

# 2015 Cotton Harvest Aid Evaluation Tom Green County Irrigated

#### Dr. David Drake

Assistant Professor and Extension Agronomist 325.653.4576 / ext. 230 DrDrake@ag.tamu.edu

#### Josh Blanek

County Extension Agent Agriculture and Natural Resources 325.659.6524

J-Blanek@ag.tamu.edu

### 2015 Harvest Aid Evaluation Tom Green Co - Irrigated

Trt	Treatment	Rate	Rate	Total Product Price/acre		7 Day			14	4 Day	
No.	Name		Unit		% Def	% DES	% GL	% Def	% DES	% GL	% Regrowth
1	Ginstar	4	fl oz/a								
1	Ethephon	16	fl oz/a	\$7.91	30	15	55	65	15	20	30
1	Non-Ionic Surfactant	0.25	% v/v								
2	Ginstar	5	fl oz/a								
2	Ethephon		fl oz/a	\$9.10	30	15	55	60	15	25	50
2	Non-Ionic Surfactant	0.25	% v/v				~~~~	~~~~~~	~~~~~~		~~~~~~
3	Ginstar		fl oz/a								
3	Ethephon		fl oz/a	\$10.30	35	15	50	70	20	10	30
3	Non-Ionic Surfactant	0.25	% v/v		*******		*******	~~~~~~		~~~~~	
4	Ginstar		fl oz/a								
4	Finish 6 Pro	16	fl oz/a	\$15.41	35	15	50	60	15	25	50
4	Non-Ionic Surfactant	0.25	% v/v								
5	Ginstar		fl oz/a								
5	Ethephon		fl oz/a	\$12.26	35	15	50	65	15	20	30
5	Finish 6 Pro	8	fl oz/a	Ψ12.20	33	'5	30	03	13	20	30
5	Non-Ionic Surfactant	0.25	% v/v								
6	Adios		fl oz/a								
	Ethephon		fl oz/a	\$6.31	25	10	65	50	15	35	30
6	Non-Ionic Surfactant	0.25	% v/v			*****		*******	********	********	************

### 2015 Harvest Aid Evaluation Tom Green Co - Irrigated

7	AIM	1	fl oz/a								
7	Ethephon	16	fl oz/a	\$5.40	15	20	65	30	30	40	70
7	Crop Oil Concentrate	1	% v/v								
8	Display	0.8	fl oz/a								
8	Ethephon	16	fl oz/a	\$5.94	15	25	60	20	30	50	60
8	Crop Oil Concentrate	1	% v/v								
9	Sharpen		fl oz/a								
	Ethephon	16	fl oz/a	\$10.00	20	20	60	25	35	40	70
9	MSO	1	% v/v	Ψ10.00	20			20		40	
9	Request	0.5	% v/v								
	Ethephon		fl oz/a								
	Folex		fl oz/a	\$11.56	20	20	60	45	15	40	70
10	Non-Ionic Surfactant	0.25	% v/v					********	********	************	************
	Gramoxone "3"		fl oz/a								
	Folex		fl oz/a	\$9.66	10	55	35	15	70	15	90
	Ethephon		fl oz/a	ψο.σσ				.0	'	10	
11	Crop Oil Concentrate	1	% v/v		0404040404	00000000	***********				3000000000000
	Ginstar		fl oz/a								
	Gramoxone "3"		fl oz/a								
	Ethephon		fl oz/a	\$10.57	20	40	40	40	30	30	70
	Finish		fl oz/a								
12	Non-Ionic Surfactant	1	% v/v			00000000					300000000000

# **Application**

2015 Harvest Aid Evaluation Tom Green Co Irrigated Application Information						
Application Dates:	9/24/2015					
App. Code A:						
Cooperator:	Doug Wilde					
GPS Coor. 31° 26' 13.71" N, 100° 22' 22.72" W	Outside East Loop 306					
Variety:	FM 2334 B2RF					
Time:	5:45-6:15 pm					
Temp (°F):	86					
% RH:	37%					
Wind Speed (mph) & Direction	5 mph out of East					
Row Spacing("):	40"					
Plot width (rows)	4					
Plot length	120 feet					
% Open	80%					
Plant Height (mean inches)	20-30"					
Transfer (mean menes)	20 30					
Sprayer Information	Spider Sprayer					
	11 gpa / 11002 Turbo Teejet					
	32 psi					
	4 mph					

# Climate

DAILY TEMPERATURES								
Date	Low	High	GDD 60					
9/23/2015	67	92	0					
9/24/2015	66	90	18					
9/25/2015	70	93	21.5					
9/26/2015	58	92	15					
9/27/2015	60	91	15.5					
9/28/2015	58	90	14					
9/29/2015	57	90	13.5					
9/30/2015	59	92	15.5					
10/1/2015	62	95	18.5					
10/2/2015	58	85	11.5					
10/3/2015	58	85	11.5					
10/4/2015	60	80	10					
10/5/2015	63	83	13					
10/6/2015	51	87	9					
10/7/2015	57	88	12.5					
10/8/2015	65	82	13.5					
10/9/2015	65	79	12					
		Total	164.5					
Rain								
10/8/2015	0.9							
10/9/2015	0.9							
Total	1.9	inches	5					

## 7 Day Summary

Plant had blooms in the top nodes indicating that they still had soil moisture. Overall plants were compact and well managed.

