

2008
Southwest Oklahoma
Entomology Report



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2008 State Extension Cotton Integrated Pest Management – Entomology

This document contains Reports of applied research/demonstration projects conducted by Oklahoma State University dealing with management of arthropod pests and production practices. Objectives of the studies were to find more cost effective ways to manage pests and to improve production practices. Experiments were conducted with commercial agricultural producers in cooperation with county Extension agents, county row committees, agricultural consultants, and agribusiness companies. Oklahoma farm cooperators are acknowledge for providing land, equipment, labor, time, ideas, and other assistance in support of these products.

Trade names of commercial products used in this report included only for better understanding in clarity. Reference to commercial products or trade names are made with understanding that no discrimination is intended and no endorsement by the Oklahoma State University System is implied. Results from one experiment may not represent conclusive evidence that the same response occur where conditions vary.

It should be emphasized that the data from only one year should not be used for major production decisions, and at least 2-3 year's results should be utilized before production practices should be modified. This report sometimes includes data generated from "off-label" applications or practices. Although this data is presented, OSU does not recommend the implementation of any "off-label" use of any product.

We are very appreciative of the contributions made by the OSU Integrated Pest Management Program. We also appreciate the support from producers, County Extension Educators, OSU Agricultural Experiment Station and ginners. Cotton Incorporated, through the Oklahoma State Support Committee, has provided assistance through partial funding of several projects. The Oklahoma Cotton Council has made tremendous contributions to our educational programs and we are grateful for their continued support. A special thanks goes also to the following organizations, whose contributions make it possible to maintain and expand our research and demonstration programs and distribute results.

Chemtura
Monsanto Company
Cotton Incorporated State Support Committee
Delta and Pine Land Company
Dupont
Dow AgroSciences
Crop Protection Services, Inc.
OSU Entomology Department

Bayer CropScience
Cotton Growers Cooperative Cotton
Oklahoma Cotton Council
Stoneville Pedigreed Seed Company
Syngenta Crop Protection
Helena Chemical
Valent
OSU IPM Program

This report and others are available for previous years at the following web site
<http://www.osu.altus.ok.us/> . If you have comments or questions about the reports herein, contact:

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Scott Price, Grant County CED, for establishing and monitoring the Bollworm, Tobacco Budworm and Beet Armyworm moth traps in Manchester, Oklahoma.

Entomology Activities

Insect monitoring is a key component in a successful IPM program. Trapping activities in 2008 covered cotton growing regions of Southwest and Northern Oklahoma. Trapping activities were centered on the beet armyworm and the bollworm complex. Population trends, insect updates, and control tips are published in the Cotton Outlook and distributed to the state's cotton producers and consultants to help formulate management strategies to enhance profitability.

Like 2007, Bollgard™ technology was the focus of this year's research. Monetary support received throughout the year permitted this applied research to continue. In addition to State IPM funds, I want to thank all companies for their contract research support. Special thanks go to the cotton producers for their support as cooperators and support through the Cotton Incorporated State Support Funds.

Oklahoma Cotton Insect Report 2008

A total of 170,000 acres were planted and harvested in 2008. The state's production average as projected was 805 lbs. of lint per acre. Insect pressure was light in most areas.

Ongoing Research Projects

Several Bt cotton trials were conducted in 2008 to further evaluate the value of this technology under Oklahoma conditions. Early season pests were also the target of several trials in the state.

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Bollworm / Tobacco Budworm and Beet Armyworm Monitoring

The bollworm/tobacco budworm complex has been the target of insecticide applications applied annually to cotton in Oklahoma. Monitoring moth activities helps determine species ratio and peak ovipositional activity for these insects. Traps were located near the communities of Altus, Hollis, Manchester, and Tipton. In addition to Heliothine activity, beet armyworm movements were also monitored at each location. Traps were maintained between June 1 and September 1, 2008.

Moth Pheromone Trap Catch Totals for Selected Regions of Oklahoma, Summer 2008.

Bollworm			
<u>Altus</u> 328	<u>Hollis</u> 671	<u>Manchester</u> 58	<u>Tipton</u> 935
Tobacco Budworm			
<u>Altus</u> 68	<u>Hollis</u> 39	<u>Manchester</u> 52	<u>Tipton</u> 106
Beet Armyworm			
<u>Altus</u> 25	<u>Hollis</u> 11	<u>Manchester</u> 3	<u>Tipton</u> 26

Although both species do coexist and are considered the same by growers, this species ratio is important since tobacco budworms exhibit a higher level of resistance to insecticides than bollworms. It is extremely important to detect fluctuations in species ratio of each ovipositional period and adjust insecticide recommendations accordingly. A total of 2,257 moths were captured between the weeks of June 1 and October 1. Bollworms comprised 88.2% of the total catch in 2008 (Figure 1).

Figure 1. Species composition of moths trapped across Oklahoma, Summer 2007.

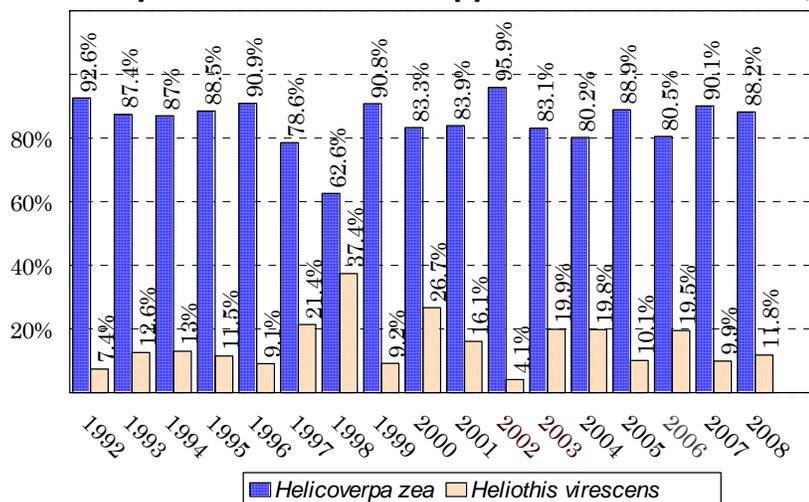
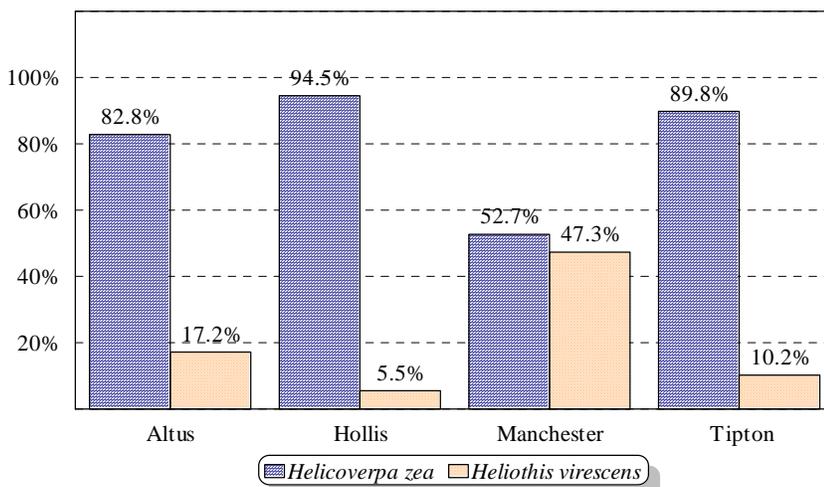


Figure 2. Species composition of trapped moths by production region, 2008.



Helicoverpa zea - Corn Earworm moth (Bollworm)

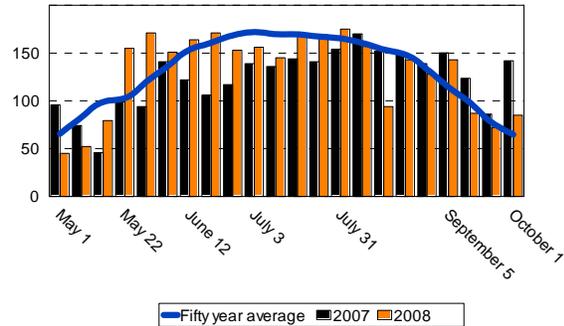
Heliiothis virescens - Tobacco Budworm moth

Growing Degree Days Accumulation For Select Locations Across Oklahoma, Summer 2008.

ALTUS

Growing Degree Days (GDD)

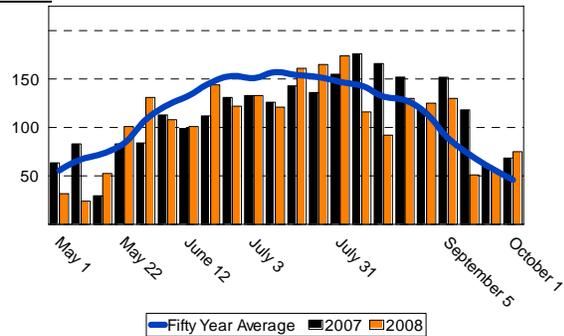
	<u>50 year</u>	<u>2007</u>	<u>2008</u>
May	469.9	408.7	400.6
June	616.9	486.3	711.7
July	678.3	560.8	705.4
August	761.1	756.4	627.4
September	354.7	428.9	369.9
Total	2,880.9	2,641.1	2,815.0



BLACKWELL

Growing Degree Days (GDD)

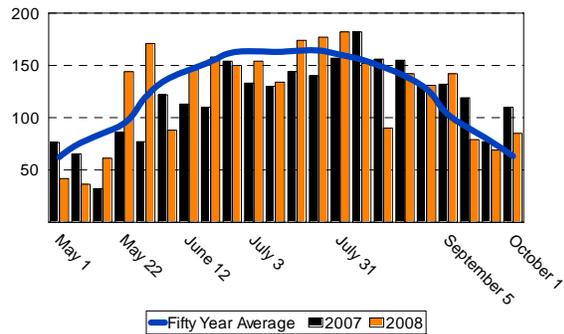
	<u>50 year</u>	<u>2007</u>	<u>2008</u>
May	389.7	343.0	265.6
June	556.8	441.0	517.3
July	615.2	537.4	640.4
August	665.8	757.5	578.8
September	266.5	364.2	282.0
Total	2,494.0	2,443.1	2,284.1



HOBART

Growing Degree Days (GDD)

	<u>50 year</u>	<u>2007</u>	<u>2008</u>
May	437.9	337.0	353.7
June	598.8	462.6	590.5
July	654.7	544.3	702.7
August	731.1	766.0	630.6
September	332.7	404.5	351.3
Total	2,755.2	2,514.4	2,628.8



Bollgard II™ and Widestrike Variety Demonstration 2008

Cooperator: Terry White
 Planting Date: May 13, 2008
 Seeding Rate: 13.5 lbs/acre

Location: Harmon County
 Heat units accumulated: 2,752.8
 Five Irrigations

Pesticide Usage:

Roundup WeatherMax (20 oz / acre) over-the-top application May 23

Roundup WeatherMax (20 oz / acre) over-the-top application +
 Vydate 0.18 lbs ai/acre + Pix 5 oz / acre June 23

Harvest Aid applied:

Ethephon (32 oz / acre) + Ginstar (7 oz / acre) October 3
 Ethephon (16 oz / acre) October 15

Table 1. Stand Densities, Retention Rates, and Lint Production White's Farm - Summer 2008

<u>Variety</u>	<u>Stand density</u>		<u>% Retention</u>		<u>Lint Yield</u>
	<u>plants/acre</u>		<u>8/1</u>	<u>8/24</u>	<u>10/9</u>
	<u>May 31</u>	<u>June 13</u>			
PHY 485 WRF	44,000	44,000	95.2	84.7	1,997
DP 161 B2RF	49,000	44,000	95.3	84.7	1,900
ST 5458 B2RF	44,000	43,000	96.4	83.3	1,798
DP 141 B2RF	41,000	41,000	95.1	84.9	1,756
ST 5327 B2RF (Cooperator's Choice)	42,000	44,000	91.3	86.3	1,750
ST 4498 B2RF	41,000	42,000	91.9	84.5	1,395
DP 143 B2RF	42,000	43,000	95.0	84.5	1,375
DP 164 B2RF	47,000	47,000	95.0	82.6	1,366
FM 9180 B2F	45,000	42,000	90.9	88.5	1,307
FM 1740 B2F	42,000	43,000	90.7	81.9	1,285

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Altus Cotton



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Aeris Seed-Applied System Nematodes and Early Season Pests SPO8NARLLA at Altus

Objective: Evaluate the comparable efficacy of Aeris seed applied system and Activa complete pak under appropriately positioned conditions.

Technical Questions: Did these trials support the current position of Aeris Seed Applied System within the local sales territory?

Did these trials reflect the same level of performance as noted in surrounding growers fields?

Did the application of Temik 15G at-planting or side-dress provide enhanced pesticidal activity and or yield?

Conclusions: The untreated and Aeris + Temik @ 5 and the Temik alone at 5 had the lowest initial stands (8 DAP). All stands were 22 to 31 thousand plants per acre at 13 DAP. Thrips damage was highest in the untreated 16 DAP followed by Temik at 3.5 lb/a. First positioned bolls were from 8.8 to 9.1. The % boll retention was 85.77 to 86.24.

Yields statistically were all equal. Numerically the Aeris + Temik 5.0 and the Aeris + Temik 3.5 had the best yield. These yields are not surprising due to the lack of insect and nematode populations during the growing season.

CROP AND INSECT DESCRIPTION

Insect 1.FRANOC Western Flower Thrips
Crop 1:GOSHI Cotton FM 9180 **Variety:** FM 9180 **Planting Date:** 5/15/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** SMOOTH
Soil Temperature: 65 F **Soil Moisture:** NORMAL **Emergence Date:** 5/22/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: SEEDBED
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

Previous: Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

Planting Conditions

Application Date: 5/15/08
Time of Day: AM
Application Method: Infurrow
Application Timing: ATPLAN
Applic. Placement: INFURR
Air Temp., Unit: 66 F
% Relative Humidity: 69
Wind Velocity, Unit: 14 MPH
Dew Presence (Y/N): n
Water Hardness: na
Soil Temp., Unit: 66 F
Soil Moisture: EXCESSIVE
% Cloud Cover: 100

Insect Code			Stand	Stand	Damage	Stand	1st	Retention	Yield	
Rating Data Type			Count	Count	Rating	Count	Position	Average	lint	
Rating Unit			Plants	Plants	Damage	Plants	Average	Average	lb/Acre	
Rating Date			/acre	/acre	rating	/acre	/5 plant	/5 plant	9/12/08	
Trt-Eval Interval			5/22/08	5/27/08	5/30/08	6/3/08	7/22/08	7/22/08		
			8 DA-A	13 DA-A	16 DA-A	20 DA-A	69 DA-A	69 DA-A	209 DA-A	
Trt	Treatment									
No.	Name	Rate	Unit							
1	Untreated ATB			16750.0 a	28250.0 a	3.5 a	27750.0 a	8.8 a	87.04 a	1177.5 a
2	Aeris Seed Applied	0.75	mg ai/seed	17500.0 a	24500.0 a	1.0 a	31250.0 a	8.8 a	86.24 a	1160.5 a
3	Aeris Seed Applied Temik	0.75 3.5	mg ai/seed lb/a	14500.0 a	25250.0 a	1.0 a	27750.0 a	9.1 a	85.82 a	1150.0 a
4	Aeris Seed Applied Temik	0.75 5.0	mg ai/seed lb/a	12750.0 a	22000.0 a	1.0 a	25000.0 a	8.9 a	87.45 a	1219.3 a
5	Temik	3.5	lb/a	17750.0 a	24500.0 a	2.3 a	31500.0 a	9.1 a	85.77 a	1096.4 a
6	Temik	5	lb/a	16000.0 a	26000.0 a	1.3 a	30750.0 a	8.8 a	87.18 a	1146.1 a
7	Aeris Seed Applied Temik	0.75 5	mg ai/seed lb/a	16750.0 a	25500.0 a	1.8 a	30000.0 a	9.0 a	86.48 a	1233.7 a
LSD (P=.05)				3463.95	5777.37	1.80	5671.03	0.53	3.976	178.56
Standard Deviation				2331.63	3888.83	1.21	3817.25	0.35	2.676	120.19
CV				14.57	15.47	71.99	13.1	3.97	3.09	10.28
Bartlett's X2				5.684	6.814	4.194	3.922	9.549	4.265	12.587
P(Bartlett's X2)				0.459	0.235	0.241	0.687	0.145	0.641	0.05
Replicate F				1.174	0.359	0.220	1.366	0.590	1.699	0.442
Replicate Prob(F)				0.3474	0.7833	0.8812	0.2850	0.6295	0.2029	0.7261
Treatment F				2.361	0.936	2.380	1.572	0.491	0.250	0.601
Treatment Prob(F)				0.0737	0.4936	0.0718	0.2123	0.8064	0.9528	0.7257

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Comparison of Bollgard II Flex and Widestrike Flex Cotton Under Irrigated Conditions at Altus

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: FIELD
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK
 Planted 5/15/08
Trial Initiation Comments: No significant difference was noted in stands at 8,13, or 20 DAP, Yields showed significant differences with DP 143 B2RF and ST 4498

CROP AND INSECT DESCRIPTION

Crop 1: GOSHI Cotton **Variety:** Various **Planting Date:** 5/15/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** SMOOTH
Soil Temperature: 65 F **Soil Moisture:** NORMAL **Emergence Date:** 5/22/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: SEEDBED
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

Previous: Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

Planting Conditions

Application Date: 5/15/08
Time of Day: AM
Application Method: Infurrow
Application Timing: ATPLAN
Applic. Placement: INFURR
Air Temp., Unit: 66 F
% Relative Humidity: 69
Wind Velocity, Unit: 14 MPH
Dew Presence (Y/N): n
Water Hardness: na
Soil Temp., Unit: 66 F
Soil Moisture: EXCESSIVE
% Cloud Cover: 100

Insect Code	Stand Count	Stand Count	Stand Count	Yield	
Rating Data Type	Plants	Plants	Plants	Lint	
Rating Unit	/acre	/acre	/acre	lbs/acre	
Rating Date	5/22/08	5/27/08	6/3/08	9/12/08	
Trt-Eval Interval	8 DA-A	13 DA-A	20 DA-A	209 DA-A	
Trt No.	Treatment Name				
1	FM 9180 B2F	14750.0 a	27250.0 a	33750.0 a	1123.2 ab
2	FM 1740 B2F	16250.0 a	27750.0 a	31750.0 a	824.3 c
3	DP 141 B2RF	18250.0 a	27500.0 a	29250.0 a	1029.4 b
4	DP 143 B2RF	13000.0 a	22250.0 a	29250.0 a	1257.8 a
5	DP 161 B2RF	16000.0 a	27250.0 a	33750.0 a	1237.1 ab
6	DP 164 B2RF	15250.0 a	28250.0 a	28750.0 a	1128.9 ab
7	PHY 485 WRF	13750.0 a	26250.0 a	30500.0 a	1218.2 ab
8	ST 4498 B2RF	16750.0 a	27250.0 a	31250.0 a	1316.7 a
9	ST 5458 B2RF	18750.0 a	28500.0 a	33500.0 a	1214.2 ab
LSD (P=.05)	4387.97	5007.24	6032.68	144.90	
Standard Deviation	3006.55	3430.87	4133.48	99.28	
CV	18.96	12.75	13.2	8.63	
Bartlett's X2	6.455	8.205	5.533	7.869	
P(Bartlett's X2)	0.596	0.414	0.699	0.446	
Replicate F	1.191	0.927	0.218	1.071	
Replicate Prob(F)	0.3341	0.4426	0.8827	0.3801	
Treatment F	1.619	1.184	0.954	9.005	
Treatment Prob(F)	0.1717	0.3488	0.4931	0.0001	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Bayer Cotton Seed Treatments Trial at Altus with Biological Nematicide

Objectives:

Increases in vigor and yield were observed with the addition of a bionematicide added to a seed applied insecticide. Record data to measure differences in treatments. Does the addition of L1460-B cause any phytotoxic or vigor concerns? Is there an increase in efficacy, plant health or yield when L-1460-A is added to Aeris or Gaucho Grande? Does the new combination equal that of the tank mix application?

Conclusions:

Stands were taken at 8, 13, and 20 DAP and no significant differences were found. Treatment #5 and #6 had the final stand of 30K plus. Square retention was the highest in the fungicide only treatment at 87.05 although no significant difference was found.

Yields will be taken and reported.

CROP AND INSECT DESCRIPTION

Insect 1.FRANOC Western Flower Thrips
Crop 1:GOSHI Cotton FM 9180 **Variety:** FM 9180 **Planting Date:** 5/15/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** SMOOTH
Soil Temperature: 65 F **Soil Moisture:** NORMAL **Emergence Date:** 5/22/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: SEEDBED
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

Previous: Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

Planting Conditions

Application Date: 5/15/08
Time of Day: AM
Application Method: Infurrow
Application Timing: ATPLAN
Applic. Placement: INFURR
Air Temp., Unit: 66 F
% Relative Humidity: 69
Wind Velocity, Unit: 14 MPH
Dew Presence (Y/N): n
Water Hardness: na
Soil Temp., Unit: 66 F
Soil Moisture: EXCESSIVE
% Cloud Cover: 100

Pest Code			Stand Count	Stand Count	Stand Count	1 ST Position	Retention	Yield	
Rating Date			5/22/08	5/27/08	6/3/08	7/22/08	7/22/08	9/12/08	
Rating Data Type			Plants	Plants	Plants	average	average	Lint	
Rating Unit			/acre	/acre	/acre	/5 plant	/5 plant	lb/ acre	
Trt-Eval Interval			8 DA-A	13 DA-A	20 DA-A	69 DA-A	69 DA-A	209 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit						
1	BAYTAN 30 VORTEX FL ALLEGIANCE FL GAUCHO GRANDE CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT	32.5 2.5 15.6 0.375 500 25 522 65	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg	12500.0 a	23750.0 a	26500.0 a	8.85 a	87.05 a	1084.6 a
2	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT	32.5 2.5 15.6 0.75 500 25 522 65	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg	13000.0 a	22500.0 a	24500.0 a	8.60 a	86.67 a	1065.0 a
3	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	17750.0 a	24000.0 a	27250.0 a	9.15 a	85.75 a	1114.7 a
4	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	16000.0 a	25000.0 a	27500.0 a	9.30 a	84.62 a	1114.7 a
5	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	16000.0 a	24750.0 a	30500.0 a	8.75 a	86.09 a	1117.3 a
6	BAYTAN 30 VORTEX FL ALLEGIANCE FL CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT TEST COMPOUND 1	32.5 2.5 15.6 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg g/100 kg g/100 kg ml/100 kg ml/100 kg ml/100 kg	16000.0 a	24750.0 a	30250.0 a	8.60 a	85.78 a	1083.3 a

Pest Code			Stand Count	Stand Count	Stand Count	1 ST Position	Retention	Yield	
Rating Date			5/22/08	5/27/08	6/3/08	7/22/08	7/22/08	9/12/08	
Rating Data Type			Plants	Plants	Plants	average	average	Lint	
Rating Unit			/acre	/acre	/acre	/5 plant	/5 plant	lb/ acre	
Trt-Eval Interval			8 DA-A	13 DA-A	20 DA-A	69 DA-A	69 DA-A	209 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit						
7	BAYTAN 30	32.5	ml/100 kg	14750.0 a	25250.0 a	26250.0 a	8.75 a	86.76 a	1095.0 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	GAUCHO GRANDE	0.375	mg ai/seed						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
	BIOLOGICAL NEMATICIDE	1	g/100 kg						
8	BAYTAN 30	32.5	ml/100 kg	15750.0 a	26500.0 a	28500.0 a	8.20 a	86.11 a	1125.1 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
	CRUISER 600FS	0.34	mg ai/seed						
	AVICTA 500FS	0.15	mg ai/seed						
LSD (P=.05)				4071.23	4363.93	4033.09	0.884	2.548	95.92
Standard Deviation				2768.07	2967.08	2742.14	0.601	1.732	65.22
CV				18.19	12.08	9.92	6.85	2.01	5.93
Bartlett's X2				7.763	7.774	9.624	10.862	7.595	5.051
P(Bartlett's X2)				0.354	0.353	0.211	0.145	0.37	0.654
Replicate F				2.712	0.535	2.631	1.126	5.529	4.666
Replicate Prob(F)				0.0709	0.6635	0.0768	0.3610	0.0059	0.0119
Treatment F				1.570	0.631	2.203	1.290	0.778	0.421
Treatment Prob(F)				0.1989	0.7253	0.0763	0.3027	0.6128	0.8785

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

At-Planting Insecticides/Nematicide Products Beltwide Study

Objective: At Planting products were tested to provide a comparison of benefits. The objective is to measure differences in at-planting products on cotton.

Conclusions: Stands, damage, and yield were measured. There were no significant differences found with any of these evaluations.

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: SEEDBED
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

Previous: Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

Planting Conditions

Application Date: 5/15/08
Time of Day: AM
Application Method: Infurrow
Application Timing: ATPLAN
Applic. Placement: INFURR
Air Temp., Unit: 66 F
% Relative Humidity: 69
Wind Velocity, Unit: 14 MPH
Dew Presence (Y/N): n
Water Hardness: na
Soil Temp., Unit: 66 F
Soil Moisture: Excessive
% Cloud Cover: 100

Insect Code			Stand	Stand	Damage	Stand	Yield	
Rating Data Type			Count	Count	Rating	Count	Lint	
Rating Unit			Plants	Plants	Damage	Plants	lb/ acre	
Rating Date			/acre	/acre	Rating	/acre	9/12/08	
Infestation Unit			5/22/08	5/27/08	5/30/08	6/3/08		
Trt-Eval Interval			8 DA-A	13 DA-A	16 DA-A	20 DA-A	209 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	7
1	Avicta Complete	0.75	mg ai/seed	18750.0 a	26750.0 a	1.0 a	28500.0 a	1034.5 a
2	Avicta Complete Orthene	0.75 4	mg ai/seed oz/a	17250.0 ab	26250.0 a	1.8 a	27750.0 a	1028.2 a
3	Aeris	0.75	mg ai/seed	17250.0 ab	26250.0 a	1.8 a	28500.0 a	1081.2 a
4	Aeries Orthene	0.75 4	mg ai/seed oz/a	14250.0 b	25500.0 a	1.0 a	28500.0 a	1090.0 a
5	Temik	5	lb/a	16500.0 ab	28500.0 a	1.0 a	27750.0 a	1030.7 a
6	Temik Orthene	5 4	lb/a oz/a	17500.0 ab	28250.0 a	1.0 a	27000.0 a	1029.4 a
7	Systemic Cruiser+Dyn	0.75	mg ai/seed	16250.0 ab	27000.0 a	1.8 a	27000.0 a	1129.1 a
8	Systemic Cruiser+Dyn Orthene	0.75 4	mg ai/seed oz/a	18500.0 a	27500.0 a	1.8 a	30250.0 a	1013.0 a
9	Untreated ATB			16500.0 ab	28000.0 a	2.5 a	24500.0 a	1049.6 a
10	Untreated ATB Orthene	4	oz/a	16000.0 ab	26000.0 a	2.5 a	29000.0 a	1050.9 a
LSD (P=.05)				2498.79	4203.49	1.87	3865.00	140.57
Standard Deviation				1722.13	2897.00	1.29	2663.71	96.88
CV				10.21	10.73	80.69	9.56	9.19
Bartlett's X2				7.646	9.807	0.16	10.358	5.313
P(Bartlett's X2)				0.57	0.366	0.999	0.322	0.806
Replicate F				18.846	1.406	0.000	2.099	1.159
Replicate Prob(F)				0.0001	0.2626	1.0000	0.1238	0.3434
Treatment F				2.271	0.503	0.840	1.317	0.548
Treatment Prob(F)				0.0481	0.8592	0.5867	0.2739	0.8261

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Launch Awareness Trial at Altus

Objectives:

Due to increasing problems with the management of fleahoppers, aphids and late season plant bugs, stink bugs, Leverage will be reevaluated.

Conclusions:

This trial was initiated with a low number of fleahoppers detected in the trial area. Following the application of all products fleahoppers were not heavy enough to determine any difference in treatments. No fleahopper population ever developed in this test or in the area including production acres.

Yields were taken and no significant difference was found between treatments. This is no surprise as there was no significant in season insect damage.

Crop Description

Crop 1: GOSHI	Gossypium hirsutum	American upland cotton
Variety: FM 9180		
BECH Scale:	BCOT	Planting Date: 5/14/08
Planting Method:	SEEDS	
Depth, Unit:	1.5 IN	
Row Spacing, Unit:	40 IN	
Seed Bed:	MEDIUM	Soil Temperature, Unit: 62 F
Soil Moisture:	NORMAL	Emergence Date: 5/22/08

Plot Width, Unit: 13.33 FT	Plot Length, Unit: 35 FT	Reps: 4
Site Type: SEEDBED		
Tillage Type: CONVENTIONAL-TILL	Study Design: RANDOMIZED COMPLETE BLOCK	
Previous: Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

Application Description

Application Date:	6/30/08
Time of Day:	PM
Application Method:	SPRAY
Application Timing:	PREBLO
Application Placement:	FOLIAR
Applied By:	J Goodson
Air Temperature, Unit:	88 F
% Relative Humidity:	32
Wind Velocity, Unit:	4 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	78 F
Soil Moisture:	EXCESSIVE
% Cloud Cover:	0

Pest Type			Insect	Insect	Yield	
Pest Name			Fleahopper	Fleahopper	Lbs/acre	
Rating Date			6/30/08	7/7/08	9/12/08	
Sample Size			10	10		
Sample Size Unit			Sweeps	Sweeps		
Trt-Eval Interval			0 DA-A	7 DA-A	162 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit	1	2	5
1	UNTREATED			2.0	0.3 a	1346.9 a
2	Leverage NIS	3.8 1.01	oz/acre % v/v		0.8 a	1249.3 a
3	Leverage NIS	5.0 1.01	oz/acre % v/v		0.0 a	1165.3 a
4	Enigo	0.39	% ai/v		0.0 a	1345.5 a
5	Orthene	0.075	lb ai/a		0.5 a	1319.8 a
6	Vydate C-LV	0.0164	lb ai/a		0.0 a	1334.7 a
7	Bidrin	0.5	lb ai/a		0.0 a	1258.8 a
8	Centric	0.047	lb ai/a		0.0 a	1323.9 a
9	Intruder	0.05	lb ai/a		0.5 a	1242.6 a
10	Trimax	0.047	lb ai/a		0.0 a	1264.2 a
LSD (P=.05)				1.02		121.02
Standard Deviation				0.70		83.41
CV				350.92		6.49
Bartlett's X2				3.014		8.207
P(Bartlett's X2)				0.389		0.513
Replicate F				0.135		2.654
Replicate Prob(F)				0.9381		0.0687
Treatment F				0.654		1.993
Treatment Prob(F)				0.7415		0.0803

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Cruiser vs Guacho Grande at Altus

Objectives:

Show the benefit of Gaucho Grande and Cruiser as an insecticide seed treatment on cotton

Conclusions:

No significant difference was found between varieties for each date counted 8, 13, and 20 DAP. The highest final stands were with FM 9180B2F, DP 161 B2RF, and ST 5458 B2RF. Damage was greatest in the untreated for each variety although the damage levels were not significantly different from the treatments.

Yields were not effected by the treatments as occurs when no significant insect damage is measured during the season.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* American upland cotton
Variety: Various **Description:** FM 9880, DP 141 B2RF, Phy 375
BBCH Scale: BCOT
Planting Method: SEEDED **Rate, Unit:** 35 P/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 62 F
Soil Moisture: NORMAL **Emergence Date:** 5/15/08

Pest Description

Pest 1 Type: I **Code:** FRANOC *Frankliniella occidentalis*
Common Name: Western flower thrips
Description: Description

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: SEEDBED
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK
Previous:

Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

Planting conditions

Application Date: 5/15/08
Time of Day: AM
Application Method: Infurrow
Application Timing: ATPLAN
Applic. Placement: INFURR
Air Temp., Unit: 66 F
% Relative Humidity: 69
Wind Velocity, Unit: 14 MPH
Dew Presence (Y/N): n
Water Hardness: na
Soil Temp., Unit: 66 F
Soil Moisture: EXCESSIVE
% Cloud Cover: 100

Pest Code	Stand Count	Stand Count	Thrips Damage	Stand Count	Yield		
Rating Date	5/22/08	5/27/08	5/30/08	6/3/08	9/12/08		
Rating Data Type	Plants	Plants	Damage rating	Plants	lint		
Rating Unit	/acre	/acre	1-5	/acre	lb/acre		
Trt-Eval Interval	8 DA-A	13 DA-A	16 DA-A	20 DA-A	162 DA-A		
Trt Treatment	Rate	Rate					
No. Name		Unit					
1 Untreated FM 9180 B2F			18000.0 a	25750.0 a	2.5 a	29500.0 a	1276.9 a
2 GAUCHO GRANDE FM 9180B2F	0.375	g ai/100 kg	16750.0 a	25750.0 a	1.8 a	29500.0 a	1227.2 a
3 CRUISER FM 9180 B2F	0.32	g ai/100 kg	15500.0 a	28750.0 a	1.8 a	28750.0 a	1334.5 a
4 Untreated DP 141 B2RF			18500.0 a	27500.0 a	2.5 a	31000.0 a	1270.4 a
5 GAUCHO GRANDE DP 141 B2RF	0.375	g ai/100 kg	19250.0 a	27500.0 a	1.8 a	32250.0 a	1351.5 a
6 CRUISER DP 141 BRF	0.32	g ai/100 kg	16500.0 a	29250.0 a	1.0 a	32250.0 a	1342.3 a
7 Untreated PHY 375 B2RF			15750.0 a	27750.0 a	2.5 a	29500.0 a	1357.7 a
8 GAUCHO GRANDE PHY 375B2RF	0.375	g ai/100 kg	18000.0 a	25500.0 a	2.3 a	30000.0 a	1307.6 a
9 CRUISER PHY 375 WRF	0.32	g ai/100 kg	13750.0 a	24750.0 a	1.0 a	28000.0 a	1231.7 a
LSD (P=.05)			5332.92	6894.68	2.15	6368.26	171.38
Standard Deviation			3654.02	4724.10	1.47	4363.41	117.42
CV			21.64	17.53	77.93	14.5	9.03
Bartlett's X2			9.036	9.926	0.198	7.147	16.703
P(Bartlett's X2)			0.339	0.27	1.00	0.521	0.033*
Replicate F			0.388	0.446	0.308	6.483	0.441
Replicate Prob(F)			0.7624	0.7221	0.8196	0.0023	0.7260
Treatment F			0.895	0.439	0.667	0.456	0.739
Treatment Prob(F)			0.5361	0.8856	0.7153	0.8743	0.6566

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls). Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Thrips Efficacy Trial on Cotton

Objective: Show the benefit of Thrip damage control by the chemical treatments.

Conclusions: No Thrip populations were detected and no differences were found between treatments.

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 35 FT **Reps:** 4
Site Type: SEEDBED
Tillage Type: CONVENTIONAL-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

Previous: Crops	Pesticides	Year
1. Cotton		2007

SOIL DESCRIPTION

Texture: CLAY LOAM
Soil Name: Tillman Clay Loam
Fertility Level: Excellent

APPLICATION DESCRIPTION

	A	B	C
Application Date:	5/15/08	6/12/08	7/10/08
Time of Day:	AM	AM	AM
Application Method:	Infurrow	SPRAY	SPRAY
Application Timing:	ATPLAN	PREBLOM	PREBLO
Applic. Placement:	INFURR	Foliar	FOLIAR
Air Temp., Unit:	66 F	79 F	81 F
% Relative Humidity:	69	71	67
Wind Velocity, Unit:	14 MPH	3 MPH	2 MPH
Dew Presence (Y/N):	n	N	n
Water Hardness:	na	NA	na
Soil Temp., Unit:	66 F	69	79 F
Soil Moisture:	EXCESSIVE	ADEQUATE	ADEQUATE
% Cloud Cover:	100	0	0

Rating Data Type			Lint
Rating Unit			lbs/acre
Rating Date			9/12/08
Trt No.	Treatment Name	Rate	Rate Unit
1	UNTREATED CHECK		1590.9 a
2	BIDRIN 8 (EC)	1.6	oz/a 1593.9 a
3	BIDRIN 8 (EC)	3.2	oz/a 1580.4 a
4	Dimethioate	1.5	pt/a 1587.9 a
5	CENTRIC (40 WG)	2.5	oz/a 1567.0 a
6	ORTHENE (SP 90.00 P)	3.2	oz/a 1516.1 a
LSD (P=.05)			74.23
Standard Deviation			49.26
CV			3.13
Bartlett's X2			2.385
P(Bartlett's X2)			0.794
Replicate F			2.240
Replicate Prob(F)			0.1256
Treatment F			1.417
Treatment Prob(F)			0.2741

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

08-171-037

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REPORT NUMBER

NEMATODE ASSAY REPORT

June 19, 2008

Page 1

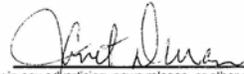
OSU - Jerry Goodson
 16721 US Hwy. 283
 Altus, OK 73521

Lab No:	Sample ID	Crop History:	Crop to be Grown:	RELATIVE ABUNDANCE OF NEMATODES RECOVERED PER 100 cc OF SOIL									Recommendations (See Explanation Below)	
				Root Knot	Lesion	Stunt	Spiral	Ring	Stubby Root	Lance	Reniform	Cyst		
N-9127	Bayer Seed Treatment-Altus			120	40	20					20	20		
N-9128	Beltwid-Altus			240	40							40		
N-9129	Bayer Seed Treatment-Tipton			180	40		20					40		

ABOUT THE NUMBERS ON YOUR NEMATODE ASSAY REPORT

<p>You may wonder why certain nematodes that occur in relatively low numbers are considered hazardous to your crops, while others at high levels are apparently ignored. The explanation, stated very simply, is that many factors must be considered before the importance of numbers can be determined. These include: kind of nematode, crop variety, time of year, previous crops, soil factors, other nematodes present, and plant disease history. Briefly, these factors have been carefully weighed and a recommendation made on the total situation known.</p>	<p>To help you interpret your own report, note the meaning of asterisks ** or *** next to some of the numbers.</p> <p>** Slight to moderate hazard, but if present along with others in this category, may contribute to definite or serious hazard.</p> <p>*** Definite or serious hazard to crop indicated</p> <p>NO ASTERISK BY A NUMBER: Not considered a hazard.</p> <p>NO NUMBER IN COLUMN: May mean this kind of nematode was not detectable rather than totally absent.</p>
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<p>* Recommendations:</p> <p>A - Production of the crop to be grown should not be affected by the kinds and numbers of nematodes in this assay.</p> <p>B - The population of nematodes found may cause crop damage and Chemical soil treatment may be profitable, especially should growing conditions be unfavorable.</p> <p>C - The nematode population found indicates that chemical soil treatment would be profitable.</p> <p>D - Nematode-resistant variety is recommended.</p> <p>*The recommendations is based upon assays of the soil samples submitted are offered only as a guide in helping you plant your nematode control program.</p>	<p>Remarks:</p> <p>*TNTC = too numerous to count</p> <p>*Use pre-plant nematicide treatment</p> <p>*ND - None Detected to be plant pathogen</p>
--	---

Signature: 

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Altus Corn & Grain Sorghum



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Latitude/Corn/Chinch Bug Seed Treatment Evaluation at Altus

Objectives:

Evaluate whether the over-treatment of either Cruiser (0.25 mg ai/seed) or Poncho (0.25 mg ai/seed) with Latitude improves the control of chinch bugs or other insects.

