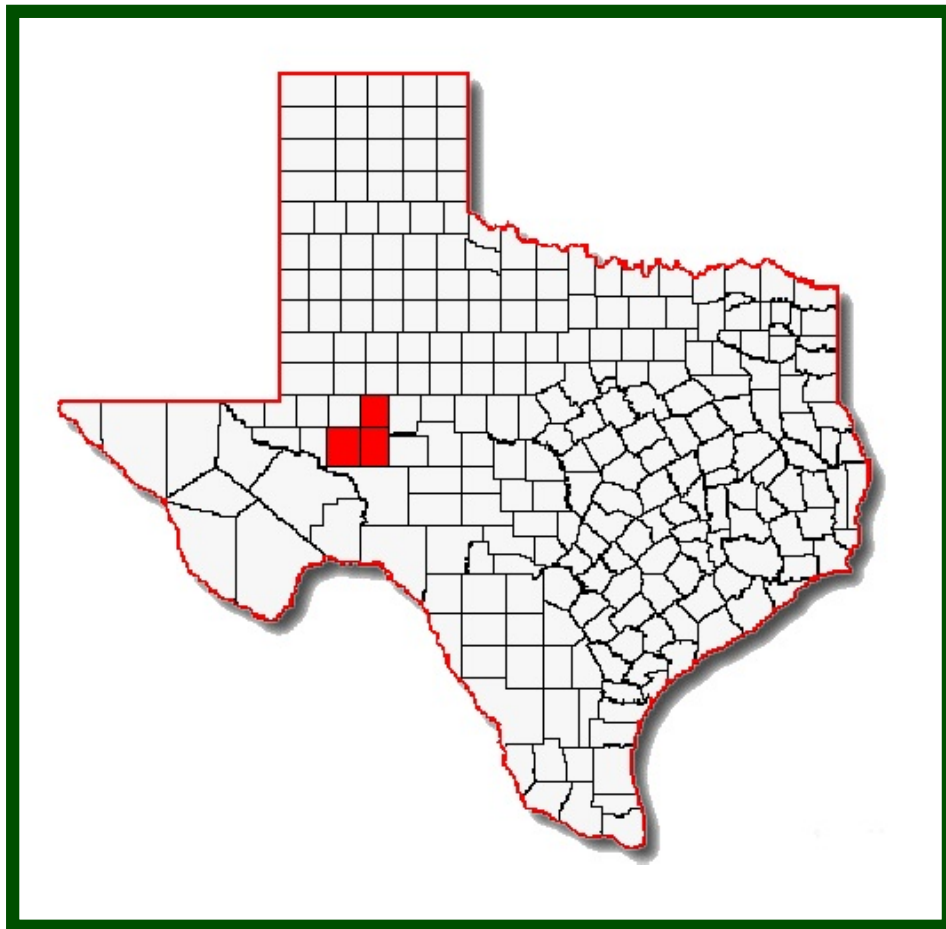


INTEGRATED PEST MANAGEMENT



Glasscock, Reagan & Upton
IPM Program
2014



TEXAS A&M
AGRILIFE
EXTENSION

GLASSCOCK, REAGAN, and UPTON COUNTIES PEST MANAGEMENT PROGRAM

2014 ANNUAL REPORT

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Glasscock, Reagan and Upton Counties

in cooperation with

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and

TEXAS PEST MANAGEMENT ASSOCIATION



PREFACE

The Texas Pest Management program began in 1972 with four county based staff members. The program was founded by participating producers, the U.S. Department of Agriculture and the Texas Pest Management Association (TPMA), whose membership is made up of commodity organizations across Texas. TPMA administers the funds of the local Pest Management Program. The objectives are to improve pest control and increase net profits through the adoption of sound principles of pest management.

The St. Lawrence Pest Management Program strives to increase producer knowledge of new scouting techniques and to use them to make sound management decisions. Our program is also aimed toward being an alert system for area producers when economic pest problems arise. Result demonstration and applied research are also an integral part of the overall program. The pest management program in this area was initiated to conduct the early diapause programs and has diversified to meet other needs as they are identified.

ACKNOWLEDGMENTS

Cooperation of all area producers is very important for a successful pest management program. We would like to express our sincere appreciation to all producer members of the St. Lawrence Cotton Growers Association for their participation and aid in the Pest Management Program.

Appreciation is also extended to the following people for their help in planning and implementing the 2014 program.

Board of Directors of the St. Lawrence Cotton Growers:

Chris Hirt	Allan Fuchs
James Schwartz	Jeremy Gully
Eric Seidenberger	Cody Wilson
Wayne Jansa	John Evridge
Dennis Hoelscher	

Appreciation is also extended to all of the following producers for their cooperation with applied research/result demonstration projects this season.

John Evridge	Carlos Dusek
Ricky Halfmann	Whit Braden
Russell Halfmann	Phillip Bales
Rodney & Jeremy Gully	Marty Brooks
Chris Matschek	Sammy Kellermeier
Darrell Halfmann	

Acknowledgment is also extended to the following members of Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research for their program-planning support:

Ray Bader.....District Extension Administrator, Ft. Stockton
Marvin Ensor.....West Region Program Leader, San Angelo
Dr. Charles Allen.....Professor and Extension IPM Coordinator, San Angelo
Dr. David Ragsdale.....Head of Department of Entomology, College Station
Dr. Mark Muegge.....Extension Entomologist, District 6, Fort Stockton
Dr. David Drake.....Extension Agronomist, District 7, San Angelo
Jackie Smith.....Extension Economist, District 2, Lubbock
Galen Morgan.....Extension Agronomist, Statewide Cotton Specialist, College Station
Bill Thompson.....Extension Economist, District 7, San Angelo
Mrs. Mandie McIlroy.....Secretary to the Extension Agent-IPM, Garden City
Mrs. Marquita Harris.....Secretary to the Extension Agent-IPM, Garden City
Mrs. Tara Johnson.....Secretary to the Extension Agent-IPM, Garden City
Mr. Rebel Royall.....Glasscock County Extension Agent-Agriculture, Garden City
Mr. Chase McPhaul.....Reagan County Extension Agent –Agriculture, Big Lake
Mr. Raymond Quigg.....Upton County Extension Agent-Agriculture, Rankin

Appreciation is also extended to the pest management scouts for 2014. Scouts were Ty Halfmann, Stetson Hillger, Colton Hare, Austin Odom.

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INTRODUCTION

A “survey type” pest management program was operated in 2014 in the St. Lawrence Area. The program has been in operation for the past thirty-four years in Glasscock, Reagan and Upton Counties. The major objectives of the program are to alert producers of pest population buildup in their area and teach them to identify and manage these problems.

Cotton is the major crop produced in the three counties. Additionally, acreages of wheat, grain sorghum, and watermelons are grown. In Table 1 below are the estimated irrigated and dryland cotton acreages combined for each county and the approximate lint yields. There were 108,500 dryland acres planted with quite a few acres failed due to drought conditions.

TABLE 1

COTTON LINT YIELDS FOR 2014

COUNTY	COTTON ACREAGE	AVERAGE YIELD
GLASSCOCK	104,505	453
REAGAN	33,805	453
UPTON	10,567	453

Several pests attack cotton in the St. Lawrence Area. Bollworms and fleahoppers are generally the major pests. Pink bollworm populations have decreased over the past several seasons and are not an economic problem now. Grasshoppers, thrips, and spider mites are occasional pests in the area. The major weed problems in the area are silverleaf nightshade, hog potato, bundle flower, devil’s claw, prairie sunflower, dwarf crownbeard, morning glory, field bindweed, and other perennial weeds. Cotton root rot, verticillium wilt and seedling disease are the primary diseases of cotton in the three county area.

Weather conditions are the major limiting factor to crop production in the area. Rainfall is important in the area because irrigation water is limited. High winds, hail and blowing sand can cause severe damage to cotton. However, temperature and length of growing season are sufficient for good cotton growth. This season, no rainfall during the growing season, limited irrigated cotton yields across the area.

The pest management annual report includes information concerning the survey scouting program, the pest situation and result demonstrations for 2014. I hope it will be informative to all persons interested in the program.

STEERING COMMITTEE

The Board of Directors of the St. Lawrence Cotton Growers Association acts as the local pest management steering committee. The board consists of ten dedicated producers from the three county areas. These board members are elected by the producers in nine districts. The board has worked diligently throughout the year to make the program a total effort. The members of the board are as follows:

President	Allan Fuchs
Vice-President.....	Eric Seidenberger
Secretary-Treasurer.....	Chris Hirt
.....	Wayne Jansa
.....	James Schwartz
.....	Jeremy Gully
.....	John Evridge
.....	Cody Wilson
.....	Dennis Hoelscher
.....	Wilbert Braden

On April 8, 2014, the annual meeting was held along with a catered meal.

Brett Cypert with NCC gave a few updates on the Farm Bill and that there was no new info since NCC had held meeting in Garden City in March. He also reported that the planting survey showed 11.1 million cotton acres and that Texas was going up 10 %.

Bob Stanley with Cotton Board commended SLCGA on working with problems instead of griping about problem!

Randall Schwartz with TBWEF gave good news. They will be creating 5 maintenance regions and that Randall will be our Regional Manager. Also, that there is not much staff anymore and that they appreciate everyone's support.

Brad Easterling was introduced as our new IPM agent. Brad said that he is happy to be here and that if you need something just call and he will do his best to assist you. He also gave a report on what he has planned for future projects and test plots for 2014. The scouting programs will be up and going again and applications are out for scouts.

