INTEGRATED PEST MANAGEMENT

Glasscock, Reagan & Upton
IPM Program
2015

TEXAS IPM
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TEXAS A&M AGRILIFE EXTENSION

GLASSCOCK, REAGAN, and UPTON COUNTIES PEST MANAGEMENT PROGRAM

2015

ANNUAL REPORT

Prepared by:

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Glasscock, Reagan and Upton Counties

in cooperation with

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Raymond Quigg, Extension Agent-Agriculture, Upton County

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 2015 program.

Board of Directors of the St. Lawrence Cotton Growers:

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

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

John Evridge
Allen & Michael Fuchs
Russell Halfmann
Gary Halfmann
Chris Matschek
Jerry Hoelscher
Daniel Michalewicz
Carlos Dusek
Darren Jost
Phillip Bales
Sammy Kellermeier
Paul Schwartz
Chris Hirt

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:

Rebel Royall…….....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. David Drake….....Extension Agronomist, District 7,San Angelo
Jackie Smith.....Extension Economist, District 2, Lubbock
Gaylon Morgan.....Extension Agronomist, Statewide Cotton Specialist, College Station
Bill Thompson.....Extension Economist, District 7, San Angelo
Peter Dotray…….....Extension Agronomist, District 2, Lubbock
Wayne Keeling…….……..Research Agronomist, District 2, Lubbock
John Robinson…….Extension State Economist-Cotton, College Station
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 2015. Scouts were Cristian Gallegos, Jacob Peddicord, Raphael Salas, Seth Miller, Scott Miller, and Shelby Morton.

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INTRODUCTION

A "survey type" pest management program was operated in 2015 in the St. Lawrence Area. The program has been in operation for the past thirty-six 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 cotton acreages combined for each county and the approximate lint yields. There were 127,000 dryland acres planted with very few acres failed this season due to good soil moisture early despite a very dry July and August.

TABLE 1

COTTON LINT YIELDS FOR 2015

COUNTY	COTTON ACREAGE	AVERAGE YIELD
GLASSCOCK	104,956	339
REAGAN	37,962	339
UPTON	15,457	339

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 silver leaf nightshade, hog potato, bundle flower, devil's claw, prairie sunflower, dwarf crown beard, morning glory, field bindweed, and other perennial weeds. We are now starting to see glyphosate resistant pigweed in the area. This will take a new approach to weed control in the future. 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 2015. 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/ Russell Halfmann
.....Wilbert Braden

ANNUAL MEETING, APRIL 7, 2015

Meeting was called to order by President Allan Fuchs. Directors present were Chris Hirt, Eric Seidenberger, Jeremy Gully, Cody Wilson, and Wayne Jansa. Also present were Brad Easterling and Wilbert Braden.

Guests were recognized. Donors were recognized.

Chris Hirt read the minutes and gave the financial report. Ricky Halfmann made a motion to accept, seconded by Pat Pelzel. Motion carried. Allan Fuchs brought up the Sharyland intervention and re-opening the case. Congressman Mike Conaway introduced his team and talked on the farm bill.

Craig Brown with NCC complimented Congressman Conaway on his representation of the "all powerful ag committee". Craig also reported that it has been a very busy 1st quarter of the year and that he had spent more time in Texas than at home in Tennessee. He also talked on the new farm bill and the new crop insurance options. He commented that "you are either at the table or on the table" and that you need to be at the table! Craig Brown also commended the SLCGA as being one of the top contributing organizations to CAC! Bob Stanley with Cotton Board introduced his co-worker (Bobby). Bob invited everyone out to the gin show to be held in Lubbock that weekend. He also says, "We have to keep telling our Story!"

Brad Easterling gave an IPM report. He is taking water samples for salinity in the area. He also reported that he will be working on root rot programs this year and gave an update on the scouting program. Carey Niehues with TBWEF says we are pretty well eradicated with Mexico being a problem. SLCGA will now be in a zone called West Texas Management Area. Randy Anderson, a consulting geologist, talked about remote sensing to help with farming.

Election of districts was next on agenda. Districts up for re-election were : District 1 – Chris Hirt
District 2 – James Schwartz
District 3 – Cody Wilson
All were re-elected for a 3 year term.

Chris Hirt reported that there is going to be a "Women is Agriculture" trip to Cary, NC on June 14-16, 2015 and we are looking for someone to go. Also the PIE tour is coming up and we are also looking for someone to go on this. If anyone is interested please contact Chris or Bob Stanley.

Russell Halfmann made a motion to adjourn and Kevin Hirt seconded it. Motion carried.

Meeting was followed by a social hour and a meal cateared by Kenny Blanek serving 124 plates.

TABLE 2

STATUS OF ACCOUNT BALANCE FOR GLASSCOCK, REAGAN, AND UPTON COUNTIES

FUNDS ON HAND, JANUARY 1, 2015	1,088.47	
BUDGET RECEIPTS		
UNIT SCOUTING CONTRIBUTIONS	32,300.00	
ACCOUNT TRANSFER – INCOME	5,336.48	
TOTAL INCOME		37,636.48
SCOUTING EXPENSE		
ACCOUNT TRANSFER – EXPENSE	4,970.89	
ADMINITSTRATIVE FEE	4,503.00	
PAYROLL TAX EXPENSE	1,402.66	
TRAVEL – SCOUT	10,646.90	
WAGES (SALARY AND WAGES)	14,921.50	
MEMBERSHIP PAID	2,280.00	
TOTAL SCOUTING EXPENSE		38,724.95
OPERATING BALANCE AS OF DATE		
CASH IN BANK	0.00	
TOTAL CURRENT BALANCE		0.00

SCOUTING PROGRAM ACTIVITIES

The St. Lawrence Area covering Glasscock, Reagan and Upton Counties had a total of 158,375 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 thrips, fleahoppers, aphids, and some stinkbugs. The four scouts checked 94 complete count fields.

Following is a table of the 2015 scouting statistics.

TABLE 3 – ST. LAWRENCE AREA SCOUTING STATISTICS - 2015

NUMBER OF COMPLETE COUNT FIELDS	94
AVERAGE SIZE OF FIELDS	60 ACRES
NUMBER OF SCOUTS	6
PROGRAM FINANCING	$0.25 PER BALE
TOTAL ACRES - IRRIGATED	31,395
TOTAL ACRES - DRYLAND	126,980
PROGRAM EXPENDITURES	38,724.95
MILEAGE RATE	.55/MILE
SCOUT HOURLY RATE	$10.00

The four field scouts began work by attending a scout training seminar at Garden City. 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 furture.

PEST SITUATION

Pest populations in 2015 were low. Thrips numbers were moderate in some fields near wheat, but overall were light. Fleahopper populations were very light and very few fields were treated in the area.

Bollworms, budworms, and armyworms were extremely low and almost all cotton had a worm control gene.

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

Stink bugs were at low levels this season.

Irrigated cotton had below average yields due to the extreme heat and long duration without rain. Dryland cotton acreage managed a crop this year, although not a superb one. There were very few acres failed this year.