Conclusions:

This trial was planted on March 27, 2008. Stands were taken at 11, 19 and 33 DAP. The best stands were with Maxim XL Cruiser #4, Maxim XL Latitude #2, and Maxim Latitude respectively. This field was monitored for pest insects through the growing season and no pest insects were detected.

Plots were harvested 117 DAP and the Maxim Latitude (#2) had the best bu weight and also the best yield. Please note the yield and quality of grain were poor due to the lack of capability to irrigate early. Late irrigation was used but yield potential had already been reduced.

Crop Description

Crop 1: CORN	Zea maize	Field Corn
Variety: NC+1773 RB		Description: Field Corn
		Planting Date: 3/27/08
Planting Method: SEEDED		Rate, Unit: 28000 S/A
Depth, Unit: 1.5 IN		
Row Spacing, Unit: 40 IN		
Seed Bed: SMOOTH		Soil Temperature, Unit: 54 F
Soil Moisture: NORMAL		Emergence Date: 4/7/08
Harvest Date: 8/14/08		Harvest Equipment: Hand Harvest
Harvested Width, Unit: 40 IN		Harvested Length, Unit: 10 FT
% Standard Moisture: 12.0		Moisture Meter: Dickey John M3G
Weighing Equipment: Ohaus		

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4	Study Design: Randomized Complete Block

Soil Description

Description Name: Clay Loam

Planting conditions

Application Date:	3/27/08
Time of Day:	AM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	76 F
% Relative Humidity:	21
Wind Velocity, Unit:	13 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	54 F
Soil Moisture:	EXCESSIVE
% Cloud Cover:	0

Part Rated		Plants /acre	Plants /acre	Plants /acre	Turn out	Bushel weight		
Rating Date		4/7/08	4/15/08	4/29/08	8/14/08	8/14/08		
Trt-Eval Interval		11 DA-A	19 DA-A	33 DA-A	117 DA-A	117 DA-A		
Trt No.	Treatment Name	Rate	Unit					
1	MAXIM XL	5.2	ml/100 kg	18000.0 a	21000.0 a	23500.0 a	0.64 a	42.75 a
2	MAXIM XL	5.2	ml/100 kg	22750.0 a	24750.0 a	24250.0 a	0.67 a	50.00 a
	LATITUDE	250	g/100 kg					
3	MAXIM XL	5.2	ml/100 kg	21500.0 a	23000.0 a	23750.0 a	0.61 a	39.00 a
	PONCHO 600	0	ml/100 kg					
	PRO-IZED RED COLORAN	0	ml/100 kg					
	Coating	0	ml/100 kg					
4	MAXIM XL	5.2	ml/100 kg	23250.0 a	24750.0 a	23750.0 a	0.68 a	48.00 a
	CRUISER 5 FS	33.3	ml/100 kg					
	PRO-IZED RED COLORAN	5.2	ml/100 kg					
5	MAXIM XL	5.2	ml/100 kg	22250.0 a	24000.0 a	25250.0 a	0.69 a	50.50 a
	PONCHO 600	33.3	ml/100 kg					
	PRO-IZED RED COLORAN	0	ml/100 kg					
	Coating	0	ml/100 kg					
	LATITUDE	230	g/100 kg					
6	MAXIM XL	5.2	ml/100 kg	20250.0 a	22500.0 a	23000.0 a	0.66 a	44.50 a
	CRUISER 5 FS	33.3	ml/100 kg					
	PRO-IZED RED COLORAN	0	ml/100 kg					
	LATITUDE	230	g/100 kg					
LSD (P=.05)				3792.14	4126.66	2536.40	0.103	10.078
Standard Deviation				2516.61	2738.61	1683.25	0.068	6.688
CV				11.8	11.74	7.04	10.41	14.61
Bartlett's X2				6.158	2.243	2.368	3.218	15.22
P(Bartlett's X2)				0.291	0.815	0.796	0.666	0.009*
Replicate F				1.421	0.978	0.882	7.311	5.856
Replicate Prob(F)				0.2757	0.4293	0.4724	0.0030	0.0074
Treatment F				2.379	1.142	0.835	0.793	1.821
Treatment Prob(F)				0.0887	0.3812	0.5448	0.5709	0.1692

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Part Rated		Yield	Moisture	Yield	Yield
Rating Date		Lbs/acre		Lbs/acre	Bushel/acre
Trt-Eval Interval		8/14/08	8/14/08	8/14/08	8/14/08
Trt		117 DA-A	117 DA-A	117 DA-A	117 DA-A
Treatment	Rate				
No. Name	Rate Unit				
1 MAXIM XL	5.2 ml/100 kg	2109.54 a	13.60 a	3147.11 a	56.20 a
2 MAXIM XL	5.2 ml/100 kg	2593.96 a	14.15 a	3875.68 a	69.21 a
LATITUDE	250 g/100 kg				
3 MAXIM XL	5.2 ml/100 kg	1634.81 a	12.20 a	2467.49 a	44.06 a
PONCHO 600	0 ml/100 kg				
PRO-IZED RED COLORAN	0 ml/100 kg				
Coating	0 ml/100 kg				
4 MAXIM XL	5.2 ml/100 kg	2131.49 a	12.85 a	3221.77 a	57.53 a
CRUISER 5 FS	33.3 ml/100 kg				
PRO-IZED RED COLORAN	5.2 ml/100 kg				
5 MAXIM XL	5.2 ml/100 kg	2417.48 a	12.90 a	3674.77 a	65.62 a
PONCHO 600	33.3 ml/100 kg				
PRO-IZED RED COLORAN	0 ml/100 kg				
Coating	0 ml/100 kg				
LATITUDE	230 g/100 kg				
6 MAXIM XL	5.2 ml/100 kg	1736.36 a	11.68 a	2652.07 a	47.36 a
CRUISER 5 FS	33.3 ml/100 kg				
PRO-IZED RED COLORAN	0 ml/100 kg				
LATITUDE	230 g/100 kg				
LSD (P=.05)		750.236	2.184	1114.740	19.906
Standard Deviation		497.886	1.449	739.784	13.210
CV		23.66	11.24	23.31	23.31
Bartlett's X2		0.473	13.711	0.586	0.586
P(Bartlett's X2)		0.993	0.018*	0.989	0.989
Replicate F		20.804	6.377	20.343	20.343
Replicate Prob(F)		0.0001	0.0053	0.0001	0.0001
Treatment F		2.241	1.541	2.219	2.219
Treatment Prob(F)		0.1037	0.2364	0.1064	0.1064

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Control of Insects Using VC1713 and VC1729 Formulations of V10170 5FS Trial Protocol 68.01 at Altus

Objectives:

Build database on VC1713 and VC1729 formulations of V10170 5FS for the corn market. Establish insect control vs the commercial standard. Record stand, vigor and yield data.

Conclusions:

This trial was planted March 27, 2008 at the OSU Research and Extension Center at Altus, OK. Stand counts were taken at 11 and 19 DAP and treatment number 4 of V-10710 had the best stand on both dates. This test was monitored for insect pests throughout the season and none were detected.

Yields were taken 117 DAP and treatment number 7 of V10710 had the best numeric yield although it was not statistically significant.

Crop Description

Crop 1: ZEAMD Zea mays indentata	Dent Corn
Variety: NC+ 1773 RB	Description: Field Corn
BECH Scale: BCOR	
Planting Method: SEDED	Rate, Unit: 28000 S/A
Depth, Unit: 1.5 IN	
Row Spacing, Unit: 40 IN	
Seed Bed: SMOOTH	Soil Temperature, Unit: 54 F
Soil Moisture: NORMAL	Emergence Date: 4/7/08
Harvest Date: 8/14/08	Harvest Equipment: Hand Harvest
Harvested Width, Unit: 40 IN	Harvested Length, Unit: 30 FT
% Standard Moisture: 13.0	Moisture Meter: Dickey John M3G
Weighing Equipment: Ohaus.	

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4	Study Design: Randomized Complete Block

Soil Description

Description Name: Clay Loam

Planting Conditions

Application Date:	3/27/08
Time of Day:	AM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	76 F
% Relative Humidity:	21
Wind Velocity, Unit:	13 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	54 F
Soil Moisture:	EXCESSIVE
% Cloud Cover:	0

Part Rated		Plants /acre	Plants /acre	Turn Out	Bushel weight	Moisture	Yield Lbs/acre	Yield Bushels/acre
Rating Date		4/7/08	4/15/08	8/14/08	8/14/08	8/14/08	8/14/08	8/14/08
Trt-Eval Interval		11 DA-A	11 DA-A	117 DA-A	117 DA-A	117 DA-A	117 DA-A	117 DA-A
Trt No.	Treatment Name	Rate	Unit					
1	Untreated			0.70 a	48.50 b	13.53 a	3913.18 a	69.88 a
2	PONCHO 600	0.250	mg ai/kg	0.74 a	52.00 a	14.35 a	5217.11 a	93.16 a
3	Cruiser	0.250	mg ai/kg	0.73 a	51.75 a	12.90 a	5056.44 a	90.29 a
4	V-10170	0.250	mg ai/kg	0.76 a	52.50 a	14.18 a	6162.04 a	110.04 a
5	V-10170	0.250	mg ai/kg	0.75 a	53.00 a	13.88 a	6025.16 a	107.59 a
6	V-10710	0.350	mg ai/kg	0.75 a	50.75 a	14.15 a	5558.15 a	99.25 a
7	V-10710	0.500	mg ai/kg	0.78 a	51.50 a	13.50 a	7445.99 a	132.96 a
LSD (P=.05)		1631.73		0.064	1.841	1.277	2674.995	47.768
Standard Deviation		1098.34	2049.45	0.043	1.239	0.860	1800.578	32.153
CV		5.72	9.5	5.78	2.41	6.24	32.01	32.01
Bartlett's X2		11.051	17.926	21.572	7.797	9.088	7.87	7.87
P(Bartlett's X2)		0.087	0.006*	0.001*	0.253	0.169	0.248	0.248
Replicate F		4.086	2.055	1.259	4.093	1.382	0.463	0.463
Replicate Prob(F)		0.0224	0.1421	0.3181	0.0222	0.2803	0.7116	0.7116
Treatment F		12.326	2.335	1.374	5.682	1.394	1.478	1.478
Treatment Prob(F)		0.0001	0.0762	0.2778	0.0018	0.2704	0.2411	0.2411

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Comparison of Sorghum Seed Treatment Packages Trial Bayer SPONARRIZ with BICEP II MAGNUM at Altus

Objectives:

How does the Vortex + Poncho sorghum seed treatment package compare to the competitive package?

Conclusions:

BICEP II MAGNUM was applied to this trial at a 2X rate (4 qts/acre). Stand counts were taken at 14, 28 and 34 DAP. There were no plants emerged at 14 DAP and at 28 DAP Vortex + Allegiance and Concep II had a numerically better stand than the other treatments. At 34 DAP the Vortex + Allegiance + Concep III + Poncho, Vortex + Allegiance + 1789 + Poncho 600, Maxim XL + Apron XL + 1789 + Poncho had numerically better stands than the Maxim + Allegiance + Concep III + Cruiser. It's difficult to distinguish if the better stand is from 1789 or Poncho although the Bayer package does appear to provide a better stand.

Vigor ratings on a 1-10 scale (1=poor, 10=best) at 28 and 34 DAP showed the best vigor with Vortex + Concep III + Poncho at 28 DAP and better vigor numerically with the Bayer package vs the Competitive package. In addition a rating on a 1-5 scale (1=poor, 5=best) indicated the Bayer packages were statistically better than the competitive package.

Crop Description

Crop 1: SORGH Grain Sorghum Sorghum bicolor
Variety: Pioneer
Planting Date: 4/16/08
Planting Method: JD 7100 MaxEmerge
Depth, Unit: 0.5 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 65 F
Soil Moisture: NORMAL **Emergence Date:** 4/24/08
Harvest Date: 8/14/08

Site and Design

Plot Width, Unit: 13.33 FT **Site Type:** Clay Loam
Plot Length, Unit: 30 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Application Description

	A	B
Application Date:	4/22/08	4/25/08
Time of Day:	AM	AM
Application Method:	IMPREG	SPRAY
Application Timing:	ATPLAN	PRETRA
Application Placement:	INFURR	BROSOI
Air Temperature, Unit:	63 F	66 F
% Relative Humidity:	88	63
Wind Velocity, Unit:	13 mph	7 mph
Dew Presence (Y/N):	n	n
Water Hardness:	na	na
Soil Temperature, Unit:	65 F	67
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	100	0

Description			Plants/acre	Plants/acre	Seedling Vigor	Plants/acre	Seedling Vigor	Seedling Vigor	Yield
Rating Date			4/30/08	5/14/08	5/15/08	5/20/08	5/20/08	5/22/08	8/18/08
Trt-Eval Interval			14 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	27 DA-B	155 DA-A
Trt No.	Treatment Name	Rate Unit	1	2	3	4	5	6	7
1	MAXIM XL	3.5 g ai/100 kg	0.0 a	13065.0 a	1.5 b	28771.5 a	3.5 a	1.3 b	3000 a
	APRON XL	1 g ai/100 kg							
	CONCEP III	41.7 g ai/100 kg							
	CRUISER 5FS	200 g ai/100 kg							
	CF NEUTRAL	65 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
2	VORTEX FL	2.5 g ai/100 kg	0.0 a	23517.0 a	2.8 a	38324.0 a	3.3 a	3.0 a	3000 a
	ALLEGIANCE FL	4 g ai/100 kg							
	CONCEP III	41.7 g ai/100 kg							
	PONCHO 600	200 g ai/100 kg							
	TEST COMPOUND 1	130 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
3	VORTEX FL	2.5 g ai/100 kg	0.0 a	14371.5 a	1.8 ab	45292.0 a	3.8 a	2.8 a	2630 a
	ALLEGIANCE FL	4 g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015 mg ai/seed							
	PONCHO 600	200 g ai/100 kg							
	TEST COMPOUND 1	130 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
4	MAXIM XL	3.5 g ai/100 kg	0.0 a	16984.5 a	2.3 ab	40937.0 a	3.5 a	2.5 a	2380 a
	APRON XL	1 g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015 mg ai/seed							
	PONCHO 600	200 g ai/100 kg							
	TEST COMPOUND 1	130 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
LSD (P=.05)			0.00	10870.88	0.85	18908.86	1.19	1.03	1.306
Standard Deviation			0.00	6796.53	0.53	11821.91	0.75	0.65	0.816
CV			0.0	40.02	25.87	30.84	21.3	27.18	29.69
Bartlett's X2			0.0	1.468	3.793	5.669	1.494	1.426	2.257
P(Bartlett's X2)			.	0.69	0.285	0.129	0.684	0.699	0.521
Replicate F			0.000	4.128	5.488	0.388	0.300	2.200	1.688
Replicate Prob(F)			1.0000	0.0426	0.0202	0.7645	0.8247	0.1577	0.2385
Treatment F			0.000	1.872	4.317	1.399	0.300	5.800	0.563
Treatment Prob(F)			1.0000	0.2047	0.0381	0.3053	0.8247	0.0173	0.6532

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Comparison of Sorghum Seed Treatment Packages Trial Bayer SPONARRIZ with Degree Herbicide at Altus

Objectives:

How does the Vortex + Poncho sorghum seed treatment package compare to the competitive package?

Conclusions:

This evaluation was with DEGREE herbicide at a 2x rate (8.0 pt/acre). Stand counts were taken at 13, 26 and 33 DAP. At 13 and 26 DAP the Vortex Allegiance + 1789 had the best numerical stand. At 33 DAP the Maxim Apron + Poncho had the best stand numerically. Vigor ratings at 26, 33 and 35 DAP showed no difference at 26 and 33 DAP and at 35 DAP the Bayer packages were numerically better than the competitive package.

Crop Description

Crop 1: SORGH Grain Sorghum	Sorghum bicolor
Variety: Pio 85G01	Description: Grain Sorghum
	Planting Date: 4/17/08
Planting Method: JD 7100 MaxEmerge	
Depth, Unit: 0.6 IN	
	Spacing Within Row, Unit: 30 IN
Seed Bed: MEDIUM	Soil Temperature, Unit: 56 F
Soil Moisture: NORMAL	Emergence Date: 4/30/08
Harvest Date: 8/14/08	
Harvested Width, Unit: 30 IN	Harvested Length, Unit: 30 FT
	Moisture Meter: Dickey John

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: Clay Loam
Plot Length, Unit: 30 FT	
Replications: 4	Study Design: Randomized Complete Block

Application Description

Application Date:	4/17/08
Time of Day:	AM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	51 F
% Relative Humidity:	75
Wind Velocity, Unit:	17 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	56 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	100

Description			Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	Yield
Rating Date			4/30/08	5/13/08	5/13/08	5/20/08	5/20/08	5/22/08	8/18/08
Trt-Eval Interval			13 DA-A	26 DA-A	26 DA-A	33 DA-A	33 DA-A	35 DA-A	154 DA-A
Trt No.	Treatment Name	Rate Unit	1	2	3	4	5	6	7
1	MAXIM XL	3.5 g ai/100 kg	27001.0 a	40937.0 a	4.0 a	44211.5 b	4.5 a	1.8 a	2500 a
	APRON XL	1 g ai/100 kg							
	CONCEP III	41.7 g ai/100 kg							
	CRUISER 5FS	200 g ai/100 kg							
	CF NEUTRAL	65 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
2	VORTEX FL	2.5 g ai/100 kg	24823.5 a	40501.5 a	4.0 a	45727.5 b	5.3 a	2.5 a	2630 a
	ALLEGIANCE FL	4 g ai/100 kg							
	CONCEP III	41.7 g ai/100 kg							
	PONCHO 600	200 g ai/100 kg							
	TEST COMPOUND 1	130 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
3	VORTEX FL	2.5 g ai/100 kg	28307.5 a	49647.0 a	4.5 a	59228.0 ab	5.3 a	2.5 a	2630 a
	ALLEGIANCE FL	4 g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015 mg ai/seed							
	PONCHO 600	200 g ai/100 kg							
	TEST COMPOUND 1	130 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
4	MAXIM XL	3.5 g ai/100 kg	22210.5 a	40501.5 a	4.0 a	64454.0 a	5.8 a	2.0 a	3000 a
	APRON XL	1 g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015 mg ai/seed							
	PONCHO 600	200 g ai/100 kg							
	TEST COMPOUND 1	130 ml/100 kg							
	PRO-IZED RED COLORANT	19.6 ml/100 kg							
	TALC	62.5 g/100 kg							
LSD (P=.05)			17866.61	12277.59	1.39	12412.58	1.20	1.93	1.006
Standard Deviation			11170.29	7676.01	0.87	7760.41	0.75	1.20	0.629
CV			43.66	17.89	20.99	14.53	14.46	55.07	23.41
Bartlett's X2			2.669	7.578	0.432	5.391	1.77	2.738	4.615
P(Bartlett's X2)			0.446	0.056	0.934	0.145	0.621	0.434	0.202
Replicate F			0.593	2.107	0.111	0.313	0.111	0.388	0.263
Replicate Prob(F)			0.6349	0.1695	0.9514	0.8159	0.9514	0.7648	0.8503
Treatment F			0.229	1.378	0.333	6.630	1.889	0.388	0.474
Treatment Prob(F)			0.8743	0.3110	0.8017	0.0117	0.2019	0.7648	0.7082

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Chickasha Cotton



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Aeris Seed-Applied System Nematodes and Early Season Pests SPO8NARLLA

GENERAL TRIAL INFORMATION

Objective: Aeris brings a new seed treatment option to the grower for the management of early season insects and nematodes. Evaluate the comparative efficacy of Aeris and Avicta under appropriate positioned conditions.

Conclusions: The best stands were with the UTC followed by the same trend 15 DAP. Thrips damage was the highest in the UTC 15 DAP and the vigor ratings were highest for Temik at 5.0 and 3.5 lb/acre at 27 DAP. The highest boll retention was found in the Aeris plus Temik @ 3.5 lb/a and the Temik @ 3.5 lb/a.

The yields were taken and Aeris and Aeris + Temik 5.0 had the lowest yields. All others were above the untreated but no significant difference was found.

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI Cotton **Variety:** FM 9180 B2R **Planting Date:** 5/21/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/28/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED **Study Design:** RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/21/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	84 F
% Relative Humidity:	43
Wind Velocity, Unit:	12
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	81
Soil Moisture:	ADEQUATE
% Cloud Cover:	60

Insect Code Rating Unit Rating Date				Stand Count /acre 5/29/08	Stand Count acre 6/4/08	Damage 1-5 6/4/08	Vigor 1-5 7/10/08	1st Position 7/24/08	Retention 7/24/08	Yield lbs/Acre 9/12/08
Trt No.	Treatment Name	Rate	Rate Unit							
1	Untreated ATB			29750.0 a	39.5 a	3.8 a	2.3 c	8.95 a	84.470 a	970.0 a
2	Aeris Seed Applied	0.75	mg ai/seed	17750.0 a	26.0 a	1.0 b	3.5 ab	8.90 a	85.540 a	899.9 a
3	Aeris Seed Applied Temik	0.75 3.5	mg ai/seed lb/a	20750.0 a	26.3 a	1.0 b	3.8 ab	8.85 a	83.513 a	1055.5 a
4	Aeris Seed Applied Temik	0.75 5.0	mg ai/seed lb/a	19250.0 a	31.0 a	1.0 b	3.3 b	8.85 a	86.105 a	949.0 a
5	Temik	3.5	lb/a	28000.0 a	37.0 a	1.0 b	4.8 a	8.75 a	85.023 a	1014.9 a
6	Temik	5	lb/a	26250.0 a	33.3 a	1.0 b	4.5 ab	8.80 a	86.380 a	1128.4 a
	Aeris Seed Applied	0.75	mg ai/seed	17500.0 a	26.0 a	1.0 b	3.8 ab	8.70 a	85.100 a	1049.9 a
7	Temik	5	lb/a							
LSD (P=.05)				13453.29	11.63	0.28	0.89	0.207	4.2009	282.29
Standard Deviation				9055.61	7.83	0.19	0.60	0.139	2.8277	190.01
CV				39.8	25.03	13.57	16.34	1.58	3.32	18.82
Bartlett's X2				6.081	6.321	0.0	2.304	6.263	6.499	2.627
P(Bartlett's X2)				0.414	0.388	.	0.89	0.394	0.37	0.854
Replicate F				0.287	0.253	1.000	1.154	19.427	2.982	0.654
Replicate Prob(F)				0.8339	0.8581	0.4155	0.3546	0.0001	0.0588	0.5907
Treatment F				1.281	2.014	121.000	7.549	1.516	0.479	0.649
Treatment Prob(F)				0.3145	0.1167	0.0001	0.0004	0.2290	0.8155	0.6906

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Bayer Cotton Seed Treatments Trial at Chickasha with Biological Nematicide

GENERAL TRIAL INFORMATION

Objectives:

Some increase in vigor and yield has been observed with the addition of a bionematicide. Does the addition of L1460-B result in any phytotoxicity or vigor? Is there an increase in efficacy, plant health or yield and does the addition of L-1460-B equal that of the tank mix?

Conclusions:

Stands were taken at 8 and 14 DAP with the best stands observed in trt #1 (Gaucho Grande), trt #4 (Aeris with Bs) and trt #5 (Aeris with Bs), since no rates were provided the master protocol should be checked for the Bs rates. The best fruit retention was found in Trt #3, Trt # 4, and Trt # 6.

Yields were taken and no significant difference was found. It is noted that BF treatments tended to have slightly better yields.

Crop Description

Crop 1: GOSHI Gossypium hirsutum American upland cotton
Variety: FM 9160 B2R
BBCH Scale: BCOT **Planting Date:** 5/21/08
Planting Method: SEEDED **Rate, Unit:** 35
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 65 F
Soil Moisture: NORMAL **Emergence Date:** 5/28/08

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI Cotton **Variety:** FM 9180 B2R **Planting Date:** 5/21/08
Planting Method: SEEDED **Rate:** 35 **P/A** **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/28/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/21/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	84 F
% Relative Humidity:	43
Wind Velocity, Unit:	12
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	81
Soil Moisture:	ADEQUATE
% Cloud Cover:	60

Pest Code			Stand Count	Damage	Vigor	1 ST Position	Retention	Yield	
Rating Date			5/29/08	6/4/08	7/10/08	7/24/08	7/24/08	9/12/08	
Rating Data Type			Plants	Plant	Vigor			lb/acre	
Rating Unit			/acre	1-5	1-5				
Trt-Eval Interval			8 DA-A	14 DA-A	50 DA-A	64 DA-A	64 DA-A	188 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit						
1	BAYTAN 30	32.5	ml/100 kg	24500.0 a	1.0 a	4.0 a	8.65 a	82.358 a	687.6 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	GAUCHO GRANDE	0.375	mg ai/seed						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
2	BAYTAN 30	32.5	ml/100 kg	17250.0 a	1.0 a	3.3 a	8.65 a	85.363 a	883.1 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
3	BAYTAN 30	32.5	ml/100 kg	21750.0 a	1.0 a	4.3 a	8.65 a	84.483 a	788.5 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
	BIOLOGICAL NEMATICIDE	1	g/100 kg						
4	BAYTAN 30	32.5	ml/100 kg	24000.0 a	1.0 a	4.0 a	8.70 a	86.938 a	845.3 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
	BIOLOGICAL NEMATICIDE	1	g/100 kg						
5	BAYTAN 30	32.5	ml/100 kg	24750.0 a	1.5 a	4.3 a	8.75 a	82.528 a	876.8 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
	BIOLOGICAL NEMATICIDE	1	g/100 kg						
6	BAYTAN 30	32.5	ml/100 kg	17000.0 a	1.0 a	4.2 a	8.44 a	84.123 a	782.2 a
	VORTEX FL	2.5	g ai/100 kg						
	ALLEGIANCE FL	15.6	g ai/100 kg						
	CALCIUM CARBONATE	500	g/100 kg						
	SUSPENDING AGENT	25	g/100 kg						
	PRECISE S FINISHER 1005	522	ml/100 kg						
	PRO-IZED BLUE COLORANT	65	ml/100 kg						
	TEST COMPOUND 1	1	ml/100 kg						

Pest Code			Stand Count	Damage	Vigor	1 st Position	Retention	Yield
Rating Date			5/29/08	6/4/08	7/10/08	7/24/08	7/24/08	9/12/08
Rating Data Type			Plants	Plant	Vigor			lb/acre
Rating Unit			/acre	1-5	1-5			
Trt-Eval Interval			8 DA-A	14 DA-A	50 DA-A	64 DA-A	64 DA-A	188 DA-A
Trt No.	Treatment Name	Rate	Rate Unit					
7	BAYTAN 30	32.5	ml/100 kg	21000.0 a	1.0 a	4.5 a	8.65 a	82.560 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	GAUCHO GRANDE	0.375	mg ai/seed					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
	BIOLOGICAL NEMATOCIDE	1	g/100 kg					
8	BAYTAN 30	32.5	ml/100 kg	17500.0 a	1.0 a	4.2 a	8.61 a	83.681 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
	CRUISER 600FS	0.34	mg ai/seed					
	AVICTA 500FS	0.15	mg ai/seed					
LSD (P=.05)			14099.60	0.52	1.10	0.229	4.4525	178.02
Standard Deviation			9586.46	0.35	0.74	0.154	3.0085	121.04
CV			45.72	33.28	18.26	1.79	3.58	14.99
Bartlett's X2			2.436	0.0	5.404	6.779	7.371	4.703
P(Bartlett's X2)			0.932	.	0.493	0.452	0.391	0.696
Replicate F			1.118	1.000	2.449	1.333	0.922	1.431
Replicate Prob(F)			0.3641	0.4123	0.0951	0.2933	0.4490	0.2620
Treatment F			0.486	1.000	0.983	1.410	1.122	1.080
Treatment Prob(F)			0.8339	0.4586	0.4720	0.2582	0.3902	0.4101

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Cruiser vs Guacho Grande

GENERAL TRIAL INFORMATION

Objectives:

Show the benefit of Gaucho Grande and Cruiser on three different cotton varieties.

Conclusions:

Plant stands were taken at 8 and 14 DAP. The best stands were with DP 141 B2RF untreated and Cruiser and with PHY 375 WRF Gaucho Grande. There were no significant differences in stands. Damage ratings were taken 14 DAP and the untreated or NON Insecticide treated seed had the most damage for all varieties. Vigor was best in the insecticide treated seed for all varieties.

Yields showed a significant difference in the untreated of DP 141 B2RF with the treatments yielding less than the untreated. With all varieties the untreated yielded more than the treated.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* American upland cotton
Variety: FM 9180 B2F, DP 141 B3RF, PHY
BBCH Scale: BCOT **Planting Date:** 5/21/08
Planting Method: SEEDED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 65 F
Soil Moisture: NORMAL

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI Cotton **Variety:** FM 9180 B2R **Planting Date:** 5/21/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/28/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/21/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	84 F
% Relative Humidity:	43
Wind Velocity, Unit:	12
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	81
Soil Moisture:	ADEQUATE
% Cloud Cover:	60

Pest Code	Stand Count	Stand Count	Thrips Damage	Vigor	Yield			
Rating Date	5/29/08	6/4/08	6/4/08	10/7/08	9/12/08			
Rating Data Type	Plants	Plants	Damage rating	Vigor	Lint			
Rating Unit	/acre	/acre	1-5	1-5	lb/ Acre			
Trt-Eval Interval	8 DA-A	14 DA-A	14 DA-A	50 DA-A	202 DA-A			
Trt No.	Treatment Name	Rate	Rate Unit					
1	Untreated FM 9180 B2F			19500.0 a	33.0 a	2.0 bc	2.5 bc	917.1 ab
2	GAUCHO GRANDE FM 9180B2F	0.375	g ai/100 kg	22500.0 a	32.3 a	1.0 c	3.5 ab	881.8 ab
3	CRUISER FM 9180 B2F	0.32	g ai/100 kg	22250.0 a	30.5 a	1.0 c	3.8 ab	809.8 ab
4	Untreated DP 141 B2RF			27250.0 a	34.8 a	3.0 ab	2.0 c	974.7 a
5	GAUCHO GRANDE DP 141 B2RF	0.375	g ai/100 kg	18750.0 a	33.5 a	1.0 c	3.8 ab	870.0 ab
6	CRUISER DP 141 BRF	0.32	g ai/100 kg	30250.0 a	36.8 a	1.0 c	4.0 a	741.8 b
7	Untreated PHY 375 B2RF			24750.0 a	33.8 a	4.0 a	2.0 c	968.8 a
8	GAUCHO GRANDE PHY 375B2RF	0.375	g ai/100 kg	28000.0 a	34.8 a	1.0 c	4.5 a	853.7 ab
9	CRUISER PHY 375 WRF	0.32	g ai/100 kg	24750.0 a	32.0 a	1.0 c	4.8 a	867.2 ab
LSD (P=.05)				13742.97	10.49	1.03	0.99	122.26
Standard Deviation				9416.42	7.19	0.71	0.68	83.77
CV				38.88	21.48	42.43	19.76	9.56
Bartlett's X2				3.548	11.382	0.0	2.609	9.489
P(Bartlett's X2)				0.895	0.181	1.00	0.956	0.303
Replicate F				0.287	0.134	0.000	1.685	5.425
Replicate Prob(F)				0.8340	0.9390	1.0000	0.1968	0.0054
Treatment F				0.673	0.259	10.000	9.183	3.070
Treatment Prob(F)				0.7098	0.9732	0.0001	0.0001	0.0158

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Launch Awareness Trial at Chickasha

Objectives:

Show the benefits of Launch over competitive products. Describe the efficacy of Leverage.

Conclusions:

Applications were made on July 1 (4 days after the initial counts). Low populations prevailed following the application including in the untreated and so no conclusions can be made from this trial. No yields were taken for this trial.

Pest Description

Common Name: Cotton Fleahopper

CROP AND INSECT DESCRIPTION

Insect 1.FRANOC Western Flower Thrips

Crop 1:GOSHI Cotton **Variety:** FM 9180 B2R **Planting Date:** 5/21/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/28/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4

Site Type: SEEDBED

Study Design: RANDOMIZED COMPLETE BLOCK

Application Description

Application Date:	6/27/08
Time of Day:	AM
Application Method:	SPRAY
Application Timing:	PREBLO
Application Placement:	FOLIAR
Applied By:	Terry Pitts
Air Temperature, Unit:	80 F
% Relative Humidity:	74
Wind Velocity, Unit:	5
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	83 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	60

08-224-010

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REPORT NUMBER

NEMATODE ASSAY REPORT

August 8, 2008

Submitted by:

OSU - Jerry Goodson
 16721 US Hwy. 283
 Altus, OK 73521

Page 1

Grower:

RELATIVE ABUNDANCE OF NEMATODES RECOVERED PER 100 cc OF SOIL													
Lab No:	Sample No:	Crop History:	Crop to be Grown:	Root Knot	Lesion	Stunt	Spiral	Ring	Stubby Root	Lance	Reniform	Sting	Recommendations (See Explanation Below)
N-9139	Chickasha			160	60								

ABOUT THE NUMBERS ON YOUR NEMATODE ASSAY REPORT

You may wonder why certain nematodes that occur in relatively low numbers are considered hazardous to your crops, while others at high levels are apparently ignored. The explanation, stated very simply, is that many factors must be considered before the importance of numbers can be determined. These include: kind of nematode, crop variety, time of year, previous crops, soil factors, other nematodes present, and plant disease history. Briefly, these factors have been carefully weighed and a recommendation made on the total situation known.

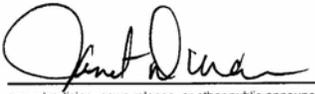
To help you interpret your own report, note the meaning of asterisks ** or *** next to some of the numbers.
 ** Slight to moderate hazard, but if present along with others in this category, may contribute to definite or serious hazard.
 *** Definite or serious hazard to crop indicated
 NO ASTERISK BY A NUMBER: Not considered a hazard.
 NO NUMBER IN COLUMN: May mean this kind of nematode was not detectable rather than totally absent.

- * Recommendations:
- A - Production of the crop to be grown should not be affected by the kinds and numbers of nematodes in this assay.
 - B - The population of nematodes found may cause crop damage and Chemical soil treatment may be profitable, especially should growing conditions be unfavorable.
 - C - The nematode population found indicates that chemical soil treatment would be profitable.
 - D - Nematode-resistant variety is recommended.

*The recommendations is based upon assays of the soil samples submitted are

Offered only as a guide in helping you plan your nematode control program. Not to be reproduced in whole or in part, nor may any reference be made to the work of A & L Plains Ag Labs company in any advertising, news release, or other public announcements.

- Remarks:
- *TNTC = too numerous to count
 - *Use pre-plant nematicide treatment
 - *ND - None Detected to be plant pathogen

Signature: 

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Chickasha Corn & Grain Sorghum



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Control of Insects Using VC1713 and VC1729 Formulations of V10170 5FS Trial at Chickasha

Objectives:

Build database on VC1713 and VC 1729 formulations of V10170 %FS for corn market support. Place into field trials to establish insect control vs commercial standard products. Take yield for general field assessment and value.

