Oct 22, 2021 Vol. 5 Issue 8



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# General Area Crop Progress

The warm and relatively dry fall has continued. The weather has helped mature our late planted cotton and soybeans. Some rain events have facilitated field preparation for wheat planting. There has also been some rebound from summer weeds and a flush of fall/winter weeds. For the coming wheat crop it is important to scout or control Johnson grass and grain sorghum for greenbugs (aphids), that can migrate hosts and infest the wheat when it emerges. Tillage or a herbicide burndown prior to planting will help to control fall weeds. Destroying the "green bridge" will help with a number of winter cereal pests. Enclosed are Cotton Harvest Aid trial results, and the 2021 Wheat Herbicide for Annual Ryegrass Trial Results.



Figure 1. Two rows of defoliated cotton 14 days after treatment D.Drake 2021 Figure 2. Johnson grass and emerged fall weeds in Oct. 2021 D.Drake

## Save the Date for **The AG Technology Conference on Thurs. Dec. 9th 2021** Texas A&M University Commerce

- 5 Pesticide Applicator CEU's including L&R, IPM, and Drift Minimization
- 6.5 Certified Crop Advisor CEU's

Topics: Controlling Annual Ryegrass in Crops

UAV Herbicide Application Technology

- Soil Fertility
- Drift Minimization

Pesticide Laws and Regulations

Crop Protection Industry Updates

Registrations forms will be mailed shortly or request more information from drdrake@ag.tamu.edu or 903-658-3295

#### 2021 Hunt County Cotton Harvest Aid Trial

Twelve commercial treatments were applied to 3 different cotton fields on Oct. 7, 2021. Each field was a different variety and condition.

In general, all the fields defoliated easily and regrowth has been moderate. The two later planted fields were not quite at 60% open boll and had not begun to self defoliate to the same extent as the earlier planted field. These three fields were typical of many of our fields yet to be harvested with many being late planted. The application was made to take advantage of warmer weather, especially with treatments including Thidiazuron (Dropp) not in a premix with Diruon (Ginstar). The Figures and Tables below show the weather conditions and the average response of the three fields. There was also a evaluation of two boll opener treatments (numbers 8 &9) that did not include defoliants. Those results are provided by field, below in Table 1.



Figure 1. Mature cotton Oct. 2021. Left row treated with 24 fl oz of Finish + NIS 7d after treatment

Figure 2. Two center rows of defoliated Cotton 14d after treatment with 4 fl oz of Ginstar + Ethephon and NIS. Oct 2021

Figure 3. A row defoliated Cotton 7d after treatment with 16 fl oz of Folex + Ethephon and NIS. Oct. 2021

Table 1. Average cotton harvest aid ratings of 12 treatments to 3 different fields in Oct. 2021. Ratings made 7 and 14 days after treatment (dat) including: % defoliation, % leaf dessication, % green leaf, % leaf regrowth (ReGr), % Terminal regrowth, % whole plant regrowth, and % open bolls when untreated, treated with Ethephon (Prep) or Finish.

Field	% Def	% Des	% GL	ReGr	% Def	% Des	% GL	% Term	% Plt	% open	% open	% open
	7 dat	7 dat	7 dat	7 dat	14 dat	14 dat	14 dat	RG 14d	RG 14d	Untrt	Prep	Finish
Mid Planted	79	13	9	18	84	10	6	38	16	64	79	81
Aggie Maroon		10	-	10	01	10	0	00	10		12	01
Late Planted	84	7	9	26	89	6	5	77	44	43	61	59
DP 1646 B2XF	01	I	-	20	07	Ū	U	1 1		15	01	07
Late Planted	40	30	30	7	56	19	25	15	25	50	63	75
PHY 332 W3FE	10	50	50	1	50	17		10	<b>_</b> _	30	00	15

Result Table 2, shows ratings averaged over the three fields with statistical analysis. There were some small field by treatment interactions but all products performed similarly in all three fields. Treatment number 11, 21.3 fl oz of Gramoxone did control regrowth but also resulted in sticking half of the leaves to the plant. In a more humid Northeast Texas climate it would be hard to harvest this crop without unacceptable amounts of leaf in the fiber. Other treatments that had lower amounts of regrowth at the plant terminal or at lower nodes included Ginstar, Dropp, and Sharpen. This is also important for Northeast Texas with frequent fall rains.