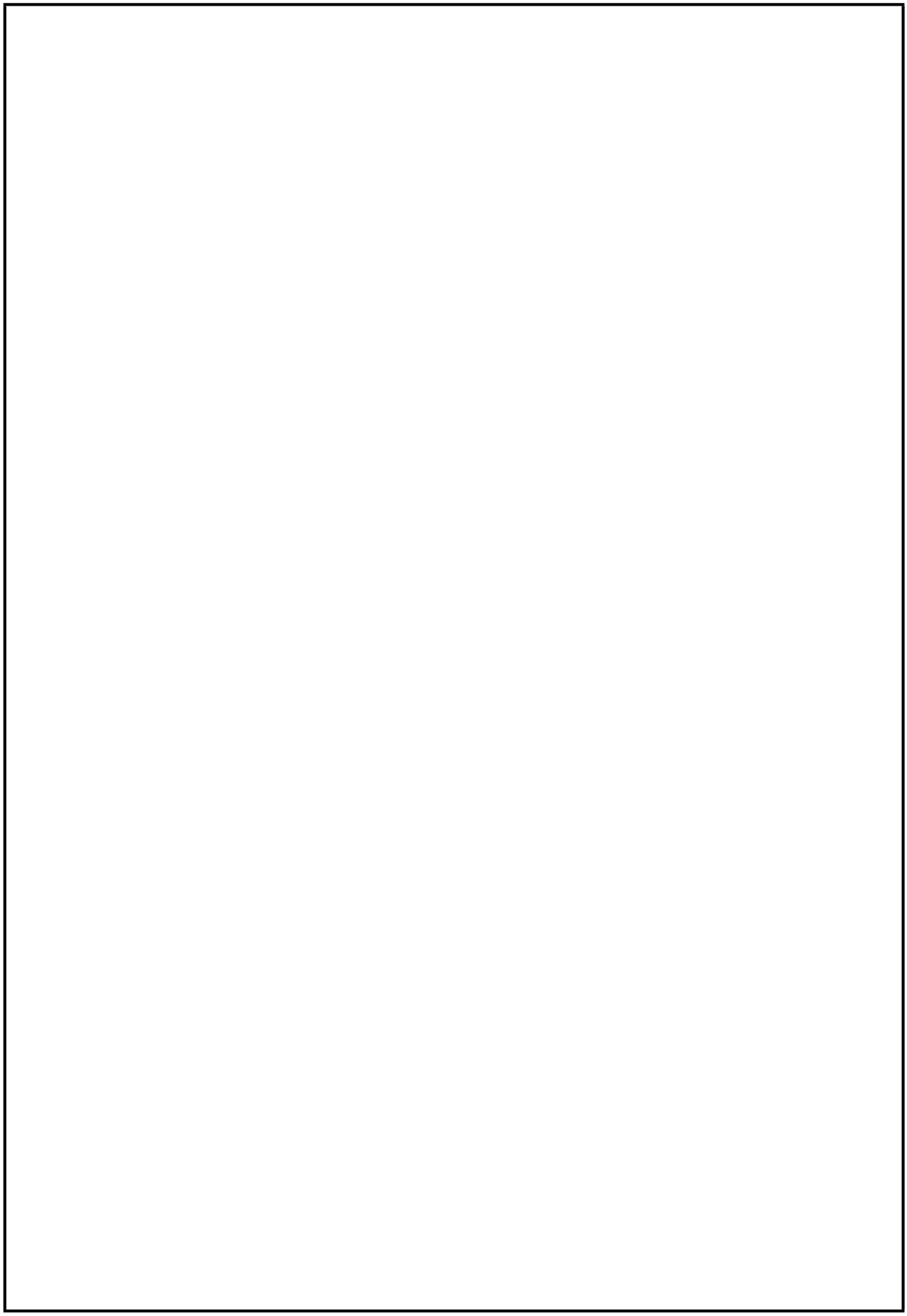
EDUCATIONAL ACTIVITIES

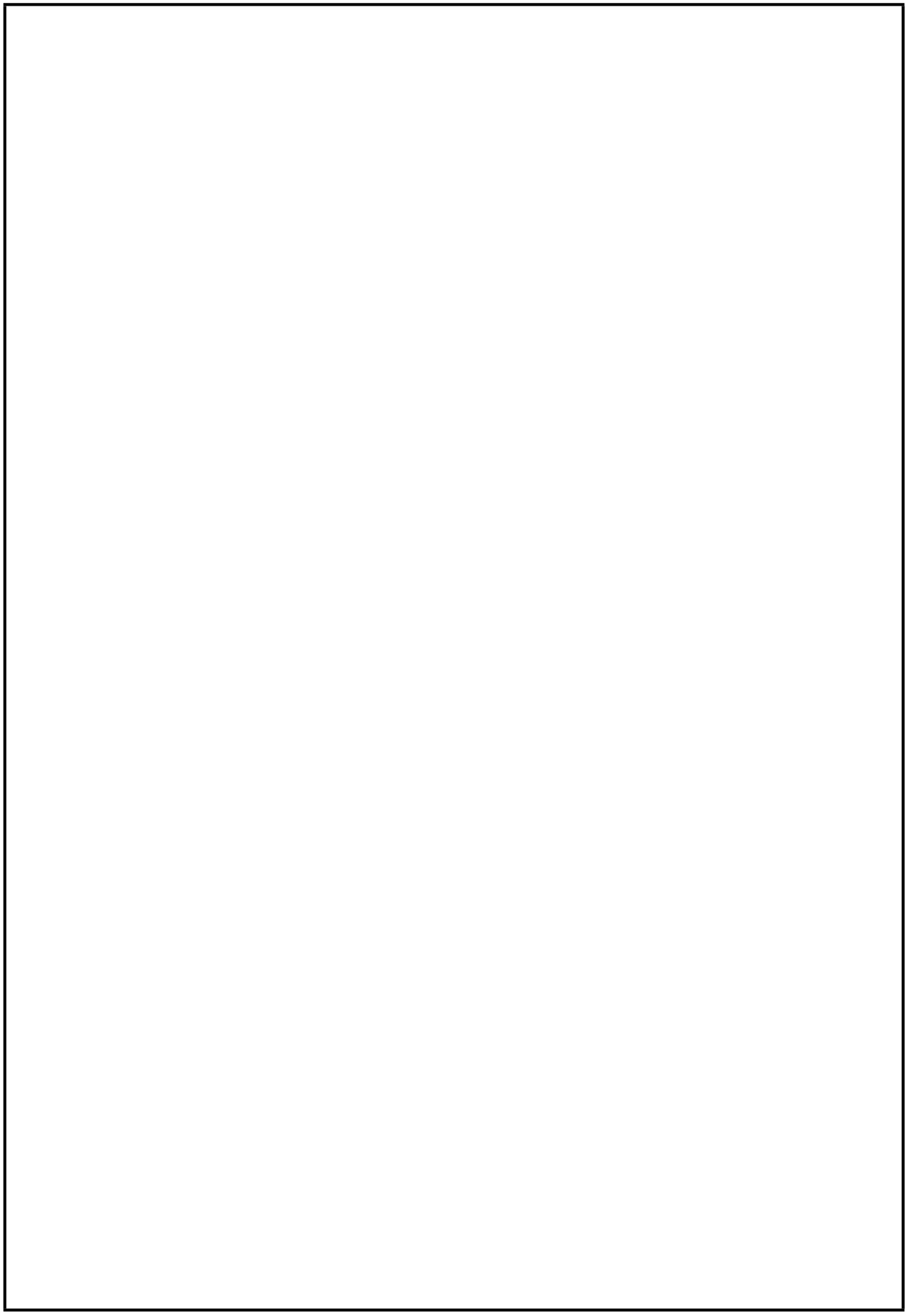
The St. Lawrence Pest Management Program includes many educational programs. The primary objective of the program is education. Producers are taught how to identify, scout and manage their pest populations in an economic way. Scout training meetings and personal contacts are methods used in the educational 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

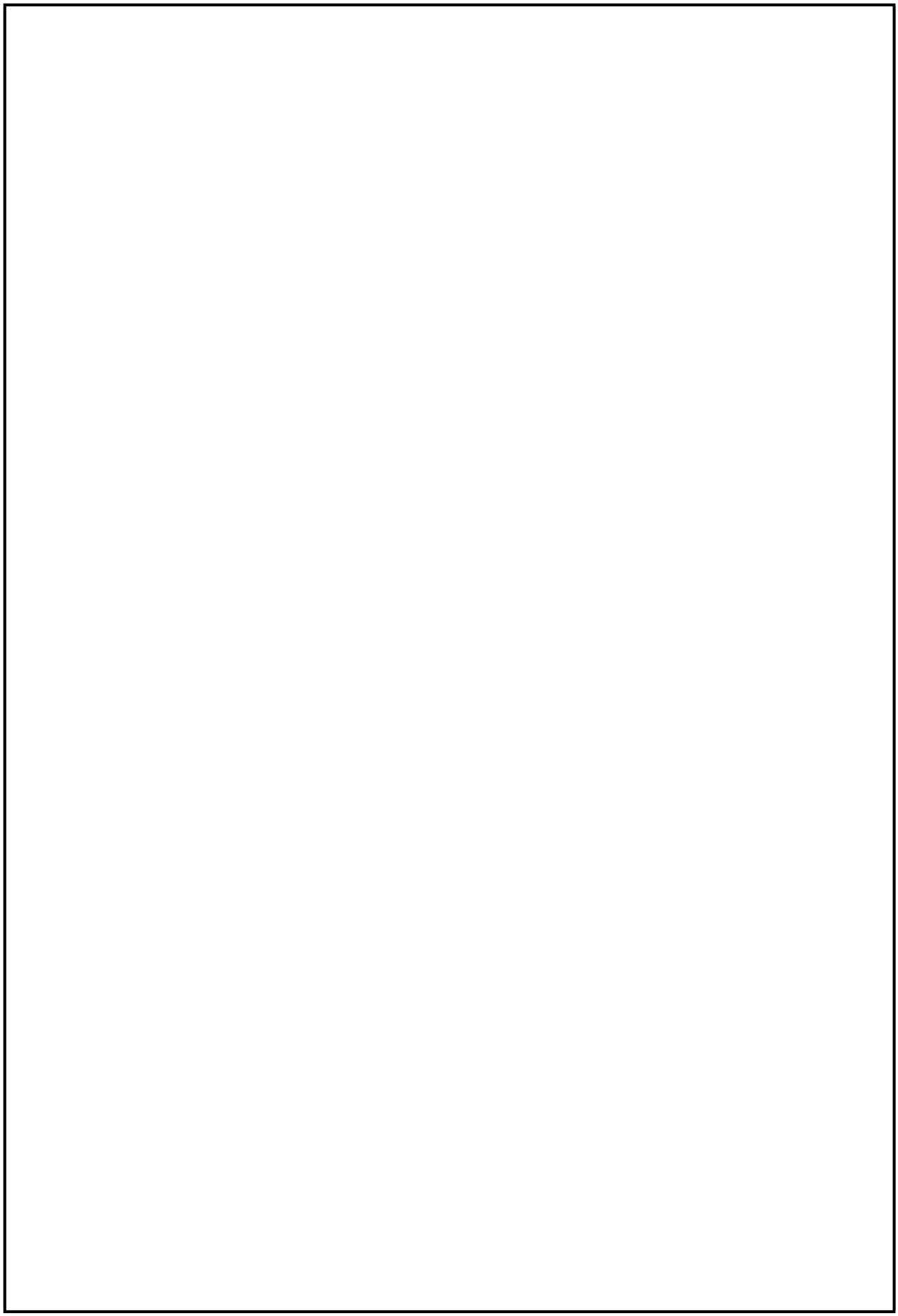
Educational Activities

Producer Contacts	880
Turnrow Meetings	20
Newsletters	13
Tours	1
Miscellaneous Crop Producer Meetings	6
Total Persons Provided Scout Training	6
Result Demonstrations	13
Pest Management Committee Meetings	10





Result Demonstration Reports



Result Demonstration Report

STACKED IRRIGATED 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

Seventeen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 456 lb/acre (NG 5315 B2RF) to a high of 780 lb/acre (FM 2334 GLT). Lint loan values averaged $0.4671 /lb and ranged from a low of $0.1125/lb (DG 2355 B2RF) to a high of $0.5325/lb (FM 2007 GLT). Net value/acre among varieties ranged from a high of $357.82 (ST 4946 GLB2) to a low of $50.54 (DG 2355 B2RF), a difference of $307.28.

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 on June 3rd. The plots received 6.44 in. of rain preplant and 3.06 in. of prewater from 2/18-5/24. They received 3.77 in. from planting until 10/1. 4.55 in. where applied from 6/20-9/18. The plots were fertilized with 10 gallons of 10-25-0-5S knifed variable rate pre-plant and 68 lbs N through the tape in June. One burn down application was made with 32 oz. of Roundup and .5 oz. Aim on 5-31. A second Roundup application was made on 6-27 with 32 oz. of Roundup and LI700.

20 oz. of Gramoxone, .25 ozs. Aim, 12 ozs Penetrator, and ammonia sulfate where used to defoliate on 11-3. They were stripper harvested on November 15th 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 456 lb/acre for NexGen 5315 B2RF to a high of 780 lb/acre for Fibermax 2334 GLT. Lint loan values averaged $0.4671 /lb and ranged from a low of $0.1125/lb for DynaGro 2355 B2RF to a high of $0.5325/lb for Fibermax 2007 GLT. Net value/acre among varieties ranged from a high of $357.82 for Stoneville 4946 GLB2 to a low of $50.54 for DynaGro 2355 B2RF, a difference of $307.28. Lint turnout ranged from a low of 22.02% to a high of 32.17% for NexGen 5315 B2RF and NexGen 4111 RR, respectively. Micronaire values ranged from a low of 4.01 for PhytoGen 339 WRF to a high of 4.84 for Stoneville 4946 GLB2. Staple averaged 33 across all varieties with a low of 32 for seven of the varieties and a high of 35 for Fibermax 2007 GLT, Fibermax 2484 B2F, and NexGen 1511 B2RF. The highest percent uniformity was observed for Fibermax 2007 GLT (82.3%) and NexGen 5007 B2XF had the lowest (78.0%). Strength values ranged from 24.7 g/tex for NexGen 5007 B2XF to 32.1 g/tex for Fibermax 2007 GLT. Color grades were mostly 31's with 1 grading a 21, 3 grading a 41, 2 grading a 32 and 1 grading a 42. Leaf was higher in this plot than most others with the DynaGro 2355 B2RF grading 8. This is the main reason for the very low loan value. The average leaf across the trial was 5 with NexGen 5007 B2XF and NexGen 5315 B2RF both receiving a 3. This was primarily due to environmental circumstances at harvest. 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.