Districts up for re-election are District 4 represented by Wayne Jansa, District 7 represented by Jeremy Gully, and District 9 represented by John Evridge. All have agreed to re-run.

On September 9, 2014, the steering committee helped sponsor the Tri-County Crop Tour. Producers and interested people toured and heard discussion of several area demonstrations and research projects. The steering committee was very active this year. They met monthly to carry out the pest management programs and other business of the St. Lawrence Cotton Growers Association. They also purchased a new set of platform scales to be used for harvesting variety trials throughout the St. Lawrence area.

The budget for the 2014 scouting program is included in Table 2. All administrative duties were assumed by the Texas Pest Management Association in Austin.

TABLE 2

STATUS OF ACCOUNT BALANCE FOR
GLASSCOCK, REAGAN AND UPTON COUNTIES

FUNDS ON HAND, JANUARY 1, 2014		269.82
BUDGET RECEIPTS		
UNIT SCOUTING CONTRIBUTIONS	19,000.00	
INTEREST INCOME	.00	
MISCELLANEOUS INCOME	2,280.00	
	<hr/>	
		21,280.00
SCOUTING EXPENSE		
ADMINISTRATIVE FEE	2,850.00	
PAYROLL EXPENSES	855.15	
SCOUTING EXPENSES (PHONE, TRAVEL)	5,271.00	
WAGES (SALARY AND WAGES)	9,205.00	
MEMBERSHIP PAID	<u>2,280.00</u>	
		20,461.35
TOTAL SCOUTING EXPENSE		
PRODUCER PROGRAMS ASSISTANCE	0.00	
TOTAL PRODUCER PROGRAMS ASSISTANCE	<hr/> 0.00	
OPERATING BALANCE AS OF DATE		
CASH IN BANK	<u>1,088.47</u>	
TOTAL CURRENT BALANCE		1,088.47

SCOUTING PROGRAM ACTIVITIES

The St. Lawrence Area covering Glasscock, Reagan and Upton Counties had a total of 148,877 acres of cotton. There are approximately 130 producers that are members of the St. Lawrence Cotton Growers Association. The survey type program gathers information to alert producers of possible insect pest problems. Most of the scouting was directed toward boll weevils, bollworms, pink bollworms, aphids and fleahoppers. The four scouts checked 84 complete count fields.

Following is a table of the 2014 scouting statistics.

TABLE 3 – ST. LAWRENCE AREA SCOUTING STATISTICS - 2014

NUMBER OF COMPLETE COUNT FIELDS	84
AVERAGE SIZE OF FIELDS	50 ACRES
NUMBER OF SCOUTS	4
PROGRAM FINANCING	\$0.50 PER BALE
TOTAL ACRES - IRRIGATED	40,292
TOTAL ACRES - DRYLAND	108,585
PROGRAM EXPENDITURES	20,461.35
MILEAGE RATE	.55/MILE
SCOUT HOURLY RATE	\$10.00

The four field scouts began work by attending a scout training seminar at San Angelo. This training allows the scouts to practice insect identification and scouting techniques in cotton fields similar to what they will see later in the season here. During the first couple of weeks the scouts familiarize themselves with the early season pests such as grasshoppers, thrips, aphids and beet armyworms. These insects were reported on number per plant basis. As the first pinhead squares began appearing, the scouts' attention was targeted at fleahopper scouting. They counted the number of fleahoppers per 100 terminals and also determined the percent square set.

As the cotton began squaring, the scouts examined 10 plants in four locations of each field for bollworm eggs and different size larvae. This data was then converted to numbers per acre and reported to area farmers. Plants were also inspected for boll weevil punctures, adult boll weevils and pink bollworms. Plant stand counts and crop phenology were recorded as the cotton crop progressed. Beneficial arthropod populations were monitored by counting the number on 40 plants and converting to number per acre. This is very important when making bollworm control decisions.

The information from these complete count fields was intended for all area producers. The information was presented in a bi-monthly newsletter and posted in area gins. This information was used by all producers to determine when to intensify scouting. I understand that there were problems this year with both communication and reporting. Steps are being taken to remedy these problems so they do not happen again in the future.

BOLL WEEVIL ERADICATION PROGRAM

This was the 10th year of Boll Weevil Eradication in the St. Lawrence Zone.

No weevils were caught this year. They will be creating 5 maintenance regions. Randall Schwartz will be our Regional Manager.

PEST SITUATION

Pest populations in 2014 were low. Thrips numbers were moderate in some fields near wheat, but overall were light. Only 2 fields were sprayed that I know of. Fleahopper populations were very light and very few fields were treated in the area. Bollworms, budworms, armyworms and pink bollworms were extremely low and almost all cotton had a worm control gene.

Boll weevil numbers were zero and no fields showed infestations this season.

Stink bugs were at low levels this season. They were a little higher in spots next to grain sorghum and several producers treated these areas.

A couple of producers had blister beetles move in. First feeding on the weeds and then moving into the cotton. Border treatments controlled them.

Irrigated cotton had average to below average yields. A good bit of dryland cotton acreage was failed except in areas with more rainfall.

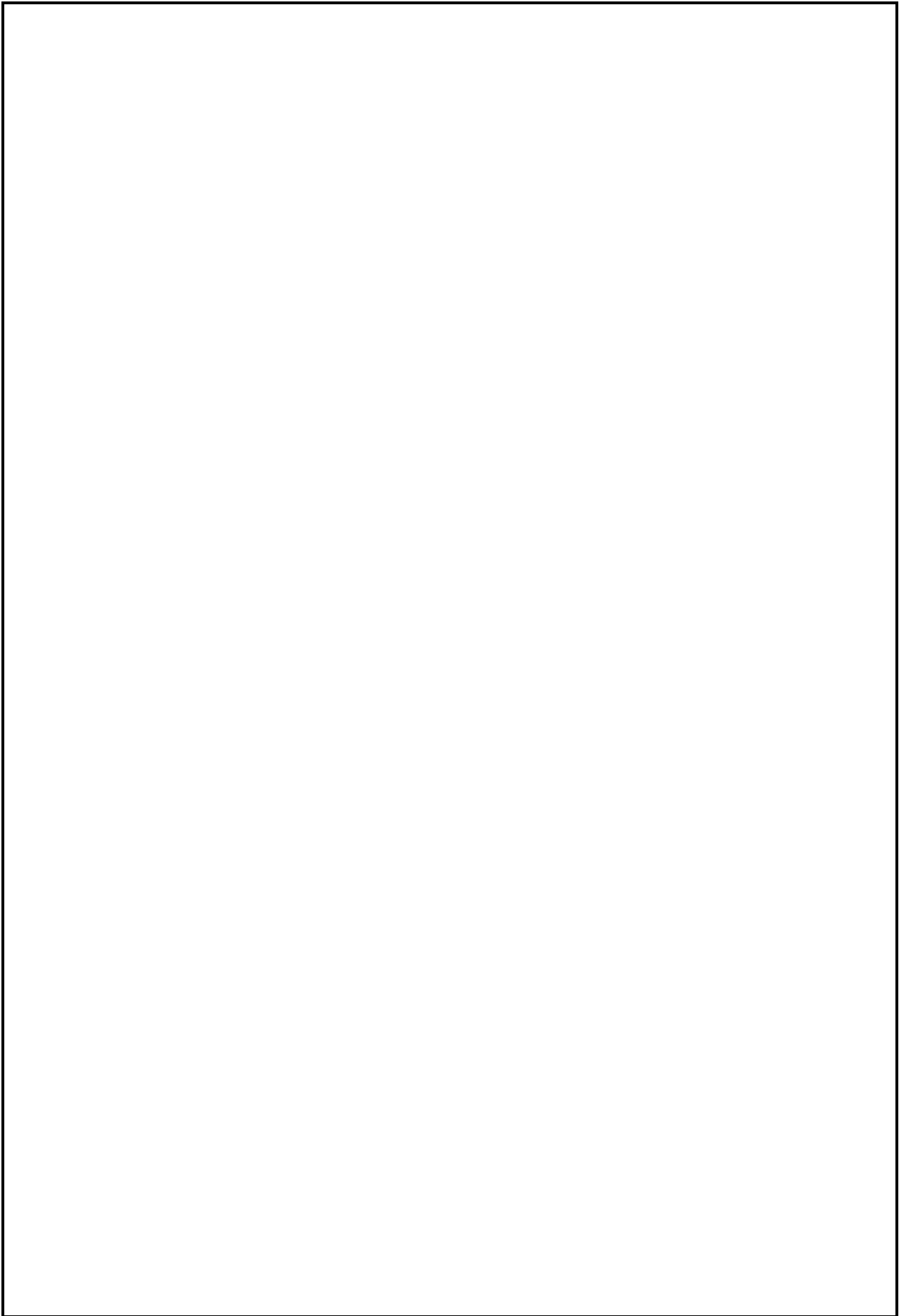
EDUCATIONAL ACTIVITIES

The St. Lawrence Pest Management Program includes many educational programs. The primary objective of the program is education. Producers are taught how to identify, scout and manage their pest populations in an economic way. Scout training meetings and personal contacts are methods used in the educational program. An emphasis is directed to training producers, spouses and family members to scout insects. The personal contacts with one-on-one scout training and management decision making are probably the most valuable techniques used. The result demonstration program and applied research projects are an integral part of the program. The turnrow meetings are held weekly in each county to discuss current insect problems and to get hands-on scouting experience. Table 4, below, is an overview of educational activities.