	2021 Cotton Harvest Aid Evaluation Texas A&M AgriLife Extension												
Fai	lie, Hunt County, TX				Established Oct. 7, 2021 15 gp								
				for questions contact David Drake drdrake@ag.tamu.edu or 903-468-3295									
Trt	Treatment	Rate	Rate	Total Product Price/acre	7 DAT	Initial Tr	eatmenl	Re- growth	1	4 DAT			gro <b>v</b> th
No.	Name	000000	Unit		% Def	% Des	% GL	*	% Def	%Des	% GL	% Plant	% Termina
1	Ginstar	4	fl oz/a										
1	Ethephon	24	flozla	\$11.50	65	21	14	3	86	9	8.0	35	25
1	Non-Ionic Surfactant	0.25	% u/u	888888888888888888888888888888888888888	138888888	888888888888	88888888	1000000000	88888888888	388888888	88888888	8888888	888888888
2	Ginstar	2	fl oz/a										
2	Dropp	2	flozla	\$11.00	67	16	17	0	88	3	9.0	34	20
2	Ethephon		flozla	a11.00	07	10		v	00	5	5.0	34	20
2	Non-Ionic Surfactant	0.25	% ołu										
3	Ginstar	4	fl ozła										
3	Finish	24	fl oz/a	\$18.00	82	7	12	3	88	5	8.0	43	18
3	Non-Ionic Surfactant	0.25	% olu										
4	Adios	4	floz/a										
4	Ethephon		floz/a	\$10.50	63	8	28	13	68	9	23	30	30
4	Non-Ionic Surfactant	0.25	% ołu								88888888		888888888
5	Dropp	4	fl ozła										
5	Ethephon	24	flozla	\$13.00	73	9	18	27	80	8	13	30	17
1010101010101	Non-Ionic Surfactant	0.25	%. v/v	89989999999999	199999999	8888888888	000000000	1000000000	888888888888	30000000	88888888	8888888	88888888
6	ETX	13	floz/a										
6	Ethephon		flozla	\$11.00	68	18	13	17	83	10	8	48	30
6	MSO	0.5	% u/u	*****	******	******	*****	*****			******	*****	******
	0												
7	Sharpen Ethephon		flozla flozla		70	44	40	40		-	_	40	42
7	MSO	1	% vlv	\$12.00	72	11	18	10	88	7	5	40	13
7	UAN		'/. u/u			100000000000000000000000000000000000000							
8	Ethephon	24	fl ozła										
	Non-Ionic Surfactant		% olu	\$8.00	63	10	27	30	64	9	27	58	57
	F: · · 1	0.4											
	Finish Non-Ionic Surfactant	0.25	flozla % vlu	\$14.50	68	13	18	37	81	5	14	62	37
m													
10	Gramoxone 3SL		fl oz/a	60.00	70	40		20	70	40	47		40
	Ethephon Non-Ionic Surfactant		fliozla % vlu	\$8.00	73	16	11	30	70	13	17	55	40
Ű													
11	Gramoxone 3SL		fl oz/a	\$7.00	42	50	8	13	49	50	1	33	7
11	Non-Ionic Surfactant	0.25	% olu										
12	Ethephon		floz/a		000000000000					6008888888		50388888	
	Folex		floz/a	\$16.50	75	19	6	17	72	14	14	52	47
	Non-Ionic Surfactant	0.25	% olu										
	Terms			Average	67.6	16.5	15.8	16.7	76.3	11.9	12.1	43.3	28.3
	ef = Percent defoliation es = Percent dessicated le	auero	n plant	P>(F) LSD n oos	0.077 NS	0.006	0.275 NS	0.355 NS	0.043	0.0006	0.25 NS	4E-04 9.9	0.003
	. = Percent green leaves on th		rpan	CV	2.1	6.8	6.4	22	2.39	7.76	9.71	9.9 1.67	5.86
	: XDEF, XDES, and X GL all s		00										