2015 Cotton Variety Trial

Producer: ***Phillip Bales*** *Plant Date:* ***6/3/2015***
County ID Numb ***383*** *Harvest Date:* ***11/15/2015***
District number: ***6*** *Design:* ***6 rows, solid, 1850 ft, Strip Trial***
Year: ***2015*** *Fertility:* ***10 gal 10-25-0S variable-PRE, 68 lbs N***
Name of County ***Reagan*** *Herbicide:* ***RU-32 oz + .5 oz Aim-Pre, 32 oz RU***

TEXAS A&M AGRILIFE EXTENSION

	Yield Per Acre In Pounds		% Turnout		CCC Loan	Lint Gross Return	Seed Gross Return	Gross Return	Ginning	Seed/ Technology	Total Net Return
Variety	Lint	Seed	Lint	Seed	Value	($/acre)	($/acre)	($/acre)	Cost	Cost	($/acr
ST 4946 GLB2	774	1064	31.77%	43.67%	$49.30	$381.67	$111.75	$493.42	$73.11	$62.49	$357.82
FM 2334 GLT	780	1030	31.85%	42.07%	$48.15	$375.53	$108.17	$483.70	$73.46	$58.98	$351.26
NG 4111 RR	735	1025	32.17%	44.89%	$47.65	$350.13	$107.65	$457.79	$68.52	$47.86	$341.41
NG 3406 B2XF	737	967	31.45%	41.30%	$46.95	$345.89	$101.59	$447.47	$70.28	$59.45	$317.74
FM 2007 GLT	651	959	28.94%	42.66%	$53.25	$346.57	$100.72	$447.29	$67.46	$63.44	$316.39
PHY 333 WRF	740	1000	31.26%	42.26%	$46.05	$340.62	$104.99	$445.62	$70.99	$58.60	$316.03
FM 2484 B2F	623	927	27.69%	41.23%	$53.00	$330.04	$97.35	$427.39	$67.46	$60.93	$299.01
NG 1511 B2RF	620	777	28.78%	36.05%	$52.85	$327.67	$81.56	$409.22	$64.63	$59.45	$285.14
ST 4747 GLB2	683	1009	28.04%	41.39%	$45.90	$313.70	$105.92	$419.62	$73.11	$62.49	$284.02
NG 3306 B2RF	604	953	26.87%	42.37%	$49.95	$301.83	$100.03	$401.85	$67.46	$59.45	$274.95
PHY 339 WRF	592	858	26.61%	38.57%	$51.05	$302.25	$90.12	$392.36	$66.75	$58.60	$267.01
DG 3635 B2XF	625	878	31.42%	44.11%	$46.80	$292.54	$92.15	$384.69	$59.69	$60.21	$264.80
NG 5007 B2XF	638	791	30.10%	37.32%	$46.95	$299.50	$83.03	$382.53	$63.57	$59.45	$259.51
FM 1900 GLT	565	892	26.67%	42.11%	$47.55	$268.71	$93.69	$362.40	$63.57	$63.44	$235.38
DG 2570 B2RF	498	714	29.15%	41.83%	$47.65	$237.10	$74.97	$312.08	$51.21	$59.86	$201.00
NG 5315 B2RF	456	612	22.02%	29.53%	$49.70	$226.73	$64.24	$290.97	$62.16	$59.45	$169.36
DG 2355 B2RF	624	1048	26.79%	44.98%	$11.25	$70.25	$110.08	$180.33	$69.93	$59.86	$50.54
Average	644	912	28.92%	40.96%	$46.71	$300.63	$95.77	$396.40	$66.67	$59.65	$270.08
Max.	780	1064	32.17%	44.98%	$53.25	$381.67	$111.75	$493.42	$73.46	$63.44	$357.82
Min.	456	612	22.02%	29.53%	$11.25	$70.25	$64.24	$180.33	$51.21	$47.86	$50.54

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 $210/ton For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576
$3.00/cwt ginning cost

2015 Cotton Variety Trial

Producer:	***Phillip Bales***	*Plant Date:*	***6/3/2015***
County ID Number:	***383***	*Harvest Date:*	***11/15/2015***
District number:	***6***	*Design:*	***6 rows, solid, 1850 ft, Strip Trial***
Year:	***2015***	*Fertility:*	***10 gal 10-25-0S variable-PRE, 68 lbs N***
Name of County:	***Reagan***	*Herbicide:*	***RU-32 oz + .5 oz Aim-Pre, 32 oz RU***

			Fiber Quality					
Variety	Color	Leaf	Fiber Length	Mic	Strength (gram/tex)	Uniformity	CCC Loan Value	Total Net Return ($/acre)
ST 4946 GLB2	31	5	33	4.84	29.20	80.50	$49.30	$357.82
FM 2334 GLT	31	5	32	4.74	27.80	80.40	$48.15	$351.26
NG 4111 RR	32	5	33	4.33	30.70	81.30	$47.65	$341.41
NG 3406 B2XF	42	6	34	4.78	28.70	82.00	$46.95	$317.74
FM 2007 GLT	31	5	35	4.25	32.10	82.30	$53.25	$316.39
PHY 333 WRF	31	6	32	4.62	27.20	79.70	$46.05	$316.03
FM 2484 B2F	31	5	35	4.17	29.00	80.30	$53.00	$299.01
NG 1511 B2RF	31	5	35	4.54	29.50	80.70	$52.85	$285.14
ST 4747 GLB2	41	6	34	4.29	25.90	79.40	$45.90	$284.02
NG 3306 B2RF	31	5	34	4.39	28.50	78.80	$49.95	$274.95
PHY 339 WRF	31	5	34	4.01	29.40	81.30	$51.05	$267.01
DG 3635 B2XF	31	6	32	4.50	27.60	80.30	$46.80	$264.80
NG 5007 B2XF	31	3	32	4.72	24.70	78.00	$46.95	$259.51
FM 1900 GLT	41	6	34	4.14	28.00	79.50	$47.55	$235.38
DG 2570 B2RF	32	4	32	4.60	26.70	80.10	$47.65	$201.00
NG 5315 B2RF	21	3	32	4.65	26.50	80.80	$49.70	$169.36
DG 2355 B2RF	41	8	32	4.29	28.10	79.40	$11.25	$50.54
Average	-	5	33	4.46	28.21	80.28	$46.71	$270.08
Max.	-	8	35	4.84	32.10	82.30	$53.25	$357.82
Min.	-	3	32	4.01	24.70	78.00	$11.25	$50.54

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 $210/ton For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576 $3.00/cwt ginning cost

Result Demonstration Report

STACKED IRRIGATED COTTON VARIETY DEMONSTRATION

Cooperator: Michael & Allen Fuchs

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

Glasscock County

SUMMARY

Fourteen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 804 lb/acre (ST 4747 GLB2) to a high of 1156 lb/acre (ST 4946 GLB2). Lint loan values averaged $0.5160 /lb and ranged from a low of $0.45/lb (PHY 499 WRF) to a high of $0.5755/lb (FM 2334 GLT). Net value/acre among varieties ranged from a high of $623.90 (FM 2007 GLT) to a low of $338.25 (ST 4747 GLB2), a difference of $285.65.

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 2 x 1 pattern on 40" spacing on June 3rd. They were stripper harvested on October 20th 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 804 lb/acre for Stoneville 4747 GLB2 to a high of 1156 lb/acre for Stoneville 4946 GLB2. Lint loan values averaged $0.5160 /lb and ranged from a low of $0.45/lb for PhytoGen 499 WRF to a high of $0.5755/lb or Fibermax 2334 GLT. Net value/acre among varieties ranged from a high of $623.90 for Fibermax 2334 GLT to a low of $338.25 for Stoneville 4747 GLB2, a difference of $285.65. Lint turnout ranged from a low of 21.74% to a high of 32.58% for Stoneville 4747 GLB2 and Fibermax 2334 GLT, respectively. Micronaire values ranged from a low of 4.08 for Fibermax 2007 GLT to a high of 4.84 for DeltaPine 1522 B2XF. Staple averaged 35 across all varieties with a low of 33 for PhytoGen W3RF and PhytoGen 499 WRF and a high of 37 for Fibermax 2334 GLT. The highest percent uniformity was observed for PhytoGen 333 WRF (82.8%) and Fibermax 2484 B2F had the lowest (79.6%). Strength values ranged from 26.4 g/tex for Stoneville 4747 GLB2 to 30.5 g/tex for DeltaPine 1219 B2RF and PhytoGen 499 WRF. Color grades were in general, mixed with 5 grading a 21, 1 grading a 31, 3 grading a 22 and 5 grading a 32. This was primarily due to environmental circumstances at harvest. 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. Michael and Allen Fuchs for cooperating in this demonstration.

They would also like to thank the seed companies who donated the seed.

2015 Cotton Variety Trial

Producer:	***Allen/Michael Fuchs***	*Plant Date:*	***6/3/2015***
County ID Number:	***173***	*Harvest Date:*	***10/20/2015***
District number:	***6***	*Design:*	***6 rows, 2 x 1, 1042 ft, Strip Trial***
Year:	***2015***	*Fertility:*	
Name of County:	***Glasscock***	*Herbicide:*	

TEXAS A&M AGRILIFE EXTENSION

	Yield Per Acre In Pounds		% Turnout		CCC Loan	Lint Gross Return	Seed Gross Return	Gross Return	Ginning	Seed/ Technology	Total Gross Return
Variety	Lint	Seed	Lint	Seed	Value	($/acre)	($/acre)	($/acre)	Cost	Cost	($/acre)
FM 2007 GLT	1101	1646	30.27%	45.26%	$56.65	$623.62	$172.84	$796.45	$109.11	$63.44	$623.90
PHY 444 WRF	1127	1436	31.89%	40.66%	$54.35	$612.33	$150.82	$763.15	$105.97	$58.60	$598.58
FM 2334 GLT	1069	1331	32.58%	40.57%	$57.55	$615.32	$139.79	$755.11	$98.45	$58.98	$597.68
FM 2484 B2F	1038	1541	29.74%	44.15%	$55.50	$576.17	$161.83	$737.99	$104.72	$60.93	$572.34
ST 4946 GLB2	1156	1634	30.90%	43.66%	$48.95	$565.84	$171.54	$737.38	$112.24	$62.49	$562.65
DP 1219 B2RF	1036	1444	29.34%	40.87%	$53.00	$549.27	$151.58	$700.85	$105.97	$54.94	$539.94
PHY 339 WRF	992	1420	30.44%	43.54%	$54.40	$539.88	$149.05	$688.94	$97.82	$58.60	$532.51
PHY 333 WRF	1118	1518	30.73%	41.74%	$47.95	$535.90	$159.41	$695.32	$109.11	$58.60	$527.61
PHY 495 W3RF	1151	1558	31.48%	42.58%	$46.05	$530.20	$163.54	$693.74	$109.74	$58.60	$525.40
DP 1522 B2XF	1044	1450	30.27%	42.05%	$49.10	$512.53	$152.27	$664.79	$103.47	$60.12	$501.21
FM 1900 GLT	951	1444	27.58%	41.87%	$54.05	$514.12	$151.61	$665.72	$103.47	$63.44	$498.82
DP 1549 B2XF	977	1393	27.99%	39.90%	$51.70	$505.10	$146.24	$651.34	$104.72	$54.94	$491.68
PHY 499 WRF	1058	1374	29.08%	37.77%	$45.00	$475.94	$144.22	$620.16	$109.11	$58.60	$452.45
ST 4747 GLB2	804	1186	21.74%	32.05%	$48.15	$387.21	$124.51	$511.73	$110.99	$62.49	$338.25
Average	1044	1455	29.57%	41.19%	$51.60	$538.82	$152.80	$691.62	$106.06	$59.63	$525.93
Max.	1156	1646	32.58%	45.26%	$57.55	$623.62	$172.84	$796.45	$112.24	$63.44	$623.90
Min.	804	1186	21.74%	32.05%	$45.00	$387.21	$124.51	$511.73	$97.82	$54.94	$338.25