TABLE 4

Educational Activities

Producer Contacts	880
Turnrow Meetings	20
Newsletters	10
Tours	1
Miscellaneous Crop Producer Meetings	6
Total Persons Provided Scout Training	4
Result Demonstrations	10
Pest Management Committee Meetings	10





Result Demonstration Reports



STACKED COTTON VARIETY DEMONSTRATION

Cooperator: Ricky Halfmann

Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas

Rebel Royall, CEA-AG, Glasscock County, Garden City, Texas

Chase McPhaul, Reagan County, Big Lake, Texas

Raymond Quigg, CEA-AG, Upton County, Rankin, Texas

Reagan County

SUMMARY

Sixteen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 918 lb/acre (FM 1830 GLT) to a high of 1173 lb/acre (DP 1321 B2RF). Lint loan values averaged \$0.5353/lb and ranged from a low of \$0.4815/lb (ST 4946 GLB2) to a high of \$0.5670/lb (FM 2334 GLB2). Net value/acre among varieties ranged from a high of \$599.82 (DP 1219 B2RF) to a low of \$448.33 (FM 1830 GLT), a difference of \$151.49. Lint turnout ranged from a low of 29.37% to a high of 36.21% for ST 4946 GLB2 and FM 2334 GLT, respectively. Micronaire values ranged from a low of 4.16 for DP 1219 B2RF to a high of 4.85 for ST 4946 GLB2. Staple averaged 35.0 across all varieties with a low of 1.02/33.0 for DG 2507 B2RF and a high of 1.13 / 36.0 for FM 2484 GLT. The highest percent uniformity was observed for NG 3306 (83.1%) and FM 1944 GLT had the lowest (80.4%). Strength values ranged from 29.4 g/tex for ST 4747 GLB2 to 33.3 g/tex for FM 1830 GLT. Color grades were all 31 and 41 except for NG 5315 B2RF which graded a 21. These data indicate that substantial differences can be obtained in terms of net value/acre due to variety and technology selection.

PROBLEMS

Area cotton producers are continually searching for a cotton variety that will increase net profits through increased yield and fiber qualities. Higher strength and longer staple are the primary characteristics they are looking for as well as varieties that are tighter in the boll.

OBJECTIVE

To find a cotton variety that will increase net profit with an increase in yield and fiber qualities. These varieties must also fit the limited irrigation of the St. Lawrence cotton growing region.

MATERIALS AND METHODS

The field used for this test was drip irrigated and received 7.8" pre-irrigation. The varieties were planted in 6 row plots to a 2X1 pattern on 40" spacing on May 20th. The field had Glyphosate (40 oz) applied 2 times for weed control. The plots received 13 inches of summer irrigation. The plots were fertilized with 13.2 gal/ac of 32-0-0 and 4 gal/ac Ecodrip Rootriton during the season. The plots were defoliated with 1.1 pt./ac Folex + 1.1 pt./ac ethephon and LI700 surfactant and desiccated with .3 oz Aim[®] and LI700 surfactant on 10/11 and 10/19 respectively. They were stripper harvested on October 29th and weighed in a boll buggy on platform scales. Samples were ginned and fiber samples were sent off for classing.

RESULTS, DISCUSSION AND ECONOMIC ANALYSIS

As seen in Tables 1 and 2, the yields in this plot ranged from 918 lb/acre to 1173 lb/acre. The highest yielding variety was Deltapine 1321 B2RF with Fibermax 1830 GLT yielding the least. Lint loan values averaged \$0.5353/lb and ranged from a low of \$0.4815/lb for Stoneville 4946 GLB2 to a high of \$0.5670/lb for Fibermax 2334 GLB2. Net value/acre among varieties ranged from a high of \$599.82 with Deltapine 1219 B2RF to a low of \$448.33 with Fibermax 1830 GLT, a difference of \$151.49. Lint turnout ranged from a low of 29.37% to a high of 36.21% for Stoneville 4946 GLB2 and Fibermax 2334 GLT, respectively. Micronaire values ranged from a low of 4.16 for Deltapine 1219 B2RF to a high of 4.85 for Stoneville 4946 GLB2. Staple averaged 35.0 across all varieties with a low of 1.02/33.0 for Dynagro 2507 B2RF and a high of 1.13 / 36.0 for Fibermax 2484 GLT. The highest percent uniformity was observed for NexGen 3306 (83.1%) and Fibermax 1944 GLT had the lowest (80.4%). Strength values ranged from 29.4 g/tex for Stoneville 4747 GLB2 to 33.3 g/tex for Fibermax 1830 GLT. Color grades were all 31 and 41 except for NexGen 5315 B2RF which graded a 21.

ACKNOWLEDGMENTS

The authors would like to thank Mr. Ricky Halfmann for cooperating in this demonstration. They would also like to thank the seed companies who donated the seed.

Trade names of commercial products used in this report is included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension Service and the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.

2014 Cotton Variety Trial

Producer:	Ricky Halfmann	Plant Date:	5/20/14
County ID Number:	383	Harvest Date:	10/29/2014
District number:	6	Design:	6 rows, 40", 2X1, 870 ft, Strip Trial
Year:	2014	Fertility:	46.5 units N & 4 gal/acre Rootriton
Name of County:	Reagan	Herbicide:	glyphosate 32 oz. x 2



Variety	Yield Per Acre			% Turnout		CCC Loan Value	Lint Gross Return (\$/acre)	Seed Gross Return (\$/acre)	Gross Return (\$/acre)	Ginning Cost	Seed/Technology Cost	Total Net Return (\$/acre)
	In Pounds			Lint	Seed							
	Bur Cotton	Lint	Seed									
Deltapine 1219 B2RF	3355	1138	1483	33.92%	44.21%	\$55.90	\$636.13	\$126.05	\$762.18	\$100.64	\$61.72	\$599.82
Deltapine 1321 B2RF	3405	1173	1486	34.45%	43.65%	\$52.75	\$618.63	\$126.33	\$744.96	\$102.14	\$67.53	\$575.29
FiberMax 2334 GLT	3054	1106	1287	36.21%	42.15%	\$56.70	\$627.10	\$109.43	\$736.53	\$91.63	\$69.66	\$575.24
NexGen 5315 B2RF	3104	1086	1339	34.99%	43.13%	\$56.50	\$613.63	\$113.79	\$727.42	\$93.13	\$62.96	\$571.33
PhytoGen 339 WRF	3305	1125	1493	34.04%	45.18%	\$53.95	\$606.89	\$126.89	\$733.78	\$99.14	\$65.06	\$569.58
FiberMax 1944 GLB2	3330	1085	1519	32.59%	45.61%	\$55.75	\$605.02	\$129.09	\$734.12	\$99.89	\$67.80	\$566.43
PhytoGen 333 WRF	3405	1155	1468	33.92%	43.13%	\$52.40	\$605.11	\$124.80	\$729.91	\$102.14	\$65.06	\$562.71
Stoneville 4747 GLB2	3480	1107	1491	31.80%	42.85%	\$54.30	\$600.87	\$126.75	\$727.63	\$104.39	\$69.60	\$553.63
FiberMax 2484 B2RF	3355	1065	1428	31.75%	42.58%	\$55.25	\$588.38	\$121.41	\$709.79	\$100.64	\$66.44	\$542.71
PhytoGen 499 WRF	3380	1097	1385	32.22%	40.68%	\$52.75	\$578.60	\$117.73	\$696.34	\$101.39	\$65.06	\$529.89
NexGen 1511 B2RF	3380	1143	1405	33.83%	41.58%	\$50.25	\$574.47	\$119.43	\$693.90	\$101.39	\$62.96	\$529.55
Dyna-Gro 2570 B2RF	3305	1126	1473	34.07%	44.59%	\$49.35	\$555.59	\$125.24	\$680.83	\$99.14	\$64.32	\$517.38
NexGen 3306 B2RF	3179	1009	1419	31.75%	44.64%	\$54.85	\$553.68	\$120.63	\$674.31	\$95.38	\$62.96	\$515.97
Dyna-Gro 2285 B2RF	3079	1034	1316	33.57%	42.73%	\$52.55	\$543.24	\$111.84	\$655.08	\$92.38	\$64.32	\$498.38
Stoneville 4946 GLB2	3680	1081	1400	29.37%	38.05%	\$48.15	\$520.38	\$119.01	\$639.39	\$110.40	\$69.60	\$459.39
FiberMax 1830 GLT	2779	918	1123	33.04%	40.42%	\$55.10	\$505.89	\$95.46	\$601.35	\$83.36	\$69.66	\$448.33
Average	3286	1090	1407	33.22%	42.82%	53.53	583.35	119.62	702.97	\$98.57	\$65.92	\$538.48
Max.	3680	1173	1519	36.21%	45.61%	56.70	636.13	129.09	762.18	\$110.40	\$69.66	\$599.82
Min.	2779	918	1123.07	29.37%	38.05%	48.15	505.89	95.46	601.35	\$83.36	\$61.72	\$448.33

Values that are average or above in a column are background highlighted

Grab samples ginned at the Texas A&M AgriLife Research and Extension Center, Lubbock. Quality analysis at the FBRI, Lubbock.