Application Information					
Application Dates:	10/7/2021				
Cooperator:	CCRI				
	A M				
Varieties:	Aggie Maroon, DP 1646,				
Time:	PHY 332 12-1:30 pm				
Temp (ºF):	84º F				
7 BH:	56%				
Wind Speed (mph) & Direc					
wind opeed (inpri) & bired	0 0 mpin 0 m				
Row Spacing("):	38"				
Plot width (rows)	2 treated 1 skipped				
Plot length	Replicated 25 feet				
% Open	60%				
Plant Height (mean inche	24-30"				
Sprayer Information	Hand boom				
	15 gpa / 80015 Turbo Teeje				
	32 psi				

<u>Terms</u> % GL: Percent of total leaves that are still green. Doesn't include regrowth % Des Lf: Percent of herbicide dessicated leaves still attached to the plant Note: %DEF, %DES, and % GL all sum to 100 Regrowth: Rating from 1-100% of the leaves that have grown from all nodes in response to defoliation treatments. For more information see http://sanangelo.tamu.edu/extension/agronomy/crop-information/ http://lubbook.tamu.edu/files/2015/09/2015\_Harvest\_Aid\_Guide.pdf http://www.cdms.net/Label-Database **Daily Temperatures** GDD 60 Rain (in) Date Low High 10/7/2021 56 90 13.0 10/8/2021 91 18.5 66 91 18.5 10/9/2021 66 10/10/2021 60 89 14.5 0.4 10/11/2021 56 80 8.0 0.3 10/12/2021 62 79 10.5 10/13/2021 65 85 15.0 0.9 48 78 10/14/2021 3.0 10/15/2021 44 72 0.0 10/16/2021 44 74 0.0 10/17/2021 52 72 2.0 7.0 10/18/2021 58 76 10/19/2021 55 78 6.5 10/20/2021 60 10.5 81 10/21/2021 52 82 7.0 total 134.0 1.6