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 $210/ton $3.00/cwt ginning cost

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

2015 Cotton Variety Trial

Producer: **Allen/Michael Fuchs**
County ID Number: **173**
District number: **6**
Year: **2015**
Name of County: **GLASSCOCK**

Plant Date: **6/3/2015**
Harvest Date: **10/20/2015**
Design: **6 rows, 2 x 1, 1042 ft, Strip Trial**
Fertility: **0**
Herbicide: **0**

TEXAS A&M AGRILIFE EXTENSION

			Fiber Quality					
Variety	Color	Leaf	**Fiber Length**	Mic	(Strength	Uniformity	CCC Loan	Total Net Return ($/acre)
FM 2007 GLT	21	3	36	4.08	29.90	81.10	$56.65	$623.90
PHY 444 WRF	22	4	36	4.10	29.40	82.10	$54.35	$598.58
FM 2334 GLT	21	1	37	4.80	30.40	81.20	$57.55	$597.68
FM 2484 B2F	21	2	35	4.24	29.30	79.60	$55.50	$572.34
ST 4946 GLB2	32	5	34	4.68	29.10	81.90	$48.95	$562.65
DP 1219 B2RF	22	2	34	4.48	30.50	80.40	$53.00	$539.94
PHY 339 WRF	21	4	35	4.42	30.20	80.90	$54.40	$532.51
PHY 333 WRF	32	6	36	4.59	29.00	82.80	$47.95	$527.61
PHY 495 W3RF	32	6	33	4.27	29.50	80.70	$46.05	$525.40
DP 1522 B2XF	32	5	34	4.84	30.20	80.80	$49.10	$501.21
FM 1900 GLT	21	5	36	4.33	30.00	81.60	$54.05	$498.82
DP 1549 B2XF	22	4	34	4.46	28.80	80.20	$51.70	$491.68
PHY 499 WRF	32	7	33	4.68	30.50	81.10	$45.00	$452.45
ST 4747 GLB2	31	7	35	4.76	26.40	80.40	$48.15	$338.25
Average	-	4	35	4.48	29.51	81.06	$51.60	$525.93
Max.	-	7	37	4.84	30.50	82.80	$57.55	$623.90
Min.	-	1	33	4.08	26.40	79.60	$45.00	$338.25

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 $210/ton
For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576
$3.00/cwt ginning cost

Result Demonstration Report

STACKED DRY LAND COTTON VARIETY DEMONSTRATION

Cooperator: Gary 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

Fifteen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 96 lb/acre (NG 5007 B2XF) to a high of 254 lb/acre (NG 3406 B2XF). Lint loan values averaged $0.4854 /lb and ranged from a low of $0.4355/lb (NG 5007 B2XF) to a high of $0.5415/lb (FM 2334 GLT). Net value/acre among varieties ranged from a high of $108.47 (FM 2334 GLT) to a low of $10.84 (NG 5007 B2XF), a difference of $97.63.

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 8 row plots in an 8 x 1 pattern on 40" spacing on June 8th. The plots received little to no rain all summer. The plots were fertilized 100 lbs of 20-10-5. They were stripper harvested on October 12th 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 96 lb/acre for NexGen 5007 B2XF to a high of 254 lb/acre for NexGen 3406 B2XF. Lint loan values averaged $0.4854 /lb and ranged from a low of $0.4355/lb for NexGen 5007 B2XF to a high of $0.5415/lb for Fibermax 2334 GLT. Net value/acre among varieties ranged from a high of $108.47 for Fibermax 2334 GLT to a low of $10.84 for NexGen 5007 B2XF, a difference of $97.63. Lint turnout ranged from a low of 23.25% to a high of 32.33% for Stoneville 4946 GLB2 and NexGen 3406 B2XF, respectively. Micronaire values ranged from a low of 4.16 for PhytoGen 339 WRF to a high of 4.63 for NexGen 3406 B2XF. Staple averaged 33 across all varieties with a low of 31 for PhytoGen 495 W3RF and DynaGro 2570 B2RF and a high of 35 for Fibermax 2334 GLT and Fibermax 2007 GLT. The highest percent uniformity was observed for NexGen 5315 B2RF (80.9%) and NexGen 5007 B2XF had the lowest (76.6%). Strength values ranged from 24.5 g/tex for Stoneville 4747 GLB2 to 29.9 g/tex for PhytoGen 339 WRF. Color grades were mostly 23's with 3 grading a 22, 3 grading a 22, 1 grading a 32 and 3 grading a 33. This was primarily due to environmental circumstances at harvest. 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. Gary Halfmann for cooperating in this demonstration.

They would also like to thank the seed companies who donated the seed.

2015 Cotton Variety Trial

Producer:	***Gary Halfmann***	*Plant Date:*	***6/8/2015***
County ID:	***383***	*Harvest Date:*	***10/12/2015***
District number:	***6***	*Design:*	***8+1, 1.7 sd/ft, 1600 ft., Strip Trial***
Year:	***2015***	*Fertility:*	***100 lbs 20-10-5***
Name of County:	***Reagan***	*Herbicide:*	***0***

TEXAS A&M AGRILIFE EXTENSION

	Yield Per Acre In Pounds		% Turnout		CCC Loan	Lint Gross Return	Seed Gross Return	Gross Return	Ginning	Seed/ Technology	Total Net Return
Variety	Lint	Seed	Lint	Seed	Value	($/acre)	($/acre)	($/acre)	Cost	Cost	($/acre)
FM 2334 GLT	250	382	28.83%	43.98%	$54.15	$135.48	$32.44	$167.92	$26.03	$33.42	$108.47
FM 2007 GLT	239	394	28.21%	46.55%	$53.05	$126.83	$33.53	$160.36	$25.42	$35.95	$98.99
NG 3406 B2XF	254	363	32.33%	46.17%	$47.30	$120.22	$30.85	$151.07	$23.58	$33.69	$93.80
PHY 499 WRF	246	337	31.34%	42.89%	$44.85	$110.50	$28.66	$139.16	$23.58	$33.21	$82.36
PHY 495 W3RF	252	366	26.52%	38.54%	$44.45	$111.92	$31.11	$143.03	$28.48	$33.21	$81.33
DG 2570 B2RF	233	382	28.58%	46.71%	$44.85	$104.71	$32.43	$137.14	$24.50	$33.92	$78.72
DP 1549 B2XF	215	313	29.67%	43.23%	$47.10	$101.30	$26.64	$127.94	$21.75	$31.13	$75.06
FM 1900 GLT	217	355	27.60%	45.13%	$47.65	$103.40	$30.16	$133.55	$23.58	$35.95	$74.02
PHY 333 WRF	221	304	27.81%	38.16%	$46.85	$103.75	$25.83	$129.58	$23.89	$33.21	$72.48
NG 5315 B2RF	192	290	29.87%	45.13%	$50.40	$96.82	$24.67	$121.49	$19.30	$33.69	$68.50
DG 3635 B2XF	213	322	29.74%	45.02%	$45.15	$95.96	$27.35	$123.31	$21.44	$34.12	$67.75
ST 4747 GLB2	189	298	28.53%	44.92%	$46.40	$87.86	$25.34	$113.20	$19.91	$35.41	$57.88
ST 4946 GLB2	183	297	23.25%	37.80%	$46.55	$85.09	$25.26	$110.36	$23.58	$35.41	$51.36
PHY 339 WRF	127	205	27.75%	44.52%	$53.00	$67.56	$17.39	$84.95	$13.78	$33.21	$37.96
NG 5007 B2XF	96	141	31.30%	46.00%	$43.55	$41.74	$11.98	$53.72	$9.19	$33.69	$10.84
Average	209	317	28.76%	43.65%	$47.69	$99.54	$26.91	$126.45	$21.87	$33.95	$70.64
Max.	254	394	32.33%	46.71%	$54.15	$135.48	$33.53	$167.92	$28.48	$35.95	$108.47
Min.	96	141	23.25%	37.80%	$43.55	$41.74	$11.98	$53.72	$9.19	$31.13	$10.84

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

2015 Cotton Variety Trial

Producer:	***Gary Halfmann***	*Plant Date:*	***6/8/2015***
County ID:	***383***	*Harvest Date:*	***10/12/2015***
District number:	***6***	*Design:*	***8+1, 1.7 sd/ft, 1600 ft., Strip Trial***
Year:	***2015***	*Fertility:*	***100 lbs 20-10-5***
Name of County:	***Reagan***	*Herbicide:*	***0***

TEXAS A&M AGRILIFE EXTENSION

			Fiber Quality					
Variety	Color	Leaf	**Fiber Length (staple**	Mic	Strength (gram/tex)	Uniformity	CCC Loan Value	Total Net Return ($/acre)
FM 2334 GLT	22	1	35	4.53	29.20	80.10	$54.15	$108.47
FM 2007 GLT	22	3	35	4.40	29.30	79.40	$53.05	$98.99
NG 3406 B2XF	23	3	32	4.63	27.20	80.40	$47.30	$93.80
PHY 499 WRF	33	5	32	4.48	28.50	80.20	$44.85	$82.36
PHY 495 W3RF	23	3	31	4.20	28.90	77.60	$44.45	$81.33
DG 2570 B2RF	23	2	31	4.47	26.40	78.40	$44.85	$78.72
DP 1549 B2XF	23	1	33	4.47	27.20	77.60	$47.10	$75.06
FM 1900 GLT	23	5	34	4.27	28.00	79.50	$47.65	$74.02
PHY 333 WRF	23	3	33	4.26	27.40	77.90	$46.85	$72.48
NG 5315 B2RF	23	1	34	4.47	28.00	80.90	$50.40	$68.50
DG 3635 B2XF	33	4	32	4.46	27.70	78.30	$45.15	$67.75
ST 4747 GLB2	32	4	33	4.49	24.50	77.90	$46.40	$57.88
ST 4946 GLB2	23	3	32	4.44	28.50	79.60	$46.55	$51.36
PHY 339 WRF	22	2	34	4.16	29.90	80.50	$53.00	$37.96
NG 5007 B2XF	33	4	32	4.31	25.60	76.60	$43.55	$10.84
Average	-	3	33	4.40	27.75	78.99	$47.69	$70.64
Max.	-	5	35	4.63	29.90	80.90	$54.15	$108.47
Min.	-	1	31	4.16	24.50	76.60	$43.55	$10.84

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 $210/ton

$3.00/cwt ginning cost

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

Result Demonstration Report

STACKED DRY LAND COTTON VARIETY DEMONSTRATION

Cooperator: Jerry Hoelscher

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

Glasscock County

SUMMARY

Ten cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 285 lb/acre (NG 3306 B2RF) to a high of 526 lb/acre (NG 3406 B2XF). Lint loan values averaged $0.4869 /lb and ranged from a low of $0.4405/lb (ST 4747 GLB2) to a high of $0.5350/lb (FM 2007 GLT). Net value/acre among varieties ranged from a high of $254.99 (NG 3406 B2XF) to a low of $121.44 (NG 3306 B2RF), a difference of $133.55.