Gross Seed Return based on \$170/ton

For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576

\$3.00/cwt ginning cost

2014 Cotton Variety Trial

Producer:	Ricky Halfmann	Plant Date:	5/20/14
County ID Number:	383	Harvest Date:	10/29/2014
District number:	6	Design:	6 rows, 40", 2X1, 870 ft, Strip Trial
Year:	2014	Fertility:	46.5 units N & 4 gal/acre Rootrition
Name of County:	Reagan	Herbicide:	glyphosate 32 oz. x 2



Fiber Quality

Variety	Color-Leaf	Fiber Length (staple)	Fiber Quality			CCC Loan Value	Total Net Return (\$/acre)
			Mic	Strength (gram/tex)	Uniformity		
Deltapine 1219 B2RF	31-1	1.08	4.16	31.7	80.8	\$55.90	\$599.82
Deltapine 1321 B2RF	41-1	1.06	4.70	31.1	80.9	\$52.75	\$575.29
FiberMax 2334 GLT	31-1	1.11	4.50	31.2	81.4	\$56.70	\$575.24
NexGen 5315 B2RF	21-1	1.08	4.66	30.4	81.5	\$56.50	\$571.33
PhytoGen 339 WRF	41-1	1.09	4.31	31.3	81.9	\$53.95	\$569.58
FiberMax 1944 GLB2	31-1	1.08	4.51	31.4	80.4	\$55.75	\$566.43
PhytoGen 333 WRF	41-3	1.07	4.51	29.7	81.9	\$52.40	\$562.71
Stoneville 4747 GLB2	41-1	1.11	4.55	29.4	80.7	\$54.30	\$553.63
FiberMax 2484 B2RF	31-2	1.13	4.19	32.1	81.6	\$55.25	\$542.71
PhytoGen 499 WRF	41-1	1.05	4.79	31.9	81.4	\$52.75	\$529.89
NexGen 1511 B2RF	41-1	1.02	4.71	30.7	81.1	\$50.25	\$529.55
Dyna-Gro 2570 B2RF	31-3	1.02	4.73	29.8	80.6	\$49.35	\$517.38
NexGen 3306 B2RF	41-3	1.11	4.75	32.3	83.1	\$54.85	\$515.97
Dyna-Gro 2285 B2RF	41-1	1.06	4.53	30.4	80.8	\$52.55	\$498.38
Stoneville 4946 GLB2	31-4	1.04	4.85	31.0	81.5	\$48.15	\$459.39
FiberMax 1830 GLT	31-2	1.11	4.40	33.3	81.3	\$55.10	\$448.33
Average	-	1.08	4.55	31.1	81.3	53.53	\$538.48
Max.	-	1.13	4.85	33.3	83.1	56.70	\$599.82
Min.	-	1.02	4.16	29.4	80.4	48.15	\$448.33

Values that are average or above in a column are background highlighted

Grab samples ginned at the Texas A&M AgriLife Research and Extension Center, Lubbock. Quality analysis at the FBRI, Lubbock. Gross Seed Return based on \$170/ton

For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576

\$3.00/cwt ginning cost



STACKED COTTON VARIETY DEMONSTRATION

Cooperator: Phillip Bales

Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas

Rebel Royall, CEA-AG, Glasscock County, Garden City, Texas

Chase McPhaul, Reagan County, Big Lake, Texas

Raymond Quigg, CEA-AG, Upton County, Rankin, Texas

Reagan County

SUMMARY

Fifteen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 381 lb/acre (FM 9170 B2F) to a high of 905 lb/acre (NG 5315 B2RF). Lint loan values averaged \$0.5444 /lb and ranged from a low of \$0.5070/lb (FM 9170 B2F) to a high of \$0.5695/lb (FM 1944 GLB2). Net value/acre among varieties ranged from a high of \$462.68 (NG 5315 B2RF) to a low of \$130.60 (FM 9170 B2F), a difference of \$332.08. Lint turnout ranged from a low of 25.4% to a high of 35.03% for FM 9170 B2F and DG 2285 B2RF, respectively. Micronaire values ranged from a low of 3.09 for FM 9170 B2F to a high of 4.73 for ST 4747 GLB2. Staple averaged 35.0 across all varieties with a low of 1.06/34.0 for PHY 333 WRF and a high of 1.14 / 36.0 for DP 1321 B2RF and FM 2484 GLT. The highest percent uniformity was observed for DG 2570 B2RF (83.3%) and DP 1219 B2RF had the lowest (79.1%). Strength values ranged from 29.1 g/tex for DG 2285 B2RF to 32.9 g/tex for NG 1511 B2RF. Color grades were all 31 and 41. These data indicate that substantial differences can be obtained in terms of net value/acre due to variety and technology selection.

PROBLEMS

Area cotton producers are continually searching for a cotton variety that will increase net profits through increased yield and fiber qualities. Higher strength and longer staple are the primary characteristics they are looking for as well as varieties that are tighter in the boll.

OBJECTIVE

To find a cotton variety that will increase net profit with an increase in yield and fiber qualities. These varieties must also fit the limited irrigation of the St. Lawrence cotton growing region.

MATERIALS AND METHODS

The field used for this test was drip irrigated. The varieties were planted in 6 row plots in a solid pattern on 40" spacing running across the tape on June 9th. The plots received 14.18 inches of summer irrigation according to the WestTexas Mesonet in Big Lake. The plots were fertilized with 92 units of N during the season. They were stripper harvested on December 1st and weighed in a boll buggy on platform scales. Samples were ginned and fiber samples were sent off for classing.

RESULTS, DISCUSSION AND ECONOMIC ANALYSIS

As seen in Tables 1 and 2, lint yields varied with a low of 381 lb/acre for Fibermax 9170 B2F to a high of 905 lb/acre for NexGen 5315 B2RF. Lint loan values averaged \$0.5444 /lb and ranged from a low of \$0.5070/lb for Fibermax 9170 B2F to a high of \$0.5695/lb for Fibermax 1944 GLB2. Net value/acre among varieties ranged from a high of \$462.68 for NexGen 5315 B2RF to a low of \$130.60 with Fibermax 9170 B2F, a difference of \$332.08. Lint turnout ranged from a low of 25.4% to a high of 35.03% for Fibermax 9170 B2F and DynaGro 2285 B2RF, respectively. Micronaire values ranged from a low of 3.09 for Fibermax 9170 B2F to a high of 4.73 for Stoneville 4747 GLB2. Staple averaged 35.0 across all varieties with a low of 1.06/34.0 for Phytogen 333 WRF and a high of 1.14 / 36.0 for Deltapine 1321 B2RF and Fibermax 2484 GLT. The highest percent uniformity was observed for DynaGro 2570 B2RF (83.3%) and Deltapine 1219 B2RF had the lowest (79.1%). Strength values ranged from 29.1 g/tex for DynaGro 2285 B2RF to 32.9 g/tex for NexGen 1511 B2RF. Color grades were all 31 and 41. These data indicate that substantial differences can be obtained in terms of net value/acre due to variety and technology selection.

ACKNOWLEDGMENTS

The authors would like to thank Mr. Phillip Bales for cooperating in this demonstration. They would also like to thank the seed companies who donated the seed.

Trade names of commercial products used in this report is included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension Service and the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.

2014 Cotton Variety Trial

Producer:	Phillip Bales	Plant Date:	6/9/2014
County ID Number:	383	Harvest Date:	12/1/2014
District number:	6	Design:	6 rows, 40", Solid, 1539 ft, Strip Trial
Year:	2014	Fertility:	92 units N
Name of County:	Reagan	Herbicide:	



Variety	Yield Per Acre			% Turnout		CCC Loan Value	Lint Gross Return (\$/acre)	Seed Gross Return (\$/acre)	Gross Return (\$/acre)	Ginning Cost	Seed/Technology Cost	Total Net Return (\$/acre)
	Bur Cotton	Lint	Seed	Lint	Seed							
NG 5315 B2RF	2632	905	1197	34.39%	45.47%	\$55.55	\$502.88	\$101.73	\$604.61	\$78.97	\$62.96	\$462.68
DP 1219 B2RF	2562	802	1166	31.32%	45.50%	\$53.70	\$430.86	\$99.07	\$529.93	\$76.85	\$61.72	\$391.37
DG 2285 B2RF	2222	778	1061	35.03%	47.73%	\$53.70	\$417.93	\$90.15	\$508.08	\$66.66	\$64.32	\$377.10
DG 2570 B2RF	2109	690	1006	32.70%	47.70%	\$53.55	\$369.30	\$85.49	\$454.78	\$63.26	\$64.32	\$327.20
PHY 333 WRF	2307	698	950	30.27%	41.18%	\$54.05	\$377.38	\$80.74	\$458.12	\$69.20	\$65.06	\$323.86
NG 3306 B2RF	2080	638	981	30.64%	47.14%	\$55.35	\$352.86	\$83.36	\$436.22	\$62.41	\$62.96	\$310.85
ST 4946 GLB2	2137	654	965	30.58%	45.15%	\$55.25	\$361.07	\$82.01	\$443.08	\$64.11	\$69.60	\$309.38
NG 1511 B2RF	2010	657	835	32.72%	41.56%	\$54.35	\$357.35	\$71.00	\$428.35	\$60.29	\$62.96	\$305.10
DP 1321 B2RF	1981	648	895	32.72%	45.15%	\$53.75	\$348.41	\$76.04	\$424.45	\$59.44	\$69.66	\$295.35
ST 4747 GLB2	2349	647	921	27.56%	39.20%	\$53.90	\$348.93	\$78.27	\$427.20	\$70.48	\$69.60	\$287.12
FM 1830 GLT	1840	597	819	32.44%	44.52%	\$55.35	\$330.39	\$69.62	\$400.00	\$55.19	\$69.66	\$275.15
FM 1944 GLB2	1925	563	870	29.25%	45.20%	\$56.95	\$320.64	\$73.94	\$394.58	\$57.74	\$67.80	\$269.04
PHY 339 WRF	1840	569	833	30.94%	45.26%	\$55.25	\$314.54	\$70.77	\$385.31	\$55.19	\$65.06	\$265.06
FM 2484 B2F	2066	543	871	26.26%	42.14%	\$55.20	\$299.50	\$74.01	\$373.51	\$61.99	\$66.44	\$245.09
FM 9170 B2F	1500	381	563	25.40%	37.51%	\$50.70	\$193.22	\$47.83	\$241.04	\$45.00	\$65.44	\$130.60
Average	2104	651	929	30.82%	44.03%	54.44	\$355.02	\$78.93	\$433.95	\$63.12	\$65.84	\$305.00
Max.	2632	905	1197	35.03%	47.73%	56.95	\$502.88	\$101.73	\$604.61	\$78.97	\$69.66	\$462.68
Min.	1500	381	563	25.40%	37.51%	50.70	\$193.22	\$47.83	\$241.04	\$45.00	\$61.72	\$130.60