Table 1 MEAN Comparison Summary					
TREATMENTS <sup>†</sup>	Initial Ryegrass Control <sup>1</sup>	Second Ryegrass Control	Final Ryegrass Control	Yield‡	Test Weight
	1-10 1/5/2021	1-10 3/3/2021	1-10 4/28/2021	bu/ac	lb/bu
Zidua SC @ 3.2 fl.oz/A (Delayed PRE)	9.9 a	9.6 a	8.9 a	48.1 a	46.4 a
Anthem Flex 4 SE @ 3.5 fl.oz/A (Delayed PRE)	9.6 ab	9.4 a	8.6 a	46.5 a	46.2 a
Axial Bold @ 15.0 fl.oz/A + Zidua SC @ 3.2 fl.oz/A (Eorly POST)	3.3 i	9.6 a	8.6 a	45.7 a	46.1 a
Axial Bold @ 15.0 fl.oz/A + Anthem Flex 4 SE @ 3.5 fl.oz/A (Early POST)	4.3 h	9.5 a	8.4 a	44.7 ab	46.6 a
Anthem Flex 4 SE @ 3.5 fl.oz/A + Metribuzin 75 DF @ 2.0 oz/A (Early POST)	7.8 f	9.3 a	8.4 a	44.6 ab	47.0 a
Zidua SC @ 3.2 fl.oz/A (Deloyed PRE) fb Axial Bold @ 15.0 fl.oz/A (Eorly POST)	9.5 ab	9.1 a	7.9 a	43.8 ab	45.7 a
Axiom 68 DF @ 6.0 oz/A (Early POST) fb Axial Bold @ 15.0 fl.oz/A (Mid POST)	<mark>5.8 g</mark>	<mark>8.1 b</mark>	6.5 b	42.4 abc	46.6 a
Zidua SC @ 3.2 fl.oz/A + Metribuzin 75 DF @ 2.0 oz/A (Early POST)	7.9 ef	9.5 a	8.5 a	41.8 abc	46.9 a
Anthem Flex 4 SE @ 3.5 fl.oz/A (PRE)	9.6 ab	9.0 a	8.1 a	41.5 abc	45.5 a
Anthem Flex 4 SE @ 3.5 fl.oz/A + Metribuzin 75 DF @ 2.0 oz/A + Axial Bold @ 15.0 fl.oz/A <i>(Early POST)</i>	8.5 de	9.5 a	8.5 a	40.4 abc	46.5 a
Axiom 68 DF @ 8.0 oz/A (PRE) fb Axial Bold @ 15.0 fl.oz/A (Early POST)	9.1 bcd	8.4 b	6.3 b	40.1 abc	45.6 a
Zidua SC @ 3.2 fl.oz/A + Metribuzin 75 DF @ 2.0 oz/A + Axial Bold @ 15.0 fl.oz/A <i>(Early POST)</i>	8.8 cd	9.4 a	8.8 a	39.1 abc	45.4 a
Axial Bold @ 15.0 fl.oz/A + Axiom 68 DF @ 8.0 oz/A (Early POST)	9.0 bcd	9.5 a	8.3 a	34.1 bc	45.1 a
Amber 75 WDG @ 0.56 oz/A + Metribuzin 75 DF @ 3.0 oz/A (PRE) fb Axial Bold @ 15.0 fl.oz/A + Metribuzin 75 DF @ 3.0 oz/A (Early POST)	9.4 abc	8.1 b	3.8 c	31.9 c	34.2 b
Amber 75 WDG @ 0.56 oz/A + Metribuzin 75 DF @ 3.0 oz/A (PRE) fb Axial Bold @ 15.0 fl.oz/A (Early POST)	5.5 g	2.3 c	1.8 d	13.2 d	0.0 c
Axial Bold @ 15.0 fl.oz/A (Early POST)	2.8 i	1.0 d	1.3 d	8.5 d	0.0 c
Axial Bold @ 15.0 fl.oz/A (Delayed PRE) fb Axiom 68 DF @ 8.0 oz/A (Early POST)	2.0 j	1.0 d	1.5 d	7.4 d	0.0 c
Untreated Check	1.0 k	1.0 d	1.0 d	3.1 d	0.0 c
LSD (P = .05)	0.74	0.62	1.11	10.86	7.72
CV (%)	7.61	5.89	12.27	22.3	15.44
GRAND MEAN	6.86	7.40	6.38	34.28	35.21

#### 21-01. 2020-21 Herbicides for the management of ACCase Resistant Ryegrass in Soft Red Winter Wheat at Fairlie, TX

\*Ranked according to Yield

to Yield #Yield Adjusted to 13% Standard Moisture

Date Planted: November 20, 2020

Date Harvested: June 29, 2021

VARIETY: Dyna-Gro 9811

<sup>1</sup>Rating NOTE: Mid POST Treatment had not been applied at initial and second rating for control assessment

Ryegrass Control Rating Scale:

1 – No Control

10 – 100% Control

Application data

PRE – November 20, 2020; WIND: 4-6 mph SE, TEMP: 73°F, RH: 61% @ 4:30 - 4:45 pm; Soil damp, good moisture; Sunshine, no dew

Delayed PRE – November 27, 2020; WIND: 6-8 mph NE, TEMP: 61°F, RH: 68% @ 11:00 – 11:30 am; cotyledon @ ½"-¾"; Soil damp, good moisture; Sunshine, no dew Early POST – December 17, 2020; WIND: 1-3 mph SE, TEMP: 46°F, RH: 57% @ 4:45 – 5:30 pm; Wheat @ 2-3 leaf, Ryegrass @ 1-2 leaf; Soil wet; Sunshine, no dew Mid POST – March 3, 2021; WIND: 8 mph SE, TEMP: 65°F, RH: 36% @ 2:45 – 2:50 pm; Wheat and Ryegrass @ 3-4 tillers, 3-5" tall; Soil wet, sunshine, no dew