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 an 2 x 1 pattern on 40" spacing on June 12th. The plots received very limited rainfall through the end of June and close to nothing the remainder of the summer. The plots were fertilized 100 lbs of 10-25-0. They were stripper harvested on November 12th 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 285 lb/acre for NexGen 3306 B2RF to a high of 526 lb/acre for NexGen 3406 B2XF. Lint loan values averaged $0.4869 /lb and ranged from a low of $0.4405/lb for Stoneville 4747 GLB2 to a high of $0.5350/lb for Fibermax 2007 GLT. Net value/acre among varieties ranged from a high of $254.99 for NexGen 3406 B2XF to a low of $121.44 for NexGen 3306 B2RF, a difference of $133.55. Lint turnout ranged from a low of 22.45% to a high of 31.97% for Fibermax 1900 GLT and NexGen 3406 B2XF, respectively. Micronaire values ranged from a low of 4.05 for Fibermax 1900 GLT to a high of 4.75 for Deltapine 1522 B2XF. Staple averaged 34 across all varieties with a low of 33 for DynaGro 2570 B2RF and a high of 36 for Fibermax 2007 GLT and NexGen 3306 B2RF. The highest percent uniformity was observed for NexGen 3306 B2RF (82.5%) and Stoneville 4747 GLB2 had the lowest (78.6%). Strength values ranged from 24.9 g/tex for Stoneville 4747 GLB2 to 32.1 g/tex for NexGen 3306 B2RF. Color grades were mostly 32's and 42's. This was primarily due to environmental circumstances at harvest. 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. Jerry Hoelscher for cooperating in this demonstration.

They would also like to thank the seed companies who donated the seed.

2015 Cotton Variety Trial

Producer:	***Jerry Hoelscher***	*Plant Date:*	***6/12/2015***
County ID Number:	***173***	*Harvest Date:*	***11/2/2015***
District number:	***6***	*Design:*	***6 rows, 2x1, 1 sd-7", 1114 ft. Strip Trial***
Year:	***2015***	*Fertility:*	***100 lbs 10-25-0***
Name of County:	***Glasscock***	*Herbicide:*	***0***

TEXAS A&M AGRILIFE EXTENSION

	Yield Per Acre In Pounds						Lint	Seed				Total
						CCC	Gross	Gross	Gross		Seed/	Gross
				% Turnout		Loan	Return	Return	Return	Ginning	Technology	Return
Variety	Bur Cotton	Lint	Seed	Lint	Seed	Value	($/acre)	($/acre)	($/acre)	Cost	Cost	($/acre)
NG 3406 B2XF	1645	526	691	31.97%	41.99%	$50.50	$265.51	$72.51	$338.02	$49.34	$33.69	$254.99
DG 2570 B2RF	1638	438	701	26.73%	42.77%	$49.80	$218.04	$73.57	$291.61	$49.14	$33.92	$208.55
PHY 222 WRF	1499	436	623	29.05%	41.53%	$49.00	$213.46	$65.39	$278.85	$44.98	$33.21	$200.66
PHY 333 WRF	1575	440	639	27.94%	40.54%	$46.95	$206.63	$67.05	$273.68	$47.25	$33.21	$193.22
DG 2355 B2RF	1466	387	654	26.40%	44.61%	$49.75	$192.60	$68.69	$261.28	$43.99	$33.92	$183.37
ST 4747 GLB2	1591	428	696	26.89%	43.72%	$44.05	$188.48	$73.04	$261.52	$47.74	$35.41	$178.38
FM 2007 GLT	1408	363	585	25.78%	41.56%	$53.50	$194.14	$61.42	$255.56	$42.23	$35.95	$177.38
DP 1522 B2XF	1271	371	530	29.16%	41.73%	$46.90	$173.82	$55.69	$229.50	$38.12	$34.07	$157.31
FM 1900 GLT	1448	325	503	22.45%	34.74%	$46.10	$149.86	$52.82	$202.67	$43.44	$35.95	$123.29
NG 3306 B2RF	1251	285	470	22.76%	37.60%	$50.30	$143.27	$49.40	$192.66	$37.54	$33.69	$121.44
DP 1219 B2RF	1823	499	722	27.38%	39.64%	$49.65	$247.73	$75.85	$323.58	$54.68	$31.13	$237.78
Average	1,510	409	619	26.96%	40.95%	$48.77	$199.41	$65.04	$264.45	$45.31	$34.01	$185.12
Max.	1,823	526	722	31.97%	44.61%	$53.50	$265.51	$75.85	$338.02	$54.68	$35.95	$254.99
Min.	1,251	285	470	22.45%	34.74%	$44.05	$143.27	$49.40	$192.66	$37.54	$31.13	$121.44

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 $210/ton For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576

$3.00/cwt ginning cost

2015 Cotton Variety Trial

Producer:	***Jerry Hoelscher***	*Plant Date:*	***6/12/2015***
County ID Number:	***173***	*Harvest Date:*	***11/2/2015***
District number:	***6***	*Design:*	***6 rows, 2x1, 1 sd-7", 1114 ft. Strip Trial***
Year:	***2015***	*Fertility:*	***100 lbs 10-25-0***
Name of County:	***Glasscock***	*Herbicide:*	***0***

Variety	Color	Leaf	**Fiber Length (staple)**	Mic	Strength (gram/tex)	Uniformity	CCC Loan Value	Total Net Return ($/acre)
NG 3406 B2XF	32	4	34	4.71	27.60	80.10	$50.50	$254.99
DG 2570 B2RF	32	3	33	4.67	27.90	80.40	$49.80	$208.55
PHY 222 WRF	32	5	34	4.67	29.70	82.40	$49.00	$200.66
PHY 333 WRF	42	6	34	4.50	29.00	80.90	$46.95	$193.22
DG 2355 B2RF	32	4	34	4.41	28.90	79.20	$49.75	$183.37
ST 4747 GLB2	41	7	34	4.44	24.90	78.60	$44.05	$178.38
FM 2007 GLT	31	5	36	4.15	29.50	81.10	$53.50	$177.38
DP 1522 B2XF	42	6	34	4.75	28.60	80.40	$46.90	$157.31
FM 1900 GLT	42	7	35	4.05	28.50	80.30	$46.10	$123.29
NG 3306 B2RF	32	5	36	4.31	32.10	82.50	$50.30	$121.44
DP 1219 B2RF	32	4	34	4.44	29.70	78.30	$49.65	$237.78
Average	-	5	34	4.46	28.76	80.38	$48.77	$185.12
Max.	-	7	36	4.75	32.10	82.50	$53.50	$254.99
Min.	-	3	33	4.05	24.90	78.30	$44.05	$121.44

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 $210/ton

$3.00/cwt ginning cost

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

Result Demonstration Report

STACKED DRY LAND COTTON VARIETY DEMONSTRATION

Cooperator: Russell 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

Glasscock County

SUMMARY

Nineteen cotton varieties were compared in strip plots under similar field conditions. Lint yields varied with a low of 250 lb/acre (NG 5315 B2RF) to a high of 395 lb/acre (PHY 499 WRF). Lint loan values averaged $0.4952 /lb and ranged from a low of $0.4125/lb (DP 1522 B2XF) to a high of $0.5525/lb (FM 2484 B2F). Net value/acre among varieties ranged from a high of $179.19 (PHY 499 WRF) to a low of $74.85 (DP 1522 B2XF), a difference of $104.34.

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 an 2 x 1 pattern on 40" spacing on June 12th. I did not receive rainfall totals on this field, however; getting it planting in early May allowing it take advantage of rains in the end of the month and into June. It received negligible rainfall after July 7th until October 8th. The plots were fertilized with 150 lbs of 10-25-0. They were stripper harvested on November 12th 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 250 lb/acre for NexGen 5315 B2RF to a high of 395 lb/acre for PhytoGen 499 WRF. Lint loan values averaged $0.4952 /lb and ranged from a low of $0.4125/lb for DeltaPine 1522 B2XF to a high of $0.5525/lb for Fibermax 2484 B2F. Net value/acre among varieties ranged from a high of $179.19 for PhytoGen 499 WRF to a low of $74.85 for DeltaPine 1522 B2XF, a difference of $104.34. Lint turnout ranged from a low of 25.41% to a high of 32.88% for Stoneville 4747 GLB2 and NexGen 5007 B2XF, respectively. Micronaire values ranged from a low of 3.98 for PhytoGen 444 WRF to a high of 4.95 for DeltaPine 1522 B2XF. Staple averaged 33 across all varieties with a low of 31 for DeltaPine 1522 B2XF and a high of 36 for Fibermax 2484 B2F. The highest percent uniformity was observed for PhytoGen 499 WRF and PhytoGen 444 WRF (81.8%) and Stoneville 4747 GLB2 had the lowest (75.6%). Strength values ranged from 23.6 g/tex for Stoneville 4747 GLB2 to 30.8 g/tex for PhytoGen 499 WRF. Color grades were mostly 22's and 32's with one 21 and one 23. 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.