Values that are average or above in a column are background highlighted

Grab samples ginned at the Texas A&M AgriLife Research and Extension Center, Lubbock. Quality analysis at the FBRI, Lubbock.

Gross Seed Return based on \$170/ton For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576

\$3.00/cwt ginning cost

2014 Cotton Variety Trial



Producer:	Phillip Bales	Plant Date:	6/9/2014
County ID Number:	383	Harvest Date:	12/1/2014
District number:	6	Design:	6 rows, 40", Solid, 1539 ft, Strip
Year:	2014	Fertility:	92 units N
Name of County:	Reagan	Herbicide:	

Variety	Color- Leaf	Fiber Quality				CCC Loan Value	Total Net Return (\$/acre)
		Fiber Length (staple)	Mic	Strength (gram/tex)	Uniformity		
NG 5315 B2RF	31-1	1.10	3.85	29.5	81.4	\$55.55	\$462.68
DP 1219 B2RF	31-1	1.10	3.34	31.3	79.1	\$53.70	\$391.37
DG 2285 B2RF	41-1	1.08	4.43	29.1	82.4	\$53.70	\$377.10
DG 2570 B2RF	31-2	1.12	4.03	30.9	83.3	\$53.55	\$327.20
PHY 333 WRF	31-1	1.06	4.23	30.9	81.6	\$54.05	\$323.86
NG 3306 B2RF	41-1	1.09	4.32	31.2	82.9	\$55.35	\$310.85
ST 4946 GLB2	41-2	1.10	3.71	30.0	80.4	\$55.25	\$309.38
NG 1511 B2RF	31-2	1.13	4.07	32.9	82.8	\$54.35	\$305.10
DP 1321 B2RF	31-2	1.14	3.92	31.3	81.0	\$53.75	\$295.35
ST 4747 GLB2	31-2	1.09	4.73	31.1	81.7	\$53.90	\$287.12
FM 1830 GLT	41-1	1.08	3.53	30.7	81.9	\$55.35	\$275.15
FM 1944 GLB2	31-1	1.13	4.17	31.1	82.7	\$56.95	\$269.04
PHY 339 WRF	31-2	1.11	3.71	31.6	81.5	\$55.25	\$265.06
FM 2484 B2F	31-2	1.14	3.59	31.5	81.7	\$55.20	\$245.09
FM 9170 B2F	31-2	1.09	3.09	30.4	80.6	\$50.70	\$130.60
Average	-	1.10	3.91	30.9	81.7	54.44	\$305.00
Max.	-	1.14	4.73	32.9	83.3	56.95	\$462.68
Min.	-	1.06	3.09	29.1	79.1	50.70	\$130.60

Values that are average or above in a column are background highlighted

Grab samples ginned at the Texas A&M AgriLife Research and Extension Center, Lubbock. Quality analysis at the FBRI, Lubbock. Gross Seed Return based on \$170/ton
 For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576
 \$3.00/cwt ginning cost



DRYLAND COTTON VARIETY DEMONSTRATION

Cooperator: Russell Halfmann

Rebel Royall, CEA-AG, Glasscock County, Garden City, Texas
Brad Easterling, EA-IPM, Glasscock, Reagan and Upton Counties, Garden City, Texas
Chase McPhaul, CEA-AG, Reagan County, Big Lake, Texas
Raymond Quigg, CEA-AG, Upton County, Rankin, Texas

Glasscock County

SUMMARY

Seventeen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 61 lb/acre (FM 2334 GLT) to a high of 116 lb/acre (FM 2484 B2RF). Lint loan values averaged \$0.4988/lb and ranged from a low of \$0.4380/lb (NG 1511 B2RF) to a high of \$0.5575/lb (FM 2484 B2RF). Net value/acre among varieties ranged from a high of \$19.36 (FM 2484 B2RF) to a low of \$-23.73 (FM 2334 GLT), a difference of \$43.09. Lint turnout ranged from a low of 28.5% to a high of 36.72% for FM 8270 GLB2 and FM 2484 B2RF, respectively. Micronaire values ranged from a low of 4.48 for DP 1410 B2RF to a high of 4.94 for DP 1321 B2RF. Staple averaged 33.0 across all varieties with a low of 0.96/31.0 for DP 1321 B2RF and NG 1511 and a high of 1.08/35.0 for FM 2484 B2RF. The highest percent uniformity was observed for PHY 499 WRF and DP 1252 B2RF (81.3%) and DP 1321 B2RF had the lowest (79.1%). Strength values ranged from 28.4 g/tex for DP 1321 B2RF to 33.8 g/tex for DP 1212 B2RF. Color grades were mostly 31's and 41's except for DP 1252 B2RF which graded a 21, FM 8270 GLB2 which graded a 32, and PHY 367 WRF which graded a 42. These data indicate that substantial differences can be obtained in terms of net value/acre due to variety and technology selection.

PROBLEMS

Area cotton producers are continually searching for a cotton variety that will increase net profits through increased yield and fiber qualities and stay tight in the bur. Sporadic rainfall makes it difficult for varieties to perform in dry conditions.

OBJECTIVE

To find a cotton variety that will increase net profit with an increase in yields and fiber qualities. These varieties must fit dryland conditions.

MATERIALS AND METHODS

The field used for this test was dryland. Adequate winter ice and rain resulted in good subsoil moisture. Moisture started leaving the top of the bed as planting season arrived. A good general rain in late May helped to establish a stand but little rainfall during the growing season lowered yield potential. The varieties were planted in 16 row plots on 40" spacing on June 9th. The field had Glyphosate (1 qt.) applied for weed control. They were stripper harvested on October 28th and weighed in a boll buggy using platform scales. Samples were ginned and fiber samples were sent off for classing.

RESULTS, DISCUSSION AND ECONOMIC ANALYSIS

As seen in Tables 1 and 2, lint yields varied with a low of 61 lb/acre for Fibermax 2334 GLT to a high of 116 lb/acre for Fibermax 2484 B2RF. Lint loan values averaged \$0.4988/lb and ranged from a low of \$0.4380/lb for NexGen 1511 B2RF to a high of \$0.5575/lb for Fibermax 2484 B2RF. Net value/acre among varieties ranged from a high of \$19.36 for Fibermax 2484 B2RF to a low of -\$23.73 for Fibermax 2334 GLT, a difference of \$43.09. Lint turnout ranged from a low of 28.5% to a high of 36.72% for FM 8270 GLB2 and FM 2484 B2RF, respectively. Micronaire values ranged from a low of 4.48 for Deltapine 1410 B2RF to a high of 4.94 for Deltapine 1321 B2RF. Staple averaged 33.0 across all varieties with a low of 0.96/31.0 for Deltapine 1321 B2RF and NexGen 1511 and a high of 1.08/35.0 for Fibermax 2484 B2F. The highest percent uniformity was observed for PhytoGen 499 WRF and Deltapine 1252 B2RF (81.3%) and Deltapine 1321 B2RF had the lowest (79.1%). Strength values ranged from 28.4 g/tex for Deltapine 1321 B2RF to 33.8 g/tex for Deltapine 1212 B2RF. Color grades were mostly 31's and 41's except for Deltapine 1252 B2RF which graded a 21, Fibermax 8270 GLB2 which graded a 32, and PhytoGen 367 WRF which graded a 42. These data indicate that substantial differences can be obtained in terms of net value/acre due to variety and technology selection.

ACKNOWLEDGMENTS

The authors would like to thank Mr. Russell Halfmann for cooperating in this demonstration. They would also like to thank the seed companies who donated the seed.