# PESTICIDE APPLICATOR CEU TRAINING Thursday, November 18th, 2021

Registration: 11:00 am Program: 12:00 pm Cost: \$25 per person **Rockwall County Courthouse** 1111 E Yellow Jacket Lane Rockwall, TX 75087

## PESTICIDE NUMBER REQUIRED AT REGISTRATION

## PARTICIPANTS ARRIVING AFTER 12:00 pm MAY STAY FOR PROGRAM <u>BUT WILL NOT RECEIVE CEU HOURS</u>

5 CEU hours for current TDA Private, Non-commercial, & Commercial Applicators and CCA Licensees (pending approval)

#### SPEAKERS AND TOPICS:

12:00-1:00 pm	1 IPM Requested: Brush Control: an IPM Approach - Chase Brooks, CEA-Ag Collin County (1hr General) Methods of managing brush using IPM principles of scouting, monitoring, recognizing damage, pest identification, action thresholds, and appropriate/low impact treatment. Cultural, Mechanical, chemical and biological treatment methods for various brush species.
1:00-2:00 pm	1 General Requested: Integrating Prescribed Fire with Pesticide Applications for Weed Management - Chase Brooks, CEA-Ag Collin County Role of prescribed fire for range & pasture management weed control, successional ecology as a treatment tool, and management implications.
2 :00-3 :00 pm	1 General Requested : Pesticide Mode of Action in Clay Soils - Brad Voss, CEA-Hort, Collin County How pesticides cause physiological distruption in clay soil to affect the target pest. The importance of pH and soil biology in pesticide use and efficacy and understanding variables in clay soils.
3:00-4:00 pm	1 Laws and Regulations Requested : Pesticide Laws and Regulations – Brad Voss, CEA-Hort. Collin County Discussion of laws and regulations associated with pesticide use including labels and label comprehension, local and state regulations, and re-entry intervals and associated laws.
4:00-5:00 pm	1 General Requested : Effects of Pesticides on Bees and Other Pollinators – Janet Rowe, Rockwall Master Gardener Biology and behavior of pollinated including life cycle. Pests and diseases of pollinators. Systemic pesticide use, topical/foliar pesticide use, and encapsulated pesticides and their effects on pollinators. Time to lessen effects on pollinators.

For more information, call Hunt County Extension at 903-455-9885 or Rockwall County Extension at 972.204.7660.

# 2021 AG TECHNOLOGY CONFERENCE DECEMBER 9, 2021 | TEXAS A&M UNIVERSITY-COMMERCE

Presented by Texas A&M AgriLife Extension, Texas A&M University–Commerce, Cereal Crops Research Incorporated and the Agribusiness Industry

#### Good Food, An Excellent Program & Five CEUs

Where:	Rayburn Student Center on the campus of Texas A&M University-Commerce				
When:	December 9, 2021				
Hosts:	Texas A&M AgriLife Extension	The Agribusiness Industry			
	Texas A&M University–Commerce	Cereal Crops Research Incorporated			

# PROGRAM

8:00 - 9:15 AM	Registration and Visit with Suppliers/Exhibitors				
Morning Section:	Presiding – Mr. Ben Scholz, President, Cereal Crops Research Incorporated				
9:15 AM	Welcome to Texas A&M University–Commere Dr. Randy Harp, Dean and Professor, College of Agricultural Sciences and Natural Resources, Texas A&M University–Commerce				
9:20 - 10:10 AM	Fertility Management Practices for Maximum Return on Crop Protection Products Dr. Jake Mowrer, Extension Specialist, Texas A&M AgriLife Extension				
10:10 - 11:00 AM	Pesticide Laws and Regulations Dr. Matt Matoka, Extension Specialist, Pesticide Safety Education, Texas A&M AgriLife Extension				
11:00 AM - 12:00 PM	UAV's and New Technologies in Aerial Herbicide Application Mr. Mathew Kutugata and Mr. Bishwa Sapkota, Ph.D. Students, Texas A&M University				
12:00 - 1:00 PM	Lunch - Conference Rooms A & B (overflow seating available in Traditions Room)				
Afternoon Section:	Presiding – Dr. David Drake, Integrated Pest Management Agent, Texas A&M AgriLife Extension				
1:00 - 2:00 PM	Drift Minimization Dr. Scott Nolte, State Extension Weed Specialist, Texas A&M AgriLife Extension				
2:00 - 3:00 PM	IPM for Control of Annual Ryegrass in Crops Dr. Ronnie Schnell, Corn & Sorghum Extension Specialist, Texas A&M AgriLife Extension				
3:00 PM – 4:30 PM	Industry Update: New & Current Pesticide Technology Dr. Greg Steele, Technology Development Rep, Bayer CropScience Dr. Sam Rushtom, Technical Service Manager, FMC Agricultural Solutions Dr. John Gordy, R&D Scientist, Syngenta Crop Protection Dr. Adam Hixson, Technical Service Representative, BASF Corporation Dr. Spencer Samuelson, Integrated Field Scientist, Corteva				
The registration fee until November 30 is \$40.00 per person and lunch is included. The late registration fee will be \$50.00. Make your check payable to CCRI and send it along with your completed registration form to:					