2015 Cotton Variety Trial

Producer:	***Russell Halfmann***	*Plant Date:*	***5/27/2015***
County ID Number:	***173***	*Harvest Date:*	***10/14/2015***
District number:	***6***	*Design:*	***12 rows, 2 x 1, 1155 ft., Strip Trial***
Year:	***2015***	*Fertility:*	***150 lbs 10-25-0***
Name of County:	***GLASSCOCK***	*Herbicide:*	***0***

TEXAS A&M AGRILIFE EXTENSION

	Yield Per Acre In Pounds			% Turnout		CCC Loan	Lint Gross Return	Seed Gross Return	Gross Return		Seed/ Technology	Total Net Return
Variety	Bur Cotton	Lint	Seed	Lint	Seed	Value	($/acre)	($/acre)	($/acre)	Ginning Cost	Cost	($/acre)
PHY 499 WRF	1311	395	563	30.11%	42.98%	$51.65	$203.84	$47.87	$251.72	$39.32	$33.21	$179.19
PHY 444 WRF	1160	349	493	30.10%	42.54%	$54.25	$189.39	$41.93	$231.32	$34.79	$33.21	$163.32
PHY 495 W3RF	1169	370	531	31.61%	45.41%	$49.15	$181.66	$45.12	$226.79	$35.07	$33.21	$158.50
NG 5007 B2XF	1075	353	506	32.88%	47.04%	$50.00	$176.73	$42.98	$219.71	$32.25	$33.69	$153.77
DP 1549 B2XF	1150	348	493	30.27%	42.88%	$49.85	$173.57	$41.93	$215.50	$34.51	$31.13	$149.86
FM 2484 B2F	1056	312	480	29.52%	45.43%	$55.25	$172.25	$40.77	$213.02	$31.68	$34.53	$146.81
DP 1219 B2RF	1245	329	508	26.47%	40.84%	$52.05	$171.45	$43.20	$214.66	$37.34	$31.13	$146.19
FM 2007 GLT	1197	364	577	30.36%	48.19%	$45.65	$165.96	$49.05	$215.01	$35.92	$35.95	$143.14
DG 2570 B2RF	1141	348	517	30.47%	45.29%	$47.55	$165.28	$43.92	$209.19	$34.23	$33.92	$141.05
DG 3635 B2XF	1084	335	483	30.90%	44.55%	$48.10	$161.15	$41.06	$202.21	$32.53	$34.12	$135.56
ST 4946 GLB2	1169	333	487	28.51%	41.63%	$47.65	$158.81	$41.37	$200.19	$35.07	$35.41	$129.70
PHY 333 WRF	1056	307	456	29.10%	43.16%	$49.60	$152.41	$38.74	$191.15	$31.68	$33.21	$126.26
FM 1830 GLT	867	280	376	32.27%	43.35%	$53.60	$150.06	$31.96	$182.02	$26.02	$35.44	$120.56
NG 3406 B2XF	1122	295	399	26.34%	35.59%	$48.85	$144.34	$33.94	$178.29	$33.66	$33.69	$110.94
FM 1900 GLT	886	267	403	30.12%	45.49%	$50.50	$134.82	$34.27	$169.09	$26.59	$35.95	$106.56
PHY 339 WRF	952	263	383	27.59%	40.17%	$50.55	$132.83	$32.52	$165.34	$28.57	$33.21	$103.56
NG 5315 B2RF	877	250	364	28.50%	41.53%	$50.65	$126.57	$30.95	$157.52	$26.31	$33.69	$97.53
ST 4747 GLB2	1113	283	442	25.41%	39.70%	$44.75	$126.50	$37.54	$164.04	$33.38	$35.41	$95.25
DP 1522 B2XF	924	256	366	27.69%	39.59%	$41.25	$105.55	$31.09	$136.64	$27.72	$34.07	$74.85
Average	1,082	318	465	29.38%	42.91%	$49.52	$157.54	$39.49	$197.02	$32.45	$33.90	$130.66
Max.	1,311	395	577	32.88%	48.19%	$55.25	$203.84	$49.05	$251.72	$39.32	$35.95	$179.19
Min.	867	250	364	25.41%	35.59%	$41.25	$105.55	$30.95	$136.64	$26.02	$31.13	$74.85

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 $210/ton For Questions Contact: Brad Easterling or Dr. David Drake (325)653-4576

$3.00/cwt ginning cost

2015 Cotton Variety Trial

Producer:	***Russell Halfmann***	*Plant Date:*	***5/27/2015***
County ID Number:	***173***	*Harvest Date:*	***10/14/2015***
District number:	***6***	*Design:*	***12 rows, 2 x 1, 1155 ft., Strip Trial***
Year:	***2015***	*Fertility:*	***150 lbs 10-25-0***
Name of County:	***GLASSCOCK***	*Herbicide:*	***0***

TEXAS A&M AGRILIFE EXTENSION

			Fiber Quality					
Variety	Color	Leaf	**Fiber Length (staple**	Mic	Strength (gram/tex)	Uniformity	CCC Loan Valu	Total Net Return ($/acre)
PHY 499 WRF	32	3	34	4.51	30.80	81.80	$51.65	$179.19
PHY 444 WRF	22	1	35	3.98	28.40	81.80	$54.25	$163.32
PHY 495 W3RF	22	3	32	4.32	29.80	80.80	$49.15	$158.50
NG 5007 B2XF	22	1	33	4.43	26.20	79.00	$50.00	$153.77
DP 1549 B2XF	22	2	33	4.50	27.90	78.30	$49.85	$149.86
FM 2484 B2F	22	2	36	4.11	29.50	80.30	$55.25	$146.81
DP 1219 B2RF	22	3	34	4.31	30.40	79.10	$52.05	$146.19
FM 2007 GLT	32	7	35	4.33	29.30	79.40	$45.65	$143.14
DG 2570 B2RF	23	1	32	4.87	28.00	80.40	$47.55	$141.05
DG 3635 B2XF	22	3	32	4.86	27.60	77.30	$48.10	$135.56
ST 4946 GLB2	32	4	32	4.72	28.80	80.80	$47.65	$129.70
PHY 333 WRF	32	5	35	4.45	29.10	80.90	$49.60	$126.26
FM 1830 GLT	21	2	34	4.67	28.60	80.50	$53.60	$120.56
NG 3406 B2XF	22	4	32	4.73	27.10	80.50	$48.85	$110.94
FM 1900 GLT	32	4	34	4.67	28.00	80.00	$50.50	$106.56
PHY 339 WRF	32	4	34	4.39	29.70	80.50	$50.55	$103.56
NG 5315 B2RF	22	3	33	4.62	28.00	81.10	$50.65	$97.53
ST 4747 GLB2	32	4	32	4.83	23.60	75.60	$44.75	$95.25
DP 1522 B2XF	32	5	31	4.95	28.50	78.60	$41.25	$74.85
Average	-	3	33	4.54	28.38	79.83	$49.52	$130.66
Max.	-	7	36	4.95	30.80	81.80	$55.25	$179.19
Min.	-	1	31	3.98	23.60	75.60	$41.25	$74.85

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 $210/ton

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

$3.00/cwt ginning cost

St. Lawrence Multi-year Irrigated Variety Trial Yields 2013-2015

	Irrigated								
	3-Year			2-Year			2015		
Variety	lbs/ac	$/ac	# Trials	lbs/ac	$/ac	# Trials	lbs/ac	$/ac	# Trials
PHY 499 WRF	1364	$972.30	6	1017	$658.25	2	1058	$620.16	1
DP 1219 B2RF	1263	$935.87	7	992	$664.32	3	1036	$700.85	1
ST 4946 GLB2	1259	$880.20	8	916	$578.32	4	965	$615.40	2
DG 2570 B2RF	1156	$827.74	6	771	$483.97	3	498	$316.31	1
FM 2484 B2F	1110	$801.95	7	817	$562.17	4	830	$582.69	2
PHY 339 WRF	1091	$792.11	8	820	$550.00	4	792	$540.65	2
FM 2334 GLT				985	$658.45	3	925	$619.87	2
PHY 333 WRF				928	$582.24	4	929	$570.47	1
NG 5315 B2RF				816	$541.00	3	456	$290.97	1
ST 4747 GLB2				810	$521.54	4	744	$465.67	2
NG 1511 B2RF				807	$510.49	3	620	$409.22	1
NG 3306 B2RF				750	$504.13	3	604	$401.85	1
PHY 444 WRF							1127	$763.15	1
PHY 495 W3RF							1151	$693.74	1
DP 1522 B2XF							1044	$664.79	1
DP 1549 B2XF							977	$651.34	1
FM 2007 GLT							876	$621.87	2
FM 1900 GLT							758	$514.06	2
NG 4111 RF							735	$457.79	1
NG 3406 B2XF							737	$447.47	1
DG 3635 B2XF							625	$384.69	1
NG 5007 B2XF							638	$382.53	1
DG 2355 B2RF							624	$180.33	1

Annual Average	1207	$868.36		869	$567.91		815	$517.21	
AVG of Pick Var	1295	$929.46		966	$626.99		926	$607.78	
AVG of Non-Pick	1119	$807.27		800	$525.67		690	$448.53	

St. Lawrence Multi-year Irrigated Variety Trial Rankings 2013-2015

	2013				2014		2015		13-15	
Irrigated	Evridge	Eggemeyer	Fuchs	Jost	Ri. Half	Bales	Fuchs	Bales	Average	# Trials
DP 1044 B2RF	6	2	2	6					4.00	4
DP 1219 B2RF	1	5	1	15	1	2	6		4.43	7
ST 4946 GLB2	2	1	4	2	15	7	5	1	4.63	8
PHY 333 WRF					7	5	8	6	6.50	4
PHY 499 WRF	4	6	6	3	10		13		7.00	6
DP 1359 B2RF	5	4	8	11					7.00	4
DG 2570 B2RF	3		3	7	12	4		15	7.33	6
FM 2484 B2F	10	7	5		9	14	4	7	8.00	7
PHY 375 WRF	8	3	13	8					8.00	4
ATX EDGE B2RF	11	8	9	5					8.25	4
PHY 339 WRF	9	9	11	13	5	13	7	11	9.75	8
FM 1944 GLB2	12	11	10	10	6	12			10.17	6
ST 4747 GLB2					8	10	14	9	10.25	4
PHY 367 WRF	14	10	12	12					12.00	4
FM 9250 GL				1					1.00	1
PHY 444 WRF							2		2.00	1
FM 2334 GLT					3		3	2	2.67	3
FM 2007 GLT							1	5	3.00	2
NG 4111 RF								3	3.00	1
FM 2011 GT				4					4.00	1
NG 3406 B2XF								4	4.00	1
DP 1321 B2RF					2	9			5.50	2
NG 5315 B2RF					4	1		16	7.00	3
FM 2989 B2RF	7								7.00	1
DG 2285 B2RF					14	3			8.50	2
NG 1511 B2RF					11	8		8	9.00	3
DG 2595 B2RF				9					9.00	1
PHY 495 W3RF							9		9.00	1
NG 3306 B2RF					13	6		10	9.67	3
ATX NITRO B2RF	13		7						10.00	2
DP 1522 B2XF							10		10.00	1
DG 3635 B2XF								12	12.00	1
DP 1549 B2XF							12		12.00	1
FM 1900 GLT							11	14	12.50	2
NG 5007 B2XF								13	13.00	1
FM 1830 GLT					16	11			13.50	2
ST 6448 GLB2				14					14.00	1
FM 9170 B2RF						15			15.00	1
DG 2355 B2RF								17	17.00	1
# of Varieties inTria	14	11	13	15	16	15	14	17		