2014 Cotton Variety Trial

Producer:	Russell Halfmann	Plant Date:	6/9/2014
County ID Number:	383	Harvest Date:	10/28/2014
District number:	6	Design:	16 rows, 8 x1, 2569 ft, Strip Trial
Year:	2014	Fertility:	0 units N
Name of County:	Glasscock	Herbicide:	32 oz glyphosate



Variety	Yield Per Acre			% Turnout		CCC Loan Value	Lint Gross Return (\$/acre)	Seed Gross Return (\$/acre)	Gross Return (\$/acre)	Ginning Cost	Seed/Technology Cost	Total Net Return (\$/acre)
	In Pounds			Lint	Seed							
	Bur Cotton	Lint	Seed									
FM 2484 B2F	315	116	157	36.72%	49.78%	\$55.75	\$64.44	\$23.50	\$87.94	\$9.44	\$59.14	\$19.36
DP 1044 B2RF	296	96	137	32.47%	46.39%	\$50.00	\$48.00	\$20.57	\$68.58	\$8.87	\$54.94	\$4.77
FM 1944 GLB2	315	97	136	30.72%	43.28%	\$52.55	\$50.81	\$20.43	\$71.24	\$9.44	\$60.36	\$1.44
PHY 499 WRF	315	101	137	32.06%	43.38%	\$47.20	\$47.63	\$20.48	\$68.11	\$9.44	\$57.92	\$0.75
DP 1219 B2RF	312	89	121	28.61%	38.95%	\$47.95	\$42.75	\$18.20	\$60.95	\$9.35	\$54.94	-\$3.34
FM 1830 GLT	280	88	108	31.56%	38.62%	\$52.65	\$46.49	\$16.21	\$62.69	\$8.39	\$62.01	-\$7.71
DP 1454 NR B2RF	270	90	116	33.41%	42.81%	\$49.50	\$44.69	\$17.36	\$62.04	\$8.11	\$64.04	-\$10.11
DP 1359 B2RF	248	80	105	32.39%	42.15%	\$50.75	\$40.76	\$15.68	\$56.44	\$7.44	\$60.12	-\$11.12
DP 1252 B2RF	248	82	102	32.89%	41.01%	\$49.50	\$40.37	\$15.25	\$55.62	\$7.44	\$60.12	-\$11.94
FM 8270GLB2	292	83	119	28.50%	40.69%	\$47.10	\$39.26	\$17.85	\$57.11	\$8.77	\$60.36	-\$12.03
NG 1511 B2RF	242	78	106	32.16%	43.77%	\$43.80	\$34.04	\$15.86	\$49.90	\$7.25	\$56.04	-\$13.39
PHY 367 WRF	264	76	111	28.73%	41.88%	\$46.80	\$35.47	\$16.58	\$52.05	\$7.92	\$57.92	-\$13.78
DP 1410 B2RF	223	69	97	31.08%	43.61%	\$52.00	\$35.97	\$14.56	\$50.53	\$6.68	\$58.23	-\$14.38
DP 1212 B2RF	226	67	101	29.61%	44.74%	\$53.05	\$35.46	\$15.15	\$50.61	\$6.77	\$58.23	-\$14.40
DP 1321 B2RF	270	80	105	29.44%	38.95%	\$45.60	\$36.28	\$15.79	\$52.07	\$8.11	\$60.12	-\$16.16
FM 2989 GLB2	258	82	119	31.88%	46.27%	\$49.15	\$40.35	\$10.13	\$50.48	\$7.73	\$60.36	-\$17.61
FM 2334 GLT	178	61	74	34.31%	41.53%	\$53.25	\$32.53	\$11.09	\$43.62	\$5.34	\$62.01	-\$23.73
Average	268	84	115	31.56%	42.81%	\$49.80	\$42.08	\$16.75	\$58.82	\$8.03	\$59.23	-\$8.43
Max.	315	116	157	36.72%	49.78%	\$55.75	\$64.44	\$23.50	\$87.94	\$9.44	\$64.04	\$19.36
Min.	178	61	74	28.50%	38.62%	\$43.80	\$32.53	\$10.13	\$43.62	\$5.34	\$54.94	-\$23.73

Values that are average or above in a column are background highlighted

Grab samples ginned at the Texas A&M AgriLife Research and Extension Center, Lubbock. Quality analysis at the FBRI, Lubbock.

Gross Seed Return based on \$170/ton

\$3.00/cwt ginning cost

For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576

2014 Cotton Variety Trial



Producer:	Russell Halfmann	Plant Date:	6/9/2014
County ID Number:	383	Harvest Date:	10/28/2014
District number:	6	Design:	16 rows, 8 x1, 2569 ft, Strip Trial
Year:	2014	Fertility:	0 units N
Name of County:	Glasscock	Herbicide:	32 oz glyphosate

Variety	Color-Leaf	Fiber Quality				CCC Loan Value	Total Net Return (\$/acre)
		Fiber Length (staple)	Mic	Strength (gram/tex)	Uniformity		
FM 2484 B2F	31-1	1.08	4.64	31.8	80.4	\$55.75	\$19.36
DP 1044 B2RF	31-1	1.00	4.78	31.3	80.4	\$50.00	\$4.77
FM 1944 GLB2	41-2	1.05	4.90	30.9	80.1	\$52.55	\$1.44
PHY 499 WRF	31-4	1.01	4.88	32.4	81.3	\$47.20	\$0.75
DP 1219 B2RF	31-4	1.02	4.52	30.6	80.1	\$47.95	-\$3.34
FM 1830 GLT	31-1	1.06	4.74	30.9	79.5	\$52.65	-\$7.71
DP 1454 NR B2RF	31-3	1.03	4.78	30.0	81.2	\$49.50	-\$10.11
DP 1359 B2RF	31-1	1.03	4.57	31.6	79.8	\$50.75	-\$11.12
DP 1252 B2RF	21-4	1.01	4.76	29.0	81.3	\$49.50	-\$11.94
FM 8270GLB2	32-2	1.00	4.86	30.1	79.6	\$47.10	-\$12.03
NG 1511 B2RF	31-4	0.96	4.77	29.0	79.4	\$43.80	-\$13.39
PHY 367 WRF	42-1	1.00	4.73	28.9	79.9	\$46.80	-\$13.78
DP 1410 B2RF	41-1	1.06	4.48	31.2	79.8	\$52.00	-\$14.38
DP 1212 B2RF	31-2	1.06	4.76	33.8	81.2	\$53.05	-\$14.40
DP 1321 B2RF	41-3	0.96	4.94	28.4	79.1	\$45.60	-\$16.16
FM 2989 GLB2	31-4	1.06	4.87	30.7	80.0	\$49.15	-\$17.61
FM 2334 GLT	31-1	1.05	4.83	29.8	81.1	\$53.25	-\$23.73
Average	-	1.03	4.75	30.6	80.2	\$49.80	-\$8.43
Max.	-	1.08	4.94	33.8	81.3	\$55.75	\$19.36
Min.	-	0.96	4.48	28.4	79.1	\$43.80	-\$23.73

Values that are average or above in a column are background highlighted

Grab samples ginned at the Texas A&M AgriLife Research and Extension Center, Lubbock. Quality analysis at the FBRI, Lubbock.

Gross Seed Return based on \$170/ton
\$3.00/cwt ginning cost

For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576



HARVEST AID TEST

Cooperator: Marty Brooks

Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas

Tommy Yeater, Howard County, Big Spring, Texas

David Drake, Extension Agronomist, San Angelo, Texas

Howard County

SUMMARY

Twelve different plots of harvest aid products were applied to a drip irrigated cotton field on September 25th. The Ginstar[®] and generic products similar to Ginstar[®] performed best as the rate was increased. The PPO's and Folex[®] plots didn't defoliate as well. Gramoxone did a decent job of defoliating but did a poor job of controlling any regrowth.

PROBLEMS

Each season, harvest aid chemicals can react differently, depending on weather and crop conditions. Also, new products are introduced periodically that need to be evaluated to give producers a heads up on how they might work.

OBJECTIVE

Determine which harvest aid products might perform best for the current season with the variable weather and crop conditions.

MATERIALS AND METHODS

The field used for this plot was dryland and planted solid row to Fibermax 9170 B2F cotton. The treatments were made on September 25th. The plots were 4 rows wide by 125 feet long. A spider mounted CO₂ powered sprayer was used with 11002 Turbo Teejet nozzles at 32 psi and

4 mph. The treatments were applied in 11 gallons of water per acre. Visual observations were made 7 and 14 days after treatments.

RESULTS, DISCUSSION AND ECONOMIC ANALYSIS

Environmental conditions were not ideal for spraying harvest aids. About a week prior to the application the Cohoma area received several inches of rain. This made both defoliation and regrowth a problem. The Ginstar® and generic products similar to Ginstar® performed the best. The PPO materials didn't perform as well. The gramoxone did a decent job of defoliating the plants and for a low cost, especially with the diuron, but could not control the regrowth with all of the moisture from the rains.

ACKNOWLEDGMENTS

The authors would like to thank Mr. Marty Brooks for allowing us to use a portion of his field for this test.

We would also like to thank the companies for supplying the chemicals for this test.