REGISTRATION FORM	4			
Name:				
Address:				
Phone:	STRIET	Email:	STATE	ZP
Type of applicator:	Private	Non-Commercial	Commercial 🗌	Certified Crop Advisor

Please mail completed registration form and check payable to CCRI for \$40.00 (\$50.00 after November 30) to: Ag Technology Conference, Texas A&M University-Commerce, Commerce, Texas 75429.

T	RINITY VALLEY PESTICIDE CONFERENCE MABANK FIRE DEPARTMENT 111 E. MASON MABANK, TEXAS 75147 FRIDAY—DECEMBER 17, 2021	TEXAS A&M GRILIFE EXTENSION \$35 Per Person
8:15 A.M.	Registration	
9:00 A.M.	Laws and Regulations Update Clint Perkins-County Extension Agent-AG/NR Smith County	6 CEU's (1 IPM-1 L&R-
10:00 A.M.	<b>Prescribed Fire Benefits to Wildlife Habitat</b> Heidi Bailey—Texas Parks and Wildlife Biologist	1 Drift and 3 General)
11:00 A.M.	<b>Beef Cattle External Parasite Control Strategies</b> Dr. Jason Cleere—Associate Professor and Extension Beef Cattle Specialist	
12:00 P.M.	Lunch -	RICT
1:00	Prevention and Treatment of Tree Diseases Jason Ellis– Texas A&M Forest Service— District Forester	POTTS N
2:00	It's Not Just 'Soap'; Spray Adjuvants - What they Are and How they Work - Steve Thurman, President, Blue Norther Investments, LLC - Agri-Consulting Practice	
3:00	Product Update and Information on Ongoing Herbicide Trials Colton Spencer—Range and Pasture Specialist -Corteva	
	SPONSORED BY TEXAS A&M AGRILIFE EXTENSION Van Zandt, Henderson, and Kaufman	N SERVICE -
Pleas	Se Pre-Register before Friday, December 10th. Pre-Registration for Van Zandt: 903-567-4149 Kaufman 469-376-4520 Henderse	
	AgriLife Extension provides equal opportunities in its programs and employment to gion, national origin, disability, age, genetic information, veteran status, sexual ori	
	as A&M University System, U.S. Department of Agriculture, and the County Comm auxiliary aids to attend this or any Extension Program-please contact the Extensio prior to event.	



*Texas A&M AgriLife Extension Texas A&M University—Commerce College of Agricultural Sciences and Natural Resources PO Box 3011 Commerce, TX 75429-3011* 

Phone: 903-468-3295 Email: drdrake@ag.tamu.edu

# Calendar

Hunt/Rockwall CEU Training November 18, 2021 Delta Co. Fall Beef Seminar—Cooper November 18, 2021 Texas Plant Protection Conference-Bryan December 7 & 8, 2021 http://www.texasplantprotection.com/ Ag. Technology Conference-Commerce December 9, 2021 Trinity Valley Pesticide Conference—Mabank December 17, 2021

For information on COVID-19 https://agrilifeextension.tamu.edu/coronavirus/

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