8 Trials - 115 entries

St. Lawrence Multi-year Dryland Variety Trial Yields 2014-2015

	Dryland					
	2-Year			2015		
Variety			# Trials	lbs/ac	$/ac	# Trials
PHY 499 WRF	247	$153.00	3	321	$195.44	2
FM 2484 B2F	214	$150.48	2	312	$213.02	1
DP 1219 B2RF	209	$137.80	2	329	$214.66	1
FM 1830 GLT	184	$122.36	2	280	$182.02	1
FM 2334 GLT	156	$105.77	2	250	$167.92	1
PHY 222 WRF				436	$278.85	1
DG 2355 B2RF				387	$261.28	1
PHY 444 WRF				349	$231.32	1
NG 3406 B2XF				358	$222.46	3
DG 2570 B2RF				340	$212.65	3
FM 2007 GLT				322	$210.31	3
PHY 333 WRF				323	$198.14	3
DP 1522 B2XF				313	$193.07	2
NG 3306 B2RF				285	$192.66	1
PHY 495 W3RF				311	$184.91	2
ST 4747 GLB2				300	$179.59	3
DP 1549 B2XF				282	$171.72	2
FM 1900 GLT				270	$168.44	3
DG 3635 B2XF				274	$162.76	2
ST 4946 GLB2				258	$155.27	2
NG 5315 B2RF				221	$139.51	2
NG 5007 B2XF				225	$136.71	2
PHY 339 WRF				195	$125.15	2

Annual Average	202	$133.88		302	$191.21
AVG of Pick Var	223	$147.09		321	$207.71
AVG of Non-Pick	170	$114.07		299	$188.74

St. Lawrence Multi-yearDryland Variety Trial Rankings 2014-2015

	2014	2015			14-15	
Dryland	Ru. Half.	Hoelscher	G. Half.	Ru. Half.	Average	# Trials
PHY 499 WRF	4		4	1	3.00	3
FM 2484 B2F	1			6	3.50	2
PHY 495 W3RF			5	3	4.00	2
DG 2570 B2RF		2	6	9	5.67	3
FM 2007 GLT		7	2	8	5.67	3
NG 3406 B2XF		1	3	14	6.00	3
DP 1219 B2RF	5			7	6.00	2
DP 1549 B2XF			7	5	6.00	2
PHY 333 WRF		4	9	12	8.33	3
FM 2334 GLT	17		1		9.00	2
FM 1830 GLT	6			13	9.50	2
NG 5007 B2XF			15	4	9.50	2
DG 3635 B2XF			11	10	10.50	2
FM 1900 GLT		9	8	15	10.67	3
ST 4747 GLB2		6	12	18	12.00	3
ST 4946 GLB2			13	11	12.00	2
DP 1522 B2XF		8		19	13.50	2
NG 5315 B2RF			10	17	13.50	2
PHY 339 WRF			14	16	15.00	2
DP 1044 B2RF	2				2.00	1
PHY 444 WRF				2	2.00	1
FM 1944 GLB2	3				3.00	1
PHY 222 WRF		3			3.00	1
DG 2355 B2RF		5			5.00	1
DP 1454 NR B2RF	7				7.00	1
DP 1359 B2RF	8				8.00	1
DP 1252 B2RF	9				9.00	1
FM 8270 GLB2	10				10.00	1
NG 3306 B2RF		10			10.00	1
NG 1511 B2RF	11				11.00	1
PHY 367 WRF	12				12.00	1
DP 1410 B2RF	13				13.00	1
DP 1212 B2RF	14				14.00	1
DP 1321 B2RF	15				15.00	1
FM 2989 B2RF	16				16.00	1
# of Varieties inTria	17	10	15	19		

4 Trials- 61 entries

Result Demonstration Report

HARVEST AID TEST

Cooperator: Chris Matschek

Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas
David Drake, Extension Agronomist, San Angelo, 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

Glasscock County

SUMMARY

Eighteen different plots of harvest aid products were applied to a drip irrigated cotton field on September 1st. Ginstar® performed best, especially as the rate of ethephone was increased. The PPO's and Folex® plots did not defoliate as well and were very inconsistent. Gramoxone did a decent job of defoliating but did a poor job of controlling any regrowth, especially at lower rates.

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. The treatments were made on September 1st. The plots were 4 rows wide by 100 feet long. A spider mounted CO_2 powered sprayer was used with 11002 Turbo Teejet nozzles at 32 psi and 4 mph. The treatments were applied in 10 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. The plants were very dry and hardened off which made uptake of the defoliant difficult. The Ginstar® performed the best. The PPO materials did not perform as well and were very inconsistent from one application to the next regardless of the amount applied. The gramoxone did a decent job of defoliating the plants and for a low cost, but could not control the regrowth at the lower rates.

ACKNOWLEDGMENTS

The authors would like to thank Mr. Chris Matschek 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.

2015 Harvest Aid Evaluation	Glasscock Co - Dryland											
Trt	Treatment	Rate	Rate	Total Product Price/acre	**Sept. 8, 2015**			**Sept. 15, 2015**				
No.	Name		Unit		% Def	% DES	% GL	% Def	% DES	% GL	% Regrowth	% open
1	Ginstar	4	fl oz/a									
1	Ethephon	16	fl oz/a	$7.91	10	10	80	55	25	20	4	95
1	Non-Ionic Surfactant	0.25	% v/v									
2	Ginstar	4	fl oz/a									
2	Ethephon	32	fl oz/a	$10.41	5	5	90	65	25	10	4	95
2	Non-Ionic Surfactant	0.25	% v/v									
3	Adios	4	fl oz/a									
3	Ethephon	16	fl oz/a	$6.31	5	5	90	25	20	55	4	90
3	Non-Ionic Surfactant	0.25	% v/v									
4	Adios	4	fl oz/a									
4	Ethephon	32	fl oz/a	$8.81	10	10	80	25	25	50	4	95
4	Non-Ionic Surfactant	0.25	% v/v									
5	Direx	0.5	fl oz/a									
5	Dropp	1	fl oz/a									
5	Ethephon	16	fl oz/a	$4.67	15	10	75	10	20	70	4	90
5	Non-Ionic Surfactant	0.25	% v/v									
6	Direx	0.5	fl oz/a									
6	Dropp	1	fl oz/a									
6	Ethephon	32	fl oz/a	$7.79	10	10	80	10	20	70	4	95
6	Non-Ionic Surfactant	0.25	% v/v									
7	Display	0.5	fl oz/a									
7	Ethephon	16	fl oz/a	$5.40	5	5	90	5	20	75	5	95
7	Crop Oil Concentrate	1	% v/v									
8	Display	0.5	fl oz/a									
8	Ethephon	32	fl oz/a	$7.90	5	5	90	10	15	75	5	95
8	Crop Oil Concentrate	1	% v/v									
9	Aim	0.25	fl oz/a									
9	Ethephon	16	fl oz/a	$4.72	25	5	70	10	10	80	5	95
9	Crop Oil Concentrate	1	% v/v									
10	Aim	0.25	fl oz/a									
10	Ethephon	32	fl oz/a	$7.22	25	5	70	15	5	80	4	95
10	Crop Oil Concentrate	1	% v/v									
11	Sharpen	0.75	fl oz/a									
11	Ams	1.7	lbs/ac	$5.33	25	5	70	25	0	75	3	95
11	MSO	0.5	% v/v									
12	Finish	16	fl oz/a									
12	Ethephon	16	fl oz/a									
12	Folex	16	fl oz/a	$20.38	25	5	70	35	20	45	6	100
12	Non-Ionic Surfactant	0.25	% v/v									
13	Finish	16	fl oz/a									
13	Ethephon	24	fl oz/a									
13	Folex	16	fl oz/a	$21.63	20	10	70	45	20	35	6	100
13	Non-Ionic Surfactant	0.25	% v/v									
14	Ethephon	16	fl oz/a									
14	Folex	16	fl oz/a	$11.56	55	10	35	10	30	60	5	99
14	Non-Ionic Surfactant	0.25	% v/v									
15	Ethephon	32	fl oz/a									
15	Folex	16	fl oz/a	14.06	45	20	35	5	30	65	6	100
15	Non-Ionic Surfactant	0.25	% v/v									
16	Gramoxone SL	3	fl oz/a									
16	Ethephon	16	fl oz/a	$4.99	1	1	98	5	10	85	6	100
16	Crop Oil Concentrate	1	% v/v									
17	Gramoxone SL	6	fl oz/a									
17	Ethephon	32	fl oz/a	$7.98	1	1	98	5	10	85	5	100
17	Crop Oil Concentrate	1	% v/v									
18	Gramoxone SL	16	fl oz/a									
18	Crop Oil Concentrate	1	% v/v	$4.63	5	90	5	50	20	30	7	100

Result Demonstration Report

PHOSPHORUS PRODUCTS IN COTTON

Cooperator: Darren Jost
Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas

Glasscock County

SUMMARY

Injecting MAP through the drip system resulted in a yield of 1029.2 lbs/ac, based on a 33% turnout. The 10-34-0 yielded 896.3 lbs/ac based on a 33% turnout.

INTRODUCTION AND OBJECTIVE

Previous fertility tests have shown that the addition of phosphorus fertilizer through the drip system can improve yield and quality of cotton when phosphorus is limiting. With nearly more products out on the market today than a person can name, this study was to determine if any of the products where better, more efficient, or cheaper than some of the more traditional products such as MAP, phosphoric acid, of knifing 10-34-0.

MATERIALS AND METHODS

The field used for this test was drip irrigated on 40" centers. The field was split along its 28 different stations and 8 different treatments were applied. All plots received $36.00 worth of fertilizer per acre with the exception of Matrix 5.3. This treatment received $47.70 worth of fertilizer per acre. The products used were MAP at 13 gal/ac, Matrix at 4 and 5.3 gal/ac, Pekacid at 19 lb/ac, Ophos at 3.3 gal/ac, Rootrition at 6 gal/ac, 10-34-0 knifed at 8 gal/ac, and an untreated check.

RESULTS AND DISCUSSION

Although not great, there were some differences in treatments between the different products. With all of the products except for the 5.3 gal/ac rate being the same price, $36.00, there was a numerical difference in the amount of cotton produced with the MAP. The Rootrition and Ophos were not far behind. Had this field been lacking in phosphorus or perhaps had we applied it a little earlier we might have seen a bigger difference in yields.

ACKNOWLEDGMENTS

The authors would like to thank Mr. Darren Jost for cooperating in this demonstration and for donating all of the fertilizer.

Phosphorus Fertilizer Trial-Darren Jost

Fertilizer	Amount	Unit	Cost/Unit	Cost/Acre	Seed Cotton Yield	33%turnout	Rating
MAP	13	gal/acre	$2.76	$35.88	3118.85	1029.2	1
Matrix	5.3	gal/acre	$9.00	$47.70	3109.76	1026.2	**
Rootrition	6	gal/acre	$6.04	$36.24	3045.64	1005.1	2
Ophos	3.3	gal/acre	$10.90	$35.97	2968.83	979.7	3
Matrix	4	gal/acre	$9.00	$36.00	2903.13	958	4
Pekacid	19	lbs./acre	$1.90	$36.10	2836.43	936	5
Check	none	none	none	none	2756.44	909.6	6
Knifed 10-34-0	8	gal/acre	$4.50	$36.00	2715.98	896.3	7
Average					2931.88	967.51	

Result Demonstration Report

SALINITY AND SOIL SAMPLING

Cooperators: Glasscock, Reagan, and Upton County Producers

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

Glasscock, Reagan, Upton Counties

Summary

The St. Lawrence Cotton Growing region has seen an ever increasing salinity problem for the past decade. Hundreds of thousands of dollars have been spent without truly knowing exactly what type of salt issue we have or how best to manage it. After taking soil samples from ten fields at both the 0-6" depth and the 6-12" depth, only 30% of the fields sampled came back with a salinity problem. Fertility appears to be the bigger problem and more frequent soil sampling needs to be performed.