2014 Harvest Aid Evaluation

Howard County-Dryland

Established Sept 25, 2014 12 gpa, 32 psi, 11002 Turbo Teejet

For questions contact David Drake drdrake@ag.tamu.edu or 325-653-4576 ext 230

Table 11

Trt No.	Treatment Name	Rate	Rate Unit	7 DAT				14 DAT				
				% Def	% DES	% GL	% Regrowth	% Def	% DES	% GL	% Regrowth	
1	Ginstar	4	fl oz/a									
1	Ethephon	16	fl oz/a	10	15	75	30	10	15	75	100	
1	Non-Ionic Surfactant	0.25	% v/v									
2	Ginstar	4	fl oz/a									
2	Ethephon	16	fl oz/a	20	10	70	30	25	5	70	100	
2	Crop Oil Concentrate	16	fl oz/a									
3	Ginstar	6	fl oz/a									
3	Ethephon	16	fl oz/a	25	15	60	30	40	20	40	100	
3	Non-Ionic Surfactant	0.25	% v/v									
4	Ginstar	6	fl oz/a									
4	Finish 6 Pro	16	fl oz/a	45	10	45	30	80	10	10	100	
4	Non-Ionic Surfactant	0.25	% v/v									
5	Adios	12	fl oz/a									
5	Ethephon	16	fl oz/a	70	10	20	10	80	10	10	40	
5	Non-Ionic Surfactant	0.25	% v/v									
6	Display	0.8	fl oz/a									
6	Ethephon	16	fl oz/a	35	20	45	30	40	20	40	100	
6	Crop Oil Concentrate	1	% v/v									
7	ETX	1.7	fl oz/a									
7	Ethephon	16	fl oz/a	20	20	60	40	45	15	40	100	
7	Crop Oil Concentrate	1	% v/v									
8	Sharpen	1.5	fl oz/a									
8	Ethephon	16	fl oz/a	10	40	50	25	50	20	30	100	
8	MSO	1	% v/v									
8	Request	0.5	% v/v									
9	Aim	1.7	fl oz/a									
9	Ethephon	16	fl oz/a	20	50	30	30	20	60	20	100	
9	Crop Oil Concentrate	1	% v/v									
10	Ethephon	16	fl oz/a									
10	Folex	16	fl oz/a	40	20	40	65	60	20	20	100	
10	Non-Ionic Surfactant	0.25	% v/v									
11	Gramoxone Inteon (2 lbs/gal)	24	fl oz/a									
11	Crop Oil Concentrate	1	% v/v	50	20	30	100	70	20	10	100	
12	Gramoxone Inteon (2 lbs/gal)	24	fl oz/a									
12	Diuron	7.5	fl oz/a	70	20	10	80	80	20	0	99	
12	Crop Oil Concentrate	1	% v/v									

2014 Trial Averages

Variety	Yield Per Acre			% Turnout		CCC Loan Value	Lint Gross Return (\$/acre)	Seed Gross Return (\$/acre)	Gross Return (\$/acre)	Ginning Cost	Seed/ Technology Cost	Total Net Return (\$/acre)
	In Pounds			Lint	Seed							
	Bur Cotton	Lint	Seed									
NexGen 5315 B2RF	2868.28	995.67	1267.75	0.35	0.44	56.03	\$558.25	\$107.76	\$666.01	\$86.05	\$62.96	\$517.00
Deltapine 1219 B2RF	2958.07	970.16	1324.24	0.33	0.45	54.80	\$533.49	\$112.56	\$646.05	\$88.74	\$61.72	\$495.59
PhytoGen 333 WRF	2855.74	926.50	1209.05	0.32	0.42	53.23	\$491.25	\$102.77	\$594.01	\$85.67	\$65.06	\$443.28
Dyna-Gro 2285 B2RF	2650.56	906.02	1188.13	0.34	0.45	53.13	\$480.59	\$100.99	\$581.58	\$79.52	\$64.32	\$437.74
Deltapine 1321 B2RF	2692.99	910.49	1190.38	0.34	0.44	53.25	\$483.52	\$101.18	\$584.70	\$80.79	\$67.53	\$436.39
Dyna-Gro 2570 B2RF	2706.60	907.72	1239.60	0.33	0.46	51.45	\$462.44	\$105.37	\$567.81	\$81.20	\$64.32	\$422.29
Stoneville 4747 GLB2	2914.52	876.97	1206.02	0.30	0.41	54.10	\$474.90	\$102.51	\$577.41	\$87.44	\$69.60	\$420.38
FiberMax 1944 GLB2	2627.13	824.13	1194.32	0.31	0.45	56.35	\$462.83	\$101.52	\$564.35	\$78.81	\$67.80	\$417.73
NexGen 1511 B2RF	2694.62	900.36	1120.17	0.33	0.42	52.30	\$465.91	\$95.21	\$561.12	\$80.84	\$62.96	\$417.33
PhytoGen 339 WRF	2572.16	847.10	1162.73	0.32	0.45	54.60	\$460.71	\$98.83	\$559.54	\$77.16	\$65.06	\$417.32
NexGen 3306 B2RF	2629.87	823.48	1199.92	0.31	0.46	55.10	\$453.27	\$101.99	\$555.26	\$78.90	\$62.96	\$413.41
FiberMax 2484 B2RF	2710.41	803.75	1149.56	0.29	0.42	55.23	\$443.94	\$97.71	\$541.65	\$81.31	\$66.44	\$393.90
Stoneville 4946 GLB2	2908.51	867.14	1182.49	0.30	0.42	51.70	\$440.73	\$100.51	\$541.24	\$87.26	\$69.60	\$384.38
FiberMax 1830 GLT	2309.30	757.52	971.04	0.33	0.42	55.23	\$418.14	\$82.54	\$500.68	\$69.28	\$69.66	\$361.74
Average	2721.34	879.79	1186.10	0.32	0.44	54.03	\$473.57	\$100.82	\$574.39	\$81.64	\$65.71	\$427.03
Max.	2958.07	995.67	1324.24	0.35	0.46	56.35	\$558.25	\$112.56	\$666.01	\$88.74	\$69.66	\$517.00
Min.	2309.30	757.52	971.04	0.29	0.41	51.45	\$418.14	\$82.54	\$500.68	\$69.28	\$61.72	\$361.74

FiberMax 2334 GLT	3054.21	1106.00	1287.36	0.36	0.42	56.7	\$627.10	\$109.43	\$736.53	\$91.63	\$69.66	\$575.24
PhytoGen 499 WRF	3379.66	1096.88	1385.10	0.32	0.41	52.75	\$578.60	\$117.73	\$696.34	\$101.39	\$65.06	\$529.89
FM 9170 B2F	1500.12	381.10	562.67	0.25	0.38	50.70	\$193.22	\$47.83	\$241.04	\$45.00	\$65.44	\$130.60

2014 Trial Averages

Variety	Fiber Quality				CCC Loan Value	Total Net Return (\$/acre)
	Fiber Length (staple)	Strength		Uniformity		
		Mic	(gram/tex)			
NexGen 5315 B2RF	1.09	4.26	30.0	81.45	\$56.03	\$517.00
Deltapine 1219 B2RF	1.09	3.75	31.5	79.95	\$54.80	\$495.59
PhytoGen 333 WRF	1.08	4.42	30.5	82.40	\$53.23	\$443.28
Dyna-Gro 2285 B2RF	1.07	4.48	29.8	81.60	\$53.13	\$437.74
Deltapine 1321 B2RF	1.07	4.12	30.9	81.40	\$53.25	\$436.39
Dyna-Gro 2570 B2RF	1.04	4.48	30.4	81.10	\$51.45	\$422.29
Stoneville 4747 GLB2	1.11	4.13	29.7	80.55	\$54.10	\$420.38
FiberMax 1944 GLB2	1.11	4.34	31.3	81.55	\$56.35	\$417.73
NexGen 1511 B2RF	1.06	4.72	30.9	81.40	\$52.30	\$417.33
PhytoGen 339 WRF	1.10	4.01	31.5	81.70	\$54.60	\$417.32
NexGen 3306 B2RF	1.12	4.41	32.6	82.95	\$55.10	\$413.41
FiberMax 2484 B2RF	1.14	3.89	31.8	81.65	\$55.23	\$393.90
Stoneville 4946 GLB2	1.08	4.44	31.0	82.40	\$51.70	\$384.38
FiberMax 1830 GLT	1.13	4.16	32.3	81.15	\$55.23	\$361.74
Average	1.09	4.26	31.0	81.52	\$54.03	\$427.03
Max.	1.14	4.72	32.6	82.95	\$56.35	\$517.00
Min.	1.04	3.75	29.7	79.95	\$51.45	\$361.74

FiberMax 2334 GLT	1.11	4.50	31.2	81.4	\$56.70	\$575.24
PhytoGen 499 WRF	1.05	4.79	31.9	81.4	\$52.75	\$529.89
FM 9170 B2F	1.09	3.09	30.4	80.6	50.7	130.5996



EVALUATION OF COTTON VARIETIES

COOPERATORS:

Carlos Dusek, Darrell Halfmann, Chris Matschek

COORDINATORS

Brad Easterling, Extension Agent - IPM, Glasscock, Reagan, Upton Counties,
Rebel Royall, County Extension Agent - Agriculture, Glasscock County
Chase McPhaul, County Extension Agent -Agriculture, Reagan County
Raymond Quigg, County Extension Agent -Agriculture, Upton County

Glasscock, Upton Counties

OBJECTIVE

To evaluate the cotton varieties which are or could potentially be commercially available to producers.

MATERIALS AND METHODS

Cotton varieties are provided from the major seed companies to evaluate for yield in our production area. These projects are planted, monitored during growing season, and then harvested for yield data.

RESULTS & DISCUSSION

The following pages contain three variety demonstrations. All three demonstrations were Bayer CAPS Trials established at the farms of Carlos Dusek, Darrell Halfmann, and Chris Matschek.

ACKNOWLEDGMENTS

Thank you to all the cooperators and to the seed companies for providing the seed and financial support.