Conclusions:

The corn was planted on April 17, 2008 at the OSU Chickasha Research Station. Stand counts were taken at 13 and 27 DAP and there were no significant differences in stand. Vigor ratings were taken at 27, 33, and 42 DAP with a 1-5 scale and no significant differences were shown although the Maxim Cruiser and the #6 treatment of V-10710 looked best numerically. Yields were taken 117 DAP and converted to lbs per acre of yield. There were no significant differences in the yield although untreated and #4 V-10170 yielded the most lbs/per acre.

The lack of significant differences is not surprising since NO INSECT PESTS were present during this test period. It does appear that there are no negative reactions to the proposed treatments in this test.

Crop Description

<p>Crop 1: ZEAMX Zea mays Variety: NC+1773BR BECH Scale: BCOR Planting Method: SEEDED Depth, Unit: 1.5 IN Row Spacing, Unit: 30 IN Seed Bed: SMOOTH Soil Moisture: NORMAL</p>	<p style="text-align: center;">Corn Description: Field Corn Rate, Unit: 42000 S/A Soil Temperature, Unit: 62 F Emergence Date: 4/28/08</p>
--	--

Site and Design

<p>Plot Width, Unit: 13.33 FT Plot Length, Unit: 30 FT Replications: 4</p>	<p>Site Type: FIELD Tillage Type: CONVENTIONAL-TILL Study Design: Randomized Complete Block</p>
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Soil Description

Description Name: Sandy Loam

Planting conditions

Application Date:	4/17/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	73 F
% Relative Humidity:	58
Wind Velocity, Unit:	17 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	62 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	95

Part Rated		Plants /acre	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor	Yield Lbs/acre	% Turn Out	Moisture		
Rating Date		4/30/08	5/13/08	5/13/08	5/20/08	5/29/08	8/12/08	8/12/08	8/12/08		
Trt-Eval Interval		13 DA-A	27 DA-A	27 DA-A	33 DA-A	42 DA-A	117 DA-A	117 DA-A	117 DA-A		
Trt No.	Treatment Name	Rate	Unit								
1	Untreated			37453.0 a	37888.5 a	3.8 a	3.5 a	3.8 a	9632.07 a	0.82 a	17.40 a
2	PONCHO 600	0.250	g ai/100 kg	31001.0 a	37453.0 a	3.3 a	4.0 a	3.5 a	9256.51 a	0.82 a	16.40 a
3	Cruiser	0.250	g ai/100 kg	36582.0 a	39630.5 a	4.5 a	4.5 a	4.5 a	9158.17 a	0.81 a	12.73 a
4	V-10170	0.250	g ai/100 kg	31751.0 a	35275.5 a	3.8 a	3.0 a	3.5 a	9750.19 a	0.81 a	12.93 a
5	V-10170	0.350	g ai/100 kg	30444.5 a	35711.0 a	4.0 a	3.8 a	4.3 a	9485.05 a	0.83 a	13.08 a
6	V-10710	0.500	g ai/100 kg	33372.0 a	37888.5 a	4.3 a	5.0 a	4.8 a	9132.16 a	0.81 a	15.58 a
LSD (P=.05)				8534.86	5139.31	1.04	1.82	1.24	1790.652	0.018	8.186
Standard Deviation				5664.06	3410.64	0.69	1.21	0.82	1188.346	0.012	5.432
CV				16.94	9.14	17.65	30.57	20.33	12.64	1.44	37.0
Bartlett's X2				4.935	5.714	4.731	4.902	4.26	5.991	8.68	0.553
P(Bartlett's X2)				0.424	0.335	0.45	0.428	0.513	0.307	0.123	0.99
Replicate F				6.236	4.304	6.163	1.546	1.543	3.843	2.010	0.644
Replicate Prob(F)				0.0058	0.0223	0.0061	0.2436	0.2444	0.0318	0.1558	0.5984
Treatment F				1.091	0.878	1.605	1.395	1.691	0.189	2.057	0.559
Treatment Prob(F)				0.4050	0.5189	0.2189	0.2816	0.1973	0.9620	0.1283	0.7295

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Determine AI Protection to Seed/Seedling in Securing Stand when Combined with V10170 Trial Valent 86.13 at Chickasha

Objectives:

Build database on VC1713 and VC1729 formulations of V10170 5FS for the corn market support. Place into field trials to establish insect control vs commercial standard products. Take yield for general field performance.

Conclusions:

The grain sorghum was planted on April 17, 2008. Stand counts were taken at 13 and 26 DAP. Treatment #4 (V-10240 Concep III and V-10170) provided the best stands and also had some of the best vigor ratings in the test. The percent bloom at 69 DAP was greatest in treatment #4 @ 88.8% and #8 with 83.8 % bloomed which equates to earlier maturity. The highest yield was in the non-insecticide untreated #1.

There were no insects detected during the growth and maturity of the corn. No yield difference is not a surprise since there were no insect pest present.

Crop Description

Crop 1: SORVVS Sorghum vulgare saccharatum Grain sorghum
Variety: KS5585 **Description:** Grain Sorghum
BBCH Scale: BGRM **Planting Date:** 4/17/08
Planting Method: SEEDED
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 62 F
Soil Moisture: NORMAL **Emergence Date:** 4/25/08

Site and Design

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 30 FT
Replications: 4 **Study Design:** Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Planting Conditions

Application Date:	4/17/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	73 F
% Relative Humidity:	58
Wind Velocity, Unit:	17 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	62 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	95

Description	Plants /acre	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor	% Blooms	% Moisture	Yield Bushels/acre			
Rating Date	4/30/08	5/13/08	5/13/08	5/20/08	5/29/08	6/25/08	8/15/08	8/15/08			
Days After First/Last Applic.	13	26 26	26 26	33 33	42 42	69 69	120 120	120 120			
Trt-Eval Interval	13 DA-A	26 DA-A	26 DA-A	33 DA-A	42 DA-A	69 DA-A	69 DA-A	69 DA-A			
Trt No.	Treatment Name	Rate	Unit								
1	V-10170 CONCEP III	200 40	gm ai/hkg gm ai/hkg	39195.0 a	58792.5 a	3.3 a	2.8 bcd	1.8 d	77.5 a	12.93 a	128.08 ab
2	MAXIM 4FS APRON XL CONCEP III CRUISER	2.5 4 40 200	gm ai/hkg gm ai/hkg gm ai/hkg gm ai/hkg	40066.0 a	56615.0 a	3.5 a	3.5 abc	3.5 bc	82.8 a	13.08 a	124.80 a
3	V-10250 CONCEP III V-10170	17.5 40 200	gm ai/hkg gm ai/hkg gm ai/hkg	39195.0 a	57050.5 a	2.5 a	2.3 d	3.3 c	71.3 a	13.00 a	123.98 ab
4	V-10250 CONCEP III V-10170	9.125 40 200	gm ai/hkg gm ai/hkg gm ai/hkg	50518.0 a	55308.5 a	3.8 a	3.8 ab	4.5 ab	88.8 a	12.95 a	123.22 ab
5	V-10240 CONCEP III V-10170	17.5 40 200	gm ai/hkg gm ai/hkg gm ai/hkg	46163.0 a	63583.0 a	3.5 a	3.3 a-d	4.8 a	82.5 a	12.88 a	125.78 b
6	V-10235 CONCEP III V-10170	19.125 40 200	gm ai/hkg gm ai/hkg gm ai/hkg	40937.0 a	53566.5 a	3.0 a	2.5 cd	4.0 abc	71.3 a	12.98 a	116.63 ab
7	V-10250 CONCEP III V-10170	19.125 40 200	gm ai/hkg gm ai/hkg gm ai/hkg	43985.5 a	53566.5 a	3.0 a	3.0 bcd	4.5 ab	78.8 a	12.88 a	122.94 ab
8	MAXIM 4FS APRON XL CONCEP III V-10170	2.5 4 40 200	gm ai/hkg gm ai/hkg gm ai/hkg gm ai/hkg	44421.0 a	64018.5 a	4.0 a	4.3 a	4.5 ab	83.8 a	13.13 a	126.37 ab
LSD (P=.05)				8375.38	18478.76	1.22	0.80	0.80	15.23	0.534	13.222
Standard Deviation				5694.51	12563.90	0.83	0.54	0.54	10.36	0.369	8.990
CV				13.22	21.73	24.98	17.15	14.09	13.02	2.84	7.25
Bartlett's X2				10.653	9.874	2.314	1.329	0.191	4.61	9.052	1.569
P(Bartlett's X2)				0.154	0.196	0.94	0.988	1.00	0.707	0.249	0.98
Replicate F				1.102	1.782	0.061	1.812	0.107	1.933	8.762	3.505
Replicate Prob(F)				0.3702	0.1814	0.9798	0.1758	0.9553	0.1551	0.0006	0.0333
Treatment F				1.961	0.424	1.330	6.076	13.629	1.406	0.236	0.580
Treatment Prob(F)				0.1098	0.8763	0.2851	0.0006	0.0001	0.2549	0.9714	0.7642

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Control of Insects in Grain Sorghum Using CRUISER & PONCHO Trial Variety 84662 at Chickasha

Objectives:

Show the benefits of Poncho and Cruiser on Grain Sorghum at Chickasha, OK.

Conclusions:

This trial was planted on April 17, 2008 at the Chickasha Research Center. Stands were taken at 13, 27 and 32 DAP. Vigor ratings were taken at 32 and 42 DAP with the Cruiser and Poncho having the highest vigor ratings. At 69 DAP both treatments had a higher % heading and bloom. Plot weights showed Cruiser was the best, followed by the untreated and then Poncho.

Crop Description

Crop 1: SORVS Sorghum vulgare saccharatum	Grain Sorghum
Variety: KS5585	Description: Grain Sorghum
BBCH Scale: BGRM	Planting Date: 4/17/08
Planting Method: SEEDED	
Depth, Unit: 1 IN	
Row Spacing, Unit: 30 IN	
Seed Bed: SMOOTH	Soil Temperature, Unit: 62
Soil Moisture: NORMAL	Emergence Date: 4/25/08

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: Sandy Loam
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4	Study Design: Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Planting conditions

Application Date:	4/17/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	73 F
% Relative Humidity:	58
Wind Velocity, Unit:	17 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	62 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	95

Description	Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	% Heading	% Heading			
Rating Date	4/30/08	5/14/08	5/14/08	5/19/08	5/20/08	5/29/08	6/25/08	7/1/08			
Trt-Eval Interval	13 DA-A	27 DA-A	27 DA-A	32 DA-A	32 DA-A	42 DA-A	69 DA-A	75 DA-A			
Trt No.	Treatment Name	Rate	Unit								
1	Untreated			30485.0 a	33533.5 a	3.3 a	53131.0 a	2.8 a	2.8 b	1.0 b	83.8 a
2	Cruiser	200 g ai/100 kg		33969.0 a	33533.5 a	3.3 a	55308.5 a	3.0 a	4.0 a	3.0 ab	96.8 a
3	PONCHO 600	200 g ai/100 kg		35711.0 a	42679.0 a	3.5 a	52260.0 a	4.0 a	4.8 a	6.8 a	97.8 a
LSD (P=.05)				15949.47	10668.52	1.61	4172.92	1.26	0.76	4.07	11.85
Standard Deviation				9217.80	6165.74	0.93	2411.69	0.73	0.44	2.35	6.85
CV				27.61	16.85	27.84	4.5	22.35	11.5	65.61	7.38
Bartlett's X2				0.619	1.594	0.809	0.021	0.764	0.0	6.506	3.337
P(Bartlett's X2)				0.734	0.451	0.667	0.989	0.682	.	0.039*	0.188
Replicate F				0.798	0.302	0.516	57.783	1.000	0.571	1.302	0.575
Replicate Prob(F)				0.5386	0.8236	0.6863	0.0001	0.4547	0.6542	0.3573	0.6521
Treatment F				0.333	2.933	0.097	1.696	3.316	21.000	6.166	5.204
Treatment Prob(F)				0.7290	0.1293	0.9091	0.2608	0.1072	0.0020	0.0351	0.0489

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description	% Bloom	Bushel weight	% Moisture	YIELD Lbs/acre	YIELD Bushels/acre			
Rating Date	7/1/08	8/15/08	8/15/08	8/15/08	8/15/08			
Trt-Eval Interval	75 DA-A	69 DA-A	69 DA-A	120 DA-A	120 DA-A			
Trt No.	Treatment Name	Rate	Unit					
1	Untreated			52.5 b	56.5 a	13.28 a	7351.00 a	122.52 a
2	Cruiser	200 g ai/100 kg		93.8 a	57.5 a	13.70 a	7941.05 a	132.35 a
3	PONCHO 600	200 g ai/100 kg		98.3 a	57.5 a	13.05 a	7661.76 a	127.70 a
LSD (P=.05)				24.74	1.29	1.759	1074.987	17.916
Standard Deviation				14.30	0.75	1.017	621.276	10.354
CV				17.54	1.3	7.62	8.12	8.12
Bartlett's X2				13.793	2.546	6.593	1.176	1.176
P(Bartlett's X2)				0.001*	0.28	0.037*	0.555	0.555
Replicate F				1.524	2.200	0.566	0.106	0.106
Replicate Prob(F)				0.3017	0.1889	0.6571	0.9537	0.9537
Treatment F				12.445	2.400	0.422	0.903	0.903
Treatment Prob(F)				0.0073	0.1715	0.6739	0.4542	0.4541

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Comparison of Sorghum Seed Treatment Packages Trial Bayer SPONARRIZ at Chickasha

Objectives:

Show the effects of 1789 as a herbicide safener as compared to the industry standard Concep III. Provide Stand, vigor and yield data as key evaluation criteria.

Conclusions:

This test was planted on April 17, 2008 at the OSU Chickasha Research Station. Stands at 13 and 26 DAP provided the best numerical stand with Maxim 1789 and Poncho. Vigor ratings at 26, 33, 42 DAP showed an improved vigor of the Vortex and Maxim Poncho treatments over the Maxim Cruiser Concep III standard. Moisture and yields were basically unaffected by the treatments.

Crop Description

Crop 1: SORVS Sorghum vulgare saccharatum Grain Sorghum
Variety: PIO provided by Bayer. **Description:** Grain Sorghum
BECH Scale: BGRM
Planting Method: SEEDED **Rate, Unit:** 68000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 62 F
Soil Moisture: NORMAL **Emergence Date:** 4/25/08
Harvest Date: 8/15/08 **Harvest Equipment:** Massey Plot Combine
Harvested Width, Unit: 8 FT **Harvested Length, Unit:** 24 FT
% Standard Moisture: 14.0 **Moisture Meter:** Dickey John M3 meter
Weighing Equipment: Ohaus scale

Site and Design

Plot Width, Unit: 13.33 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Planting conditions

Application Date:	4/17/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	73 F
% Relative Humidity:	58
Wind Velocity, Unit:	17 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	62 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	95

Description		Plants /acre	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor	% Heading		
Rating Date		4/30/08	5/13/08	5/13/08	5/20/08	5/29/08	6/26/08		
Trt-Eval Interval		13 DA-A	26 DA-A	26 DA-A	33 DA-A	42 DA-A	69 DA-A		
Trt No.	Treatment Name	Rate	Unit						
1	MAXIM XL	3.5	g ai/100 kg	45727.5 a	74470.5 a	2.3 a	2.3 a	2.8 b	55.0 a
	APRON XL	1	g ai/100 kg						
	CONCEP III	41.7	g ai/100 kg						
	CRUISER 5FS	200	g ai/100 kg						
	CF NEUTRAL	65	ml/100 kg						
	PRO-IZED RED COLORANT	19.6	ml/100 kg						
	TALC	62.5	g/100 kg						
2	VORTEX FL	2.5	g ai/100 kg	53131.0 a	74906.0 a	3.3 a	3.8 a	4.3 a	71.3 a
	ALLEGIANCE FL	4	g ai/100 kg						
	CONCEP III	41.7	g ai/100 kg						
	PONCHO 600	200	g ai/100 kg						
	TEST COMPOUND 1	130	ml/100 kg						
	PRO-IZED RED COLORANT	19.6	ml/100 kg						
	TALC	62.5	g/100 kg						
3	VORTEX FL	2.5	g ai/100 kg	45292.0 a	72293.0 a	4.0 a	3.3 a	2.5 b	77.5 a
	ALLEGIANCE FL	4	g ai/100 kg						
	AE 0001789 00 SC43 A1	0.015	mg ai/seed						
	PONCHO 600	200	g ai/100 kg						
	TEST COMPOUND 1	130	ml/100 kg						
	PRO-IZED RED COLORANT	19.6	ml/100 kg						
	TALC	62.5	g/100 kg						
4	MAXIM XL	3.5	g ai/100 kg	55744.0 a	85358.0 a	3.3 a	4.3 a	4.0 a	78.8 a
	APRON XL	1	g ai/100 kg						
	AE 0001789 00 SC43 A1	0.015	mg ai/seed						
	PONCHO 600	200	g ai/100 kg						
	TEST COMPOUND 1	130	ml/100 kg						
	PRO-IZED RED COLORANT	19.6	ml/100 kg						
	TALC	62.5	g/100 kg						
LSD (P=.05)				11089.38	22551.19	1.61	1.58	1.03	19.45
Standard Deviation				6933.13	14099.12	1.00	0.99	0.65	12.16
CV				13.87	18.37	31.48	29.22	19.13	17.22
Bartlett's X2				2.011	0.559	0.31	2.045	1.376	1.491
P(Bartlett's X2)				0.57	0.906	0.958	0.563	0.503	0.684
Replicate F				1.330	0.622	1.717	0.771	0.600	10.099
Replicate Prob(F)				0.3244	0.6185	0.2326	0.5385	0.6310	0.0031
Treatment F				2.308	0.688	2.048	3.000	7.400	3.225
Treatment Prob(F)				0.1450	0.5818	0.1776	0.0877	0.0084	0.0752

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description			Bushel weight	% Moisture	YIELD	YIELD
Rating Date			8/15/08	8/15/08	Lbs/acre	Bushel/acre
Days After First/Last Applic.			120 120	120 120	8/15/08	8/15/08
Trt No.	Treatment Name	Rate	Rate Unit			
1	MAXIM XL	3.5	g ai/100 kg	57.3 a	14.03 a	8910.09 a
	APRON XL	1	g ai/100 kg			148.50 a
	CONCEP III	41.7	g ai/100 kg			
	CRUISER 5FS	200	g ai/100 kg			
	CF NEUTRAL	65	ml/100 kg			
	PRO-IZED RED COLORANT	19.6	ml/100 kg			
	TALC	62.5	g/100 kg			
2	VORTEX FL	2.5	g ai/100 kg	56.8 a	13.80 a	8637.97 a
	ALLEGIANCE FL	4	g ai/100 kg			143.97 a
	CONCEP III	41.7	g ai/100 kg			
	PONCHO 600	200	g ai/100 kg			
	TEST COMPOUND 1	130	ml/100 kg			
	PRO-IZED RED COLORANT	19.6	ml/100 kg			
	TALC	62.5	g/100 kg			
3	VORTEX FL	2.5	g ai/100 kg	57.0 a	13.90 a	8692.44 a
	ALLEGIANCE FL	4	g ai/100 kg			144.87 a
	AE 0001789 00 SC43 A1	0.015	mg ai/seed			
	PONCHO 600	200	g ai/100 kg			
	TEST COMPOUND 1	130	ml/100 kg			
	PRO-IZED RED COLORANT	19.6	ml/100 kg			
	TALC	62.5	g/100 kg			
4	MAXIM XL	3.5	g ai/100 kg	57.0 a	13.80 a	8873.73 a
	APRON XL	1	g ai/100 kg			147.90 a
	AE 0001789 00 SC43 A1	0.015	mg ai/seed			
	PONCHO 600	200	g ai/100 kg			
	TEST COMPOUND 1	130	ml/100 kg			
	PRO-IZED RED COLORANT	19.6	ml/100 kg			
	TALC	62.5	g/100 kg			
LSD (P=.05)			1.07	1.151	1417.062	23.618
Standard Deviation			0.67	0.720	885.954	14.766
CV			1.17	5.18	10.09	10.09
Bartlett's X2			1.098	3.008	2.315	2.315
P(Bartlett's X2)			0.777	0.39	0.51	0.51
Replicate F			2.625	1.035	0.115	0.115
Replicate Prob(F)			0.1145	0.4226	0.9489	0.9489
Treatment F			0.375	0.088	0.091	0.091
Treatment Prob(F)			0.7733	0.9646	0.9632	0.9632

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Evaluate the Control Provided by Latitude Delivering a Lower Rate of Imidacloprid Compared to Commercial Standard (preferably Gaucho) at Chickasha

Objectives:

Evaluate the control provided by Latitude delivering a lower rate of Imidacloprid to commercial standard (Gaucho).

Conclusions:

The plots were planted April 17, 2008 at Chickasha, OK. Stand counts were taken at 13 and 26 DAP. The best final stand was with the Fungicide Check. Vigor ratings resulted in the best vigor with the Fungicide Check + Latitude and the commercial standard. The plots were harvested on Aug 15th and there was no significant difference in the yields. This is no surprise since no insect pests were detected through to thes.

Crop Description

Crop 1: SORVS Sorghum vulgare saccharatum	Grain Sorghum
Variety: KS5585	Description: Grain Sorghum
BECH Scale: BGRM	Planting Date: 4/17/08
Planting Method: SEEDED	Rate, Unit: 68000 S/A
Depth, Unit: 1 IN	
Row Spacing, Unit: 30 IN	
	Soil Temperature, Unit: 62 F
Soil Moisture: NORMAL	Emergence Date: 4/24/08
Harvest Date: 8/15/08	Harvest Equipment: Massey Plot Combine
Harvested Width, Unit: 8 FT	Harvested Length, Unit: 25 FT
	Moisture Meter: Dickey-John M3
Weighing Equipment: Ohaus Scale	

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4	Study Design: Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Planting conditions

Application Date:	4/17/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	73 F
% Relative Humidity:	58
Wind Velocity, Unit:	17 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	62 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	95

Description		Plants /acre	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor	% Bloom
Rating Date		4/30/08	5/13/08	5/13/08	5/20/08	5/29/08	6/26/08
Trt-Eval Interval		13 DA-A	26 DA-A	26 DA-A	33 DA-A	42 DA-A	69 DA-A
Trt No.	Treatment Name	Rate					
		Rate Unit					
1	Check						
	Vortex	0.8 fl oz/cwt	44856.5 a	62712.0 a	4.3 a	3.3 a	2.3 a
	Allegiance FL	0.75 fl oz/cwt					82.5 a
2	Vortex	0.8 fl oz/cwt					
	Allegiance FL	0.75 fl oz/cwt	42243.5 a	49647.0 a	3.8 a	2.8 a	4.3 a
	Latitude	315 g/100 kg					95.0 a
3	Vortex	0.8 fl oz/cwt					
	Allegiance FL	0.75 fl oz/cwt	46598.5 a	59228.0 a	3.8 a	3.8 a	4.3 a
	Poncho	5.1 fl oz/cwt					96.3 a
LSD (P=.05)			10774.44	11930.41	1.82	1.00	1.63
Standard Deviation			6226.96	6895.04	1.05	0.58	0.94
CV			13.97	12.06	26.91	17.76	26.31
Bartlett's X2			0.261	1.292	2.055	1.662	1.273
P(Bartlett's X2)			0.878	0.524	0.358	0.436	0.529
Replicate F			2.598	1.340	0.475	2.250	0.344
Replicate Prob(F)			0.1475	0.3467	0.7111	0.1829	0.7952
Treatment F			0.496	3.851	0.300	3.000	6.000
Treatment Prob(F)			0.6321	0.0840	0.7513	0.1250	0.0370

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description		Bushel weight	% Moisture	Yield Lbs/acre	Yield Bushel/acre
Rating Date		8/15/08	8/15/08	8/15/08	8/15/08
Trt-Eval Interval		120 DA-A	120 DA-A	120 DA-A	120 DA-A
Trt No.	Treatment Name	Rate			
		Rate Unit			
8					
9					
10					
11					
1	Check				
	Vortex	0.8 fl oz/cwt	57.3 a	12.718 a	7489.94 a
	Allegiance FL	0.75 fl oz/cwt			124.83 a
2	Vortex	0.8 fl oz/cwt			
	Allegiance FL	0.75 fl oz/cwt	56.8 a	12.900 a	7204.29 a
	Latitude	315 g/100 kg			120.07 a
3	Vortex	0.8 fl oz/cwt			
	Allegiance FL	0.75 fl oz/cwt	57.5 a	12.825 a	7837.51 a
	Poncho	5.1 fl oz/cwt			130.63 a
LSD (P=.05)			1.55	0.5230	1314.305
Standard Deviation			0.90	0.3023	759.587
CV			1.57	2.36	10.11
Bartlett's X2			0.809	0.813	1.086
P(Bartlett's X2)			0.667	0.666	0.581
Replicate F			0.690	2.033	0.793
Replicate Prob(F)			0.5907	0.2109	0.5407
Treatment F			0.724	0.367	0.697
Treatment Prob(F)			0.5227	0.7071	0.5343

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Intentionally Left Blank

Tipton Cotton



Intentionally Left Blank

Bayer Cotton Seed Treatments Trial at Tipton with Biological Nematicide

Objectives:

Is there an increase in efficacy, plant health, or yield where L1460-A is added to Aeris or Gaucho Grande? Does the new combination of Aeris and L1460-B equal that of the tank mix system? Does the addition cause any phytotoxic or vigor concerns?

Conclusions:

Plant stands were taken at 8 DAP and 15 DAP. At 8 DAP stands ranged from 22,000/a to 25,750 plants/a with no significant difference. At 15 DAP the range was 24,500 to 28,500 plants/a. Damage ratings (1=best, 5=dead) were taken at 14 DAP and ranged from 1.0-1.8 with no significant difference measured.

Yields were not taken in this trial since a spray drift of Ally occurred on July 3rd and heavily damaged the terminal growth of the plants and rendered yield results as unacceptable.

Crop Description

Crop 1: GOSHI Gossypium hirsutum cotton
Variety: Fiber Max treated by BCS
BBCH Scale: BCOT **Planting Date:** 5/19/08
Planting Method: JD 1700 planter
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 81 F
Soil Moisture: NORMAL **Emergence Date:** 5/26/08

Pest Description

Pest 1 Type: I **Code:** FRANSP *Frankliniella* sp.
Common Name: *Frankliniella* sp.
Description: Description Western Flower Thrips

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/19/08
Time of Day:	AM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	93 F
% Relative Humidity:	27
Wind Velocity, Unit:	27 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	81 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Pest Code			Stand Count	Thrip Damage	Stand Count
Rating Date			5/27/08	6/3/08	6/3/08
Rating Unit			/acre	1-5	/acre
Trt-Eval Interval			8 DA-A	14 DA-A	15 DA-A
Trt No.	Treatment Name	Rate	Rate Unit		
1	BAYTAN 30 VORTEX FL ALLEGIANCE FL GAUCHO GRANDE CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT	32.5 2.5 15.6 0.375 500 25 522 65	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg	24500.0 a	1.0 a 26250.0 a
2	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT	32.5 2.5 15.6 0.75 500 25 522 65	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg	25000.0 a	1.8 a 28500.0 a
3	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	23500.0 a	1.0 a 27500.0 a
4	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	22000.0 a	1.0 a 24500.0 a
5	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	23750.0 a	1.0 a 25750.0 a

Pest Code			Stand Count	Thrip Damage	Stand Count	
Rating Date			5/27/08	6/3/08	6/3/08	
Rating Unit			/acre	1-5	/acre	
Trt-Eval Interval			8 DA-A	14 DA-A	15 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit			
6	BAYTAN 30	32.5	ml/100 kg	23250.0 a	1.0 a	25500.0 a
	VORTEX FL	2.5	g ai/100 kg			
	ALLEGIANCE FL	15.6	g ai/100 kg			
	CALCIUM CARBONATE	500	g/100 kg			
	SUSPENDING AGENT	25	g/100 kg			
	PRECISE S FINISHER 1005	522	ml/100 kg			
	PRO-IZED BLUE COLORANT	65	ml/100 kg			
	TEST COMPOUND 1	1	ml/100 kg			
7	BAYTAN 30	32.5	ml/100 kg	24250.0 a	1.3 a	25500.0 a
	VORTEX FL	2.5	g ai/100 kg			
	ALLEGIANCE FL	15.6	g ai/100 kg			
	GAUCHO GRANDE	0.375	mg ai/seed			
	CALCIUM CARBONATE	500	g/100 kg			
	SUSPENDING AGENT	25	g/100 kg			
	PRECISE S FINISHER 1005	522	ml/100 kg			
	PRO-IZED BLUE COLORANT	65	ml/100 kg			
	BIOLOGICAL NEMATICIDE	1	g/100 kg			
8	BAYTAN 30	32.5	ml/100 kg	25750.0 a	1.5 a	27500.0 a
	VORTEX FL	2.5	g ai/100 kg			
	ALLEGIANCE FL	15.6	g ai/100 kg			
	CALCIUM CARBONATE	500	g/100 kg			
	SUSPENDING AGENT	25	g/100 kg			
	PRECISE S FINISHER 1005	522	ml/100 kg			
	PRO-IZED BLUE COLORANT	65	ml/100 kg			
	CRUISER 600FS	0.34	mg ai/seed			
	AVICTA 500FS	0.15	mg ai/seed			
LSD (P=.05)			4018.30	0.98	3749.77	
Standard Deviation			2732.08	0.67	2549.51	
CV			11.38	56.27	9.67	
Bartlett's X2			7.028	3.002	5.203	
P(Bartlett's X2)			0.426	0.223	0.635	
Replicate F			2.155	0.840	0.872	
Replicate Prob(F)			0.1237	0.4872	0.4714	
Treatment F			0.708	0.760	1.099	
Treatment Prob(F)			0.6656	0.6261	0.3994	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Cruiser vs Guacho Grande at Tipton

Objectives:

Show the performance of untreated non-insecticide treated seed verses Gaucho Grande and Cruiser on three varieties of cotton.

Conclusions:

Final stands were taken 15 DAP and numerically all non-insecticide seed provided numerically better but not significantly better stands. In addition all non-insecticide treated seed showed damage ratings (1=no damage, 5=dead plant) of 4 versus 1.0-1.8 on the insecticide treated seed.

No yields were taked due to Ally herbicide drift that killed the plant terminals that would result in unreliable data.

Crop Description

Crop 1: GOSHI Gossypium hirsutum cotton
Variety: Fiber Max treated by BCS
BBCH Scale: BCOT **Planting Date:** 5/19/08
Planting Method: JD 1700 planter
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 81 F
Soil Moisture: NORMAL **Emergence Date:** 5/26/08

Pest Description

Pest 1 Type: I **Code:** FRANSP Frankliniella sp.
Common Name: Frankliniella sp.
Description: Description Western Flower Thrips

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/19/08
Time of Day:	AM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	93 F
% Relative Humidity:	27
Wind Velocity, Unit:	27 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	81 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Pest Code			Stand Count	Thrip Damage Rating	Stand Count	
Rating Date			5/27/08	6/3/08	6/3/08	
Rating Data Type			Plants	Damage	Plants	
Rating Unit			/acre	1-5	/acre	
Trt-Eval Interval			8 DA-A	15 DA-A	15 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit			
1	Untreated FM 9180 B2F			23500.0 a	4.0 a	24000.0 a
2	GAUCHO GRANDE FM 9180B2F	0.375	g ai/100 kg	19250.0 a	1.0 b	20500.0 a
3	CRUISER FM 9180 B2F	0.32	g ai/100 kg	21500.0 a	1.3 b	21750.0 a
4	Untreated DP 141 B2RF			21750.0 a	4.0 a	24000.0 a
5	GAUCHO GRANDE DP 141 B2RF	0.375	g ai/100 kg	19000.0 a	1.0 b	22250.0 a
6	CRUISER DP 141 BRF	0.32	g ai/100 kg	19750.0 a	1.0 b	22750.0 a
7	Untreated PHY 375 B2RF			23000.0 a	4.0 a	23000.0 a
8	GAUCHO GRANDE PHY 375B2RF	0.375	g ai/100 kg	21250.0 a	1.8 b	22750.0 a
9	CRUISER PHY 375 WRF	0.32	g ai/100 kg	22750.0 a	1.5 b	24250.0 a
LSD (P=.05)				3925.97	0.95	4561.51
Standard Deviation				2690.00	0.65	3125.46
CV				12.63	30.04	13.7
Bartlett's X2				4.882	3.28	4.674
P(Bartlett's X2)				0.77	0.35	0.792
Replicate F				11.704	1.836	5.061
Replicate Prob(F)				0.0001	0.1676	0.0074
Treatment F				1.518	18.443	0.600
Treatment Prob(F)				0.2030	0.0001	0.7685

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Aeris Seed-Applied System Nematodes and Early Season Pests SPO8NARLLA at Tipton

Objective: Do these trials reflect the same level of performance as noted in the surrounding growers fields? Did the addition of Temik 15G at planting provide enhanced pesticidal activity or yield?

Conclusions: Plant stands at 8 DAP showed significantly better yields with Aeris + Temik @ 5 lbs and Temik at 3.5 lbs. The final stands were different at 15 DAP with the untreated showing the significantly best stand than all other treatments. A damage rating (1=no damage, 5=dead plant) at 13 DAP provided significant differences between the untreated at 4.3 verses ratings of 1-3 in other treatments. Nematodes from soil samples at this site on June 19th, showed that the following was present: 180 Root-knot, 40 Lesion, 20 Spiral, and 40 Reniform nematodes.

No yields were taken from this trial due to unappreciated drift of Ally herbicide on July 13 which burned the terminals and rendered the yield data as unreliable.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* cotton
Variety: Fiber Max treated by BCS
BBCH Scale: BCOT **Planting Date:** 5/19/08
Planting Method: JD 1700 planter
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 81 F
Soil Moisture: NORMAL **Emergence Date:** 5/26/08

Pest Description

Pest 1 Type: I **Code:** FRANSP *Frankliniella* sp.
Common Name: Frankliniella sp.
Description: Description Western Flower Thrips

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/19/08
Time of Day:	AM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	93 F
% Relative Humidity:	27
Wind Velocity, Unit:	27 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	81 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Pest Code				Stand Count	Thrip Damage Rating	Stand Count
Rating Date				5/27/08	6/3/08	6/3/08
Rating Data Type				Plants	Damage	Plants
Rating Unit				/acre	1-5	/acre
Trt-Eval Interval				8 DA-A	15 DA-A	15 DA-A
Trt No.	Treatment Name	Rate	Rate Unit			
1	Untreated ATB			24750.0 ab	4.3 a	27500.0 a
2	Aeris Seed Applied	0.75	mg ai/seed	23500.0 ab	1.0 b	25000.0 ab
3	Aeris Seed Applied Temik	0.75 3.5	mg ai/seed lb/a	26250.0 a	1.0 b	26250.0 ab
4	Aeris Seed Applied Temik	0.75 5.0	mg ai/seed lb/a	19250.0 b	1.0 b	19750.0 b
5	Temik	3.5	lb/a	26500.0 a	3.0 ab	26500.0 ab
6	Temik	5	lb/a	22000.0 ab	1.5 b	26250.0 ab
7	Aeris Seed Applied Temik	0.75 5	mg ai/seed lb/a	21500.0 ab	1.0 b	21750.0 ab
LSD (P=.05)				4449.03	1.52	4540.61
Standard Deviation				2994.70	1.02	3056.35
CV				12.8	56.09	12.37
Bartlett's X2				1.845	5.958	8.402
P(Bartlett's X2)				0.933	0.051	0.21
Replicate F				0.588	0.308	1.172
Replicate Prob(F)				0.6307	0.8193	0.3478
Treatment F				3.149	6.445	3.510
Treatment Prob(F)				0.0273	0.0009	0.0178

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

08-171-037

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REPORT NUMBER

NEMATODE ASSAY REPORT

June 19, 2008

Page 1

OSU - Jerry Goodson
 16721 US Hwy. 283
 Altus, OK 73521

Grower: Stacy Smith

				RELATIVE ABUNDANCE OF NEMATODES RECOVERED PER 100 cc OF SOIL									
Lab No:	Sample ID	Crop History:	Crop to be Grown:	Root Knot	Lesion	Stunt	Spiral	Ring	Stubby Root	Lance	Reniform	Cyst	Recommendations (See Explanation Below)
N-9127	Bayer Seed Treatment-Altus			120	40	20				20	20		
N-9128	Beltwid-Altus			240	40						40		
N-9129	Bayer Seed Treatment-Tipton	←		180	40		20				40		

ABOUT THE NUMBERS ON YOUR NEMATODE ASSAY REPORT

<p>You may wonder why certain nematodes that occur in relatively low numbers are considered hazardous to your crops, while others at high levels are apparently ignored. The explanation, stated very simply, is that many factors must be considered before the importance of numbers can be determined. These include: kind of nematode, crop variety, time of year, previous crops, soil factors, other nematodes present, and plant disease history. Briefly, these factors have been carefully weighed and a recommendation made on the total situation known.</p> <p>* Recommendations:</p> <p>A - Production of the crop to be grown should not be affected by the kinds and numbers of nematodes in this assay.</p> <p>B - The population of nematodes found may cause crop damage and Chemical soil treatment may be profitable, especially should growing conditions be unfavorable.</p> <p>C - The nematode population found indicates that chemical soil treatment would be profitable.</p> <p>D - Nematode-resistant variety is recommended.</p> <p>*The recommendations is based upon assays of the soil samples submitted are offered only as a guide in helping you plant your nematode control program.</p>	<p>To help you interpret your own report, note the meaning of asterisks ** or *** next to some of the numbers.</p> <p>** Slight to moderate hazard, but if present along with others in this category, may contribute to definite or serious hazard.</p> <p>*** Definite or serious hazard to crop indicated</p> <p>NO ASTERISK BY A NUMBER: Not considered a hazard.</p> <p>NO NUMBER IN COLUMN: May mean this kind of nematode was not detectable rather than totally absent.</p>
--	---

* Recommendations:

A - Production of the crop to be grown should not be affected by the kinds and numbers of nematodes in this assay.