- The Ginstar and Adios treatments averaged 30% defoliation, typical of 7 days after treatment. Addition of 8 fl oz of Finish 6 Pro appeared to improve performance compared to ethephon alone. Ginstar treatments with the proprietary ingredient and an SC formulation scored better than the Adios EC formulation of "Dropp" and diuron.
- The PPO treatments were all similar with 15 and 20 percent defoliated.
   Sharpen appeared slightly better but is higher cost. ETX was not evaluated in this trial
- The traditional Folex and ethephon treatment performed midway between the Ginstar and PPO treatments
- Of the two "kitchen sink" mixes Ginstar and Finish performed better than the Folex mix.





7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	30	Ginstar	4	fl oz/a
% Desiccation	15	Ethephon	16	fl oz/a
% Green Leaf	55	Non-Ionic Surfactant	0.25%	v/v





7 Day Rating		Treatment Name	<u>Rate</u>	Rate Unit
% Defoliation	30	Ginstar	5	fl oz/a
% Desiccation	15	Ethephon	16	fl oz/a
% Green Leaf	55	Non-Ionic Surfactant	0.25%	v/v





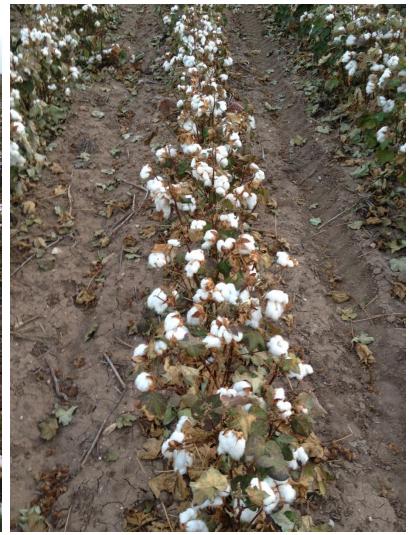
7 Day Rating		Treatment Name	<u>Rate</u>	Rate Unit
% Defoliation	35	Ginstar	6	fl oz/a
% Desiccation	15	Ethephon	16	fl oz/a
% Green Leaf	50	Non-Ionic Surfactant	0.25%	v/v





7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	35	Ginstar	5	fl oz/a
% Desiccation	15	Finish 6 Pro	16	fl oz/a
% Green Leaf	50	Non-Ionic Surfactant	0.25%	v/v





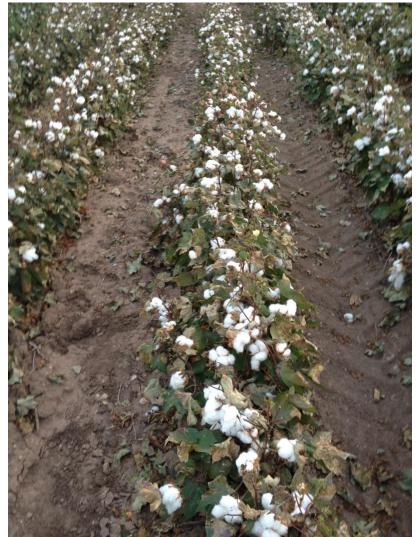
7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	35	Ginstar	5	fl oz/a
% Desiccation	15	Ethephon	8	fl oz/a
% Green Leaf	50	Finish 6 Pro	8	fl oz/a
		Non-Ionic Surfactant	0.25%	v/v





7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	25	Adios	4	fl oz/a
% Desiccation	10	Ethephon	16	fl oz/a
% Green Leaf	65	Non-Ionic Surfactant	0.25%	v/v





7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	15	AIM	1	fl oz/a
% Desiccation	20	Ethephon	16	fl oz/a
% Green Leaf	65	Crop Oil Concentrate	1%	v/v





7 Day Rating		Treatment Name	<u>Rate</u>	Rate Unit
% Defoliation	15 25	Display	0.8	fl oz/a
% Desiccation % Green Leaf	25 60	Ethephon	16	fl oz/a
% Green Lear	60	Crop Oil Concentrate	1%	v/v





7 Day Rating		<u>Treatment Name</u>
% Defoliation % Desiccation % Green Leaf	20 20 60	Sharpen Ethephon MSO Request
		nequest