2014 CAP Trial

Midkiff, Upton County, TX

Grower – Carlos Dusek
 Cooperator – Brad Easterling
 Sales Rep – Noble Laminack (325) 716-8839
 Regional Agronomist - Heath Reeves (806) 252-4585



Irrigated

Variety	Seed Cotton/Acre	GTO	Lint/Acre
ST 4747GLB2	5,028	0.394	1,981
ST 4946GLB2	4,848	0.407	1,973
FM 2007GLT**	4,920	0.398	1,958
FM 2484B2F	4,758	0.409	1,946
FM 2334GLT	4,633	0.413	1,913
FM 1900GLT*	4,830	0.392	1,893
BX 1537GLT	4,184	0.436	1,824
ST 6448GLB2	4,633	0.391	1,811
FM 1944GLB2	4,686	0.371	1,739
FM 1830GLT	3,645	0.413	1,505

*Tested as BX 1538GLT

** Tested as BX 139GLT



2014 CAP Trial

Midkiff, Upton County, TX

Grower – Carlos Dusek
 Cooperator – Brad Easterling
 Sales Rep – Noble Laminack (325) 716-8839
 Regional Agronomist - Heath Reeves (806) 252-4585



Irrigated

Variety	Lint Yield	Turnout	Mic	Length	Stren	Unif	Loan Value	Value/A
ST 4946GLB2	1,973	0.407	4.69	1.15	31.10	85.20	57.65	\$1,138
ST 4747GLB2	1,981	0.394	4.72	1.15	27.50	82.00	56.95	\$1,128
FM 2007GLT**	1,958	0.398	4.80	1.22	29.60	84.10	57.30	\$1,122
FM 2484B2F	1,946	0.409	4.69	1.19	31.70	83.90	57.60	\$1,121
FM 2334GLT	1,913	0.413	4.65	1.20	30.40	84.10	57.45	\$1,099
FM 1900GLT*	1,893	0.392	3.95	1.21	31.40	83.00	57.75	\$1,093
BX 1537GLT	1,824	0.436	4.51	1.13	29.60	84.80	56.95	\$1,039
ST 6448GLB2	1,811	0.391	4.66	1.21	29.50	83.20	57.25	\$1,037
FM 1944GLB2	1,739	0.371	4.49	1.16	30.80	83.80	57.30	\$996
FM 1830GLT	1,505	0.413	4.67	1.19	31.70	83.80	57.60	\$867

Loan Value calculated from 2014 CCC Loan Schedule using uniform color grade of 21 and uniform leaf grade of 2.

*Tested as BX 1538GLT

** Tested as BX 1539GLT



2014 CAP Trial

St. Lawrence, Glasscock County, TX

Grower – Darrell Halfmann
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Heath Reeves (806) 252-4585



Irrigated

Variety	Seed Cotton/Acre	GTO	Lint/Acre
ST 4747GLB2	4,833	0.408	1,972
FM 2334GLT	4,548	0.421	1,915
FM 1900GLT*	4,568	0.409	1,868
FM 2007GLT**	4,588	0.403	1,849
BX 1537GLT	4,201	0.432	1,815
ST 6448GLB2	4,507	0.397	1,789
FM 1944GLB2	4,507	0.385	1,735
FM 1830GLT	4,058	0.426	1,729
ST 4946GLB2	3,691	0.408	1,506
FM 2484B2F	2,325	0.407	946

*Tested as BX 1538GLT

** Tested as BX 139GLT



Bayer CropScience



2014 CAP Trial

St. Lawrence, Glasscock County, TX

Grower – Darrell Halfmann
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Heath Reeves (806) 252-4585



Irrigated

Variety	Lint Yield	Turnout	Mic	Length	Stren	Unif	Loan Value	Value/A
ST 4747GLB2	1,972	0.408	4.99	1.16	28.80	82.50	56.95	\$1,123
FM 2334GLT	1,915	0.421	4.94	1.20	32.50	84.20	57.65	\$1,104
FM 1900GLT*	1,868	0.409	3.95	1.21	31.40	83.00	57.75	\$1,079
FM 2007GLT**	1,849	0.403	4.38	1.20	31.50	84.20	57.65	\$1,066
BX 1537GLT	1,815	0.432	4.51	1.13	29.60	84.80	56.95	\$1,034
FM 1830GLT	1,729	0.426	4.90	1.19	32.10	83.60	57.60	\$996
FM 1944GLB2	1,735	0.385	4.74	1.16	30.10	82.80	57.20	\$993
ST 6448GLB2	1,789	0.397	5.13	1.18	30.10	82.40	54.45	\$974
ST 4946GLB2	1,506	0.408	5.14	1.13	30.50	83.90	54.20	\$816
FM 2484B2F	946	0.407	4.41	1.18	32.40	83.10	57.60	\$545

Loan Value calculated from 2014 CCC Loan Schedule using uniform color grade of 21 and uniform leaf grade of 2.

*Tested as BX 1538GLT

** Tested as BX 1539GLT



2014 CAP Trial

St. Lawrence, Glasscock County, TX

Grower – Chris Matschek
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Heath Reeves (806) 252-4585



Irrigated

Variety	Seed Cotton/Acre	GTO	Lint/Acre
ST 4946GLB2	3,437	0.430	1,478
ST 6448GLB2	3,299	0.442	1,458
FM 1944GLB2	3,247	0.419	1,361
FM 2007GLT**	3,092	0.439	1,357
FM 2484B2F	3,195	0.424	1,355
ST 4747GLB2	3,178	0.425	1,351
BX 1537GLT	2,919	0.454	1,325
FM 2334GLT	2,936	0.446	1,310
FM 1900GLT*	2,954	0.433	1,279
FM 1830GLT	2,884	0.434	1,252

*Tested as BX 1538GLT

** Tested as BX 139GLT



2014 CAP Trial

St. Lawrence, Glasscock County, TX

Grower – Chris Matschek
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Heath Reeves (806) 252-4585



Irrigated

Variety	Lint Yield	Turnout	Mic	Length	Stren	Unif	Loan Value	Value/A
ST 4946GLB2	1,478	0.430	5.10	1.11	30.00	84.10	54.25	\$802
ST 6448GLB2	1,458	0.442	5.19	1.13	29.50	83.00	54.05	\$788
FM 2484B2F	1,355	0.424	4.70	1.19	33.00	83.20	57.60	\$780
FM 2007GLT**	1,357	0.439	4.79	1.16	31.20	82.50	57.40	\$779
BX 1537GLT	1,325	0.454	4.90	1.13	31.80	84.10	57.30	\$759
FM 2334GLT	1,310	0.446	4.91	1.15	30.70	82.90	57.20	\$749
FM 1944GLB2	1,361	0.419	5.02	1.14	31.20	82.80	54.55	\$742
FM 1900GLT*	1,279	0.433	4.90	1.13	32.80	83.90	57.25	\$732
ST 4747GLB2	1,351	0.425	5.07	1.14	28.90	82.50	54.10	\$731
FM 1830GLT	1,252	0.434	5.05	1.16	30.80	83.00	54.45	\$682

Loan Value calculated from 2014 CCC Loan Schedule using uniform color grade of 21 and uniform leaf grade of 2.

*Tested as BX 1538GLT

** Tested as BX 1539GLT



2014 CAP Trial Summary

Southern High Plains



	Cooperator County	Dusek Upton	Halfmann Glasscock	Matschek Glasscock
	Average Across Locations	Lint Yield (lbs/acre)	Lint Yield (lbs/acre)	Lint Yield (lbs/acre)
ST 4747GLB2	1,768	1,981	1,972	1,351
FM 2007GLT**	1,721	1,958	1,849	1,357
FM 2334GLT	1,713	1,913	1,915	1,310
ST 6448GLB2	1,686	1,811	1,789	1,458
FM 1900GLT*	1,680	1,893	1,868	1,279
BX 1537GLT	1,655	1,824	1,815	1,325
ST 4946GLB2	1,652	1,973	1,506	1,478
FM 1944GLB2	1,612	1,739	1,735	1,361
FM 1830GLT	1,495	1,505	1,729	1,252
FM 2484B2F	1,416	1,946	946	1,355

*Tested as BX 1538GLT

**Tested as BX 1539GLT



2014 CAP Trial Summary

Southern High Plains



COTTON AGRONOMIC PERFORMANCE TRIAL

	Average of Turnout	Average of Mic	Average of Length	Average of Strength	Average of Unif.	Average of Loan	Average of Value/A
ST 4747GLB2	0.409	4.93	1.15	28.40	82.33	56.00	\$994
FM 2007GLT**	0.413	4.66	1.19	30.77	83.60	57.45	\$989
FM 2334GLT	0.427	4.83	1.18	31.20	83.73	57.43	\$984
FM 1900GLT*	0.411	4.27	1.18	31.87	83.30	57.58	\$968
BX 1537GLT	0.441	4.64	1.13	30.33	84.57	57.07	\$944
ST 6448GLB2	0.410	4.99	1.17	29.70	82.87	55.25	\$933
ST 4946GLB2	0.415	4.98	1.13	30.53	84.40	55.37	\$919
FM 1944GLB2	0.392	4.75	1.15	30.70	83.13	56.35	\$910
FM 1830GLT	0.424	4.87	1.18	31.53	83.47	56.55	\$848
FM 2484B2F	0.413	4.60	1.19	32.37	83.40	57.60	\$815

Trial locations: Midkiff, TX; St. Lawrence, TX

Varieties only included if they were represented at all locations

Loan Value calculated from 2014 CCC Loan Schedule using uniform color grade of 21 and uniform leaf grade of 2.

*Tested as BX 1538GLT

**Tested as BX 1539GLT