B - The population of nematodes found may cause crop damage and Chemical soil treatment may be profitable, especially should growing conditions be unfavorable.

C - The nematode population found indicates that chemical soil treatment would be profitable.

D - Nematode-resistant variety is recommended.

*The recommendations is based upon assays of the soil samples submitted are offered only as a guide in helping you plant your nematode control program.

Remarks:

*TNTC = too numerous to count
 *Use pre-plant nematicide treatment
 *ND - None Detected to be plant pathogen

Signature:

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A&L Plains Ag Labs, Inc

Tipton Corn & Grain Sorghum



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Control of Insects Using VC1713 and VC1729 Formulations of V10170 5FS Trial Protocol 68.01 at Tipton

Objectives:

Build database on VC1713 and VC1729 formulations of V10170 5FS for corn market support. Field test to establish insect control vs commercial standard with insect pests and remain aware of new insect pest issues. Take yield for general field performance and value as ROI.

Conclusions:

This trial was planted on April 16, 2008 with a John Deere 1700 MaxEmerge planter in a randomized complete block design 4 x 40" rows by 30 ft/treatment x 3 replications at the OSU Agronomy Research Station at Tipton. The ambient temperature was 71 Degrees F and the soil temperature was 63 degrees F with 25 mph wind. Stands were taken at 14 DAP and no significant difference was found although the V-10170 at 1729 mg/kg numerically had the best stand. At 33 DAP The V-10170 continued to have the best numerical stand although not significant.

A vigor rating from 1-10 (1=dead, 10=best) was taken 33 DAP and no significant vigor difference was noted. Vigor ratings of 1-5 (1=dead, 5=best) and no significant difference was noted at 36 and or 55 DAP. The only insects noted were corn leaf aphids at 55 DAP although no significant difference was found.

Yields were taken at 111 DAP on August 5, 2008. The untreated provided the best numerical yield although there was no significant statistical difference in the yields.

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
BECH Scale: BCOR

Site and Design

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 30 FT
Replications: 3 **Study Design:** Randomized Complete Block

Planting conditions

Application Date:	4/16/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	72 F
% Relative Humidity:	64
Wind Velocity, Unit:	25 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	63 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	20

Part Rated			Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor	
Rating Date			4/30/08	5/13/08	5/13/08	5/19/08	5/19/08	5/22/08	6/10/08	
Rating Data Type			Plants	Plants	seedling	Plants	seedling	Vigor	Vigor	
Trt-Eval Interval			14 DA-A	27 DA-A	27 DA-A	33 DA-A	33 DA-A	36 DA-A	55 DA-A	
Trt No.	Treatment Name	Rate	Unit							
1	Untreated			37743.3 a	38324.0 a	6.0 a	34259.3 a	6.7 a	2.3 a	4.0 a
2	PONCHO 600	0.250	g ai/100 kg	37743.3 a	27872.0 c	6.0 a	37743.3 a	6.7 a	3.7 a	3.7 a
3	Cruiser	0.250	g ai/100 kg	33098.0 a	34259.3 ab	5.7 a	36582.0 a	6.7 a	3.3 a	3.3 a
4	V-10170	0.250	g ai/100 kg	37162.7 a	36582.0 ab	6.0 a	37162.7 a	6.7 a	3.3 a	4.0 a
5	V-10170	0.350	g ai/100 kg	41808.0 a	30775.3 bc	5.0 a	38324.0 a	6.3 a	3.7 a	4.7 a
6	V-10710	0.500	g ai/100 kg	30775.3 a	39485.3 a	6.0 a	35420.7 a	6.7 a	3.0 a	3.7 a
LSD (P=.05)				7841.01	5076.95	1.65	5609.46	1.08	1.81	0.98
Standard Deviation				4310.25	2790.83	0.91	3083.55	0.60	0.99	0.54
CV				11.85	8.08	15.69	8.43	9.02	30.86	13.82
Bartlett's X2				4.242	3.394	0.476	0.888	0.0	3.93	1.03
P(Bartlett's X2)				0.515	0.494	0.788	0.926	1.00	0.416	0.905
Replicate F				2.241	3.961	0.270	0.851	0.625	0.730	3.077
Replicate Prob(F)				0.1569	0.0541	0.7686	0.4557	0.5549	0.5058	0.0909
Treatment F				2.454	7.831	0.595	0.723	0.156	0.764	2.154
Treatment Prob(F)				0.1064	0.0031	0.7054	0.6211	0.9731	0.5959	0.1413

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Part Rated			Aphids /5 plants	% Turn out	Yield Lbs/acre	
Rating Date			10/6/08	5/8/08	5/8/08	
Trt-Eval Interval			55 DA-A	111 DA-A	111 DA-A	
Trt No.	Treatment Name	Rate	Unit			
1	Untreated			6.7 a	0.70 a	432.93 a
2	PONCHO 600	0.250	g ai/100 kg	3.3 a	0.73 a	415.43 a
3	Cruiser	0.250	g ai/100 kg	0.0 a	0.70 a	246.81 a
4	V-10170	0.250	g ai/100 kg	0.0 a	0.70 a	297.65 a
5	V-10170	0.350	g ai/100 kg	0.0 a	0.73 a	488.76 a
6	V-10710	0.500	g ai/100 kg	0.0 a	0.72 a	321.41 a
LSD (P=.05)			5.75	0.075	244.259	
Standard Deviation			3.16	0.041	134.270	
CV			189.74	5.75	36.57	
Bartlett's X2			0.0	6.049	11.34	
P(Bartlett's X2)			.	0.301	0.045*	
Replicate F			1.667	2.817	0.324	
Replicate Prob(F)			0.2373	0.1070	0.7305	
Treatment F			2.333	0.348	1.426	
Treatment Prob(F)			0.1191	0.8724	0.2954	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Control of Insects in Grain Sorghum Using CRUISER & PONCHO Trial Variety 84662 Valent 86.01 at Tipton

Objectives:

Demonstrate V10170 performance in Field vs Cruiser & Poncho Systems. Determine longevity of protection that the seed treatments provide as compared to the commercial standards. Note early plant stand and seed safety in the field.

Conclusions:

At 13 DAP the Cruiser had the best numerical although not statistically significant stand. At 38 DAP there was no statistical significant difference in stand although trt #4 had the best numerical stand in addition #4 (V-10170 200gmai/hkg(vc#1713)) had the best vigor rating at 28 DAP and 33 DAP on a vigor scale of 1-10. At 33 DAP the Cruiser system had the best although not significant stand at 60970 plants/acre.

No yields were taken from this trial as it received a drift of Ally in June which deterred the stand and made it unusable and unreliable.

Crop Description

Crop 1: SORVU Sorghum vulgare	Grain Sorghum
Variety: KS5585	Description: Grain Sorghum
BBCH Scale: BGRM	Planting Date: 4/16/08
Planting Method: SEEDED	Rate, Unit: 56000 P/A
Depth, Unit: 1 IN	
Row Spacing, Unit: 30 IN	
Seed Bed: SMOOTH	Soil Temperature, Unit: 63 F
Soil Moisture: NORMAL	Emergence Date: 4/25/08

Site and Design

Plot Width, Unit: 13.33 FT
Plot Length, Unit: 30 FT
Replications: 4 **Study Design:** Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Planting conditions

Application Date:	4/16/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	72 F
% Relative Humidity:	64
Wind Velocity, Unit:	25 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	63 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	20

Description	Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor			
Rating Date	4/30/08	5/14/08	5/14/08	5/19/08	5/19/08			
Trt-Eval Interval	13 DA-A	28 DA-A	28 DA-A	33 DA-A	33 DA-A			
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5
1	Untreated			47469.5 a	41372.5 a	5.5 a	58357.0 a	5.3 a
2	Cruiser	200	gm ai/hkg	54437.5 a	39195.0 a	5.0 a	60970.0 a	6.0 a
3	PONCHO 600	200	gm ai/hkg	47905.0 a	40066.0 a	5.8 a	57921.5 a	5.3 a
4	V-10170 1713	200	gm ai/hkg	49211.5 a	44856.5 a	6.0 a	57486.0 a	6.0 a
5	V-10170 1729	200	gm ai/hkg	48340.5 a	41372.5 a	6.3 a	58792.5 a	5.0 a
LSD (P=.05)				10691.37	9111.94	1.15	5063.07	1.20
Standard Deviation				6938.91	5913.83	0.75	3286.03	0.78
CV				14.03	14.29	13.11	5.6	14.18
Bartlett's X2				3.533	1.327	3.921	1.968	2.669
P(Bartlett's X2)				0.473	0.857	0.417	0.742	0.263
Replicate F				0.286	0.606	10.627	4.103	1.205
Replicate Prob(F)				0.8348	0.6237	0.0011	0.0322	0.3497
Treatment F				0.674	0.531	1.657	0.681	1.438
Treatment Prob(F)				0.6224	0.7152	0.2241	0.6180	0.2808

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Determine AI Protection to Seed/Seedling in Securing Stand when Combined with V10170 Trial Valent 86.13 at Tipton

Objectives:

Determine AI protection to seed/seedling in securing stand when combined with V10170; strengths/weaknesses of fungicide options. Assess speed of stand to determine if germ delays exist in AI candidate combinations. Yield results in relation to stand population vs commercial standard.

Conclusions:

The best final stand was attained by No.2 Maxim + Apron+ Cruiser, No.3 V-10250+V10170, and No.4 V-10250+V10170 and No. 8 Maxim Apron Concep + V10170. The best vigor rating on a 1-10 scale was No. 2, No.3, and No.4 at 33 DAP. Another evaluator used the 1-5 scale on 36 & 55 DAP and found No. 4, No. 5 the best with No. 8 added in the 55 DAP evaluation. The least number of corn leaf aphids were found on No. 2 and No. 3 at 55 DAP although the populations were not high enough to obtain a good comparison. The highest % headed plants at 71 DAP were No's. 1, 5, 6, and 8. Yields were not taken due to the negative effects of an Ally drift into the plots.

Crop Description

Crop 1: SORVC Sorghum vulgare var. caffrorum Kaffir
Variety: KS5585 **Description:** Grain Sorghum
BBCH Scale: BGRM **Planting Date:** 4/16/08
Planting Method: SEEDED **Rate, Unit:** 57000 P/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Seed Bed: SMOOTH **Soil Temperature, Unit:** 63 F
Soil Moisture: NORMAL **Emergence Date:** 4/25/08

Pest Description

Pest 1 Type: I **Code:** RHOPMA Rhopalosiphum maidis
Common Name: Cereal leaf aphid
Description: Corn Leaf Aphid

Site and Design

Plot Width, Unit: 13.33 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Moisture and Weather Conditions

Overall Moisture Conditions: NORMAL
Closest Weather Station: OSU Tipton

Planting conditions

Application Date:	4/16/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	72 F
% Relative Humidity:	64
Wind Velocity, Unit:	25 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	63 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	20

Description	Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor	Rhopalosiph /5 plants			
Rating Date	4/30/08	5/14/08	5/14/08	5/19/08	5/19/08	5/22/08	6/10/08	6/10/08			
Trt-Eval Interval	13 DA-A	28 DA-A	28 DA-A	33 DA-A	33 DA-A	36 DA-A	55 DA-A	55 DA-A			
Trt No.	Treatment Name	Rate	Rate Unit								
1	V-10170 CONCEP III	200 40	g ai/100 kg g ai/100 kg	45727.5 a	40501.5 a	5.3 a	57921.5 a	5.3 a	3.0 a	4.3 a	2.5 a
2	MAXIM 4FS APRON XL CONCEP III CRUISER	2.5 4 40 200	g ai/100 kg g ai/100 kg g ai/100 kg g ai/100 kg	42243.5 a	43114.5 a	5.0 a	58357.0 a	5.8 a	3.3 a	3.8 a	0.0 a
3	V-10250 CONCEP III V-10170	17.5 40 200	g ai/100 kg g ai/100 kg g ai/100 kg	35275.5 a	41372.5 a	4.8 a	54437.5 a	6.0 a	2.0 a	3.8 a	0.0 a
4	V-10250 CONCEP III V-10170	9.125 40 200	g ai/100 kg g ai/100 kg g ai/100 kg	40501.5 a	43985.5 a	5.3 a	62712.0 a	5.8 a	4.3 a	4.5 a	2.5 a
5	V-10240 CONCEP III V-10170	17.5 40 200	g ai/100 kg g ai/100 kg g ai/100 kg	40501.5 a	41808.0 a	5.0 a	52260.0 a	5.3 a	4.3 a	4.5 a	2.5 a
6	V-10235 CONCEP III V-10170	19.125 40 200	g ai/100 kg g ai/100 kg g ai/100 kg	35711.0 a	40501.5 a	4.3 a	54437.5 a	5.3 a	2.3 a	3.5 a	5.0 a
7	V-10250 CONCEP III V-10170	19.125 40 200	g ai/100 kg g ai/100 kg g ai/100 kg	43985.5 a	43985.5 a	5.3 a	58357.0 a	5.5 a	3.5 a	4.0 a	2.5 a
8	MAXIM 4FS APRON XL CONCEP III V-10170	2.5 4 40 200	g ai/100 kg g ai/100 kg g ai/100 kg g ai/100 kg	41808.0 a	44421.0 a	5.8 a	53566.5 a	5.8 a	3.8 a	4.5 a	5.0 a
LSD (P=.05)				8372.46	7262.88	1.26	10968.49	1.16	1.59	0.65	8.02
Standard Deviation				5692.52	4938.11	0.86	7457.59	0.79	1.08	0.44	5.46
CV				13.98	11.63	16.9	13.2	14.21	33.02	10.87	218.22
Bartlett's X2				6.178	2.994	5.329	9.088	7.664	4.009	1.125	2.711
P(Bartlett's X2)				0.519	0.886	0.62	0.246	0.264	0.779	0.993	0.744
Replicate F				1.475	0.363	3.244	3.458	2.333	1.162	6.895	0.840
Replicate Prob(F)				0.2501	0.7804	0.0425	0.0348	0.1032	0.3476	0.0021	0.4872
Treatment F				1.659	0.427	1.049	0.849	0.543	2.399	3.226	0.480
Treatment Prob(F)				0.1739	0.8746	0.4286	0.5608	0.7924	0.0570	0.0175	0.8382

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description				% Headed
Rating Date				6/26/08
Trt-Eval Interval				71 DA-A
Trt No.	Treatment Name	Rate	Rate Unit	
1	V-10170	200	g ai/100 kg	11.3 a
	CONCEP III	40	g ai/100 kg	
2	MAXIM 4FS	2.5	g ai/100 kg	5.5 a
	APRON XL	4	g ai/100 kg	
	CONCEP III	40	g ai/100 kg	
	CRUISER	200	g ai/100 kg	
3	V-10250	17.5	g ai/100 kg	5.8 a
	CONCEP III	40	g ai/100 kg	
	V-10170	200	g ai/100 kg	
4	V-10250	9.125	g ai/100 kg	5.3 a
	CONCEP III	40	g ai/100 kg	
	V-10170	200	g ai/100 kg	
5	V-10240	17.5	g ai/100 kg	11.5 a
	CONCEP III	40	g ai/100 kg	
	V-10170	200	g ai/100 kg	
6	V-10235	19.125	g ai/100 kg	10.0 a
	CONCEP III	40	g ai/100 kg	
	V-10170	200	g ai/100 kg	
7	V-10250	19.125	g ai/100 kg	6.5 a
	CONCEP III	40	g ai/100 kg	
	V-10170	200	g ai/100 kg	
8	MAXIM 4FS	2.5	g ai/100 kg	11.3 a
	APRON XL	4	g ai/100 kg	
	CONCEP III	40	g ai/100 kg	
	V-10170	200	g ai/100 kg	
LSD (P=.05)				8.46
Standard Deviation				5.75
CV				68.7
Bartlett's X2				5.123
P(Bartlett's X2)				0.645
Replicate F				2.424
Replicate Prob(F)				0.0943
Treatment F				0.990
Treatment Prob(F)				0.4647

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Comparison of Sorghum Seed Treatment Packages Trial Bayer SPONARRIZ - Degree At Tipton

Objectives:

Show the effect of 1789 as a herbicide safener as compared to the industry standard Concep III. Provide stand, vigor and yield data as key evaluation criteria.

Conclusions:

The herbicide Degree was applied to these plots 3 DAP at a 2X rate to test the safening effects of 1789. Stands were taken at 8, 22, and 27 DAP. 1789 + Poncho had the best stand at 8 and 22 DAP, At 27 DAP Maxim + 1789 had the best stand. Vigor ratings at 22 and 27 DAP showed the best vigor with 1789 + Poncho on the 1-10 scale. On 30 and 49 DAP vigor was best with Poncho + Concep III and Maxim Poncho/1789. The % headed plants at 66 DAP was highest with the untreated.

No yields were taken at this location due to the negative impact of Ally drift on grain fill and yield.

Crop Description

Crop 1: SORVS Sorghum vulgare saccharatum	Grain Sorghum
Variety: Pio provided by Bayer	Description: Grain Sorghum
BBCH Scale: BGRM	Planting Date: 4/22/08
Planting Method: SEEDED	Rate, Unit: 65000 P/A
Depth, Unit: 1 IN	
Row Spacing, Unit: 30 IN	
Seed Bed: SMOOTH	Soil Temperature, Unit: 69 F
Soil Moisture: NORMAL	Emergence Date: 5/3/08

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4	Study Design: Randomized Complete Block

Soil Description

Description Name: sandy loam

Application Description

	A	B
Application Date:	4/22/08	4/25/08
Time of Day:	PM	AM
Application Method:	IMPREG	SPRAY
Application Timing:	ATPLAN	Pre emerg
Application Placement:	INFURR	Spray
Applied By:	Terry Pitts	
Air Temperature, Unit:	74 F	59 F
% Relative Humidity:	64	61
Wind Velocity, Unit:	17 mph	11 mph
Dew Presence (Y/N):	n	n
Water Hardness:	na	
Soil Temperature, Unit:	69 F	67 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	75	0

Description		Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor		
Rating Date		4/30/08	5/14/08	5/14/08	5/19/08	5/19/08	5/22/08	6/10/08		
Trt-Eval Interval		8 DA-A	22 DA-A	22 DA-A	27 DA-A	27 DA-A	30 DA-A	49 DA-A		
Trt No.	Treatment Name	Rate	Unit							
1	MAXIM XL	3.5	g ai/100 kg	30920.5 a	37453.0 a	3.3 a	51824.5 a	5.8 a	2.8 a	4.0 a
	APRON XL	1	g ai/100 kg							
	CONCEP III	41.7	g ai/100 kg							
	CRUISER 5FS	200	g ai/100 kg							
	CF NEUTRAL	65	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
2	VORTEX FL	2.5	g ai/100 kg	34840.0 a	32662.5 a	3.3 a	52260.0 a	5.0 a	3.8 a	4.3 a
	ALLEGIANCE FL	4	g ai/100 kg							
	CONCEP III	41.7	g ai/100 kg							
	PONCHO 600	200	g ai/100 kg							
	TEST COMPOUND 1	130	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
3	VORTEX FL	2.5	g ai/100 kg	37888.5 a	40501.5 a	3.5 a	50953.5 a	5.8 a	3.0 a	4.0 a
	ALLEGIANCE FL	4	g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015	mg ai/seed							
	PONCHO 600	200	g ai/100 kg							
	TEST COMPOUND 1	130	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
4	MAXIM XL	3.5	g ai/100 kg	37017.5 a	36582.0 a	3.3 a	59663.5 a	5.0 a	3.0 a	4.5 a
	APRON XL	1	g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015	mg ai/seed							
	PONCHO 600	200	g ai/100 kg							
	TEST COMPOUND 1	130	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
LSD (P=.05)		15515.13	11665.12	1.42	9897.42	1.39	1.90	1.26		
Standard Deviation		9700.13	7293.09	0.89	6187.92	0.87	1.19	0.79		
CV		27.58	19.82	26.74	11.53	16.11	38.09	18.77		
Bartlett's X2		12.739	0.637	0.865	2.195	4.213	1.516	1.255		
P(Bartlett's X2)		0.005*	0.888	0.834	0.533	0.239	0.678	0.534		
Replicate F		0.851	0.052	0.929	4.773	1.222	0.176	1.180		
Replicate Prob(F)		0.5002	0.9832	0.4655	0.0295	0.3569	0.9097	0.3707		
Treatment F		0.411	0.784	0.080	1.696	1.000	0.529	0.371		
Treatment Prob(F)		0.7494	0.5321	0.9694	0.2369	0.4363	0.6732	0.7761		

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description			% Heading
Rating Date			6/30/08
Trt-Eval Interval			49 DA-A
Trt No.	Treatment Name	Rate Rate Unit	
1	MAXIM XL	3.5 g ai/100 kg	8.8 a
	APRON XL	1 g ai/100 kg	
	CONCEP III	41.7 g ai/100 kg	
	CRUISER 5FS	200 g ai/100 kg	
	CF NEUTRAL	65 ml/100 kg	
	PRO-IZED RED COLORANT	19.6 ml/100 kg	
	TALC	62.5 g/100 kg	
2	VORTEX FL	2.5 g ai/100 kg	6.3 a
	ALLEGIANCE FL	4 g ai/100 kg	
	CONCEP III	41.7 g ai/100 kg	
	PONCHO 600	200 g ai/100 kg	
	TEST COMPOUND 1	130 ml/100 kg	
	PRO-IZED RED COLORANT	19.6 ml/100 kg	
	TALC	62.5 g/100 kg	
3	VORTEX FL	2.5 g ai/100 kg	2.5 a
	ALLEGIANCE FL	4 g ai/100 kg	
	AE 0001789 00 SC43 A1	0.015 mg ai/seed	
	PONCHO 600	200 g ai/100 kg	
	TEST COMPOUND 1	130 ml/100 kg	
	PRO-IZED RED COLORANT	19.6 ml/100 kg	
	TALC	62.5 g/100 kg	
4	MAXIM XL	3.5 g ai/100 kg	6.8 a
	APRON XL	1 g ai/100 kg	
	AE 0001789 00 SC43 A1	0.015 mg ai/seed	
	PONCHO 600	200 g ai/100 kg	
	TEST COMPOUND 1	130 ml/100 kg	
	PRO-IZED RED COLORANT	19.6 ml/100 kg	
	TALC	62.5 g/100 kg	
LSD (P=.05)			13.99
Standard Deviation			8.75
CV			144.28
Bartlett's X2			5.939
P(Bartlett's X2)			0.115
Replicate F			0.169
Replicate Prob(F)			0.9149
Treatment F			0.356
Treatment Prob(F)			0.7862

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Comparison of Sorghum Seed Treatment Packages Trial Bayer SPONARRIZ - BICEP II MAGNUM at Tipton

Conclusions:

The plots were treated with a 2X rate of Bicep-Atrazine 2 Days after planting. Stands were taken at 14, 28, and 33 DAP. The Vortex Poncho Concep III and Maxim Poncho 1789 had the best stands. The best final stand was with Maxim Poncho + 1789. Vigor ratings at 28, 33 and 36 DAP showed best vigor with Vortex, Poncho, + 1789 at 33 DAP. The % bloom was assessed at 70 DAP and the most bloom was recorded on Vortex, Concep III = Poncho.

Herbicide drift of Ally was received on the plants and the residue had a negative in pact on grain fill and yield so no yields were taken.

Crop Description

Crop 1: SORVS Sorghum vulgare saccharatum Grain Sorghum
Variety: Pio Provided by Bayer **Description:** Grain Sorghum
BCH Scale: BGRM **Planting Date:** 4/16/08
Planting Method: SEEDED
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Seed Bed: SMOOTH **Soil Temperature, Unit:** 63 F
Soil Moisture: NORMAL **Emergence Date:** 4/25/08

Site and Design

Plot Width, Unit: 13.33 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Application Description

	A	B
Application Date:	4/16/08	4/18/08
Time of Day:	PM	AM
Application Method:	IMPREG	SPRAY
Application Timing:	ATPLAN	Pre emerg
Application Placement:	INFURR	Spray
Applied By:	Terry Pitts	Terry Pitts
Air Temperature, Unit:	72 F	52 F
% Relative Humidity:	64	46
Wind Velocity, Unit:	25 mph	7 mph
Dew Presence (Y/N):	n	n
Water Hardness:	na	
Soil Temperature, Unit:	63 F	46 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	20	0

Description				Plants /acre	Plants /acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	% Emergence
Rating Date				4/30/08	5/14/08	5/14/08	5/19/08	5/19/08	5/22/08	6/25/08
Trt-Eval Interval				14 DA-A	28 DA-A	28 DA-A	33 DA-A	33 DA-A		
Trt No.	Treatment Name	Rate	Unit							
1	MAXIM XL	3.5	g ai/100 kg	33098.0 a	40937.0 a	5.5 a	52260.0 a	4.3 a	1.8 a	1.3 a
	APRON XL	1	g ai/100 kg							
	CONCEP III	41.7	g ai/100 kg							
	CRUISER 5FS	200	g ai/100 kg							
	CF NEUTRAL	65	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
2	VORTEX FL	2.5	g ai/100 kg	38759.5 a	46598.5 a	5.3 a	60534.5 a	4.5 a	2.8 a	3.8 a
	ALLEGIANCE FL	4	g ai/100 kg							
	CONCEP III	41.7	g ai/100 kg							
	PONCHO 600	200	g ai/100 kg							
	TEST COMPOUND 1	130	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
3	VORTEX FL	2.5	g ai/100 kg	36146.5 a	40501.5 a	5.0 a	55308.5 a	4.0 a	2.8 a	0.8 a
	ALLEGIANCE FL	4	g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015	mg ai/seed							
	PONCHO 600	200	g ai/100 kg							
	TEST COMPOUND 1	130	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
4	MAXIM XL	3.5	g ai/100 kg	38759.5 a	42679.0 a	5.5 a	61405.5 a	4.5 a	4.3 a	1.8 a
	APRON XL	1	g ai/100 kg							
	AE 0001789 00 SC43 A1	0.015	mg ai/seed							
	PONCHO 600	200	g ai/100 kg							
	TEST COMPOUND 1	130	ml/100 kg							
	PRO-IZED RED COLORANT	19.6	ml/100 kg							
	TALC	62.5	g/100 kg							
LSD (P=.05)				7801.74	6090.30	1.37	16274.89	0.77	1.87	4.07
Standard Deviation				4877.69	3807.69	0.85	10175.14	0.48	1.17	2.54
CV				13.29	8.92	16.07	17.73	11.1	40.58	135.68
Bartlett's X2				6.299	9.291	1.055	11.343	0.074	0.331	11.163
P(Bartlett's X2)				0.098	0.026*	0.788	0.01*	0.963	0.954	0.011*
Replicate F				3.728	1.570	0.086	1.379	1.000	0.184	0.760
Replicate Prob(F)				0.0543	0.2635	0.9661	0.3106	0.4363	0.9048	0.5444
Treatment F				1.220	2.128	0.314	0.730	1.000	3.122	1.069
Treatment Prob(F)				0.3577	0.1668	0.8148	0.5597	0.4363	0.0807	0.4098

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Evaluate the Control Provided by Latitude Delivering a Lower Rate of Imidacloprid Compared to Commercial Standard (preferably Gaucho) at Tipton

Objectives:

Evaluate the control provided by Latitude delivering a lower rate of Imidacloprid compared to commercial standard (Gaucho).

Conclusions:

Stands at 13 DAP showed similar stands of 44856 to 46163 plants per acre numerically. At 33 DAP the commercial standard fungicide + insecticide provided the best numeric stand of 65,325 plants/acre. Vigor ratings at 28 DAP showed the best vigor with the commercial standard on a 1-10 scale. On a 1-5 scale with another evaluator both treatments showed improved vigor over the untreated. At 71 DAP the % headed plants was the highest in the commercial standard.

No yields were taken due to Ally herbicide drift and its effects on grain fill.

Crop Description

Crop 1: SORVC Sorghum vulgare var. caffrorum	Grain Sorghum
Variety: KS5585	Description: Grain Sorghum
BBCH Scale: BGRM	Planting Date: 4/16/08
	Rate, Unit: 65000 P/A
Depth, Unit: 1 IN	
Row Spacing, Unit: 30 IN	
Seed Bed: SMOOTH	Soil Temperature, Unit: 63 F
Soil Moisture: NORMAL	Emergence Date: 4/25/08

Site and Design

Plot Width, Unit: 13.33 FT	Site Type: FIELD
Plot Length, Unit: 30 FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4	Study Design: Randomized Complete Block

Soil Description

Description Name: Sandy Loam

Planting conditions

Application Date:	4/16/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	ATPLAN
Application Placement:	INFURR
Air Temperature, Unit:	72 F
% Relative Humidity:	64
Wind Velocity, Unit:	25 mph
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	63 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	20

Description		Plants/ acre	Plants/ acre	Seedling Vigor	Plants /acre	Seedling Vigor	Seedling Vigor	Seedling Vigor
Rating Date		4/30/08	5/14/08	5/14/08	5/19/08	5/19/08	5/22/08	6/10/08
Trt-Eval Interval		13 DA-A	28 DA-A	28 DA-A	33 DA-A	33 DA-A	36 DA-A	55 DA-A
Trt No.	Treatment Name	Rate						
		Rate Unit						
1	Check							
	Vortex	0.8 fl oz/cwt	46163.0 a	42679.0 a	5.0 a	60534.5 a	5.8 a	2.8 a
	Allegiance FL	0.75 fl oz/cwt						3.3 b
2	Vortex	0.8 fl oz/cwt	45727.5 a	43550.0 a	4.8 a	60970.0 a	5.8 a	3.5 a
	Allegiance FL	0.75 fl oz/cwt						4.3 a
	Latitude	315 g/100 kg						
3	Vortex	0.8 fl oz/cwt	44856.5 a	41372.5 a	5.3 a	65325.0 a	5.8 a	3.5 a
	Allegiance FL	0.75 fl oz/cwt						4.5 a
	Poncho	5.1 fl oz/cwt						
LSD (P=.05)			6979.02	5879.98	1.19	7733.75	0.82	2.69
Standard Deviation			4033.44	3398.26	0.69	4469.63	0.47	1.55
CV			8.85	7.99	13.74	7.18	8.2	47.83
Bartlett's X2			10.068	0.825	0.089	0.214	0.0	0.834
P(Bartlett's X2)			0.007*	0.662	0.957	0.898	.	0.659
Replicate F			1.762	2.533	3.294	4.266	1.375	0.310
Replicate Prob(F)			0.2540	0.1534	0.0997	0.0620	0.3376	0.8177
Treatment F			0.109	0.416	0.529	1.405	0.000	0.310
Treatment Prob(F)			0.8986	0.6773	0.6141	0.3159	1.0000	0.7443

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Description		% Headed
Rating Date		6/26/08
Trt-Eval Interval		71 DA-A
Trt No.	Treatment Name	Rate
		Rate Unit
1	Check	
	Vortex	0.8 fl oz/cwt
	Allegiance FL	0.75 fl oz/cwt
2	Vortex	0.8 fl oz/cwt
	Allegiance FL	0.75 fl oz/cwt
	Latitude	315 g/100 kg
3	Vortex	0.8 fl oz/cwt
	Allegiance FL	0.75 fl oz/cwt
	Poncho	5.1 fl oz/cwt
LSD (P=.05)		24.03
Standard Deviation		13.89
CV		85.45
Bartlett's X2		2.838
P(Bartlett's X2)		0.242
Replicate F		1.955
Replicate Prob(F)		0.2222
Treatment F		3.627
Treatment Prob(F)		0.0928

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

State Trials



Intentionally Left Blank

Cruiser vs Guacho Grande Beckham County

City: Texola

Objectives:

Show the benefit of Gaucho Grande and Cruiser on cotton.

Conclusions:

There was no significant difference in stand count, Thrip damage or yield in this test. All treatments provided a better numerical yield than the untreated.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* American upland cotton
Variety: FM 9180 B2F,
BBCH Scale: BCOT **Planting Date:** 5/19/08
Planting Method: SEEDED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 65 F
Soil Moisture: NORMAL

Pest Description

Pest 1 Type: I **Code:** FRANOC *Frankliniella occidentalis*
Common Name: Western flower thrips

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI Cotton **Variety:** FM 9180 B2R **Planting Date:** 5/19/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/25/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4

Site Type: SEEDBED

Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/19/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	PREPLA
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	101 F
% Relative Humidity:	18
Wind Velocity, Unit:	7 mph
Wind Direction:	NNW
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	91 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Pest Code	Stand Count	Thrips Damage	Thrips Damage	Yield	
Rating Date	6/3/08	6/3/08	6/11/08	11/17/08	
Rating Data Type	Plants	Rating	Rating	Lint lbs	
Rating Unit	/acre	1-5	1-5	/acre	
Trt-Eval Interval	15 DA-A	15 DA-A	23 DA-A	182 DA-A	
Trt Treatment					
No. Name					
1 Untreated PHY 375 B2RF					
	25750.0 a	1.0 a	1.0 a	634.2 a	
2 GAUCHO GRANDE PHY 375B2RF	0.375 g ai/100 kg	29500.0 a	1.0 a	1.0 a	696.0 a
3 CRUISER PHY 375 WRF	0.32 g ai/100 kg	32250.0 a	1.0 a	1.0 a	702.8 a
4 Temik	5 Lbs/acre	27500.0 a	1.0 a	1.0 a	659.9 a
LSD (P=.05)		11068.66	0.00	0.00	121.60
Standard Deviation		6920.18	0.00	0.00	76.02
CV		24.07	0.0	0.0	11.29
Bartlett's X2		3.008	0.0	0.0	7.644
P(Bartlett's X2)		0.39	.	.	0.054
Replicate F		4.458	0.000	0.000	5.067
Replicate Prob(F)		0.0351	1.0000	1.0000	0.0251
Treatment F		0.651	0.000	0.000	0.715
Treatment Prob(F)		0.6021	1.0000	1.0000	0.5675

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Cruiser vs Guacho Grande Custer County

City: Hammons

Objectives:

Show the benefit of Gaucho Grande and Cruiser on cotton.

Conclusions:

There was no significant difference in stand count, Thrip damage or yield in this test. All treatments provided a better numerical yield than the untreated.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* American upland cotton
Variety: FM 9180 B2F,
BBCH Scale: BCOT **Planting Date:** 5/19/08
Planting Method: SEEDED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 65 F
Soil Moisture: NORMAL

Pest Description

Pest 1 Type: I **Code:** FRANOC *Frankliniella occidentalis*
Common Name: Western flower thrips

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI **Variety:** FM 9180 B2R **Planting Date:** 5/15/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/22/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	5/15/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	PREPLA
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	69 F
% Relative Humidity:	39
Wind Velocity, Unit:	5 mph
Wind Direction:	NNW
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	79 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	75

Pest Code			Stand Count	Thrips Damage rating	Thrips Damage rating	Yield
Rating Date			6/18/08	6/11/08	6/18/08	11/13/08
Rating Data Type			Plants	Rating	Rating	Lint lbs
Rating Unit			/acre	1-5	1-5	/acre
Trt-Eval Interval			34 DA-A	23 DA-A	34 DA-A	182 DA-A
Trt No.	Treatment Name					
1	Untreated PHY 375 B2RF		29250.0 a	1.0 a	1.0 a	466.0 a
2	GAUCHO GRANDE PHY 375B2RF	0.375 g ai/100 kg	28750.0 a	1.0 a	1.0 a	457.1 a
3	CRUISER PHY 375 WRF	0.32 g ai/100 kg	30500.0 a	1.0 a	1.0 a	441.3 a
4	Temik	5 Lbs/acre	25750.0 a	1.0 a	1.0 a	440.0 a
LSD (P=.05)			5464.88	0.00	0.00	103.15
Standard Deviation			3416.67	0.00	0.00	64.49
CV			11.96	0.0	0.0	14.3
Bartlett's X2			6.564	0.0	0.0	10.348
P(Bartlett's X2)			0.087	.	.	0.016*
Replicate F			2.689	0.000	0.000	3.296
Replicate Prob(F)			0.1092	1.0000	1.0000	0.0718
Treatment F			1.390	0.000	0.000	0.153
Treatment Prob(F)			0.3076	1.0000	1.0000	0.9253

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Cruiser vs Guacho Grande Washita County

City: Canute

Objectives:

Show the benefit of Gaucho Grande and Cruiser on cotton.

