Tinsley Gin

United Gin Corporation

Woolam Gin

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Heat Units Totals									
	Tahoka			O'Donnell			Lamesa		
Planting window →	May 23	June 1	June 10	May 23	June 1	June 10	May 23	June 1	June 10
May 23-31 (actual)*	71.5			77			79		
June 1-30 (actual)*	492	492		500.5	500.5		506	506	
June 10-30 (actual)*			353			357			363
July 1-31 (actual)*	623	623	623	642.5	642.5	642.5	655.5	655.5	655.5
Aug 1-12 (actual)*	262.5	262.5	262.5	272.5	272.5	272.5	275	275	275
Total	1449	1377.5	1238.5	1492.5	1415.5	1272	1515.5	1436.5	1293.5
HU needed to obtain 2200	751	822.5	961.5	707.5	784.5	928	684.5	763.5	906.5

* Based on the Texas Tech Mesonet temperatures for each location.

Rainfall, high and low temperatures and heat units by date for July 30 - Aug. 12.

Tahoka				
Date	Rainfall	High	Low	Heat Units
7/30/2015	0	95	66	20.5
7/31/2015	0	97	70	23.5
8/01/2015	0.23	93	67	20
8/02/2015	1.28	96	68	22
8/03/2015	0.58	93	68	20.5
8/04/2015	0.06	91	67	19
8/05/2015	0	96	70	23
8/06/2015	0	97	69	23
8/07/2015	0	96	67	21.5
8/08/2015	0	97	67	22
8/09/2015	0	97	71	24
8/10/2015	0	97	69	23
8/11/2015	0	94	69	21.5
8/12/2015	0	96	70	23
Total	2.15			306.5

O'Donnell				
Date	Rainfall	High	Low	Heat Units
7/30/2015	0	95	68	21.5
7/31/2015	0	97	69	23
8/01/2015	0	92	70	21
8/02/2015	0	97*	69	23
8/03/2015	0.7	97	66	21.5
8/04/2015	0.1	94	67	20.5
8/05/2015	0	97*	68	22.5
8/06/2015	0	97*	68	22.5
8/07/2015	0	97*	68	22.5
8/08/2015	0	97*	72	24.5
8/09/2015	0	97*	73	25
8/10/2015	0	97*	70	23.5
8/11/2015	0	97	69	23
8/12/2015	0	97*	69	23
Total	0.8			317

Lamesa

Date	Rainfall	High	Low	Heat Units
7/30/2015	0	97*	69	23
7/31/2015	0	97*	69	23
8/01/2015	0	96	69	22.5
8/02/2015	0	97*	68	22.5
8/03/2015	1.02	97*	68	22.5
8/04/2015	0.08	97	67	22
8/05/2015	0	97*	69	23
8/06/2015	0	97*	69	23
8/07/2015	0	97*	67	22
8/08/2015	0	97*	70	23.5
8/09/2015	0	97*	72	24.5
8/10/2015	0	97*	68	22.5
8/11/2015	0	97*	70	23.5
8/12/2015	0	97*	70	23.5
Total	1.1			321

* Actual temperature exceeded 97degrees - I max-out my HU calculations at 97 degrees.