<u>Rate</u>	Rate Unit
1	fl oz/a
16	fl oz/a
1%	v/v
0.5%	v/v





7 Day Rating		Treatment Name
% Defoliation	20	Ethephon
% Desiccation	20	Folex
% Green Leaf	60	Non-Ionic Surfactant

<u>Rate</u>	Rate Unit
16	fl oz/a
16	fl oz/a
0.25%	v/v





7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation 10 % Desiccation 55	Gramozone "3"	4	fl oz/a	
% Green Leaf	35 Folex		8	fl oz/a
		Ethephon	16	fl oz/a
		Crop Oil Concentrate	1%	v/v





7 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	20	Ginstar	3	fl oz/a
% Desiccation	40	Gramoxone "3"	3	fl oz/a
% Green Leaf	40	Ethephon	8	fl oz/a
		Finish	8	fl oz/a
		Non-Ionic Surfactant	1%	v/v

### 14 Day Summary

Plant had blooms in the top nodes indicating that they still had soil moisture. Overall plants were compact and well managed.

- The Ginstar and Adios treatments averaged 65% defoliation, a little lower than expected 14 days after treatment. Addition of 8 fl oz of Finish 6 Pro appeared to improve performance compared to ethephon alone or Finish 6 alone but this may have been just a factor of the field. Ginstar treatments with the proprietary ingredient and an SC formulation scored better than the Adios EC formulation of "Dropp" and diuron.
- The PPO treatments were all similar with 20 to 30 percent defoliated. Aim and Sharpen appeared slightly better for defoliation but were a tick below Display on regrowth. ETX the other PPO on the market was not evaluated in this trial
- The traditional Folex and ethephon treatment performed midway between the Ginstar and PPO treatments
- Of the two "kitchen sink" mixes Ginstar, Finish, Gramoxone performed better than the Folex, Gramoxone mix.





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	65	Ginstar	4	fl oz/a
% Desiccation	15	Ethephon	16	fl oz/a
% Green Leaf	20	Non-Ionic Surfactant	0.25%	v/v
% Regrowth	30	Non Tome Surfactant	0.2370	V / V





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	60	Ginstar	5	fl oz/a
% Desiccation	15	Ethephon	16	fl oz/a
% Green Leaf	25	Non-Ionic Surfactant	0.25%	v/v
% Regrowth	50	Non Tome Surfactant	0.2570	V / V





14 Day Rating		Treatment Name	<u>Rate</u>	Rate Unit
% Defoliation	70			
% Desiccation	20	Ginstar	6	fl oz/a
% Green Leaf	10	Ethephon	16	fl oz/a
% Regrowth	30	Non-Ionic Surfactant	0.25%	v/v









14 Day Rating	
% Defoliation	60
% Desiccation	15
% Green Leaf	25
% Regrowth	50

Treatment Name

Ginstar
Finish 6 Pro
Non-Ionic Surfactant

<u>Rate</u>	Rate Unit
5	fl oz/a
16	fl oz/a
0.25%	v/v





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	65	Ginstar	5	fl oz/a
% Desiccation	15	Ethephon	8	fl oz/a
% Green Leaf	20	Finish 6 Pro	8	fl oz/a
% Regrowth	30	Non-Ionic Surfactant	0.25%	v/v





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	50	Adios	4	fl oz/a
% Desiccation	15	Ethephon	16	fl oz/a
% Green Leaf	35	Non-Ionic Surfactant	0.25%	v/v
% Regrowth	30	rton forme sanactane	0.2370	<b>0</b> / <b>0</b>





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	30	AIM	1	fl oz/a
% Desiccation	30	Ethephon	16	fl oz/a
% Green Leaf	40	Crop Oil Concentrate	1%	v/v
% Regrowth	70	o. op o concentrate	170	-, -





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	20	Display	0.8	fl oz/a
% Desiccation	30	Ethephon	16	fl oz/a
% Green Leaf	50	Crop Oil Concentrate	1%	v/v
% Regrowth	60	or op on concentrate	170	•, •





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	25	Sharpen	1	fl oz/a
% Desiccation	35	Ethephon	16	fl oz/a
% Green Leaf	40	MSO	1%	v/v
% Regrowth	70	Request	0.5%	v/v





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	45	Ethephon	16	fl oz/a
% Desiccation	15	Folex	16	fl oz/a
% Green Leaf	40	Non-Ionic Surfactant	0.25%	v/v
% Regrowth	70	Tron forme Sarractant	0.2370	•, •





14 Day Rating		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
% Defoliation	15	Gramozone "3"	4	fl oz/a
% Desiccation	70	Folex	8	fl oz/a
% Green Leaf	15	Ethephon	16	fl oz/a
% Regrowth	90	Crop Oil Concentrate	1%	v/v





		<u>Treatment Name</u>	<u>Rate</u>	Rate Unit
14 Day Rating		Ginstar	3	fl oz/a
% Defoliation	40	Gramoxone "3"	3	fl oz/a
% Desiccation	30	Ethephon	8	fl oz/a
% Green Leaf	30	Finish	8	fl oz/a
% Regrowth	70	Non-Ionic Surfactant	1%	v/v