Conclusions:

There was no significant difference in stand count, Thrip damage or yield in this test. A higher damage rating was seen at 15 DAP after planting but correlated to no difference in yield.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* American upland cotton
Variety: FM 9180 B2F,
BBCH Scale: BCOT **Planting Date:** 5/19/08
Planting Method: SEEDED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 65 F
Soil Moisture: NORMAL

Pest Description

Pest 1 Type: I **Code:** FRANOC *Frankliniella occidentalis*
Common Name: Western flower thrips

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI **Variety:** FM 9180 B2R **Planting Date:** 5/19/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 68 F **Soil Moisture:** NORMAL **Emergence Date:** 5/25/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4
Site Type: SEEDBED
Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	6/11/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	PREPLA
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	89 F
% Relative Humidity:	45
Wind Velocity, Unit:	45 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	87 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Pest Code	Rating Date	Rating Unit	Trt-Eval Interval	Stand Count 6/18/08 /acre 7 DA-A	Stand Count 6/26/08 /acre 15 DA-A	Stand Count 7/1/08 /acre 15 DA-A	Thrips Damage 6/16/08 1-5 7 DA-A	Thrips Damage 6/26/08 1-5 15 DA-A	Thrips Damage 7/1/08 1-5 20 DA-A	Yield 11/24/08 /acre 166 DA-A
Trt No.	Treatment Name									
1	Untreated PHY 375 B2RF			30250.0 a	29000.0 a	28750.0 a	1.0 a	2.5 a	1.0 a	464.7 a
2	GAUCHO GRANDE PHY 375B2RF	0.375	g ai/100 kg	20000.0 a	32000.0 a	32000.0 a	1.0 a	1.3 b	1.0 a	431.2 a
3	CRUISER PHY 375 WRF	0.32	g ai/100 kg	25000.0 a	29750.0 a	29500.0 a	1.0 a	1.5 b	1.0 a	464.7 a
4	Temik	5	Lbs/acre	25500.0 a	34000.0 a	33500.0 a	1.0 a	1.3 b	1.0 a	431.2 a
LSD (P=.05)				8506.55	9493.55	7569.40	0.00	0.80	0.00	82.47
Standard Deviation				5318.34	5935.42	4732.42	0.00	0.50	0.00	51.56
CV				21.11	19.03	15.3	0.0	30.77	0.0	11.51
Bartlett's X2				1.969	9.004	7.908	0.0	2.039	0.0	8.89
P(Bartlett's X2)				0.579	0.029*	0.048*	.	0.564	.	0.031*
Replicate F				1.546	0.319	0.613	0.000	4.333	0.000	4.262
Replicate Prob(F)				0.2689	0.8117	0.6235	1.0000	0.0378	1.0000	0.0394
Treatment F				2.483	0.584	0.866	0.000	5.667	0.000	0.565
Treatment Prob(F)				0.1271	0.6406	0.4934	1.0000	0.0185	1.0000	0.6519

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Bayer Cotton Seed Treatments Trial at Dill City with Biological Nematicide

City: Dill City

Objectives:

Show the benefit of Gaucho Grande and Cruiser on cotton.

Conclusions:

There was no significant difference in stand count, Thrip damage or yield in this test.

Crop Description

Crop 1: GOSHI *Gossypium hirsutum* American upland cotton
Variety: FM 9180 B2F,
BBCH Scale: BCOT **Planting Date:** 6/11/08
Planting Method: SEEDED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 40 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 84 F
Soil Moisture: NORMAL

Pest Description

Pest 1 Type: I **Code:** FRANOC *Frankliniella occidentalis*
Common Name: Western flower thrips

CROP AND INSECT DESCRIPTION

Insect 1: FRANOC Western Flower Thrips

Crop 1: GOSHI **Variety:** FM 9180 B2R **Planting Date:** 6/11/08
Planting Method: SEEDED **Rate:** 35 P/A **Depth:** 1.5 IN
Row Spacing: 40 IN **Seed Bed:** MEDIUM
Soil Temperature: 84 F **Soil Moisture:** NORMAL **Emergence Date:** 6/15/08

Plot Width, Unit: 13.33 FT **Plot Length, Unit:** 50 FT **Reps:** 4

Site Type: SEEDBED

Study Design: RANDOMIZED COMPLETE BLOCK

Planting conditions

Application Date:	6/11/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	PREPLA
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	94 F
% Relative Humidity:	37
Wind Velocity, Unit:	37 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	84 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Pest Code			Stand Count	Thrips Damage	Stand Count	Thrips Damage	Stand Count	Thrips Damage	1 ST Position	Retention	Yield	
Rating Date			6/18/08	6/18/08	6/26/08	6/26/08	7/1/08	7/1/08	8/27/08	8/27/08	12/11/08	
Rating Data Type			Plants	rating	Plants	Rating	Plants	Rating	average	average	Lint lbs	
Rating Unit			/acre	1-5	/acre	1-5	/acre	1-5	/5 plant	/5 plant	/acre	
Trt-Eval Interval			7 DA-A	7 DA-A	15 DA-A	15 DA-A	20 DA-A	20 DA-A	69 DA-A	69 DA-A	154 DA-A	
Trt No.	Treatment Name	Rate										
1	BAYTAN 30 VORTEX FL ALLEGIANCE FL GAUCHO GRANDE CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT	32.5 2.5 15.6 0.375 500 25 522 65	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg	22750.0 a	1.0 a	29750.0 a	1.0 a	29000.0 a	1.0 a	9.55 a	87.04 a	604.4 a
2	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT	32.5 2.5 15.6 0.75 500 25 522 65	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg	16000.0 a	1.0 a	28500.0 a	1.0 a	28000.0 a	1.0 a	9.75 a	84.59 a	657.6 a
3	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	21000.0 a	1.0 a	26000.0 a	1.0 a	26000.0 a	1.0 a	9.55 a	86.55 a	576.6 a
4	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	16075.0 a	1.0 a	25250.0 a	1.0 a	25250.0 a	1.0 a	9.55 a	86.69 a	552.1 a
5	BAYTAN 30 VORTEX FL ALLEGIANCE FL AERIS SEED APPLIED SYSTEM CALCIUM CARBONATE SUSPENDING AGENT PRECISE S FINISHER 1005 PRO-IZED BLUE COLORANT BIOLOGICAL NEMATICIDE	32.5 2.5 15.6 0.75 500 25 522 65 1	ml/100 kg g ai/100 kg g ai/100 kg mg ai/seed g/100 kg g/100 kg ml/100 kg ml/100 kg g/100 kg	20000.0 a	1.0 a	27750.0 a	1.0 a	27000.0 a	1.0 a	9.80 a	85.87 a	618.8 a

Pest Code			Stand Count	Thrips Damage	Stand Count	Thrips Damage	Stand Count	Thrips Damage	1 ST Position	Retention	Yield	
Rating Date			6/18/08	6/18/08	6/26/08	6/26/08	7/1/08	7/1/08	8/27/08	8/27/08	12/11/08	
Rating Data Type			Plants	rating	Plants	Rating	Plants	Rating	average	average	Lint lbs	
Rating Unit			/acre	1-5	/acre	1-5	/acre	1-5	/5 plant	/5 plant	/acre	
Trt-Eval Interval			7 DA-A	7 DA-A	15 DA-A	15 DA-A	20 DA-A	20 DA-A	69 DA-A	69 DA-A	154 DA-A	
Trt No.	Treatment Name	Rate	Rate Unit									
6	BAYTAN 30	32.5	ml/100 kg	21500.0 a	1.0 a	27750.0 a	1.0 a	27250.0 a	1.0 a	9.40 a	87.63 a	594.3 a
	VORTEX FL	2.5	g ai/100 kg									
	ALLEGIANCE FL	15.6	g ai/100 kg									
	CALCIUM CARBONATE	500	g/100 kg									
	SUSPENDING AGENT	25	g/100 kg									
	PRECISE S FINISHER 1005	522	ml/100 kg									
	PRO-IZED BLUE COLORANT	65	ml/100 kg									
	TEST COMPOUND 1	1	ml/100 kg									
7	BAYTAN 30	32.5	ml/100 kg	22750.0 a	1.0 a	26500.0 a	1.0 a	26500.0 a	1.0 a	9.50 a	87.53 a	571.5 a
	VORTEX FL	2.5	g ai/100 kg									
	ALLEGIANCE FL	15.6	g ai/100 kg									
	GAUCHO GRANDE	0.375	mg ai/seed									
	CALCIUM CARBONATE	500	g/100 kg									
	SUSPENDING AGENT	25	g/100 kg									
	PRECISE S FINISHER 1005	522	ml/100 kg									
	PRO-IZED BLUE COLORANT	65	ml/100 kg									
	BIOLOGICAL NEMATICIDE	1	g/100 kg									
8	BAYTAN 30	32.5	ml/100 kg	22250.0 a	1.0 a	23250.0 a	1.0 a	23750.0 a	1.0 a	9.55 a	86.39 a	535.2 a
	VORTEX FL	2.5	g ai/100 kg									
	ALLEGIANCE FL	15.6	g ai/100 kg									
	CALCIUM CARBONATE	500	g/100 kg									
	SUSPENDING AGENT	25	g/100 kg									
	PRECISE S FINISHER 1005	522	ml/100 kg									
	PRO-IZED BLUE COLORANT	65	ml/100 kg									
	CRUISER 600FS	0.34	mg ai/seed									
	AVICTA 500FS	0.15	mg ai/seed									
LSD (P=.05)				8273.50	0.00	6809.58	0.00	6022.91	0.00	0.322	5.080	106.37
Standard Deviation				5625.24	0.00	4629.90	0.00	4095.04	0.00	0.219	3.454	72.32
CV				27.72	0.0	17.25	0.0	15.4	0.0	2.29	3.99	12.28
Bartlett's X2				12.701	0.0	7.888	0.0	8.743	0.0	5.73	1.128	2.19
P(Bartlett's X2)				0.08	.	0.343	.	0.272	.	0.572	0.992	0.949
Replicate F				0.721	0.000	1.207	0.000	1.334	0.000	7.109	11.407	0.018
Replicate Prob(F)				0.5508	1.0000	0.3318	1.0000	0.2902	1.0000	0.0018	0.0001	0.9967
Treatment F				0.978	0.000	0.776	0.000	0.634	0.000	1.424	0.321	1.156
Treatment Prob(F)				0.4725	1.0000	0.6139	1.0000	0.7225	1.0000	0.2479	0.9358	0.3683

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

08-199-025

A & L PLAINS AGRICULTURAL LABORATORIES, INC.
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REPORT NUMBER

NEMATODE ASSAY REPORT

July 17, 2008

Submitted by:

OSU - Jerry Goodson
 16721 US Hwy. 283
 Altus, OK 73521

Page 1

Grower: *Mike Johnson*

RELATIVE ABUNDANCE OF NEMATODES RECOVERED PER 100 cc OF SOIL													
Lab No:	Sample No:	Crop History:	Crop to be Grown:	Root Knot	Lesion	Stunt	Spiral	Ring	Stubby Root	Lance	Reniform	Sting	Recommendations (See Explanation Below)
N-9135	Washita Co.			220	300	100	160				140		

ABOUT THE NUMBERS ON YOUR NEMATODE ASSAY REPORT

<p>You may wonder why certain nematodes that occur in relatively low numbers are considered hazardous to your crops, while others at high levels are apparently ignored. The explanation, stated very simply, is that many factors must be considered before the importance of numbers can be determined. These include: kind of nematode, crop variety, time of year, previous crops, soil factors, other nematodes present, and plant disease history. Briefly, these factors have been carefully weighed and a recommendation made on the total situation known.</p>	<p>To help you interpret your own report, note the meaning of asterisks ** or *** next to some of the numbers.</p> <p>** Slight to moderate hazard, but if present along with others in this category, may contribute to definite or serious hazard.</p> <p>*** Definite or serious hazard to crop indicated</p> <p>NO ASTERISK BY A NUMBER: Not considered a hazard.</p> <p>NO NUMBER IN COLUMN: May mean this kind of nematode was not detectable rather than totally absent.</p>
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- * Recommendations:
- A - Production of the crop to be grown should not be affected by the kinds and numbers of nematodes in this assay.
 - B - The population of nematodes found may cause crop damage and Chemical soil treatment may be profitable, especially should growing conditions be unfavorable.
 - C - The nematode population found indicates that chemical soil treatment would be profitable.
 - D - Nematode-resistant variety is recommended.

- Remarks:
- *TNTC = too numerous to count
 - *Use pre-plant nematicide treatment
 - *ND - None Detected to be plant pathogen

*The recommendations is based upon assays of the soil samples submitted are offered only as a guide in helping you plant your nematode control program.

Signature: 
 A&L Plains Ag Labs.

Bayer Cotton Seed Treatments Trial at Canute with Biological Nematicide

Objectives:

Show the benefit of Gaucho Grande and Cruiser on cotton.

Conclusions: There was no significant difference in stand count, or Thrip damage. Yield was not taken.

Site and Design

Plot Width, Unit: 13.33 FT

Plot Length, Unit: 30 FT

Replications: 4

Study Design: Randomized Complete Block

Planting Conditions

Application Date:	6/11/08
Time of Day:	PM
Application Method:	IMPREG
Application Timing:	PREPLA
Application Placement:	INFURR
Applied By:	Terry Pitts
Air Temperature, Unit:	89 F
% Relative Humidity:	45
Wind Velocity, Unit:	45 mph
Wind Direction:	SSE
Dew Presence (Y/N):	n
Water Hardness:	na
Soil Temperature, Unit:	87 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0

Part Rated		Stand Count	Thrips Damage	Stand Count	Thrips Damage	Stand Count	Thrips Damage	1 st Position
Rating Date		6/18/08	6/18/08	6/26/08	6/26/08	7/1/08	7/1/08	8/27/08
Rating Data Type		Plants	rating	Plants	Rating	Plants	Rating	Average
Rating Unit		/acre	/plot	/acre	/plot	/acre	/plot	/5 plant
Trt-Eval Interval		7 DA-A	7 DA-A	15 DA-A	15 DA-A	20 DA-A	20 DA-A	69 DA-A
Trt No.	Treatment Name	Rate	Unit					
1	BAYTAN 30	32.5	ml/100 kg	17000.0 a	1.0 a	28500.0 a	1.0 a	9.55 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	GAUCHO GRANDE	0.375	mg ai/seed					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
2	BAYTAN 30	32.5	ml/100 kg	13000.0 a	1.0 a	21500.0 a	1.0 a	9.65 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
3	BAYTAN 30	32.5	ml/100 kg	16000.0 a	1.0 a	25750.0 a	1.0 a	9.58 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
	BACILLUS FIRMUS TECHN.	1	g/100 kg					
4	BAYTAN 30	32.5	ml/100 kg	12750.0 a	1.0 a	24750.0 a	1.0 a	9.55 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
	BACILLUS FIRMUS TECHN.	1	g/100 kg					
5	BAYTAN 30	32.5	ml/100 kg	9750.0 a	1.0 a	22500.0 a	1.0 a	9.50 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	AERIS SEED APPLIED SYSTEM	0.75	mg ai/seed					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
	BACILLUS FIRMUS TECHN.	1	g/100 kg					
6	BAYTAN 30	32.5	ml/100 kg	11500.0 a	1.0 a	22000.0 a	1.0 a	9.65 a
	VORTEX FL	2.5	g ai/100 kg					
	ALLEGIANCE FL	15.6	g ai/100 kg					
	CALCIUM CARBONATE	500	g/100 kg					
	SUSPENDING AGENT	25	g/100 kg					
	PRECISE S FINISHER 1005	522	ml/100 kg					
	PRO-IZED BLUE COLORANT	65	ml/100 kg					
	TEST COMPOUND 1	1	ml/100 kg					

Part Rated		Stand Count	Thrips Damage	Stand Count	Thrips Damage	Stand Count	Thrips Damage	1 st Position	
Rating Date		6/18/08	6/18/08	6/26/08	6/26/08	7/1/08	7/1/08	8/27/08	
Rating Data Type		Plants /acre	Rating /plot	Plants /acre	Rating /plot	Plants /acre	Rating /plot	Average /5 plant	
Rating Unit		7 DA-A	7 DA-A	15 DA-A	15 DA-A	20 DA-A	20 DA-A	69 DA-A	
Trt-Eval Interval									
Trt No.	Treatment Name	Rate							
		Unit							
7	BAYTAN 30	32.5 ml/100 kg	14250.0 a	1.0 a	24250.0 a	1.0 a	24250.0 a	1.0 a	9.75 a
	VORTEX FL	2.5 g ai/100 kg							
	ALLEGIANCE FL	15.6 g ai/100 kg							
	GAUCHO GRANDE	0.375 mg ai/seed							
	CALCIUM CARBONATE	500 g/100 kg							
	SUSPENDING AGENT	25 g/100 kg							
	PRECISE S FINISHER 1005	522 ml/100 kg							
	PRO-IZED BLUE COLORANT	65 ml/100 kg							
	BACILLUS FIRMUS TECHN.	1 g/100 kg							
8	BAYTAN 30	32.5 ml/100 kg	17750.0 a	1.0 a	27750.0 a	1.0 a	27500.0 a	1.0 a	9.55 a
	VORTEX FL	2.5 g ai/100 kg							
	ALLEGIANCE FL	15.6 g ai/100 kg							
	CALCIUM CARBONATE	500 g/100 kg							
	SUSPENDING AGENT	25 g/100 kg							
	PRECISE S FINISHER 1005	522 ml/100 kg							
	PRO-IZED BLUE COLORANT	65 ml/100 kg							
	CRUISER 600FS	0.34 mg ai/seed							
	AVICTA 500FS	0.15 mg ai/seed							
LSD (P=.05)			7407.99	0.00	5836.99	0.00	5267.66	0.00	0.374
Standard Deviation			5036.77	0.00	3968.63	0.00	3581.53	0.00	0.254
CV			35.98	0.0	16.12	0.0	14.66	0.0	2.64
Bartlett's X2			14.986	0.0	10.149	0.0	10.124	0.0	9.961
P(Bartlett's X2)			0.036*	.	0.18	.	0.182	.	0.191
Replicate F			3.117	0.000	0.492	0.000	0.575	0.000	2.378
Replicate Prob(F)			0.0479	1.0000	0.6916	1.0000	0.6378	1.0000	0.1002
Treatment F			1.216	0.000	1.719	0.000	2.098	0.000	0.403
Treatment Prob(F)			0.3373	1.0000	0.1587	1.0000	0.0893	1.0000	0.8893

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

08-241-036

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 FAX (806) 763-2762 • www.al-labs-plains.com



REPORT NUMBER

NEMATODE ASSAY REPORT

August 26, 2008

Submitted by:

OSU - Jerry Goodson
 16721 US Hwy. 283
 Altus, OK 73521

Page 1

Grower: *Danny Davis*

RELATIVE ABUNDANCE OF NEMATODES RECOVERED PER 100 cc OF SOIL													
Lab No:	Sample No:	Crop History:	Crop to be Grown:	Root Knot	Lesion	Stunt	Spiral	Ring	Stubby Root	Lance	Reniform	Sting	Recommendations (See Explanation Below)
N-9144	Untreated			20	80								
N-9145	Field			280	40	60							

ABOUT THE NUMBERS ON YOUR NEMATODE ASSAY REPORT

<p>You may wonder why certain nematodes that occur in relatively low numbers are considered hazardous to your crops, while others at high levels are apparently ignored. The explanation, stated very simply, is that many factors must be considered before the importance of numbers can be determined. These include: kind of nematode, crop variety, time of year, previous crops, soil factors, other nematodes present, and plant disease history. Briefly, these factors have been carefully weighed and a recommendation made on the total situation known.</p>	<p>To help you interpret your own report, note the meaning of asterisks ** or *** next to some of the numbers.</p> <p>** Slight to moderate hazard, but if present along with others in this category, may contribute to definite or serious hazard.</p> <p>*** Definite or serious hazard to crop indicated</p> <p>NO ASTERISK BY A NUMBER: Not considered a hazard.</p> <p>NO NUMBER IN COLUMN: May mean this kind of nematode was not detectable rather than totally absent.</p>
---	---

* Recommendations:

- A - Production of the crop to be grown should not be affected by the kinds and numbers of nematodes in this assay.
- B - The population of nematodes found may cause crop damage and Chemical soil treatment may be profitable, especially should growing conditions be unfavorable.
- C - The nematode population found indicates that chemical soil treatment would be profitable.
- D - Nematode-resistant variety is recommended.

*The recommendations is based upon assays of the soil samples submitted are

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Remarks:

- *TNTC = too numerous to count
- *Use pre-plant nematicide treatment
- *ND - None Detected to be plant pathogen

Signature:

J. Duran

A & L Plains Ag Labs.

Altus Weather



All Data can be accessed at <http://agweather.mesonet.org/index.php/data/section/weather>

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MESONET CLIMATOLOGICAL DATA SUMMARY				March 2008				Time Zone: Midnight-Midnight CST													
(ALTU) Altus				Nearest City: 3.0 S Altus				County: Jackson													
Latitude: 34-35-13				Longitude: 99-20-17				Elevation: 1365 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	79	33	56.2	40.2	9	0	92	30	59	0.00	28.62	30.08	SSW	10.7	30.4	19.42	48.9	52.0	59	45	
2	81	42	60.4	49.3	3	0	96	34	70	0.36	28.19*	29.63*	S	20.2	51.2	9.96	51.9	55.1	60	52	
3	43	30	39.2	25.8	29	0	83	37	60	0.00	NA	NA	N	20.1	49.6	4.29	48.0	45.9	52	42	
4	62*	24*	41.5*	26.3*	22*	0*	88*	25*	59*	0.00*	NA	NA	ESE*	10.8*	30.1*	18.60*	45.5*	44.6*	51*	39*	
5	59	33	43.6	29.8	19	0	83	29	61	0.00	28.45	29.90	NNE	16.2	34.6	18.91	46.6	47.1	53	42	
6	44	31	36.1	22.6	27	0	88	31	59	0.00	28.68	30.14	NNE	14.5	32.2	8.80	45.4	44.9	47	43	
7	43	24	33.3	17.3	32	0	82	30	54	0.00	28.71	30.17	N	12.2	34.0	17.41	43.4	42.8	48	39	
8	51	17	33.4	12.6	31	0	79	24	44	0.00	28.62	30.07	SSE	7.5	19.1	16.85	42.3	42.0	47	37	
9	62	27	45.9	28.7	21	0	80	32	53	0.00	28.65	30.10	NE	9.0	17.3	16.94	44.5	45.9	53	40	
10	64	39	51.6	31.4	13	0	71	27	48	0.00	28.84	30.30	NE	8.0	18.9	21.13	47.5	50.5	58	45	
11	75*	34*	52.9*	30.9*	11*	0*	82*	18*	48*	0.00*	28.69*	30.15*	SSW*	8.4*	22.7*	18.39*	48.7*	51.8*	59*	45*	
12	81	36	61.4	31.7	6	0	77	14	38	0.00	28.41	29.85	SSW	13.4	32.9	21.22	50.1	53.7	60	47	
13	71	43	55.5	38.6	8	0	81	31	55	0.00	28.22	29.66	N	9.9	24.1	19.09	51.5	54.9	60	50	
14	88	37	59.8	36.0	3	0	95	10	52	0.00	28.11	29.55	N	11.4	39.8	20.84	52.0	55.6	63	49	
15	58	39	50.0	40.4	16	0	88	52	70	0.00	28.42	29.87	N	13.6	31.7	15.13	53.1	55.9	60	53	
16	68	39	53.5	40.4	12	0	90	36	64	0.00	28.46	29.91	ESE	16.6	32.7	16.86	52.2	54.3	59	50	
17	74	48	59.0	55.1	4	0	97	53	88	0.87	28.29	29.73	N	17.8	32.1	7.66	54.8	57.2	60	55	
18	51	44	47.3	42.1	18	0	94	67	83	0.65	28.39	29.83	N	15.7	37.0	6.11	51.8	51.7	54	50	
19	65	34	49.4	36.7	16	0	91	33	64	0.00	28.65	30.10	NW	8.1	16.0	23.19	51.5	51.7	60	45	
20	73	35	56.2	37.8	11	0	94	24	56	0.00	28.60	30.05	S	14.2	36.8	23.38	52.6	52.4	58	46	
21	69	41	55.5	38.4	10	0	89	26	56	0.00	28.60	30.05	E	10.9	26.1	23.35	53.4	55.1	62	49	
22	66	39	52.0	36.5	12	0	85	29	58	0.00	28.74	30.19	NE	11.6	29.8	16.61	53.0	54.4	61	49	
23	54	36	45.3	29.6	20	0	76	30	56	0.00	28.97	30.44	NNE	12.5	27.6	18.36	52.3	53.7	59	50	
24	67	33	50.1	35.0	15	0	84	35	59	0.00	28.75	30.21	SSE	15.3	34.0	23.39	51.2	52.4	59	46	
25	85	43	62.5	42.4	1	0	89	13	55	0.00	28.45	29.90	SSE	12.4	24.9	24.16	53.5	57.3	65	50	
26	79	51	62.3	46.1	0	0	89	24	60	0.00	28.37	29.82	SE	8.2	16.6	20.54	56.0	60.5	67	55	
27	89	46	63.5	39.8	0	3	81	10	50	0.00	28.24	29.68	SSW	14.4	34.3	24.80	56.7	61.1	69	54	
28	51	42	47.2	39.6	18	0	87	66	75	0.00	28.58	30.03	NNE	15.3	33.6	7.40	55.1	57.0	61	55	
29	61	44	53.0	44.7	13	0	86	61	73	0.00	28.52	29.97	SSE	8.8	24.1	11.32	54.5	56.5	60	53	
30	88	54	71.2	57.7	0	6	94	36	66	0.00	28.35	29.80	SSE	13.3	31.6	20.89	57.8	62.5	70	57	
31	89	54	72.8	50.6	0	6	87	12	54	0.00	28.30	29.74	S	16.2	32.3	23.53	62.0	67.7	74	64	
67* 38* 52.3* 36.6*				<- Monthly Averages ->				28.51* 29.96*		N * 12.8* 51.2*			17.37*		51.2* 53.2* 59* 48*						
Temperature - Highest: 89* Lowest: 17*				Degree Days - Total HDD: 400* Total CDD: 15*				Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 3* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 3* Tmin ≤ 32: 6* Avg Wind Speed ≥ 10 mph: 23* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 19*													
Rainfall: Monthly Total: 1.88* in. Greatest 24 Hr: 0.87* in.				Humidity - Highest: 97* Lowest: 10*																	

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* Denotes incomplete record

monthly data generated on Thursday, June 18, 2009 at 16:24 UTC

MESONET CLIMATOLOGICAL DATA SUMMARY (ALTU) Altus Latitude: 34-35-13				April 2008 Nearest City: 3.0 S Altus Longitude: 99-20-17				Time Zone: Midnight-Midnight CST County: Jackson Elevation: 1365 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	59	41	49.5	34.1	15	0	74	39	57	0.00	28.75	30.21	NNE	16.8	40.0	24.91	59.1	62.1	67	58	
2	53	41	47.8	41.7	18	0	98	63	80	0.02	28.67	30.12	NE	7.8	17.8	4.53	56.2	56.7	59	55	
3	89	51	65.4	48.5	0	5	98	8	66	0.00	28.34	29.78	NNE	12.5	40.6	21.10	58.6	61.9	71	56	
4	64	44	52.4	37.2	11	0	75	33	58	0.00	28.57	30.02	N	13.2	42.8	22.92	59.1	61.8	67	57	
5	76	35	56.6	37.4	10	0	92	24	54	0.00	28.41	29.85	SE	12.7	30.2	24.60	58.0	60.4	67	54	
6	75	44	59.6	40.0	6	0	83	24	52	0.00	28.35	29.79	SE	12.1	31.5	25.36	59.3	62.2	69	56	
7	83	46	65.2	51.6	0	0	83	34	63	0.00	28.32	29.76	ESE	14.4	35.4	22.80	60.4	63.7	71	57	
8	72	46	59.7	44.6	6	0	89	36	59	0.00	28.41	29.86	NNE	15.6	33.2	25.41	62.5	65.9	71	61	
9	51	40	46.5	44.7	20	0	98	83	93	1.73	28.34	29.78	ENE	10.3	32.1	2.33	57.8	57.8	63	55	
10	70	45	57.2	42.0	7	0	97	20	64	0.42	28.10	29.53	WSW	19.0	49.0	22.97	56.2	56.6	61	54	
11	63	41	51.3	37.6	13	0	85	38	61	0.00	28.53	29.98	NW	11.5	23.8	17.63	55.5	54.0	59	50	
12	65	38	51.0	34.4	14	0	92	22	58	0.00	28.73	30.19	NW	12.2	32.6	25.72	55.1	53.8	59	48	
13	63	37	50.8	30.8	15	0	85	22	51	0.00	28.86	30.32	NNW	14.1	33.3	27.01	55.1	55.3	61	50	
14	70	34	51.9	33.9	13	0	94	24	56	0.00	28.78	30.24	SE	8.9	21.5	27.03	55.4	56.8	66	49	
15	80	39	61.2	40.4	6	0	88	26	51	0.00	28.50	29.95	SSE	17.5	39.7	26.81	56.9	59.7	67	52	
16	83	50	66.6	52.4	0	2	86	35	62	0.00	28.30	29.74	SE	17.5	35.6	25.76	59.3	63.5	71	57	
17	66	45	58.2	47.5	10	0	90	46	69	0.00	28.37	29.81	NNW	16.2	41.7	18.22	60.7	63.7	68	60	
18	76	36	55.5	33.3	9	0	91	14	51	0.00	28.54	29.99	WNW	9.6	26.6	27.56	58.8	61.0	69	54	
19	88	39	64.1	37.7	1	0	89	13	46	0.00	28.43	29.88	SSE	10.5	25.2	27.11	59.9	63.4	71	56	
20	83	52	69.0	49.6	0	3	78	28	53	0.00	28.28	29.72	SE	15.2	29.0	25.01	62.0	66.4	73	61	
21	91	55	72.0	47.6	0	8	97	11	52	0.00	28.30	29.74	SSE	8.1	21.3	28.32	64.5	69.3	77	63	
22	78	57	68.1	60.7	0	3	97	58	79	0.00	28.44	29.89	NE	11.2	26.7	20.77	65.3	69.1	74	65	
23	77	62	69.2	65.5	0	5	96	55	89	0.15	28.43	29.88	ESE	12.0	33.5	9.31	65.9	68.5	70	67	
24	96	61	77.0	55.1	0	13	95	10	59	0.00	28.26	29.70	SSE	15.4	33.1	27.84	66.4	70.4	78	64	
25	75	49	65.8	45.5	3	0	84	22	52	0.00	28.44	29.89	NNW	17.9	38.7	27.55	66.9	71.0	75	67	
26	76	42	59.7	40.1	6	0	85	23	53	0.00	28.58	30.03	ESE	8.3	39.2	27.02	64.8	67.8	75	61	
27	65	42	53.8	34.3	11	0	86	17	53	0.12	28.79	30.25	N	15.8	41.5	26.07	63.8	65.7	71	61	
28	84	36	60.7	29.1	5	0	82	9	41	0.00	28.65	30.10	WSW	9.2	26.2	28.83	62.0	64.3	73	56	
29	89	44	68.3	33.0	0	1	78	12	35	0.00	28.43	29.87	SSE	15.7	35.6	28.82	63.4	67.2	75	60	
30	90	48	71.8	44.6	0	4	71	21	40	0.00	28.15	29.59	SSE	18.0	36.5	26.74	64.9	69.4	75	63	
<- Monthly Averages ->										28.47	29.92	SSE	13.3	49.0	23.20	60.5	63.0	69	58		
Temperature - Highest: 96 Lowest: 34					Degree Days - Total HDD: 197 Total CDD: 43					Number of Days With: Tmax ≥ 90: 2 Rainfall ≥ 0.01 inch: 5 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 4 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 24 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 21											
Rainfall: Monthly Total: 2.44 in. Greatest 24 Hr: 1.73 in.					Humidity - Highest: 98 Lowest: 8																

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* Denotes incomplete record

monthly data generated on Thursday, June 18, 2008 at 16:28 UTC

MESONET CLIMATOLOGICAL DATA SUMMARY										May 2008		Time Zone: Midnight-Midnight CST									
(ALTU) Altus										Nearest City: 3.0 S Altus		County: Jackson									
Latitude: 34-35-13										Longitude: 99-20-17		Elevation: 1365 feet									
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	94	63	79.1	41.7	0	14	80	8	36	0.00	28.02	29.46	S	17.3	49.1	26.59	67.8	72.8	80	67	
2	80	45	63.2	27.4	2	0	61	8	30	0.00	28.33	29.77	WNW	14.5	44.0	29.39	67.0	70.8	77	64	
3	69	44	55.5	22.8	9	0	54	13	31	0.00	28.67	30.12	NNW	11.8	39.6	29.27	65.3	68.0	75	62	
4	79	38	61.1	35.5	6	0	80	19	43	0.00	28.61	30.06	SE	10.2	22.4	27.42	65.2	67.4	75	60	
5	78	55	66.7	56.0	0	2	89	51	69	0.00	28.57	30.02	SSE	12.5	26.5	17.74	66.7	69.5	74	65	
6	84	62	71.8	62.4	0	8	97	27	75	0.50	28.39	29.83	SSE	11.0	50.9	24.32	69.1	72.2	79	66	
7	72	58	63.1	58.4	0	0	97	57	85	1.02	28.18	29.61	NW	13.9	39.0	12.91	67.6	68.6	72	66	
8	78	53	65.8	58.0	0	1	96	52	78	0.00	28.28	29.72	S	9.2	21.1	24.18	67.0	67.7	74	61	
9	82	58	69.5	54.7	0	5	89	30	63	0.00	28.35	29.79	NNW	9.7	27.1	29.16	69.0	70.7	80	63	
10	90	57	72.2	49.0	0	8	92	18	52	0.00	28.30	29.74	N	15.7	44.0	27.42	69.5	72.7	80	67	
11	70	44	56.5	33.8	8	0	73	21	45	0.00	28.64	30.09	SE	9.3	35.1	29.24	67.1	69.9	77	63	
12	83	48	65.9	46.5	0	0	78	28	53	0.00	28.32	29.77	SE	16.8	34.1	27.92	66.9	69.5	77	63	
13	86	62	72.3	55.4	0	9	94	28	60	0.00	28.30	29.74	NE	11.8	30.1	27.99	69.3	73.2	81	67	
14	77	53	63.3	50.0	0	0	93	34	65	0.30	28.48	29.93	NE	13.5	36.8	17.72	68.8	70.9	75	67	
15	75	52	61.4	50.2	2	0	96	34	71	0.00	28.56	30.01	NNE	8.7	21.9	24.95	67.1	67.4	73	62	
16	80	53	65.9	45.5	0	2	90	19	55	0.00	28.65	30.11	N	7.2	22.2	25.80	67.5	69.5	77	62	
17	85	51	68.5	45.4	0	3	85	17	50	0.00	28.48	29.92	SSW	5.6	15.1	19.33*	67.5	70.4	77	64	
18	92	52	73.3	45.2	0	7	88	14	46	0.00	28.41	29.85	NW	7.2	21.5	29.73	69.3	73.5	83	65	
19	101	57	81.5	44.8	0	14	70	11	34	0.00	28.24	29.68	SW	10.8	30.0	29.91	71.3	76.3	85	68	
20	89*	62*	75.8*	50.2*	0*	10*	69*	22*	44*	0.00*	28.38*	29.82*	NE*	12.6*	28.0*	23.36*	72.3*	77.1*	83*	73*	
21	92	58	76.0	56.8	0	10	80	33	53	0.00	28.15	29.58	SE	17.0	33.2	20.70	71.0	75.2	81	70	
22	94	71	81.6	65.3	0	17	86	34	61	0.00	27.96	29.39	SSE	21.0	40.2	21.48	72.7	77.2	82	73	
23	97	76	84.5	67.1	0	21	79	28	59	0.00	28.13	29.56	SE	21.9	36.2	23.59	74.5	79.6	85	75	
24	97	70	84.8	59.7	0	18	88	18	49	0.00	28.33	29.78	SSE	9.2	33.5	29.24	76.7	82.9	90	77	
25	96	67	83.1	61.1	0	16	67	32	49	0.00	28.38	29.82	SSE	17.3	37.6	26.64	76.5	82.4	88	77	
26	97	74	84.6	65.7	0	21	84	30	56	0.00	28.31	29.75	SSE	16.5	34.6	25.75	77.3	82.7	88	78	
27	94	65	77.3	66.8	0	14	89	41	71	0.66	28.42	29.86	SSE	13.4	33.2	13.76	76.5	79.8	85	74	
28	90	65	75.5	63.1	0	12	94	35	69	0.00	28.63	30.09	SSE	8.4	20.2	24.88	75.0	76.3	82	71	
29	93*	68*	80.7*	64.2*	0*	16*	93*	31*	61*	0.00*	28.53*	29.98*	SSE*	16.3*	34.6*	26.21*	75.9*	78.8*	85*	73*	
30	97	69	83.0	63.2	0	18	85	31	54	0.00	28.40	29.85	SSE	15.1	30.3	29.27	76.2	80.9	88	75	
31	98	68	83.8	62.7	0	18	82	31	52	0.00	28.40	29.84	SSE	14.6	31.2	29.04	77.0	82.2	89	76	
87* 59* 72.5* 52.5*										<- Monthly Averages ->		28.38* 29.82*		SSE* 12.9* 50.9*			25.00* 70.7* 74.1* 81* 68*				
Temperature - Highest: 101*					Degree Days - Total HDD: 27*					Number of Days With:											
Lowest: 38*					Total CDD: 265*					Tmax ≥ 90: 13* Rainfall ≥ 0.01 inch: 4*											
Rainfall: Monthly Total: 2.48* in.					Humidity - Highest: 97*					Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 4*											
Greatest 24 Hr: 1.02* in.					Lowest: 8*					Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 22*											
										Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 21*											

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* Denotes incomplete record

monthly data generated on tuesday, july 01, 2008 at 11:02 vnc

MESONET CLIMATOLOGICAL DATA SUMMARY										June 2008		Time Zone: Midnight-Midnight CST										
(ALTU) Altus										Nearest City: 3.0 S Altus		County: Jackson										
Latitude: 34-35-13										Longitude: 99-20-17		Elevation: 1365 feet										
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES				
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN		
1	99	71	85.6	64.1	0	20	78	30	52	0.00	28.40	29.85	SSE	12.7	26.8	29.19	78.4	84.2	91	78		
2	100	71	86.7	61.7	0	21	79	27	47	0.00	28.32	29.77	S	18.8	35.4	29.50	78.6	84.2	90	79		
3	108	75	90.4	57.5	0	26	62	13	36	0.00	28.15	29.58	S	19.0	37.7	28.44	78.6	84.4	90	79		
4	102	76	90.0	57.6	0	24	48	24	34	0.00	28.02	29.45	S	23.2	43.3	28.88	78.7	84.7	90	80		
5	101	70	85.1	64.1	0	21	87	23	54	0.72	28.00*	29.42*	S	25.8	57.5	26.00	78.5	83.8	88	80		
6	95	64	79.5	65.8	0	14	97	25	68	0.00	NA	NA	SSE	11.7	32.7	28.28	77.4	80.8	87	74		
7	95	77	85.0	66.9	0	21	81	35	57	0.00	28.35	29.80	SSE	22.5	41.8	23.79	77.8	82.5	87	78		
8	96	76	86.2	64.4	0	21	74	33	50	0.00	28.31	29.75	SSE	22.2	39.0	26.91	77.8	83.3	88	79		
9	83	61	71.3	62.6	0	7	93	46	76	0.04	28.44	29.89	ESE	11.0	34.6	17.05	76.5	80.4	84	78		
10	95	57	75.8	63.5	0	11	97	37	70	0.01	28.44	29.88	SSE	13.6	35.3	22.30	75.3	78.7	85	73		
11	100	74	87.1	61.4	0	22	75	24	46	0.00	28.25	29.69	SSE	24.3	42.8	28.96	77.2	82.3	88	77		
12	100	75	87.5	61.9	0	23	67	27	44	0.00	28.31	29.75	SSE	18.4	31.9	27.62	78.3	84.0	90	79		
13	99	75	86.0	62.6	0	22	76	24	48	0.00	28.44	29.89	SSE	15.0	30.1	29.54	79.9	85.7	92	80		
14	101	68	81.6	64.1	0	19	94	23	61	0.19	28.49	29.94	S	10.8	50.4	27.33	81.0	86.0	93	80		
15	100	66	84.2	61.3	0	18	88	24	51	0.00	28.38	29.82	SSE	13.0	49.5	27.98	79.9	83.9	91	77		
16	100	69	83.0	63.2	0	20	86	24	55	0.37	28.42	29.87	SSE	17.1	53.4	27.18	79.8	84.6	92	80		
17	89	67	76.0	60.9	0	13	90	31	63	0.00	28.57	30.02	E	13.7	39.7	24.99	78.4	81.1	89	76		
18	94	66	79.7	65.9	0	15	95	35	66	0.00	28.49	29.94	ESE	8.5	25.5	26.91	79.3	83.7	92	76		
19	91	66	75.9	66.8	0	13	96	37	76	1.63	28.49	29.94	E	9.5	39.6	19.37	78.6	80.9	86	77		
20	94	68	79.7	62.1	0	16	94	26	60	0.00	28.57	30.02	NE	6.8	21.6	29.11	79.3	81.4	90	75		
21	92	70	80.1	61.3	0	16	87	24	57	0.00	28.68	30.14	NE	4.9	14.5	25.72	80.1	84.0	92	78		
22	96	67	82.1	56.9	0	17	84	19	48	0.00	28.59	30.04	SSE	6.9	16.7	28.08	80.3	84.8	93	78		
23	98	71	85.2	55.6	0	20	73	21	40	0.00	28.52	29.97	SSE	10.7	31.2	25.90	80.5	85.2	91	79		
24	95	69	82.8	58.5	0	17	73	25	46	0.00	28.57	30.02	S	11.2	26.8	21.82	79.8	84.0	89	80		
25	95	71	83.4	60.1	0	18	66	25	48	0.00	28.55	30.00	S	12.1	29.9	27.48	80.1	84.5	90	79		
26	98	74	86.0	61.3	0	21	69	26	46	0.00	28.44	29.89	S	15.3	33.0	27.17	80.7	85.2	91	80		
27	100	75	87.4	61.3	0	22	64	26	44	0.00	28.36	29.80	S	16.1	36.8	28.77	81.3	85.9	91	81		
28	91	68	79.3	65.3	0	15	92	41	64	0.38	28.50	29.94	NE	8.7	40.0	14.72	80.3	82.2	86	79		
29	90	69	78.7	59.7	0	15	89	24	57	0.00	28.70	30.15	NE	5.5	17.0	22.48	79.6	81.9	89	77		
30	92	63	79.1	58.0	0	12	84	28	53	0.00	28.67	30.13	SSW	6.5	19.7	28.86	79.5	83.4	92	76		
										96 70 82.7 61.9		<- Monthly Averages ->		28.43* 29.87*		SSE 13.9 57.5			26.01 79.1 83.4 90 78			
Temperature - Highest: 108 Lowest: 57					Degree Days - Total HDD: 0 Total CDD: 542					Number of Days With: Tmax ≥ 90: 28 Rainfall ≥ 0.01 inch: 7 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 5 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 22 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 21												
Rainfall: Monthly Total: 3.34 in. Greatest 24 Hr: 1.63 in.					Humidity - Highest: 97 Lowest: 13																	

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* Denotes incomplete record

monthly data generated on Friday, August 01, 2008 at 11:13 AM

MESONET CLIMATOLOGICAL DATA SUMMARY										July 2008		Time Zone: Midnight-Midnight CST										
(ALTU) Altus										Nearest City: 3.0 S Altus		County: Jackson										
Latitude: 34-35-13										Longitude: 99-20-17		Elevation: 1365 feet										
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES				
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN		
1	95	65	82.0	59.9	0	15	84	28	51	0.00	28.54	29.99	SSW	9.8	24.6	27.25	80.0	84.5	91	78		
2	95	70	83.3	59.3	0	17	79	25	48	0.00	28.48	29.92	SSE	11.1	30.8	29.02	80.8	85.6	92	80		
3	95*	70*	81.5*	61.5*	0*	17*	77*	28*	53*	0.00*	28.52*	29.97*	NNW*	6.4*	29.8*	25.60*	81.7*	86.4*	93*	80*		
4	95	71	82.8	63.6	0	18	81	29	55	0.00	28.54	29.99	SSE	6.5	24.9	29.11	82.3	87.6	94	82		
5	96	68	83.7	61.3	0	17	88	25	52	0.00	28.47	29.92	S	8.9	23.9	28.90	82.0	87.2	93	81		
6	94	72	83.3	62.3	0	18	75	32	51	0.00	28.46	29.90	S	12.0	28.7	27.45	81.3	86.7	91	82		
7	93	70	83.5	63.0	0	17	77	35	52	0.00	28.48	29.93	SSW	13.7	33.0	27.98	80.9	86.0	91	81		
8	92	73	82.0	65.0	0	17	79	38	58	0.00	28.51	29.96	SSW	11.8	37.2	22.73	80.8	85.8	90	82		
9	92	71	78.1	68.7	0	16	95	36	75	0.09	28.58	30.03	S	8.1	28.1	17.57	81.2	84.5	89	82		
10	94	68	81.3	66.1	0	16	98	33	65	0.00	28.54	29.99	S	8.7	26.8	21.51	80.1	83.1	88	79		
11	95	74	84.9	62.1	0	20	69	29	48	0.00	28.48	29.93	S	14.0	32.0	25.05	79.8	84.4	89	80		
12	100	72	83.0	66.6	0	21	88	30	61	0.60	NA	NA	S	9.9	66.6	24.36	80.8	85.3	93	81		
13	79	68	72.3	69.2	0	9	97	72	90	0.40	NA	NA	NNE	7.5	28.1	6.34	78.6	79.1	83	77		
14	91	69	78.8	69.4	0	15	99	44	76	0.00	NA	NA	SSE	4.4	16.1	24.07	79.3	80.9	88	75		
15	83	74	77.4	69.9	0	13	90	62	78	0.00	28.56	30.01	SE	7.7	23.0	10.32	79.7	81.0	83	79		
16	90	72	80.0	68.7	0	16	95	43	71	0.03	28.59	30.05	SSE	11.4	27.6	21.28	79.1	81.5	87	77		
17	95	75	83.3	66.0	0	20	82	32	59	0.00	28.54	29.99	SE	11.1	24.2	23.85	80.1	84.0	91	79		
18	96	71	84.0	61.5	0	19	76	28	50	0.00	28.47	29.92	SE	9.7	24.6	26.81	80.6	85.4	92	79		
19	96	69	84.1	58.3	0	18	72	26	44	0.00	28.50	29.95	SSE	8.7	19.4	27.20	80.9	86.0	93	80		
20	98	69	84.5	59.7	0	18	77	25	46	0.00	28.56	30.02	SSE	8.2	20.3	28.30	81.6	86.7	93	81		
21	99	69	85.2	59.5	0	19	76	23	46	0.00	28.50	29.95	SE	8.0	24.1	28.94	82.3	87.5	94	81		
22	101	71	86.8	58.6	0	21	75	21	42	0.00	28.46	29.91	SE	7.5	21.4	28.56	83.2	88.5	95	82		
23	98	72	86.2	62.0	0	20	75	27	47	0.00	28.50	29.95	SE	8.3	23.6	28.17	83.8	89.0	95	83		
24	96	71	84.9	64.8	0	18	82	32	53	0.00	28.52	29.96	SSE	9.3	26.8	28.50	84.2	89.2	95	84		
25	95	72	84.1	67.0	0	19	87	39	59	0.00	28.58	30.04	S	9.8	26.8	27.02	84.2	89.1	95	84		
26	96	72	84.7	62.6	0	19	76	29	50	0.00	28.55	30.00	SSW	8.0	19.7	27.99	84.5	89.2	95	84		
27	100	73	87.2	57.7	0	22	65	21	40	0.00	28.41	29.85	SSW	9.7	22.2	27.18	84.3	88.9	95	84		
28	103	72	89.8	56.7	0	22	62	19	35	0.00	28.31	29.75	SSE	10.7	27.9	27.16	84.1	89.4	95	84		
29	91	71	83.2	69.1	0	16	94	31	65	0.70	28.34	29.79	S	9.9	29.1	20.56	83.6	86.9	90	83		
30	94	73	81.8	68.6	0	18	93	36	67	0.00	28.36	29.80	N	7.2	18.5	25.84	83.7	86.8	94	81		
31	97*	70*	83.0*	68.5*	0*	18*	94*	34*	66*	0.00*	28.37*	29.81*	ENE*	5.5*	17.6*	26.25*	83.6*	87.8*	95*	81*		
95* 71* 82.9* 63.8*										<- Monthly Averages ->		28.49* 29.94*		S * 9.2* 66.6*			24.87*		81.7* 85.9* 92* 81*			
Temperature - Highest: 103*					Degree Days - Total HDD: 0*					Number of Days With:												
Lowest: 65*					Total CDD: 550*					Tmax >= 90: 28*					Rainfall > 0.01 inch: 5*							
										Tmax < 32: 0*					Rainfall > 0.10 inch: 3*							
Rainfall: Monthly Total: 1.82* in.					Humidity - Highest: 99*					Tmin < 32: 0*					Avg Wind Speed >= 10 mph: 8*							
Greatest 24 Hr: 0.70* in.					Lowest: 19*					Tmin < 0: 0*					Max Wind Speed >= 30 mph: 5*							

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* Denotes incomplete record

monthly data generated on Monday, September 01, 2008 at 11:28 AM

MESONET CLIMATOLOGICAL DATA SUMMARY				August 2008				Time Zone: Midnight-Midnight CST													
(ALTU) Altus				Nearest City: 3.0 S Altus				County: Jackson													
Latitude: 34-35-13				Longitude: 99-20-17				Elevation: 1365 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	102	74	86.3	68.1	0	23	90	27	59	0.00	28.42	29.87	ENE	7.0	21.3	27.05	84.5	89.4	97	83	
2	98	71	85.2	66.4	0	20	88	32	57	0.00	28.45	29.90	SSE	6.9	17.2	27.65	84.6	89.7	96	83	
3	99	72	86.1	62.2	0	20	78	24	48	0.00	28.44	29.89	SSE	9.0	20.5	28.23	84.5	89.5	96	84	
4	100	71	87.0	61.8	0	21	74	25	45	0.00	28.48	29.92	SSE	8.0	18.8	27.53	84.3	89.3	96	83	
5	103	72	88.3	62.1	0	22	83	23	45	0.00	28.52	29.97	SE	7.0	21.4	26.48	85.0	90.1	96	84	
6	91	70	81.2	65.1	0	16	79	41	59	0.00	28.56	30.02	E	10.1	33.5	24.69	84.5	88.7	93	84	
7	97	72	82.3	67.4	0	19	92	33	63	0.07	28.54	29.99	E	6.0	29.1	23.19	84.7	88.8	95	84	
8	91	72	80.0	70.4	0	16	96	46	75	0.49	28.52	29.97	ESE	8.9	18.9	22.57	84.5	87.1	92	83	
9	96	74	85.0	67.2	0	20	90	34	58	0.00	28.37	29.81	SSW	9.6	22.8	21.31	83.3	87.0	93	82	
10	94	75	83.2	67.9	0	20	87	43	61	0.00	28.33	29.78	NNE	10.6	22.7	23.32	83.2	87.4	93	82	
11	88	73	78.5	72.1	0	16	97	53	82	0.47	28.38	29.83	NE	8.0	17.5	19.12	83.3	85.7	90	82	
12	94	69	79.7	65.3	0	17	98	27	67	0.00	28.41	29.86	NNE	8.2	25.9	26.29	82.7	85.8	94	79	
13	92	67	79.3	65.9	0	14	96	41	66	0.00	28.45	29.90	ESE	6.0	21.9	22.86	82.0	86.0	93	80	
14	98	66	80.2	63.5	0	17	95	24	61	0.62	28.45	29.89	SE	7.0	53.4	24.42	82.2	87.0	94	81	
15	86	66	74.7	65.7	0	11	97	45	76	0.07	28.54	29.99	NE	7.0	16.7	24.52	80.8	83.1	89	78	
16	76	69	72.0	67.0	0	7	94	63	85	0.01	28.64	30.09	ENE	6.5	14.5	6.58	79.4	79.2	82	77	
17	79	66	70.5	66.3	0	7	98	60	87	0.76	28.58	30.03	ENE	5.7	14.7	7.19	77.3	76.5	79	74	
18	72	66	68.9	67.3	0	4	98	86	95	1.05	28.50	29.95	E	8.3	21.5	5.34	75.5	74.8	77	73	
19	71	66	68.2	65.8	0	4	96	85	92	0.07	28.50	29.95	NE	10.3	18.5	7.04	75.3	73.6	75	72	
20	79	67	70.9	66.0	0	8	94	63	85	0.00	28.47	29.91	NNE	6.0	13.0	12.99	75.5	74.4	79	72	
21	87	65	75.0	67.5	0	11	99	50	80	0.01	28.43	29.88	SE	6.6	18.4	23.09	77.1	78.0	86	72	
22	93	70	81.3	68.6	0	17	95	38	68	0.00	28.43	29.88	SE	11.0	27.2	25.45	78.7	81.6	89	75	
23	94	69	81.2	68.0	0	17	95	33	68	0.00	28.57	30.02	ESE	6.1	19.4	25.21	79.9	84.4	93	77	
24	94	71	80.7	68.1	0	17	97	33	69	0.00	28.56	30.01	ENE	6.6	21.3	23.04	80.6	85.2	92	79	
25	90	70	79.3	65.1	0	15	97	34	66	0.00	28.49	29.94	ENE	6.3	17.5	23.96	80.8	85.4	92	80	
26	93	66	79.8	65.6	0	15	91	37	65	0.00	28.41	29.85	SE	7.7	21.6	23.21	80.4	85.0	92	79	
27	94	70	82.0	67.3	0	17	92	36	64	0.00	28.39	29.84	SE	8.1	18.2	20.75	80.7	85.3	91	80	
28	94	70	81.7	67.7	0	17	91	40	65	0.00	28.39	29.84	SSE	7.6	17.1	21.03	80.8	85.3	91	80	
29	95	71	79.2	68.0	0	18	88	37	70	0.00	28.51	29.95	SSE	4.2	21.6	12.33	80.2	83.7	87	80	
30	90	67	75.3	67.1	0	13	95	46	77	0.02	28.56	30.01	E	5.5	22.1	15.10	79.3	82.1	87	78	
31	91	68	79.2	67.4	0	15	96	43	70	0.00	28.50	29.95	SE	8.1	21.9	18.90	79.4	82.5	88	78	
	91	69	79.4	66.6	<- Monthly Averages ->						28.48	29.93	SE	7.5	53.4	20.66	81.1	84.2	90	79	
Temperature - Highest: 103 Lowest: 65				Degree Days - Total HDD: 0 Total CDD: 472				Number of Days With: Tmax ≥ 90: 22 Tmax ≤ 32: 0 Tmin < 32: 0 Tmin ≤ 0: 0				Rainfall ≥ 0.01 inch: 11 Rainfall ≥ 0.10 inch: 5 Avg Wind Speed ≥ 10 mph: 4 Max Wind Speed ≥ 30 mph: 2									
Rainfall: Monthly Total: 3.64 in. Greatest 24 Hr: 1.05 in.				Humidity - Highest: 99 Lowest: 23																	

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* Denotes incomplete record

monthly data generated on Wednesday, October 01, 2008 at 12:00 PM

MESONET CLIMATOLOGICAL DATA SUMMARY				September 2008				Time Zone: Midnight-Midnight CST													
(ALTU) Altus				Nearest City: 3.0 S Altus				County: Jackson													
Latitude: 34-35-13				Longitude: 99-20-17				Elevation: 1365 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	91	68	79.4	65.3	0	15	89	32	64	0.00	28.43	29.87	ESE	8.4	21.2	23.03	80.0	84.2	91	79	
2	94	67	77.4	65.9	0	15	94	34	70	0.00	28.44	29.89	N	11.7	34.3	21.38	80.1	84.0	89	79	
3	72	60	66.4	57.7	0	1	86	65	74	0.00	28.50	29.95	N	16.9	36.2	12.41	78.1	79.5	82	77	
4	85	57	70.2	58.5	0	6	91	39	69	0.00	28.46	29.90	NNW	6.2	18.5	23.70	76.9	78.9	86	73	
5	91	62	75.4	62.1	0	11	94	35	67	0.00	28.47	29.92	E	10.3	28.4	22.33	77.6	80.8	87	75	
6	93	63	77.4	62.6	0	13	92	34	63	0.00	28.49	29.93	E	7.4	17.8	23.35	78.4	82.1	88	76	
7	94	63	78.3	57.8	0	13	94	15	55	0.00	28.55	30.00	NE	9.1	25.6	23.65	78.6	82.6	89	77	
8	79	62	70.4	63.5	0	6	95	55	80	0.15	28.56	30.01	SE	7.3	21.3	4.83	77.3	79.0	83	76	
9	68	58	62.6	60.2	2	0	98	79	92	0.03	28.61	30.07	SSE	7.7	21.2	4.97	74.9	73.5	76	72	
10	73	65	68.3	67.0	0	4	98	91	95	0.13	28.52	29.97	SSE	6.4	17.5	4.53	74.3	73.3	75	72	
11	80	70	73.2	71.0	0	10	99	74	93	0.28	28.45	29.90	SSE	7.7	21.0	4.22	75.1	74.6	77	73	
12	85	70	74.7	71.5	0	13	98	67	90	0.21	28.36	29.81	SSE	6.2	23.7	8.68	76.1	76.0	79	74	
13	82	65	73.5	69.2	0	8	98	58	87	0.00	28.29	29.73	N	9.0	25.5	12.21	76.9	76.0	79	74	
14	77	59	67.7	53.2	0	3	92	33	63	0.00	28.62	30.08	N	11.9	28.3	23.17	75.7	73.6	80	69	
15	77	52	64.2	46.5	0	0	96	25	59	0.00	28.82	30.28	NNE	5.7	16.9	23.46	73.6	73.4	81	67	
16	83	48	65.0	47.4	0	0	97	24	59	0.00	28.79	30.25	SE	4.6	13.2	23.32	71.8	73.1	81	66	
17	84	52	67.1	48.6	0	3	87	28	57	0.00	28.72	30.18	SE	5.9	13.1	21.93	71.8	74.0	82	67	
18	81	55	66.5	53.1	0	3	90	36	66	0.00	28.68	30.14	SE	7.8	18.1	19.99	72.1	74.2	81	69	
19	83	53	68.2	55.3	0	3	96	36	68	0.00	28.64	30.09	SE	6.8	14.5	21.49	72.5	74.7	81	69	
20	86	57	71.2	54.6	0	7	88	31	60	0.00	28.63	30.09	ESE	6.0	16.9	21.49	73.2	76.1	83	70	
21	86	56	72.1	55.9	0	6	90	33	60	0.00	28.64	30.10	SE	9.3	24.1	20.13	73.1	75.9	81	71	
22	88	61	74.0	59.9	0	10	92	37	64	0.00	28.65	30.11	SE	11.5	25.2	17.54	73.5	76.1	81	72	
23	90	62	74.8	59.4	0	11	94	29	63	0.00	28.67	30.13	SE	9.7	20.7	20.58	74.0	76.8	83	72	
24	89	61	73.9	57.9	0	10	91	29	61	0.00	28.75	30.20	ESE	7.9	25.0	18.90	74.6	77.4	83	73	
25	88*	58*	71.3*	55.8*	0*	8*	92*	31*	61*	0.00*	28.74*	30.20*	SSE*	5.5*	22.9*	17.28*	73.8*	76.4*	82*	72*	
26	88	57	71.4	52.8	0	8	88	26	57	0.00	28.64	30.09	SE	5.1	12.5	21.04	73.6	76.3	83	71	
27	90	57	72.6	50.5	0	9	80	19	51	0.00	28.61	30.06	SE	5.3	15.1	20.72	73.3	76.2	83	71	
28	90	55	72.1	51.8	0	7	91	24	53	0.00	28.66	30.11	ESE	5.3	15.6	20.43	73.4	76.3	83	71	
29	90	54	72.8	52.1	0	7	86	22	53	0.00	28.68	30.13	NNE	6.0	18.1	19.75	73.0	75.8	81	70	
30	82	55	68.4	40.6	0	3	71	17	41	0.00	28.73	30.19	NNE	6.2	15.1	20.74	73.1	75.6	81	71	
85* 59* 71.4* 57.6*				<- Monthly Averages ->				28.59* 30.05*		SE * 7.8* 36.2*			18.04*		75.0* 76.9* 82* 72*						
Temperature - Highest: 94*				Degree Days - Total HDD: 2*				Number of Days With:				Tmax >= 90: 7*				Rainfall >= 0.01 inch: 5*					
Lowest: 48*				Total CDD: 213*				Tmax <= 32: 0*				Rainfall >= 0.10 inch: 4*									
Rainfall: Monthly Total: 0.80* in.				Humidity - Highest: 99*				Tmin <= 32: 0*				Avg Wind Speed >= 10 mph: 5*									
Greatest 24 Hr: 0.28* in.				Lowest: 15*				Tmin <= 0: 0*				Max Wind Speed >= 30 mph: 2*									

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* Denotes incomplete record

monthly data generated on Saturday, November 01, 2008 at 11:08 AM

MESONET CLIMATOLOGICAL DATA SUMMARY				October 2008				Time Zone: Midnight-Midnight CST													
(ALTU) Altus				Nearest City: 3.0 S Altus				County: Jackson													
Latitude: 34-35-13				Longitude: 99-20-17				Elevation: 1365 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	88	50	67.9	41.5	0	4	82	17	44	0.00	28.62	30.09	NNW	3.8	16.2	20.16	71.4	74.1	80	69	
2	83	49	67.5	44.9	0	1	82	26	47	0.00	28.55	30.00	ESE	8.3	19.4	19.54	71.4	73.8	80	68	
3	92	61	73.8	49.8	0	11	70	18	47	0.00	28.43	29.88	SE	11.2	28.6	18.57	72.6	75.1	81	71	
4	92	54	75.0	48.4	0	8	80	15	45	0.00	28.45	29.90	SSE	14.3	40.1	19.21	72.2	74.6	79	70	
5	83	61	72.2	56.7	0	7	98	39	61	1.34	28.44	29.89	SSE	15.7	32.4	11.97	72.7	75.0	78	72	
6	80	61	67.3	59.7	0	5	98	47	79	0.17	28.40	29.84	S	11.0	24.8	15.92	71.4	71.5	75	69	
7	75	52	63.4	48.7	1	0	90	30	63	0.00	28.67	30.13	NNW	10.7	25.3	20.22	70.9	68.1	72	64	
8	85	49	65.7	50.3	0	2	92	30	63	0.00	28.57	30.02	SE	7.1	20.0	19.65	69.4	67.7	76	61	
9	85	52	67.8	50.2	0	4	94	23	60	0.00	28.48	29.93	SE	10.4	28.7	19.48	69.7	69.6	76	64	
10	85	59	70.9	52.9	0	7	78	32	56	0.00	28.41	29.86	SE	13.8	30.2	18.66	69.8	70.7	77	66	
11	85	61	71.5	59.2	0	8	92	36	68	0.00	28.51	29.96	SE	14.0	30.3	15.01	70.3	71.8	77	67	
12	81	64	72.3	60.0	0	7	88	48	67	0.00	28.50	29.95	SE	16.2	30.9	11.23	70.7	72.4	76	69	
13	73	53	62.9	59.4	2	0	97	69	89	0.74	NA	NA	SSE	13.6	30.2	2.20	70.3	70.0	73	65	
14	64	52	56.6	55.8	7	0	99	92	97	1.34	NA	NA	NNW	10.9	26.3	4.77	66.3	63.8	67	62	
15	59	49	53.7	50.1	11	0	98	76	88	0.07	28.75	30.21	N	10.7	22.7	4.67	65.9	61.4	63	60	
16	66	43	54.4	44.3	10	0	97	39	72	0.00	28.84	30.30	NNW	6.0	15.9	18.81	65.5	61.0	67	56	
17	75	41	58.0	47.3	7	0	99	38	72	0.01	28.79	30.25	NA	2.8	12.3	18.34	64.5	61.0	68	55	
18	78	46	61.2	48.8	3	0	99	31	69	0.00	28.78	30.25	SSE	6.2	16.6	18.27	64.9	62.3	68	57	
19	80	48	63.5	48.8	1	0	93	31	63	0.00	28.65	30.10	S	10.1	27.5	18.15	65.1	62.6	69	58	
20	77	50	62.9	53.8	1	0	95	45	75	0.00	28.68	30.13	NE	7.8	17.4	17.24	65.8	64.8	72	59	
21	79	54	64.5	55.6	0	2	97	42	76	0.00	28.58	30.04	SSE	9.2	26.2	14.38	66.6	66.1	72	62	
22	61	37	54.1	42.2	16	0	89	38	66	0.00	28.63	30.08	NNW	16.8	39.6	10.99	65.3	63.5	66	59	
23	65	35	48.3	30.1	15	0	89	20	56	0.00	28.65	30.11	W	10.4	33.1	12.15	61.3	57.7	62	54	
24	66	31	47.7	35.3	16	0	98	30	67	0.00	28.60	30.05	WNW	4.6	13.5	17.19	60.1	57.7	64	52	
25	75	36	54.4	40.0	10	0	98	26	65	0.00	28.59	30.05	SSE	6.0	15.6	16.98	60.0	59.0	66	53	
26	71	42	56.2	38.9	9	0	97	27	58	0.00	28.75	30.21	NNE	13.6	39.2	16.41	60.9	60.2	65	56	
27	60	30	46.2	23.2	20	0	86	18	46	0.00	29.15	30.62	NNW	6.6	21.3	16.98	59.4	57.6	63	53	
28	67	37	50.3	26.9	13	0	70	21	44	0.00	28.96	30.43	ESE	9.9	21.6	16.03	58.3	57.0	63	52	
29	78	38	56.3	37.0	7	0	80	25	52	0.00	28.74	30.20	ESE	6.8	18.2	15.90	58.8	58.8	65	53	
30	81	45	62.5	47.5	2	0	86	33	61	0.00	28.71	30.17	S	10.7	26.1	15.82	60.0	60.9	67	56	
31	81	50	63.6	48.9	0	1	93	29	63	0.00	28.82	30.28	ENE	5.7	15.0	15.71	61.7	63.3	70	59	
	76	48	61.7	47.0	<- Monthly Averages ->							28.65*	30.10*	SSE*	9.8	40.1	15.50	66.2	65.6	71	61
Temperature - Highest: 92				Degree Days - Total HDD: 151				Number of Days With:													
Lowest: 30				Total CDD: 68				Tmax ≥ 90: 2				Rainfall ≥ 0.01 inch: 6									
								Tmax ≤ 32: 0				Rainfall ≥ 0.10 inch: 4									
Rainfall: Monthly Total: 3.67 in.				Humidity - Highest: 99				Tmin ≤ 32: 2				Avg Wind Speed ≥ 10 mph: 17									
Greatest 24 Hr: 1.34 in.				Lowest: 15				Tmin ≤ 0: 0				Max Wind Speed ≥ 30 mph: 9									

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* Denotes incomplete record

monthly data generated on Monday, December 01, 2008 at 11:42 UTC

Chickasha Weather



All Data can be accessed at <http://agweather.mesonet.org/index.php/data/section/weather>

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MESONET CLIMATOLOGICAL DATA SUMMARY (CHIC) Chickasha Latitude: 35-01-56				March 2008 Nearest City: 2.0 SSE Chickasha Longitude: 97-54-52				Time Zone: Midnight-Midnight CST County: Grady Elevation: 1076 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	76	29	54.7	42.0	12	0	98	33	67	0.00	28.94	30.09	NA	10.3	31.2	19.98	46.6	50.8	61	41	
2	72	41	62.0	52.9	9	0	94	59	73	0.61	28.54	29.68	SSE	22.5	42.6	9.37	51.3	56.1	61	51	
3	41	32	37.1	29.1	29	0	88	56	73	0.03	28.83	29.98	N	18.2	43.7	5.36	46.6	43.3	51	38	
4	56	26	39.3	25.3	24	0	88	28	61	0.00	28.77	29.91	NNW	7.3	22.9	21.66	44.6	42.8	53	36	
5	56	32	41.4	30.8	21	0	86	36	67	0.00	28.76	29.91	N	12.5	32.6	19.67	45.1	43.1	51	37	
6	41	28	34.4	20.3	30	0	75	32	57	0.00	29.00	30.15	NNE	11.6	26.6	7.90	43.3	38.9	42	36	
7	46	20	32.0	17.2	32	0	76	28	56	0.00	29.01	30.17	N	11.4	33.5	20.22	41.4	37.9	45	34	
8	50	16	31.4	14.7	32	0	84	24	55	0.00	28.95	30.11	SSE	5.7	17.8	19.32	40.3	38.1	48	32	
9	67	27	45.7	28.1	18	0	80	26	54	0.00	28.98	30.13	NA	3.9	13.5	21.27	43.1	45.2	59	35	
10	64	35	49.1	30.5	15	0	86	24	53	0.00	29.15	30.31	N	5.7	19.7	21.94	45.9	50.1	61	41	
11	73	26	50.3	32.2	16	0	97	21	58	0.00	29.01	30.16	NA	6.8	22.4	21.79	46.1	50.6	62	40	
12	80*	47*	62.4*	35.6*	2*	0*	57*	18*	39*	0.00*	28.73*	29.87*	SW*	16.2*	33.8*	20.83*	48.6*	54.9*	64*	47*	
13	74	45	61.8	42.7	6	0	89	23	52	0.00	28.51	29.65	S	10.2	26.6	17.34	51.3	57.9	66	52	
14	80	38	58.4	41.5	6	0	97	22	61	0.00	28.42	29.56	SE	8.1	29.9	19.63	51.5	57.4	67	49	
15	55	42	48.5	40.3	17	0	88	58	74	0.00	28.73	29.87	N	12.5	31.9	16.11	51.8	55.8	61	52	
16	68	39	53.4	39.8	11	0	89	35	63	0.00	28.82	29.97	ESE	12.6	35.1	19.54	51.1	54.7	63	48	
17	75	50	60.2	51.0	3	0	93	54	73	0.24	28.64	29.78	SE	14.5	36.1	9.68	53.7	57.7	62	54	
18	49	44	46.7	43.5	18	0	96	76	89	1.51	28.69	29.83	N	13.7	30.6	3.42	51.3	50.2	55	47	
19	64	38	51.0	34.2	14	0	78	25	56	0.00	28.93	30.08	NNW	8.3	24.1	24.02	50.5	50.7	61	42	
20	74	37	57.5	34.9	10	0	90	21	47	0.00	28.92	30.07	S	15.3	38.4	24.09	51.2	51.3	60	43	
21	70	39	57.4	35.6	10	0	91	25	47	0.00	28.90	30.05	N	10.8	34.3	23.79	52.5	53.1	61	46	
22	68	38	52.5	35.0	12	0	93	28	55	0.00	29.06	30.22	NNE	7.1	23.3	20.22	51.9	53.0	65	44	
23	52	31	43.5	28.9	23	0	87	35	58	0.00	29.29	30.46	N	9.3	24.9	21.99	51.3	52.8	62	47	
24	64	30	48.4	30.4	18	0	87	31	54	0.00	29.09	30.24	SSW	13.8	38.6	24.53	50.0	51.4	62	41	
25	79*	51*	61.5*	43.0*	0*	0*	79*	29*	52*	0.00*	28.78*	29.93*	SSW*	16.4*	39.5*	18.76*	52.6*	57.5*	69*	49*	
26	81	57	67.5	55.6	0	4	90	41	68	0.00	28.68	29.83	SSE	12.4	29.8	17.89	55.7	62.0	70	55	
27	88	49	67.0	54.4	0	4	88	17	68	0.00	28.55	29.69	N	18.6	36.7	24.69	58.4	65.9	77	59	
28	56	42	48.8	40.2	16	0	87	52	73	0.00	28.88	30.04	N	12.8	28.8	8.30	55.0	57.3	62	54	
29	62	47	54.1	48.6	10	0	95	69	82	0.00	28.84	29.99	SSE	7.4	21.4	8.45	54.9	57.1	61	54	
30	79	59	68.1	62.3	0	4	96	58	83	0.00	28.70	29.84	S	12.9	33.8	11.02	57.9	62.5	70	58	
31	82	50	68.6	56.1	0	1	85	18	68	0.00	28.62	29.76	S	17.1	36.5	18.41	60.8	67.0	75	62	
66* 38* 52.1* 38.0*				<- Monthly Averages ->				28.83* 29.98*		N * 11.8* 43.7*			17.46*		50.2* 52.5* 61* 46*						
Temperature - Highest: 88* Lowest: 16*				Degree Days - Total HDD: 415* Total CDD: 13*				Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 4* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 3* Tmin ≤ 32: 11* Avg Wind Speed ≥ 10 mph: 21* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 17*													
Rainfall: Monthly Total: 2.39* in. Greatest 24 Hr: 1.51* in.				Humidity - Highest: 98* Lowest: 17*																	

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* Denotes incomplete record

monthly data generated on Thursday, June 18, 2009 at 16:28 UTC

MESONET CLIMATOLOGICAL DATA SUMMARY April 2008 Time Zone: Midnight-Midnight CST
 (CHIC) Chickasha Nearest City: 2.0 SSE Chickasha County: Grady
 Latitude: 35-01-56 Longitude: 97-54-52 Elevation: 1076 feet

DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN		PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	58	39	48.4	35.6	16	0	81	40	63	0.00	29.07	30.22	N	12.7	31.3	25.79	57.0	60.5	69	53	
2	56	39	47.5	42.2	17	0	97	57	82	0.28	29.00	30.15	SE	6.5	17.0	5.35	54.4	54.1	58	51	
3	81	49	61.7	54.5	0	0	98	30	80	0.01	28.66	29.80	SE	11.9	33.7	17.06	57.3	59.3	69	53	
4	61	38	49.5	38.0	16	0	93	38	66	0.00	28.87	30.02	N	12.1	32.0	19.81	56.1	57.1	66	51	
5	71	31	52.9	38.0	14	0	98	28	63	0.00	28.75	29.89	SSE	8.6	23.5	25.78	55.2	57.5	70	46	
6	73	48	60.9	43.4	4	0	79	35	54	0.00	28.66	29.81	SSE	10.0	34.0	25.80	57.5	62.5	74	53	
7	83	44	65.2	49.4	2	0	85	36	58	0.00	28.67	29.82	SSE	12.6	32.4	17.82	58.1	63.1	72	55	
8	70	44	54.2	46.1	8	0	90	59	75	0.00	28.74	29.88	N	13.1	32.1	23.41	59.2	63.8	71	58	
9	53	41	47.4	44.9	18	0	97	83	91	2.18	28.67	29.81	ENE	8.4	27.8	1.64	54.4	53.5	58	52	
10	72	49	60.2	45.2	5	0	98	20	64	1.71	28.37	29.50	SW	17.6	49.0	24.00	56.5	57.9	65	52	
11	63	43	52.2	36.0	12	0	74	37	55	0.00	28.80	29.95	WNW	13.4	30.3	26.91	55.2	56.3	67	48	
12	63	42	51.4	36.2	13	0	78	30	59	0.00	29.01	30.16	NW	10.7	29.8	24.50	53.6	53.6	62	46	
13	58	35	48.0	31.6	19	0	91	29	57	0.00	29.15	30.31	NW	10.8	32.7	27.95	53.1	52.7	61	46	
14	67	30	49.1	31.1	16	0	98	24	57	0.00	29.11	30.27	NA	4.5	15.1	28.19	53.0	53.1	66	42	
15	76	40	59.5	38.6	7	0	85	28	49	0.00	28.86	30.01	SSE	16.9	36.3	27.94	55.3	54.6	63	46	
16	77	54	65.0	52.6	0	1	81	50	65	0.00	28.66	29.80	SSE	19.4	36.5	23.71	58.1	58.8	67	52	
17	74*	48*	60.6*	50.8*	4*	0*	81*	57*	70*	0.00*	28.67*	29.81*	SSE*	18.0*	34.7*	9.72*	59.3*	59.3*	66*	54*	
18	72	43	55.1	35.5	7	0	84	18	53	0.00	28.82	29.97	WNW	10.1	29.2	27.91	57.5	58.8	71	49	
19	87	37	62.4	39.0	3	0	96	13	53	0.00	28.76	29.90	NA	5.6	19.8	28.85	58.5	63.8	79	50	
20	80	57	68.6	48.6	0	4	86	24	52	0.00	28.64	29.78	SSE	14.8	33.8	21.37	60.3	66.8	76	59	
21	91	67	76.5	61.0	0	14	88	18	64	0.00	28.61	29.75	S	11.7	28.3	26.16	64.4	74.0	86	65	
22	77	58	66.7	61.1	0	2	96	60	83	0.00	28.77	29.91	N	6.2	17.8	11.87	64.3	70.1	76	66	
23	80	58	66.5	62.8	0	4	97	63	88	0.07	28.77	29.92	SE	5.3	18.6	8.32	63.5	66.8	72	64	
24	89*	59*	73.9*	63.0*	0*	9*	95*	40*	71*	0.00*	28.60*	29.74*	SSE*	16.4*	36.0*	22.94*	65.6*	71.0*	83*	61*	
25	73	44	64.3	50.3	6	0	88	31	63	0.00	28.74	29.89	NNW	15.0	41.1	24.82	67.0	72.6	81	65	
26	77	39	58.5	39.6	7	0	96	19	57	0.00	28.90	30.05	SE	6.9	32.7	28.69	64.0	68.7	82	57	
27	63	36	52.0	36.6	16	0	89	29	60	0.01	29.09	30.25	N	12.5	34.5	26.07	63.2	66.4	76	59	
28	81	34	59.5	33.9	7	0	93	15	47	0.00	28.96	30.11	WSW	7.3	22.7	29.18	62.0	66.5	81	53	
29	85	44	67.0	37.5	1	0	87	13	41	0.00	28.77	29.92	SE	14.3	38.9	29.27	63.7	69.9	82	58	
30	83	56	70.6	50.4	0	4	68	33	50	0.00	28.50	29.64	SSE	19.0	40.0	27.58	65.3	72.1	82	63	

73* 45* 59.2* 44.5* <- Monthly Averages -> 28.79* 29.92* SSE* 11.7* 49.0* 22.28* 59.1* 62.2* 72* 54*

Temperature - Highest: 91* Lowest: 30*	Degree Days - Total HDD: 218* Total CDD: 37*	Number of Days With: Tmax ≥ 90: 1* Rainfall ≥ 0.01 inch: 6* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 3* Tmin ≤ 32: 2* Avg Wind Speed ≥ 10 mph: 21* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 19*
Rainfall: Monthly Total: 4.26* in. Greatest 24 Hr: 2.18* in.	Humidity - Highest: 98* Lowest: 13*	

MESONET CLIMATOLOGICAL DATA SUMMARY (CHIC) Chickasha Latitude: 35-01-56				May 2008 Nearest City: 2.0 SSE Chickasha Longitude: 97-54-52				Time Zone: Midnight-Midnight CST County: Grady Elevation: 1076 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	93	61	77.4	58.8	0	12	83	19	58	0.02	28.33	29.46	S	21.1	37.6	26.71	68.4	76.5	87	67	
2	76	50	62.3	35.4	2	0	76	16	41	0.00	28.60	29.75	NW	11.2	37.7	30.09	67.7	73.6	84	63	
3	66	39	52.5	28.2	12	0	81	19	43	0.00	28.95	30.11	NNW	9.9	34.1	29.99	65.5	69.6	81	59	
4	79	34	58.2	36.7	9	0	94	20	53	0.00	28.94	30.09	NA	4.8	18.9	28.68	65.1	69.6	83	57	
5	84	53	67.1	55.4	0	3	92	43	68	0.00	28.89	30.04	SSE	9.0	27.6	23.12	67.2	73.3	85	64	
6	80	63	69.8	63.6	0	7	95	59	82	0.12	28.71	29.85	SSE	11.2	28.1	19.93	68.6	73.5	81	67	
7	72	59	64.6	61.7	0	0	96	72	90	1.69	28.45	29.58	NNW	10.9	57.4	4.69	67.0	67.9	72	64	
8	77	57	65.8	58.0	0	2	92	50	77	0.00	28.57	29.71	NNW	8.0	19.9	22.40	67.5	67.8	77	61	
9	79	58	67.6	57.0	0	4	95	40	72	0.00	28.64	29.78	N	6.4	24.7	28.64	69.7	69.6	79	62	
10	89	55	70.8	54.3	0	7	91	25	60	0.00	28.59	29.73	NNW	12.4	34.6	25.94	69.8	70.7	82	63	
11	69	43	54.9	35.7	9	0	85	23	52	0.00	28.93	30.08	NNW	8.3	39.2	30.81	67.3	68.0	81	56	
12	79	44	63.6	45.3	4	0	94	28	56	0.00	28.67	29.81	SSE	14.3	35.6	29.76	65.8	69.1	81	57	
13	86	64	74.0	60.5	0	10	84	38	65	0.00	28.61	29.75	SSE	11.4	31.8	23.00	69.1	75.8	88	67	
14	71	54	62.7	49.6	2	0	96	36	65	0.80	28.79	29.94	ENE	10.6	25.7	16.77	68.4	72.5	80	65	
15	71	52	60.2	50.5	3	0	95	43	73	0.00	28.84	29.99	N	8.6	23.7	23.75	66.9	66.6	74	61	
16	78	50	63.4	48.6	1	0	96	27	64	0.00	28.94	30.09	NNW	5.0	17.7	30.17	67.9	67.2	77	58	
17	85	50	69.2	48.6	0	2	90	21	53	0.00	28.76	29.91	SW	5.4	18.1	26.81	68.6	70.8	84	58	
18	88	54	71.1	48.8	0	6	95	17	53	0.00	28.69	29.84	NNW	5.0	18.8	30.63	70.6	75.9	90	63	
19	99	57	78.7	51.3	0	13	81	15	44	0.00	28.54	29.68	SW	9.1	27.5	30.51	71.3	78.9	93	66	
20	83	57	72.5	51.5	0	5	89	25	53	0.00	28.69	29.83	NNE	8.5	26.7	24.93	72.1	79.6	89	71	
21	85	54	71.2	58.1	0	4	93	41	66	0.00	28.50	29.63	SE	11.2	30.2	24.33	71.1	77.2	88	68	
22	90	69	79.4	67.8	0	14	94	48	69	0.00	28.32	29.45	SSE	17.3	36.8	23.05	73.0	80.0	89	72	
23	91	75	81.4	70.2	0	18	83	50	70	0.00	28.49	29.63	SE	15.9	32.1	18.16	74.6	81.5	90	76	
24	93	76	83.5	70.8	0	19	86	46	67	0.00	28.66	29.80	SSE	13.6	34.4	24.44	76.5	84.5	94	77	
25	92	73	81.5	63.2	0	17	79	28	55	0.01	28.69	29.83	SSE	14.2	53.0	23.53	76.3	83.8	92	77	
26	93	75	82.5	69.2	0	19	85	43	66	0.00	28.65	29.79	SSE	12.7	29.6	25.94	77.4	85.4	95	78	
27	81	64	71.4	66.0	0	8	96	62	84	0.71	28.77	29.92	SE	9.3	43.5	13.03	75.2	76.8	84	73	
28	86	66	76.1	66.7	0	11	96	51	75	0.00	28.94	30.09	ESE	5.3	14.3	27.24	76.7	77.8	86	71	
29	89	70	77.4	68.7	0	14	94	50	76	0.00	28.86	30.01	SSE	11.7	26.8	21.88	76.6	78.8	89	72	
30	93*	71*	80.7*	66.0*	0*	17*	86*	37*	64*	0.00*	28.73*	29.87*	S	13.2*	30.6*	29.25*	76.9*	82.7*	95*	73*	
31	93	68	80.5	67.3	0	15	93	44	66	0.98	28.74	29.88	SSE	12.1	52.0	29.92	77.7	85.1	97	75	
83* 58* 70.7* 55.9*				<- Monthly Averages ->				28.69* 29.84*		SSE* 10.6* 57.4*			24.78*		70.8* 75.2* 85* 67*						
Temperature - Highest: 99* Lowest: 34*				Degree Days - Total HDD: 43* Total CDD: 228*				Number of Days With: Tmax ≥ 90: 8* Rainfall ≥ 0.01 inch: 7* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 5* Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 17* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 16*													
Rainfall: Monthly Total: 4.33* in. Greatest 24 Hr: 1.69* in.				Humidity - Highest: 96* Lowest: 15*																	

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* Denotes incomplete record

monthly data generated on tuesday, july 01, 2008 at 11:02 vnc

MESONET CLIMATOLOGICAL DATA SUMMARY June 2008 Time Zone: Midnight-Midnight CST
 (CHIC) Chickasha Nearest City: 2.0 SSE Chickasha County: Grady
 Latitude: 35-01-56 Longitude: 97-54-52 Elevation: 1076 feet

DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	91	71	79.5	70.4	0	16	92	53	75	0.00	28.74	29.89	SE	8.9	26.3	21.09	77.9	80.3	86	75	
2	93	71	81.7	69.1	0	17	93	43	68	0.00	28.65	29.80	SSE	14.4	32.6	29.99	78.2	80.5	89	73	
3	95	75	85.0	65.2	0	20	73	37	53	0.00	28.46	29.60	S	17.8	40.7	30.00	78.1	83.7	95	74	
4	93	77	84.8	66.1	0	20	73	42	54	0.00	28.35	29.48	S	21.6	41.0	28.78	78.5	85.9	96	78	
5	92	63	82.0	66.5	0	13	92	41	61	0.73	28.36	29.49	S	25.3	57.9	24.93	78.2	85.0	93	78	
6	91	66	78.9	69.7	0	13	94	51	75	0.00	28.64	29.78	SSW	11.3	28.9	22.73	76.8	78.8	85	73	
7	90	76	82.7	70.0	0	18	84	52	67	0.00	28.69	29.84	S	18.5	40.3	27.43	78.2	81.4	90	75	
8	92	76	83.2	68.3	0	19	81	44	62	0.00	28.65	29.79	S	17.4	36.6	23.70	78.2	83.7	93	76	
9	80	59	67.0	63.8	0	4	97	67	90	3.85	28.76	29.91	ESE	6.7	44.1	8.76	74.2	74.9	83	71	
10	85	59	72.3	67.0	0	7	97	68	84	0.00	28.77	29.91	SE	10.2	24.6	22.84	73.5	75.7	86	66	
11	91	72	81.2	67.6	0	16	88	43	65	0.00	28.60	29.74	SSE	18.1	36.7	28.84	76.6	77.7	85	72	
12	90	75	82.2	67.3	0	18	75	47	62	0.00	28.64	29.78	SSE	16.1	36.7	29.46	76.7	77.8	85	72	
13	91	70	80.2	69.3	0	15	94	51	70	0.18	28.77	29.91	S	11.7	33.4	24.36	78.1	78.6	86	73	
14	89	65	77.0	70.3	0	12	96	62	81	0.25	28.83	29.98	SE	7.7	18.7	29.60	79.3	79.8	89	71	
15	93	69	81.1	70.2	0	16	96	42	72	0.00	28.72	29.86	SE	7.2	22.1	26.07	80.3	80.8	89	73	
16	85	68	75.9	67.5	0	11	86	64	76	0.00	28.80	29.95	ESE	11.0	30.9	20.89	79.8	81.4	94	75	
17	76	64	69.2	65.6	0	5	96	69	88	0.53	28.91	30.06	ESE	5.8	29.8	8.25	75.9	74.4	77	71	
18	87	66	76.0	68.4	0	11	96	54	79	0.00	28.81	29.96	ESE	4.9	18.6	27.72	78.0	78.6	89	70	
19	89	69	77.1	68.3	0	14	95	45	76	0.07	28.79	29.93	SSE	5.9	38.1	23.88	79.8	80.0	89	73	
20	88	66	77.1	66.1	0	12	95	43	72	0.00	28.86	30.01	NE	5.6	17.4	30.39	80.9	83.7	97	74	
21	90	63	76.0	63.7	0	11	96	33	70	0.00	28.98	30.13	NA	3.2	11.8	28.43	80.7	85.8	99	74	
22	94	64	78.8	62.8	0	14	96	29	63	0.00	28.89	30.04	SSE	5.2	16.6	30.06	80.9	88.1	102	76	
23	91	67	80.3	62.8	0	14	87	39	57	0.00	28.84	29.98	SSW	9.3	25.9	24.13	80.5	87.6	97	79	
24	92	65	78.8	63.9	0	13	90	38	63	0.00	28.89	30.04	SE	9.1	25.1	21.48	79.0	85.3	95	77	
25	92	71	80.5	67.3	0	17	90	37	66	0.00	28.86	30.01	SE	9.8	24.3	23.94	79.5	86.3	95	78	
26	95	69	81.8	66.6	0	17	91	37	63	0.00	28.77	29.91	SSE	10.9	27.3	29.20	80.5	88.4	100	78	
27	95	73	82.8	67.4	0	19	79	38	61	0.00	28.69	29.84	SSE	11.1	31.3	27.47	81.3	89.5	100	81	
28	88	72	80.3	68.1	0	15	92	50	68	0.00	28.79	29.94	ESE	5.4	18.1	14.76	80.6	87.0	94	82	
29	87	60	74.9	59.9	0	9	93	27	65	0.00	28.99	30.14	NNW	5.1	18.6	25.50	80.6	87.3	98	80	
30	91	56	75.0	60.0	0	8	97	32	66	0.00	28.98	30.13	NA	3.0	13.9	29.15	79.8	87.7	101	76	

90 68 78.8 66.6 <- Monthly Averages -> 28.75 29.89 SSE* 10.6 57.9 24.79 78.7 82.5 92 75

Temperature - Highest: 95 Lowest: 56	Degree Days - Total HDD: 0 Total CDD: 415	Number of Days With: Tmax ≥ 90: 18 Tmax ≤ 32: 0 Tmin ≤ 32: 0 Tmin ≤ 0: 0	Rainfall ≥ 0.01 inch: 6 Rainfall ≥ 0.10 inch: 5 Avg Wind Speed ≥ 10 mph: 14 Max Wind Speed ≥ 30 mph: 13
Rainfall: Monthly Total: 5.61 in. Greatest 24 Hr: 3.85 in.	Humidity - Highest: 97 Lowest: 27		

MESONET CLIMATOLOGICAL DATA SUMMARY July 2008 Time Zone: Midnight-Midnight CST
 (CHIC) Chickasha Nearest City: 2.0 SSE Chickasha County: Grady
 Latitude: 35-01-56 Longitude: 97-54-52 Elevation: 1076 feet

DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	94	61	78.8	61.8	0	12	96	28	61	0.00	28.85	30.00	SSE	8.4	25.1	29.36	80.6	89.3	101	79	
2	94	71	81.8	61.8	0	17	70	31	53	0.00	28.79	29.93	S	9.9	29.2	28.87	81.7	90.5	102	81	
3	93	65	77.2	65.9	0	14	94	41	70	0.00	28.82	29.96	SSE	5.2	23.5	21.46	81.3	88.9	99	81	
4	94	66	79.3	67.3	0	15	96	38	71	0.00	28.85	29.99	SSE	4.1	20.5	28.21	81.7	90.6	103	80	
5	96	65	81.1	65.1	0	15	96	32	63	0.00	28.78	29.93	SSE	7.4	21.8	29.77	82.4	91.8	104	81	
6	94	68	81.9	64.9	0	16	88	36	59	0.00	28.77	29.91	SSW	9.5	25.9	28.71	82.7	91.9	102	83	
7	95	75	84.7	63.5	0	20	77	34	50	0.00	28.79	29.94	S	12.0	28.2	28.06	83.1	92.4	102	84	
8	93	72	81.0	67.0	0	17	92	37	65	0.03	28.82	29.97	SSW	9.4	27.5	20.48	82.7	90.7	98	84	
9	89	71	75.8	70.4	0	15	95	52	84	0.29	28.89	30.04	SSE	4.4	26.5	13.21	80.9	85.2	93	80	
10	93	68	79.8	70.2	0	16	97	42	75	0.00	28.85	30.00	SE	6.2	19.7	22.28	79.9	84.8	94	77	
11	95	73	83.8	65.8	0	19	85	33	57	0.00	28.79	29.94	SSE	11.9	29.4	26.99	80.6	88.4	101	78	
12	98	73	83.4	67.8	0	20	86	36	62	0.00	28.80	29.95	SSW	10.1	30.3	24.25	81.2	90.2	102	81	
13	82	68	75.1	70.0	0	10	96	66	85	0.50	28.87	30.02	NNE	5.0	25.3	8.73	79.2	82.8	88	78	
14	91	63	77.9	67.7	0	12	97	45	74	0.00	28.83	29.98	ESE	4.1	12.7	26.45	78.6	82.5	93	73	
15	91	70	79.0	69.8	0	15	95	46	76	0.00	28.88	30.03	SE	6.8	21.4	22.65	79.7	85.4	97	77	
16	94	69	78.6	69.7	0	16	96	44	77	0.04	28.92	30.07	SE	6.0	31.1	23.14	79.7	87.2	99	78	
17	94	69	80.9	68.8	0	17	95	40	70	0.00	28.86	30.01	SE	5.2	21.1	23.79	80.0	87.8	99	78	
18	98*	69*	82.2*	64.3*	0*	18*	90*	29*	59*	0.00*	28.79*	29.93*	SSE*	7.0*	20.2*	22.75*	81.3*	89.7*	101*	80*	
19	97	66	82.3	63.2	0	17	89	27	56	0.00	28.82	29.97	SSE	6.8	18.9	28.73	82.1	90.9	103	80	
20	99	66	83.3	63.2	0	18	92	25	56	0.00	28.87	30.02	SE	6.2	24.8	29.45	83.5	92.4	104	82	
21	100	67	84.4	63.5	0	18	92	26	55	0.00	28.82	29.96	SE	5.5	16.2	29.06	84.7	93.7	105	83	
22	101	67	84.3	63.1	0	19	94	22	56	0.00	28.78	29.92	ESE	4.8	16.7	28.95	85.4	94.5	106	84	
23	100	68	84.9	66.1	0	19	92	30	58	0.00	28.81	29.96	SE	6.1	17.6	28.19	86.3	95.0	106	85	
24	96	67	83.6	66.2	0	17	93	33	59	0.00	28.83	29.97	SSE	7.3	21.9	27.18	86.2	94.3	104	85	
25	96	71	83.9	67.1	0	19	86	34	60	0.00	28.88	30.03	SSW	8.3	25.1	26.91	86.3	94.1	103	86	
26	98	69	83.7	64.6	0	19	90	28	57	0.00	28.85	30.00	SSW	6.1	20.1	28.31	86.5	94.6	105	85	
27	101	68	84.4	60.7	0	20	84	21	49	0.00	28.72	29.87	SE	7.6	21.9	25.42	85.9	93.6	103	85	
28	105	66	87.3	57.9	0	20	77	18	41	0.00	28.63	29.78	SE	9.6	25.7	25.57	85.4	93.2	104	84	
29	94	74	83.1	67.8	0	19	86	39	62	0.08	28.64	29.78	SSE	7.9	30.5	15.98	85.6	91.3	98	86	
30	90	73	80.0	70.8	0	16	95	49	75	0.00	28.64	29.78	NNW	4.7	16.1	21.54	84.8	89.7	99	83	
31	97	69	82.7	69.8	0	18	95	40	68	0.00	28.66	29.80	ENE	4.6	16.2	23.29	84.6	91.3	101	82	

95* 69* 81.6* 66.0* <- Monthly Averages -> 28.80* 29.95* SE * 7.0* 31.1* 24.77* 82.7* 90.3* 101* 81*

Temperature - Highest: 105* Lowest: 61*	Degree Days - Total HDD: 0* Total CDD: 525*	Number of Days With: Tmax ≥ 90: 29* Rainfall ≥ 0.01 inch: 5* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 2* Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 3* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 3*
Rainfall: Monthly Total: 0.94* in. Greatest 24 Hr: 0.50* in.	Humidity - Highest: 97* Lowest: 18*	

MESONET CLIMATOLOGICAL DATA SUMMARY August 2008 Time Zone: Midnight-Midnight CST
 (CHIC) Chickasha Nearest City: 2.0 SSE Chickasha County: Grady
 Latitude: 35-01-56 Longitude: 97-54-52 Elevation: 1076 feet

DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	102	69	85.5	68.4	0	20	96	30	62	0.00	28.72	29.87	NA	3.6	20.2	25.30	85.8	94.4	106	84	
2	102	69	87.6	64.4	0	21	91	26	51	0.00	28.75	29.89	SSE	6.0	18.7	26.12	86.4	95.7	106	86	
3	104	71	88.3	60.2	0	22	77	17	44	0.00	28.75	29.89	SSE	8.3	24.1	26.80	86.6	95.8	106	86	
4	104*	70*	88.5*	61.9*	0*	22*	83*	20*	46*	0.00*	28.78*	29.92*	SSE*	6.3*	19.1*	26.03*	87.0*	96.3*	107*	87*	
5	102	70	85.9	65.0	0	21	88	29	55	0.00	28.83	29.98	NA	4.5	18.9	25.48	87.7	97.0	108	87	
6	92	66	79.5	66.2	0	14	93	43	66	0.00	28.88	30.03	NA	6.5	22.5	21.36	86.9	94.0	102	86	
7	95	68	79.2	67.9	0	16	93	40	71	0.00	28.86	30.01	NA	4.8	22.7	19.21	86.0	92.1	101	85	
8	92	70	80.3	68.9	0	16	93	44	71	0.00	28.83	29.98	SE	5.3	18.9	20.69	86.2	92.0	101	85	
9	101	74	86.2	66.1	0	22	86	27	56	0.00	28.68	29.82	SE	9.1	24.4	24.40	87.1	93.5	104	85	
10	90	73	81.7	68.1	0	17	89	43	65	0.12	28.64	29.78	E	6.5	18.6	12.63	86.0	88.9	93	85	
11	86	73	75.8	71.4	0	14	95	62	87	0.13	28.68	29.82	E	5.5	13.9	10.48	83.3	83.6	89	81	
12	87*	65*	76.5*	67.0*	0*	11*	94*	47*	75*	0.00*	28.70*	29.85*	N *	6.7*	19.4*	22.18*	83.3*	86.2*	98*	78*	
13	94	61	76.8	62.4	0	13	97	30	67	0.00	28.75	29.90	E	4.1	15.0	26.73	82.9	88.0	101	77	
14	95	62	76.0	63.4	0	14	95	34	70	0.17	28.77	29.92	SE	8.1	39.2	23.31	83.3	88.0	100	80	
15	86	66	74.6	66.1	0	11	96	47	77	0.03	28.86	30.01	N	4.3	13.3	21.66	81.8	84.6	94	77	
16	82	62	72.3	64.9	0	7	95	52	79	0.00	28.94	30.10	ENE	5.0	14.8	12.97	80.2	81.6	88	77	
17	84	60	71.4	63.5	0	7	97	50	78	0.01	28.89	30.04	NA	4.2	15.6	13.15	78.2	79.6	87	74	
18	69	67	67.9	66.2	0	3	97	85	94	1.86	28.82	29.97	ESE	5.3	18.3	3.15	76.4	74.7	78	72	
19	70	65	67.3	65.7	0	3	97	87	94	1.62	28.81	29.96	ENE	6.7	19.7	3.50	73.1	71.2	73	70	
20	80	66	71.6	66.5	0	8	94	66	84	0.00	28.76	29.90	ENE	3.6	13.7	13.68	75.2	74.8	82	70	
21	87	67	75.5	67.0	0	12	96	47	78	0.00	28.74	29.88	NA	3.5	14.8	19.43	77.8	77.8	85	73	
22	95	69	81.7	70.2	0	17	95	41	71	0.00	28.76	29.90	SE	8.7	25.2	25.42	79.0	79.8	88	73	
23	94	68	80.3	70.8	0	16	96	44	75	0.00	28.88	30.03	SE	4.1	17.7	20.84	80.3	83.0	93	74	
24	90	66	78.1	69.2	0	13	97	50	77	0.00	28.86	30.01	NA	4.2	18.7	23.98	81.0	85.5	98	75	
25	86	65	75.0	62.8	0	10	94	34	69	0.00	28.79	29.94	NNE	4.8	18.4	25.41	80.9	86.3	98	77	
26	91	61	76.0	65.9	0	11	97	43	74	0.00	28.72	29.87	NA	3.5	14.5	22.91	80.1	85.5	97	76	
27	93	68	80.2	69.1	0	16	96	42	72	0.00	28.71	29.85	SE	6.3	19.6	23.96	81.0	87.2	98	78	
28	95	70	81.8	69.0	0	17	93	41	68	0.00	28.70	29.84	S	6.6	19.5	24.23	81.9	88.6	99	80	
29	95	67	80.0	67.8	0	16	96	40	70	0.00	28.80	29.95	NA	3.7	16.9	21.38	82.3	88.8	100	80	
30	92	66	78.7	67.5	0	14	96	41	72	0.30	28.86	30.01	NA	5.0	24.5	22.98	82.5	88.6	99	80	
31	90	69	78.3	70.0	0	14	97	48	78	0.00	28.82	29.96	SE	5.9	16.5	21.49	81.8	84.6	92	78	

91* 67* 78.7* 66.6* <- Monthly Averages -> 28.79* 29.93* NA 5.5* 39.2* 20.35* 82.3* 86.7* 96* 79*

Temperature - Highest: 104* Lowest: 60*	Degree Days - Total HDD: 0* Total CDD: 440*	Number of Days With: Tmax ≥ 90: 21* Rainfall ≥ 0.01 inch: 8* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 6* Tmin ≤ 32: 0* Avg Wind Speed ≥ 10 mph: 0* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 1*
Rainfall: Monthly Total: 4.24* in. Greatest 24 Hr: 1.86* in.	Humidity - Highest: 97* Lowest: 17*	

MESONET CLIMATOLOGICAL DATA SUMMARY (CHIC) Chickasha Latitude: 35-01-56				September 2008 Nearest City: 2.0 SSE Chickasha Longitude: 97-54-52				Time Zone: Midnight-Midnight CST County: Grady Elevation: 1076 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	90	65	77.4	68.0	0	12	96	47	76	0.00	28.74	29.89	ESE	4.8	18.2	22.92	81.5	85.3	97	75	
2	89	67	77.1	68.5	0	13	96	48	77	0.76	28.71	29.86	N	10.0	32.6	21.21	81.2	85.5	96	78	
3	67	61	63.7	58.3	1	0	93	77	83	0.01	28.74	29.89	NNW	16.3	35.3	7.32	75.3	72.1	78	68	
4	82	59	68.3	59.3	0	5	96	52	75	0.00	28.73	29.88	NNW	8.0	23.2	23.66	74.4	73.4	83	65	
5	83	56	69.7	60.8	0	5	97	52	76	0.00	28.81	29.96	NA	4.4	16.0	23.17	76.1	77.0	89	67	
6	90	60	74.3	64.0	0	10	95	46	73	0.00	28.81	29.96	SSE	7.0	21.4	22.39	77.1	80.2	91	71	
7	92	62	76.2	62.9	0	12	96	32	68	0.00	28.87	30.02	SE	6.3	16.9	24.01	78.3	82.8	95	73	
8	82	62	72.8	65.8	0	7	95	56	80	0.04	28.86	30.01	SSE	6.4	22.1	9.25	77.1	78.7	83	75	
9	71	60	64.9	61.6	0	1	96	77	89	0.01	28.91	30.06	N	5.9	19.7	5.23	73.9	72.1	75	70	
10	72	66	69.5	67.9	0	4	96	92	95	0.36	28.83	29.98	SSE	5.6	17.4	3.47	73.5	72.0	74	71	
11	82	70	75.3	71.2	0	11	96	73	87	0.00	28.78	29.92	SE	7.8	19.7	7.41	74.6	74.4	79	71	
12	89	72	78.8	70.2	0	15	95	50	77	0.00	28.67	29.82	SSE	8.1	24.1	17.84	76.7	77.3	84	73	
13	77	67	73.0	69.4	0	7	96	81	89	0.16	28.56	29.70	N	7.9	24.1	5.40	76.1	74.9	77	71	
14	75	52	67.0	54.5	1	0	94	39	67	0.00	28.90	30.05	NNW	10.7	30.7	23.45	73.5	71.7	79	66	
15	75	45	59.8	46.4	5	0	96	30	68	0.00	29.11	30.27	NNE	4.6	19.5	24.38	71.2	70.6	83	60	
16	81	40	58.7	45.3	5	0	98	27	69	0.00	29.10	30.25	NA	1.8	9.1	24.17	70.1	70.7	84	59	
17	82	43	61.0	48.0	3	0	98	27	70	0.00	29.04	30.19	NA	2.5	11.5	23.80	70.2	71.9	85	61	
18	79	47	61.8	53.6	2	0	98	46	78	0.00	29.01	30.17	NA	3.4	16.4	17.34	70.4	71.6	81	63	
19	81*	46*	61.7*	52.1*	2*	0*	98*	35*	76*	0.00*	28.96*	30.11*	NA	2.1*	16.1*	19.91*	70.9*	73.1*	85*	63*	
20	84	48	65.1	54.1	0	1	98	36	73	0.00	28.95	30.10	NA	2.4	14.3	21.22	71.4	74.0	85	64	
21	86	52	68.5	58.0	0	4	98	37	74	0.00	28.97	30.12	NA	5.5	20.7	19.60	72.1	74.8	85	66	
22	85	59	71.2	61.1	0	7	97	45	74	0.00	28.99	30.14	SE	7.9	22.7	19.29	73.0	76.0	86	68	
23	88	58	71.4	60.2	0	8	97	35	72	0.00	29.00	30.16	SE	6.6	21.7	20.16	73.6	76.5	87	68	
24	87	56	70.0	58.7	0	7	98	34	72	0.00	29.06	30.22	NA	3.5	15.7	19.45	74.1	77.0	87	69	
25	87	54	68.3	57.1	0	5	97	35	73	0.00	29.05	30.20	NA	2.3	11.8	20.44	74.2	77.1	88	68	
26	88	53	68.2	54.8	0	6	97	27	69	0.00	28.94	30.09	NA	2.1	10.3	20.69	74.4	77.5	89	69	
27	89	50	67.7	54.0	0	5	98	28	69	0.00	28.91	30.07	NA	2.0	13.7	20.41	74.3	77.3	88	68	
28	87	51	67.0	53.1	0	4	97	25	69	0.00	28.97	30.12	NA	2.3	12.9	20.78	74.3	77.3	88	68	
29	89	47	68.3	54.3	0	3	98	27	67	0.00	28.97	30.13	NA	4.4	18.3	19.63	73.7	76.3	87	67	
30	79	46	62.1	46.1	3	0	93	23	64	0.00	29.03	30.18	NNW	4.3	17.1	21.03	73.3	75.8	86	67	
83* 56* 68.6* 58.6*				<- Monthly Averages ->				28.90* 30.05*		NA 5.6* 35.3*			18.30*		74.3* 75.8* 85* 68*						
Temperature - Highest: 92* Lowest: 40*				Degree Days - Total HDD: 21* Total CDD: 151*				Number of Days With: Tmax >= 90: 1* Rainfall > 0.01 inch: 6* Tmax <= 32: 0* Rainfall > 0.10 inch: 3* Tmin <= 32: 0* Avg Wind Speed >= 10 mph: 3* Tmin <= 0: 0* Max Wind Speed >= 30 mph: 3*													
Rainfall: Monthly Total: 1.34* in. Greatest 24 Hr: 0.76* in.				Humidity - Highest: 98* Lowest: 23*																	

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* Denotes incomplete record

monthly data generated on saturday, november 01, 2008 at 11:08 am

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Tipton Weather



All Data can be accessed at <http://agweather.mesonet.org/index.php/data/section/weather>

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MESONET CLIMATOLOGICAL DATA SUMMARY (TIPT) Tipton Latitude: 34-26-22				March 2008 Nearest City: 4.0 S Tipton Longitude: 99-08-15				Time Zone: Midnight-Midnight CST County: Tillman Elevation: 1270 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	78	31	55.9	42.0	11	0	97	33	64	0.00	28.74	30.09	NA	10.2	29.1	20.39	50.0	53.3	62	45	
2	79	42	61.8	51.6	4	0	93	39	72	0.55	28.32	29.66	S	20.7	51.7	11.47	53.5	57.5	64	53	
3	42	29	38.9	28.1	29	0	89	48	66	0.01	28.66	30.01	N	20.1	48.5	3.71	49.2	45.3	53	41	
4	60	24	42.0	28.4	23	0	93	33	62	0.00	28.53	29.88	ESE	11.3	28.1	21.85	46.6	43.9	53	38	
5	58	33	43.3	31.4	19	0	89	32	65	0.00	28.55	29.90	NNE	15.6	36.9	20.21	47.6	45.6	53	40	
6	43	29	35.5	24.5	29	0	89	36	65	0.00	28.79	30.15	NNE	14.6	32.1	7.67	46.1	42.3	45	40	
7	45	24	33.7	19.9	31	0	88	36	59	0.00	28.82	30.18	N	12.4	42.3	19.07	44.1	41.3	48	36	
8	51	18	33.8	15.1	31	0	86	27	50	0.00	28.73	30.09	SSE	8.2	24.3	19.03	43.3	41.3	49	35	
9	64	31	46.8	29.3	18	0	75	27	53	0.00	28.75	30.11	ENE	8.6	16.4	17.71	45.8	46.3	55	38	
10	66	36	51.3	32.0	14	0	85	23	52	0.00	28.94	30.30	NNE	8.1	20.8	22.30	49.0	51.9	61	44	
11	75*	31*	52.0*	32.8*	12*	0*	91*	23*	53*	0.00*	28.81*	30.16*	SSW*	8.1*	22.6*	17.68*	49.8*	52.6*	62*	44*	
12	79	43	61.3	34.2	4	0	69	18	40	0.00	28.52	29.87	SSW	15.1	32.6	21.39	51.5	55.5	63	48	
13	71	44	56.4	40.6	8	0	86	34	58	0.00	28.33	29.66	S	10.6	25.9	19.37	52.8	56.9	63	52	
14	86	37	59.8	38.3	3	0	97	10	56	0.00	28.22	29.55	N	10.4	37.9	22.23	53.2	57.7	67	49	
15	60	41	51.0	40.8	15	0	86	43	69	0.00	28.52	29.87	N	13.5	29.0	16.78	54.5	57.9	63	54	
16	68	41	54.3	41.2	11	0	85	39	64	0.00	28.56	29.91	ESE	17.9	33.4	19.06	53.8	56.4	63	51	
17	76	49	61.1	56.7	3	0	96	54	86	1.09	28.39	29.73	SE	19.2	37.4	8.85	57.2	60.2	65	56	
18	50	45	47.3	43.0	18	0	94	71	85	0.97	28.49	29.84	N	17.4	41.1	5.26	53.4	51.9	56	49	
19	65	34	50.5	36.3	15	0	90	26	61	0.00	28.76	30.11	NW	8.2	18.4	24.20	52.8	52.4	62	44	
20	73	41	57.3	37.0	8	0	84	23	51	0.00	28.71	30.07	S	14.3	35.3	24.37	53.7	53.0	60	46	
21	70	40	55.1	39.2	10	0	90	26	59	0.00	28.70	30.06	NNE	11.0	28.2	24.24	54.6	56.3	66	48	
22	67	41	53.7	36.4	11	0	79	27	54	0.00	28.84	30.20	E	12.3	29.6	17.96	54.4	55.9	64	49	
23	53	36	45.2	30.9	20	0	83	32	59	0.00	29.08	30.45	NNE	12.2	26.0	20.90	53.9	55.2	62	50	
24	65	32	49.5	35.8	17	0	90	40	62	0.00	28.87	30.23	SSW	14.1	32.7	24.45	52.8	53.8	62	45	
25	82	44	62.5	44.9	2	0	87	25	56	0.00	28.57	29.92	SSE	13.5	28.4	24.69	55.3	59.3	69	50	
26	78	50	64.1	50.4	1	0	93	32	64	0.00	28.48	29.83	SSE	8.2	21.1	20.18	57.8	63.0	71	56	
27	89	51	66.3	45.8	0	5	85	14	55	0.00	28.34	29.68	SSW	14.8	36.6	25.66	59.3	65.0	75	57	
28	52	42	47.5	40.3	18	0	88	65	76	0.00	28.68	30.04	NNE	13.8	29.4	5.69	57.0	58.0	64	56	
29	59	42	52.5	46.0	15	0	93	68	79	0.00	28.63	29.98	SSE	7.5	22.6	9.91	56.1	57.4	62	54	
30	85	54	70.6	59.8	0	5	96	46	71	0.00	28.47	29.81	SSE	11.9	29.8	20.87	59.5	64.9	75	57	
31	88	52	72.7	53.5	0	5	88	14	58	0.00	28.40	29.75	S	14.7	31.1	23.49	63.2	70.9	79	66	
67* 38* 52.7* 38.3*				<- Monthly Averages ->				28.62* 29.97*		NNE* 12.8* 51.7*			18.09*		52.6* 54.3* 62* 48*						
Temperature - Highest: 89* Lowest: 18*				Degree Days - Total HDD: 398* Total CDD: 15*				Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 4* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 3* Tmin ≤ 32: 9* Avg Wind Speed ≥ 10 mph: 24* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 14*													
Rainfall: Monthly Total: 2.62* in. Greatest 24 Hr: 1.09* in.				Humidity - Highest: 97* Lowest: 10*																	

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* Denotes incomplete record

monthly data generated on Thursday, June 18, 2008 at 16:28 UTC

MESONET CLIMATOLOGICAL DATA SUMMARY										April 2008		Time Zone: Midnight-Midnight CST									
(TIPT) Tipton										Nearest City: 4.0 S Tipton		County: Tillman									
Latitude: 34-26-22										Longitude: 99-08-15		Elevation: 1270 feet									
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	60	41	50.0	35.2	14	0	77	38	59	0.00	28.85	30.21	NNE	15.7	38.8	25.76	60.6	64.1	70	58	
2	53	40	48.6	42.5	19	0	98	62	80	0.00	28.77	30.13	ESE	8.1	16.4	4.48	57.6	57.4	60	56	
3	89	52	66.0	51.2	0	5	98	11	68	0.00	28.44	29.78	ESE	13.2	38.9	22.32	60.0	64.1	75	56	
4	64	41	51.3	37.8	12	0	80	32	62	0.00	28.67	30.03	N	13.8	36.8	21.90	60.0	62.9	69	58	
5	73	33	55.0	39.6	12	0	95	32	61	0.00	28.52	29.87	SE	11.9	27.6	26.05	58.8	61.5	71	53	
6	75	44	60.4	41.8	5	0	85	30	53	0.00	28.45	29.80	SSE	12.3	27.6	26.09	60.2	64.2	73	57	
7	81	53	66.7	53.8	0	2	79	47	64	0.00	28.43	29.77	E	15.7	33.4	23.51	61.6	66.6	75	59	
8	70	47	60.0	46.0	6	0	85	39	62	0.00	28.51	29.86	NNE	14.9	34.0	26.24	63.2	68.3	75	63	
9	54	45	48.2	45.8	15	0	97	82	91	2.78	28.44	29.78	E	11.4	30.6	2.23	58.0	57.5	64	55	
10	73	47	58.6	42.1	5	0	98	20	63	0.38	28.20	29.54	WSW	18.1	50.4	23.96	56.8	57.4	63	54	
11	65	40	51.4	38.2	13	0	89	36	63	0.00	28.64	29.99	NW	10.8	24.3	21.51	56.3	54.5	62	49	
12	65	38	50.4	36.1	14	0	92	25	63	0.00	28.84	30.20	NW	11.1	31.4	25.36	55.6	55.6	65	47	
13	63	38	50.5	32.8	15	0	87	23	56	0.00	28.96	30.33	NNW	13.1	32.7	28.00	55.1	57.7	67	50	
14	67	31	50.8	35.4	16	0	98	31	61	0.00	28.89	30.25	SSE	8.3	21.9	28.00	55.7	59.1	71	48	
15	77	40	60.7	41.7	6	0	86	31	53	0.00	28.62	29.97	SSE	16.1	34.9	27.53	57.8	62.3	72	53	
16	81	51	66.0	53.9	0	1	85	43	66	0.00	28.42	29.76	SSE	16.8	36.4	26.18	60.2	66.3	76	58	
17	68	43	58.7	49.1	9	0	87	50	71	0.00	28.48	29.82	SSE	15.2	36.3	17.75	61.0	66.0	73	61	
18	75	36	54.5	37.2	10	0	94	20	58	0.00	28.64	30.00	WNW	9.6	21.4	28.20	59.1	63.3	74	54	
19	85	39	63.5	41.0	3	0	92	17	51	0.00	28.54	29.89	SSE	9.7	23.5	28.19	60.4	66.2	77	56	
20	81	54	69.0	51.2	0	3	83	36	55	0.00	28.40	29.74	SSE	14.8	29.2	26.00	62.7	69.8	78	63	
21	90	60	72.8	52.9	0	10	96	14	59	0.00	28.40	29.75	S	8.2	20.0	29.06	64.7	73.3	83	65	
22	82	61	70.1	62.7	0	6	96	54	79	0.00	28.54	29.89	NNE	9.8	25.8	23.13	65.7	73.5	81	67	
23	75*	61*	68.9*	65.8*	0*	3*	96*	63*	90*	0.30*	28.54*	29.89*	ESE*	10.3*	24.6*	6.29*	67.0*	70.7*	73*	67*	
24	90	61	75.3	60.9	0	10	93	23	66	0.00	28.37	29.72	S	14.2	28.2	28.38	68.1	71.4	81	64	
25	74	53	66.0	48.3	1	0	91	25	56	0.00	28.55	29.90	N	16.7	36.8	28.42	66.5	72.3	79	67	
26	76	40	60.6	41.5	7	0	94	25	54	0.00	28.68	30.04	ESE	7.8	35.7	28.16	64.7	69.4	79	60	
27	65	40	53.0	37.2	13	0	88	22	60	0.13	28.89	30.25	N	15.7	41.7	26.59	61.7	66.0	73	60	
28	83	35	59.6	34.3	6	0	96	11	49	0.00	28.76	30.11	SSE	7.9	22.2	29.80	61.0	65.1	77	53	
29	85	42	67.1	36.1	1	0	85	15	38	0.00	28.54	29.89	S	14.6	32.3	29.51	63.8	68.5	78	59	
30	85	52	71.4	47.1	0	4	64	28	43	0.00	28.27	29.61	S	16.2	32.6	26.44	65.7	71.0	78	63	
74* 45* 60.2* 44.6*										<- Monthly Averages ->		28.57* 29.93*		SSE* 12.7* 50.4*			23.83* 61.0* 64.9* 73* 58*				
Temperature - Highest: 90*					Degree Days - Total HDD: 202*					Number of Days With:											
Lowest: 31*					Total CDD: 45*					Tmax ≥ 90: 2* Rainfall ≥ 0.01 inch: 4*											
Rainfall: Monthly Total: 3.59* in.					Humidity - Highest: 98*					Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 4*											
Greatest 24 Hr: 2.78* in.					Lowest: 11*					Tmin ≤ 32: 1* Avg Wind Speed ≥ 10 mph: 22*											
										Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 17*											

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* Denotes incomplete record

monthly data generated on Thursday, June 18, 2008 at 16:28 UTC

MESONET CLIMATOLOGICAL DATA SUMMARY (TIPT) Tipton Latitude: 34-26-22				May 2008 Nearest City: 4.0 S Tipton Longitude: 99-08-15				Time Zone: Midnight-Midnight CST County: Tillman Elevation: 1270 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	91	64	77.4	47.0	0	12	86	12	43	0.00	28.14	29.47	S	15.0	38.7	27.41	68.5	75.3	84	68	
2	78	45	62.5	32.3	4	0	72	12	35	0.00	28.43	29.78	NW	12.6	40.4	30.27	66.6	73.0	81	65	
3	68	45	54.5	25.4	8	0	63	15	37	0.00	28.77	30.13	NNW	11.4	41.4	30.27	63.8	69.6	78	62	
4	78	38	61.3	37.1	7	0	84	21	45	0.00	28.72	30.07	SE	9.5	22.7	27.68	64.8	69.0	78	60	
5	76	57	66.1	56.3	0	1	91	50	71	0.00	28.68	30.03	SSE	11.3	23.8	15.57	66.7	70.5	75	66	
6	86	62	71.9	63.3	0	9	97	21	77	0.67	28.50	29.84	S	10.4	48.2	25.25	70.2	72.4	79	66	
7	72	57	62.5	59.0	1	0	97	65	89	1.74	28.28	29.62	NW	10.5	51.1	11.31	67.3	68.2	72	65	
8	79	53	66.3	58.0	0	1	97	50	77	0.01	28.39	29.73	S	8.0	22.4	25.46	67.3	68.1	76	60	
9	82	57	69.1	56.1	0	4	93	33	67	0.00	28.45	29.79	ESE	8.1	27.7	29.91	69.3	70.6	80	63	
10	90	58	72.5	51.9	0	9	91	21	55	0.00	28.40	29.74	N	13.5	39.6	28.36	69.9	73.9	85	65	
11	69	43	55.8	36.7	9	0	86	27	52	0.00	28.75	30.10	N	8.7	31.7	30.41	66.7	71.3	81	62	
12	80	49	65.1	48.0	1	0	85	35	56	0.00	28.44	29.78	SSE	15.1	30.2	28.04	67.2	70.9	80	62	
13	84*	62*	72.0*	57.9*	0*	8*	95*	31*	65*	0.00*	28.41*	29.75*	NE*	9.4*	25.3*	25.08*	69.5*	75.8*	86*	68*	
14	76	54	64.2	50.4	0	0	94	37	63	0.48	28.58	29.93	NE	12.1	29.3	18.83	69.2	73.7	81	67	
15	71	53	60.7	51.9	3	0	96	43	75	0.00	28.66	30.01	NNE	8.5	21.2	25.30	67.0	67.7	74	62	
16	79	51	64.1	49.2	0	0	96	24	65	0.00	28.76	30.11	N	5.9	18.5	24.82	67.5	69.0	78	60	
17	83	52	66.6	52.1	0	2	93	24	64	0.00	28.58	29.93	SSW	4.7	14.8	18.78	68.0	70.6	79	62	
18	89	52	71.1	49.6	0	5	95	20	54	0.00	28.51	29.86	S	6.2	13.9	27.81	69.5	74.7	87	64	
19	98	56	78.7	50.6	0	12	80	18	42	0.00	28.34	29.68	SW	10.8	29.9	27.93	71.3	77.8	89	68	
20	87	64	75.2	52.7	0	10	85	27	49	0.00	28.48	29.82	ENE	10.3	25.1	23.43	72.9	79.0	88	73	
21	91	60	75.9	57.9	0	11	87	38	55	0.01	28.26	29.59	SE	16.1	32.7	23.23	72.4	77.6	86	70	
22	92	71	81.3	66.2	0	16	87	37	62	0.00	28.07	29.40	SSE	19.5	38.6	24.07	74.1	80.6	88	74	
23	96	76	84.1	68.0	0	21	80	32	61	0.00	28.24	29.57	SE	20.1	36.3	26.86	76.2	83.8	92	77	
24	94	75	84.0	64.4	0	19	88	29	56	0.00	28.44	29.78	SSE	11.2	45.7	28.51	77.9	86.2	95	79	
25	94	65	81.7	62.9	0	14	80	37	54	0.00	28.49	29.83	SSE	15.1	44.0	27.92	77.7	85.9	94	78	
26	94	74	83.8	67.0	0	19	87	36	60	0.00	28.42	29.77	SSE	14.8	31.9	26.88	78.5	86.5	94	80	
27	91	70	79.1	66.1	0	16	85	20	66	0.01	28.52	29.87	SE	14.4	55.8	19.02	78.3	84.7	92	80	
28	90	65	77.7	62.0	0	13	92	33	62	0.00	28.73	30.08	SE	8.3	23.1	27.04	77.8	84.1	94	76	
29	93*	70*	81.1*	64.7*	0*	16*	91*	32*	61*	0.00*	28.64*	29.99*	SSE*	14.9*	33.0*	26.90*	78.8*	85.9*	94*	79*	
30	95	71	82.8	64.1	0	18	82	34	56	0.00	28.51	29.86	SSW	14.6	30.3	29.31	79.4	86.6	95	79	
31	97	67	83.3	63.7	0	17	83	37	54	0.00	28.51	29.85	S	13.9	29.2	29.32	79.8	87.4	96	79	
85* 59* 72.0* 54.6*				<- Monthly Averages ->				28.49* 29.82*		SSE* 11.8* 55.8*			25.52*		71.4* 76.5* 85* 69*						
Temperature - Highest: 98*					Degree Days - Total HDD: 32*					Number of Days With:											
Lowest: 38*					Total CDD: 255*					Tmax >= 90: 13*					Rainfall > 0.01 inch: 6*						
Rainfall: Monthly Total: 2.92* in.					Humidity - Highest: 97*					Tmax < 32: 0*					Rainfall > 0.10 inch: 3*						
Greatest 24 Hr: 1.74* in.					Lowest: 12*					Tmin < 32: 0*					Avg Wind Speed >= 10 mph: 21*						
										Tmin < 0: 0*					Max Wind Speed >= 30 mph: 17*						

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* Denotes incomplete record

monthly data generated on tuesday, july 01, 2008 at 11:02 vnc

MESONET CLIMATOLOGICAL DATA SUMMARY (TIPT) Tipton Latitude: 34-26-22				June 2008 Nearest City: 4.0 S Tipton Longitude: 99-08-15				Time Zone: Midnight-Midnight CST County: Tillman Elevation: 1270 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	98	71	85.0	65.2	0	19	82	33	54	0.00	28.51	29.85	SE	12.3	25.7	29.01	81.1	89.0	98	80	
2	98	71	85.6	62.9	0	19	82	31	50	0.00	28.44	29.78	S	17.2	32.1	29.59	81.5	89.3	97	82	
3	103	73	88.8	60.3	0	23	68	21	41	0.00	28.26	29.60	S	18.7	36.1	29.49	81.8	89.4	98	82	
4	100	75	89.0	59.9	0	23	55	28	38	0.00	28.13	29.47	S	22.6	43.2	29.05	82.3	90.0	98	83	
5	99	69	84.5	65.2	0	19	95	29	57	1.40	28.13	29.46	S	25.9	61.6	26.62	81.7	88.2	96	80	
6	96	67	81.2	67.9	0	16	97	27	68	0.01	28.43	29.77	SSE	11.6	34.6	28.89	79.5	82.2	88	76	
7	94	77	84.8	67.6	0	20	80	41	58	0.00	28.47	29.81	S	21.3	39.7	25.30	79.8	84.2	93	77	
8	95	76	85.7	65.3	0	21	76	37	52	0.00	28.42	29.77	S	21.2	37.9	28.63	79.9	87.0	96	79	
9	82	63	70.5	63.9	0	7	93	53	80	0.13	28.54	29.89	E	10.9	35.5	13.13	78.7	80.8	86	75	
10	95	60	76.3	64.6	0	12	97	39	71	0.00	28.54	29.89	SSE	13.1	32.8	23.15	77.6	79.9	91	71	
11	98	74	86.1	62.4	0	21	77	26	49	0.00	28.37	29.71	SSE	23.4	45.2	29.72	79.2	86.0	95	78	
12	98	77	86.9	63.0	0	22	69	31	46	0.00	28.42	29.76	SSE	17.9	34.4	29.42	80.4	88.6	98	80	
13	99	73	85.6	65.2	0	21	81	27	53	0.00	28.54	29.89	S	14.3	30.9	27.42	81.5	89.7	98	82	
14	99	70	81.9	64.9	0	20	90	26	62	0.30	28.60	29.95	E	10.7	51.3	28.57	82.2	90.0	100	82	
15	99	68	84.4	61.7	0	19	88	23	51	0.00	28.50	29.84	S	12.3	45.9	28.18	80.8	87.0	97	78	
16	101	70	83.8	64.0	0	21	82	25	55	0.06	28.53	29.88	S	17.4	43.3	29.16	81.3	89.1	100	81	
17	90	68	76.4	61.2	0	14	86	31	63	0.00	28.68	30.03	E	15.7	39.6	24.71	80.9	86.1	95	78	
18	95	67	80.2	66.1	0	16	94	35	66	0.00	28.59	29.94	ESE	8.9	26.5	29.39	81.7	88.5	99	80	
19	90	68	76.3	67.7	0	14	95	42	77	1.08	28.59	29.94	E	8.8	27.8	19.21	80.6	83.8	91	79	
20	92	67	78.8	64.3	0	14	95	32	65	0.00	28.67	30.03	ENE	6.6	20.5	29.67	81.0	82.7	91	76	
21	92	69	79.5	62.3	0	15	85	31	59	0.00	28.79	30.14	ENE	5.0	14.7	25.55	80.9	84.3	95	77	
22	97	67	81.9	59.5	0	17	85	20	51	0.00	28.70	30.05	SSE	6.7	18.2	29.05	80.6	86.5	98	77	
23	98	71	84.6	57.1	0	20	77	19	43	0.00	28.63	29.98	SSW	10.9	25.7	26.32	80.8	87.9	96	80	
24	95	68	82.5	59.4	0	17	79	27	48	0.00	28.67	30.03	SSW	10.9	24.2	20.78	80.0	86.3	94	81	
25	95	70	83.2	61.7	0	17	75	28	51	0.00	28.65	30.01	SSW	12.1	29.5	28.50	80.4	88.1	97	80	
26	98	73	85.9	62.0	0	21	69	26	47	0.00	28.55	29.90	S	15.3	29.8	28.75	81.1	89.6	99	82	
27	101	74	87.6	61.8	0	23	67	26	45	0.00	28.47	29.82	S	16.4	40.1	29.29	81.7	90.6	100	83	
28	94	72	80.9	64.0	0	18	81	37	58	0.00	28.59	29.94	SSW	10.0	35.5	13.67	81.3	87.2	92	84	
29	91	68	79.0	58.0	0	14	90	21	55	0.00	28.80	30.15	N	6.7	19.2	25.55	81.0	86.6	94	81	
30	92	61	79.1	58.0	0	12	88	28	53	0.00	28.78	30.14	S	6.5	17.5	29.78	80.8	87.4	97	78	
<- Monthly Averages ->											28.53	29.88	S	13.7	61.6	26.52	80.7	86.9	96	79	
Temperature - Highest: 103 Lowest: 60					Degree Days - Total HDD: 0 Total CDD: 534					Number of Days With: Tmax ≥ 90: 27 Rainfall ≥ 0.01 inch: 6 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 4 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 22 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 18											
Rainfall: Monthly Total: 2.98 in. Greatest 24 Hr: 1.40 in.					Humidity - Highest: 97 Lowest: 19																

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* Denotes incomplete record

monthly data generated on Friday, August 01, 2008 at 11:13 AM

MESONET CLIMATOLOGICAL DATA SUMMARY July 2008 Time Zone: Midnight-Midnight CST
 (TIPT) Tipton Nearest City: 4.0 S Tipton County: Tillman
 Latitude: 34-26-22 Longitude: 99-08-15 Elevation: 1270 feet

DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR (MJ/m2)	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	SOD		BARE	MAX	MIN	
1	97	64	82.3	60.0	0	15	89	26	51	0.00	28.65	30.00	SSW	9.9	28.3	29.00	81.6	88.9	98	80	
2	97	69	84.0	58.8	0	18	78	23	46	0.00	28.58	29.93	SSW	11.4	31.5	29.38	82.4	90.4	100	82	
3	97	68	81.7	62.0	0	18	81	28	55	0.00	28.62	29.97	SSE	6.7	32.0	25.42	82.5	89.8	97	83	
4	96	71	82.2	64.6	0	19	90	30	59	0.01	28.65	30.00	SSW	7.9	25.9	27.37	83.3	90.4	100	83	
5	99	71	85.1	61.7	0	20	79	20	50	0.00	28.58	29.93	SSW	10.5	26.6	30.07	83.7	91.5	101	83	
6	97	73	84.4	61.7	0	20	72	29	49	0.00	28.56	29.91	SSW	13.2	29.8	29.12	84.0	91.9	101	84	
7	97	72	85.0	62.2	0	19	73	30	49	0.00	28.59	29.94	SSW	14.3	31.4	29.77	84.1	92.1	101	84	
8	97	73	82.9	64.4	0	20	91	31	57	0.02	28.62	29.97	SSW	12.5	34.4	25.09	84.4	91.7	99	85	
9	95	71	78.9	68.3	0	18	95	33	74	1.02	28.68	30.04	S	8.5	24.1	22.94	83.4	88.5	98	83	
10	97	70	82.4	66.4	0	19	94	32	63	0.00	28.64	29.99	S	8.9	24.7	23.83	81.8	84.7	92	78	
11	98	74	85.4	63.0	0	21	75	27	50	0.00	28.59	29.94	S	13.8	31.0	26.91	81.2	87.0	97	78	
12	101	73	84.4	66.0	0	22	89	25	58	0.05	28.60	29.95	S	11.0	29.6	26.71	81.8	89.3	101	81	
13	79	69	73.1	69.5	0	9	95	73	89	0.37	28.68	30.03	N	7.9	27.3	8.28	79.3	80.5	86	77	
14	93*	68*	80.1*	68.3*	0*	15*	97*	41*	70*	0.01*	28.62*	29.97*	SSE*	5.0*	15.3*	22.72*	80.1*	81.1*	90*	74*	
15	86	73	78.3	68.7	0	15	89	49	73	0.00	28.67	30.02	SE	8.8	23.5	10.98	80.4	80.2	85	77	
16	92	72	80.5	67.8	0	17	93	39	68	0.05	28.70	30.05	SSE	12.7	29.9	20.72	79.6	81.7	91	76	
17	97	76	84.4	64.9	0	22	79	29	55	0.00	28.65	30.00	SE	11.4	24.9	23.23	81.0	86.1	96	79	
18	99	74	86.4	59.2	0	22	66	23	43	0.00	28.58	29.93	SSE	11.7	28.1	28.08	81.9	88.5	98	80	
19	99	71	85.6	57.0	0	20	65	21	40	0.00	28.61	29.96	SSE	9.8	24.1	27.41	82.5	89.3	99	81	
20	101	72	87.0	57.5	0	21	67	21	40	0.00	28.67	30.02	SSE	10.1	23.9	29.18	83.4	90.4	100	82	
21	102	73	88.5	57.4	0	23	63	20	38	0.00	28.61	29.96	SSE	10.2	21.8	29.00	84.3	91.5	101	83	
22	103	72	89.4	56.5	0	23	69	17	37	0.00	28.57	29.92	SE	8.8	20.8	29.15	85.3	92.7	102	84	
23	102	72	88.2	61.0	0	22	73	24	43	0.00	28.60	29.95	SE	9.5	27.6	28.58	86.1	93.3	103	85	
24	99	73	86.6	63.5	0	21	77	28	49	0.00	28.62	29.97	SSE	10.2	26.8	27.25	86.5	93.0	101	85	
25	98	73	85.8	64.9	0	21	85	31	53	0.00	28.69	30.04	SSW	10.6	24.7	27.12	86.7	92.7	100	85	
26	100	73	87.1	59.9	0	22	68	22	43	0.00	28.65	30.00	SSW	8.7	22.4	28.31	86.9	92.8	102	85	
27	106	76	90.3	52.3	0	26	51	13	31	0.00	28.51	29.86	SSW	11.5	24.8	28.09	86.8	92.7	101	85	
28	108	77	92.7	52.5	0	28	48	13	28	0.00	28.42	29.76	S	13.4	30.4	28.66	87.5	93.7	103	85	
29	94	71	84.5	67.2	0	18	93	29	59	0.75	28.45	29.79	SSE	12.2	38.4	21.65	86.3	87.6	94	83	
30	94	73	82.3	68.7	0	19	88	37	66	0.00	28.46	29.80	NNW	7.9	19.9	24.98	84.9	85.7	95	79	
31	95*	70*	83.5*	68.4*	0*	18*	91*	37*	64*	0.00*	28.46*	29.81*	N	5.5*	17.5*	26.30*	85.2*	89.0*	100*	79*	
	97*	72*	84.3*	62.7*	<- Monthly Averages ->						28.60*	29.95*	SSE*	10.1*	38.4*	25.65*	83.5*	89.0*	98*	82*	
Temperature - Highest: 108*					Degree Days - Total HDD: 0*					Number of Days With:											
Lowest: 64*					Total CDD: 608*					Tmax >= 90: 29*					Rainfall > 0.01 inch: 8*						
Rainfall: Monthly Total: 2.28* in.					Humidity - Highest: 97*					Tmax < 32: 0*					Rainfall > 0.10 inch: 3*						
Greatest 24 Hr: 1.02* in.					Lowest: 13*					Tmin < 32: 0*					Avg Wind Speed >= 10 mph: 17*						
										Tmin < 0: 0*					Max Wind Speed >= 30 mph: 7*						

MESONET CLIMATOLOGICAL DATA SUMMARY (TIPT) Tipton Latitude: 34-26-22				August 2008 Nearest City: 4.0 S Tipton Longitude: 99-08-15				Time Zone: Midnight-Midnight CST County: Tillman Elevation: 1270 feet													
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	102	75	87.5	67.2	0	24	87	25	56	0.00	28.52	29.87	ENE	7.5	25.3	28.04	86.6	92.3	103	83	
2	103	72	87.9	63.5	0	22	81	23	49	0.00	28.56	29.90	SSE	7.4	20.0	28.07	86.7	92.7	102	84	
3	105	77	91.1	56.6	0	26	59	14	35	0.00	28.55	29.90	SSE	11.9	24.1	28.99	86.9	93.2	102	85	
4	105	74	91.2	57.1	0	24	64	17	35	0.00	28.58	29.93	S	9.6	23.2	28.19	87.1	93.4	103	85	
5	104	74	90.1	60.2	0	24	72	23	39	0.00	28.62	29.97	SE	8.8	24.7	27.23	87.9	94.4	104	86	
6	93	70	81.9	64.8	0	17	79	38	58	0.00	28.66	30.02	ESE	11.6	30.1	25.02	87.0	92.4	100	85	
7	99	75	83.8	66.3	0	22	87	29	59	0.00	28.64	29.99	E	8.6	33.4	22.73	87.1	91.9	100	86	
8	93	72	80.8	69.5	0	18	94	41	72	0.17	28.62	29.97	ESE	10.1	20.5	23.70	86.3	89.8	99	82	
9	104	76	88.9	63.2	0	25	85	21	48	0.00	28.47	29.82	SSW	11.9	25.3	25.43	86.0	91.3	100	83	
10	94	78	85.4	65.8	0	21	83	40	53	0.00	28.43	29.77	NNE	10.2	23.5	23.33	86.2	92.0	100	86	
11	89	73	79.2	72.1	0	16	95	51	80	0.16	28.48	29.82	NE	6.9	18.6	17.39	85.3	88.0	94	83	
12	94	70	79.9	65.3	0	17	95	29	66	0.00	28.51	29.86	NNE	8.3	20.6	26.71	84.4	88.0	98	80	
13	93	64	79.8	63.5	0	13	95	32	61	0.00	28.56	29.90	SE	5.9	16.2	22.09	83.8	87.8	96	80	
14	100	66	82.1	60.4	0	18	94	22	53	0.77	28.55	29.90	SE	8.7	52.3	22.03	84.0	88.2	97	82	
15	86	67	75.6	65.6	0	12	95	42	74	0.11	28.66	30.01	NE	6.6	19.8	25.60	81.5	82.2	89	76	
16	76	68	72.5	66.7	0	7	92	65	82	0.00	28.74	30.09	E	7.3	16.5	8.15	79.7	77.5	79	76	
17	83	67	72.9	64.9	0	10	96	50	78	1.19	28.68	30.03	E	7.7	20.7	11.88	78.1	76.3	82	73	
18	74	66	69.2	67.1	0	5	96	83	93	1.77	28.60	29.95	E	9.2	19.1	6.17	75.0	74.0	77	71	
19	71	66	68.5	65.7	0	3	94	86	91	0.00	28.60	29.95	NE	9.3	19.9	4.95	74.7	72.4	74	71	
20	80	67	71.4	66.5	0	9	95	62	85	0.01	28.56	29.91	NNE	5.8	12.6	13.41	75.4	73.9	79	71	
21	89	66	75.9	67.3	0	12	97	45	78	0.01	28.53	29.88	ESE	6.6	16.3	23.68	77.3	77.1	85	71	
22	98	71	83.3	67.3	0	19	92	31	63	0.00	28.54	29.89	SE	12.7	26.8	25.84	79.0	81.0	91	73	
23	95	69	82.3	67.2	0	17	93	29	64	0.00	28.67	30.02	ESE	6.8	14.9	26.12	80.3	85.0	96	76	
24	91	72	80.4	68.9	0	16	95	41	71	0.00	28.66	30.01	ENE	7.0	19.1	25.53	81.1	86.6	96	78	
25	89	70	79.2	64.5	0	15	93	37	64	0.00	28.59	29.94	E	7.3	21.5	25.34	81.3	86.7	96	79	
26	94	67	80.7	64.5	0	16	90	33	61	0.00	28.51	29.86	SE	8.7	18.9	25.25	81.0	86.3	96	78	
27	97	71	83.6	65.8	0	19	90	29	59	0.00	28.50	29.84	SE	9.2	18.4	23.60	81.6	87.2	95	80	
28	96	73	84.0	65.9	0	20	82	32	57	0.00	28.50	29.84	S	9.5	22.9	23.39	82.0	87.8	96	81	
29	95	71	80.5	67.0	0	18	87	33	66	0.02	28.61	29.96	ESE	4.5	19.7	16.14	81.4	86.1	94	81	
30	94	66	76.9	65.7	0	15	94	35	71	0.01	28.66	30.01	SSE	6.2	28.8	17.97	80.3	84.0	92	78	
31	92	69	80.4	66.3	0	16	94	37	66	0.00	28.60	29.95	SE	9.8	23.0	20.71	80.2	84.5	92	78	
<- Monthly Averages ->										28.58	29.93	SE	8.4	52.3	21.70	82.4	85.9	94	79		
Temperature - Highest: 105 Lowest: 64					Degree Days - Total HDD: 0 Total CDD: 514					Number of Days With: Tmax ≥ 90: 22 Rainfall ≥ 0.01 inch: 10 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 6 Tmin ≤ 32: 0 Avg Wind Speed ≥ 10 mph: 6 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 3											
Rainfall: Monthly Total: 4.22 in. Greatest 24 Hr: 1.77 in.					Humidity - Highest: 97 Lowest: 14																

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* Denotes incomplete record

monthly data generated on Wednesday, October 01, 2008 at 12:00 UTC

MESONET CLIMATOLOGICAL DATA SUMMARY										September 2008			Time Zone: Midnight-Midnight CST								
(TIPT) Tipton										Nearest City: 4.0 S Tipton			County: Tillman								
Latitude: 34-26-22										Longitude: 99-08-15			Elevation: 1270 feet								
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN		PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	92	69	80.4	64.3	0	15	87	28	61	0.00	28.53	29.88	ESE	9.2	22.7	24.19	80.9	86.0	95	79	
2	94	66	78.7	64.5	0	15	94	31	65	0.00	28.53	29.88	N	13.0	36.9	23.29	80.9	85.6	93	79	
3	73	62	67.2	57.1	0	2	78	62	70	0.00	28.59	29.94	N	18.8	38.3	14.24	78.3	80.0	83	76	
4	86	59	71.5	57.4	0	7	86	38	64	0.00	28.55	29.90	NNW	7.2	19.3	24.54	77.4	79.9	89	72	
5	93	62	76.7	61.1	0	13	93	33	62	0.00	28.57	29.92	ESE	12.0	26.7	23.38	78.6	82.4	91	75	
6	95	64	79.6	59.9	0	15	89	28	55	0.00	28.58	29.93	SSE	10.5	22.4	23.57	79.5	83.8	93	76	
7	98	64	80.2	55.9	0	16	89	13	49	0.00	28.65	30.00	SE	11.1	26.3	24.68*	80.0	84.5	93	77	
8	82	63	72.1	62.9	0	7	94	49	74	0.17	28.66	30.01	SE	9.4	25.1	NA	78.5	79.8	84	75	
9	66	59	62.6	60.4	2	0	95	83	92	0.22	28.72	30.07	N	8.1	24.0	NA	73.9	70.8	74	69	
10	73	65	68.8	67.0	0	4	96	90	94	0.18	28.63	29.98	SSE	6.4	18.0	NA	73.8	72.0	74	70	
11	81	70	75.3	71.0	0	10	97	70	87	0.13	28.55	29.90	SE	10.7	21.7	NA	75.2	74.6	77	73	
12	87	73	77.2	71.8	0	15	94	61	84	0.08	28.47	29.81	SSE	7.8	20.3	NA	76.4	76.3	80	74	
13	82	65	74.4	69.3	0	8	96	61	85	0.30	28.38	29.72	N	9.6	26.8	NA	77.0	76.5	80	73	
14	78	57	67.5	54.1	0	3	96	32	66	0.01	28.72	30.08	N	11.3	33.0	NA	74.1	71.0	76	67	
15	77	50	63.4	47.6	1	0	96	25	64	0.00	28.92	30.28	NNE	5.1	18.8	NA	71.3	69.9	80	62	
16	83	47	64.7	46.7	0	0	96	24	59	0.00	28.89	30.25	NA	3.9	14.3	NA	69.8	70.7	82	61	
17	84	50	66.7	48.3	0	2	94	27	57	0.00	28.83	30.19	SE	5.7	16.0	NA	70.2	72.5	84	63	
18	81	56	67.5	53.3	0	4	88	36	64	0.00	28.79	30.15	ESE	8.6	21.9	NA	71.2	73.9	84	66	
19	84	54	68.7	54.9	0	4	95	33	65	0.00	28.74	30.10	SE	7.8	16.9	NA	72.0	74.9	85	67	
20	86	56	71.0	54.2	0	6	92	30	60	0.00	28.74	30.09	SE	6.0	19.9	NA	72.7	76.4	86	68	
21	88	59	73.2	56.1	0	8	89	30	59	0.00	28.75	30.11	SE	10.9	24.9	NA	73.1	76.6	85	69	
22	89	63	75.1	59.4	0	11	87	34	61	0.00	28.76	30.12	SE	13.6	28.3	NA	74.0	77.6	86	71	
23	91	61	75.7	59.2	0	11	94	29	61	0.00	28.78	30.14	SE	11.3	23.6	NA	74.6	78.6	88	71	
24	90	62	74.3	57.7	0	11	92	27	61	0.00	28.85	30.21	ESE	8.8	22.8	NA	75.1	78.7	87	72	
25	88*	58*	72.5*	56.3*	0*	8*	91*	28*	61*	0.00*	28.84*	30.20*	ESE*	6.6*	20.7*	NA	74.4*	77.4*	86*	71*	
26	89	56	73.1	52.3	0	7	90	24	53	0.00	28.74	30.10	SSE	5.8	13.7	NA	74.2	77.6	87	70	
27	91	56	73.1	50.7	0	8	86	21	51	0.00	28.71	30.06	SE	5.4	16.4	NA	74.1	77.6	87	70	
28	89	56	72.2	51.9	0	8	90	24	54	0.00	28.76	30.12	E	5.2	18.3	NA	74.2	77.6	87	70	
29	91	53	72.3	51.4	0	7	87	21	54	0.00	28.78	30.13	NE	5.2	16.1	NA	73.7	77.0	86	69	
30	83	52	67.1	41.9	0	3	88	14	47	0.00	28.83	30.19	NNE	6.0	14.4	NA	73.4	76.3	85	70	
85* 60* 72.1* 57.3*										<- Monthly Averages ->		28.69* 30.05*		SE * 8.7* 38.3*			22.56* 75.1* 77.2* 85* 71*				
Temperature - Highest: 98*					Degree Days - Total HDD: 4*					Number of Days With:											
Lowest: 47*					Total CDD: 229*					Tmax >= 90: 9*					Rainfall > 0.01 inch: 7*						
										Tmax <= 32: 0*					Rainfall > 0.10 inch: 5*						
Rainfall: Monthly Total: 1.09* in.					Humidity - Highest: 97*					Tmin <= 32: 0*					Avg Wind Speed >= 10 mph: 10*						
Greatest 24 Hr: 0.30* in.					Lowest: 13*					Tmin <= 0: 0*					Max Wind Speed >= 30 mph: 3*						

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* Denotes incomplete record

monthly data generated on saturday, november 01, 2008 at 11:08 utc

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