Objective

The objective of this study was to determine the extent of the salt problem in the St. Lawrence Area and to determine what type of salts were present causing the salinity issue. After determining this, we can then move forward with a remediation plan for trying to lower the salt levels in the high salinity soils.

Materials and Methods

Twenty samples were taken from 10 producers fields scattered throughout the St. Lawrence Cotton Growing Region. Each field had a 0-6" and a 6-12" sample taken. Fields were selected by producer input as having a previous history of salt issues. One producer was chosen as a "check" field that had not reported any previous history of salts or salinity problems. Samples were taken in the spring in between the frequent rains. I was originally going to take water samples as well, so soil samples did not get shipped to the lab until the fall. All samples were shipped the Texas A&M Soil, Water, and Forage Testing Lab in College Station for analysis.

Results and Discussion

Only four samples from two fields recorded an EC above 7.7 which is the point where any yield reduction occurs and only three samples from two fields recorded an EC above 9.6, which is the point at which yield potential drops below 90%. The high level of nitrates in the soil appears to be contributing to the increased salinity levels. We do not use all of our nitrogen each year due to an ever increasing salinity problem; therefore excess nitrate increases the salinity of the soil further compounding the problem. We need to get a handle on this, as there are six fields in this category with high nitrate loads.

Conclusions

In total, 40% of locations have bad to severe salt issues. It appears that nitrates are compounding the problem. The remaining 60% of locations have relatively no salinity problem at all. The problem appears to be more fertility related. At this point in time we need more rain to increase the filtration of salts through the soil profile.

Acknowledgements

The author would like to thank all of the producers who allowed me to take samples on their farms.

I would also like to thank Cotton Inc. and the Texas State Support Committee for the funding for this research.

Salinity Soil Samples in St. Lawrence

Table 1: EC & Sodium Absorbtion Ration

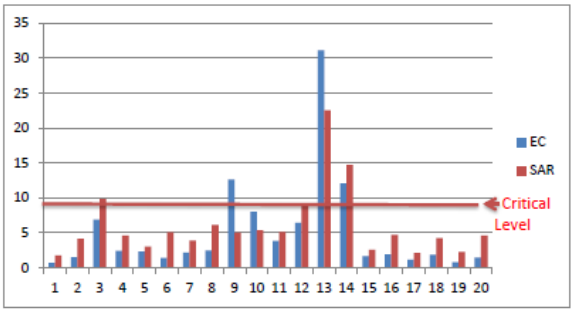


Table 2: NitrateN & Soil P Levels

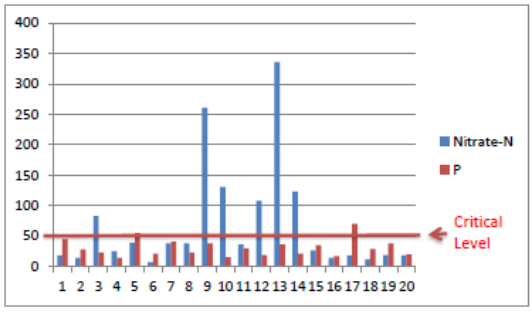


Table 3: 0-6" Salts

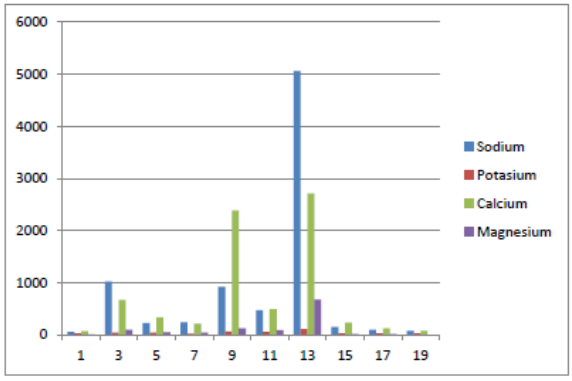
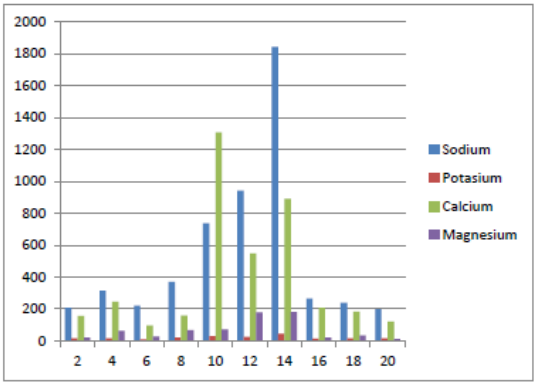


Table 4: 6-12" Salts



Result Demonstration Report

2015 Sorghum Variety Trial

Cooperator: Daniel Michalewicz

Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas
Rebel Royall, CEA-AG, Glasscock County, Garden City, Texas

Summary

Twelve sorghum varieties were planted by Daniel Michalewicz on April 23, 2015 in Reagan County. Yields for this trial ranged from a low of 1717 lbs/ac for Sorghum Partners' NK7633 to a high of 2944 lbs/ac for Dekalb 53-53. All of the varieties received full irrigation and fertility. The trial did receive severe hail damage the evening of June 26th. The medium maturity varieties were affected the worst. Sugarcane aphid was not a problem in this field, they did begin to show up about 2-3 weeks prior to harvest but never reached a point of becoming an economical concern.

Objective

A handful of producers have begun rotating sorghum more and more with cotton acres over the past few years. The objective of this trial was to determine which varieties are likely to perform better in the extreme heat and dry climate of West Texas. Sugarcane aphids were also monitored to see if there was difference in numbers of aphids on any variety compared to other varieties. After the hailstorm in June in which all varieties received severe damage, it was decided to leave the trial until harvest in order to determine if any varieties fared better after being hailed on than others.

Materials and Methods

The field used for this test was drip irrigated. The varieties were planted in row plots in a 2 x 1 pattern on 40" spacing on April 23rd. The trial did receive severe hail damage the evening of June 26th. The medium maturity varieties were affected the worst due to being in the boot stage at that point in time. The plots were harvested on September 28th, and weighed on platform scales. The samples were taken to the Glasscock County Co-op and tested for moisture and test weight.

Results and Discussion

As seen in Table 1, grain yields varied with a low of 1717 lbs/ac for Sorghum Partners' NK7633 to a high of 2944 lbs/ac for Dekalb 53-53. Percent Moisture varied from a low of 10.2% for Pioneer 85Y40 and Pioneer 84P80, to a high of 11.0% for B&H Genetics 4100. All moisture readings were below the allowable limits. Test weights ranged from a high of 60.7 for B&H Genetics 4100, to a low of 58.0 for Pioneer 84G62. Hail damage was the most limiting factor in yield this year. All plots had some amount of damage, but the mid-maturity varieties had the most damage. Sugarcane aphids were also present, but were not much of an issue until the very end of the season and were not an economical threat.

Conclusions

Sorghum areas have been seeing a resurgence of sorts in the St. Lawrence area, but proper planting date, variety selection, fertility, and moisture are keys. With the hail damage a true variety comparison was hard to achieve. Early planting does help to get an early head start against the Sugarcane aphid and hopefully eliminate or reduce insecticide applications.

Acknowledgements

The authors would like to thank Mr. Daniel Michalewicz for cooperating in this demonstration.

They would also like to thank the seed companies who donated the seed.

Company/Brand	Variety	% Moisture	Test WT.	Yield lbs/per Acre	Maturity
Dekalb	53-53	10.4	58.7		ML
Dekalb	53-67	10.8			ML
Richardson	9450	10.5			ML
Pioneer	85 Y 40	10.2	58.6		M
B & H	BH 1401	10.7	58.9	2184	
Pioneer	84 G 62	10.2	58.0	2097	ML
Pioneer	84 P 72	10.4	58.3	2070	ML
Dekalb	49-45	10.9	58.8	2036	M
B & H	4100	11.0	60.7	2023	M
Pioneer	84 P 80	10.2	58.6	1997	ML
Sorghum Partners	KS 585	10.7		1765	M
Sorghum Partners	NK7633	10.9		1717	M
	Average	10.6	59.3	2193	
	Max.	11.0	60.7	2944	
	Min.	10.2	58.0	1717	
Harvest	9/8/2015				

Result Demonstration Report

2014-2015 Wheat Variety Trial

Cooperator: Sammy Kellemeier

Brad Easterling, EA-IPM, Glasscock, Reagan, and Upton Counties, Garden City, Texas
Rebel Royall, CEA-AG, Glasscock County, Garden City, Texas

Summary

Eleven wheat varieties were planted by Sammy Kellermeier on November 14, 2014 in Glasscock County. Yields ranged from 53.54 bu/ac for TAM 114 to 35.33 bu/ac for Weathermaster. Test weights ran from 61.6 for Winterhawk to 58.0 for Grainfield. These varieties were raised using normal limited irrigation small grain production practices. When reviewing the test results, producers should keep in mind that this is only one year's data. Year to year consistency should be a primary consideration in selecting varieties of small grains to be planted. Also note that this was an unusually wet winter for the St. Lawrence area as well as a year of higher than normal rust incidence. Not all varieties in the trial were resistant or even tolerant to stripe or leaf rust.

Objective

Small grain production has not been at the forefront of cropping systems in the tri-county area historically. Many producers not only plant wheat for grain production, but for livestock grazing as well. New varieties of wheat and other small grain forages become available on a yearly basis. When combined with already available varieties planting decisions become very difficult. Variety tests provide producers with the opportunity of comparing new varieties of smallgrains with more established varieties that have been successfully grown under varying weather conditions in Glasscock County. Utilization of new varieties, that are equal to or exceed currently available varieties, should increase production and income of county producers.

Materials and Methods

Varieties were sown in single replications 15 feet wide in 2030 foot long passes on November 14, 2014 following cotton at a rate of 40 lbs per acre. Moisture at the time of establishment was good and all seed came up fine except for TAM 113. We later found out that there was a germination and vigor issue with the lot of TAM 113. The plots received 2 gallons, 20 units of N during the season as well as 2 inches of water. This was applied during February, before the plants began tillering and when the crop was starting to get a little dry. One application of generic Tilt was made late in the growing season as leaf rust was increasing in most all varieties. The plots where weighed on platform scales and samples taken to the Glasscock County Co-op and tested for moisture and test weight.

Rainfall

November 14 – 0.02
December – 0.4
January – 2.36
February – 0.37
March – 2.35
April – 2.35
May – 4.96
June 5 – 0.00

Results and Discussion

As seen in Table 1, grain yields varied with a low of 35.33 lbs/ac for Weathermaster to a high of 53.54 lbs/ac for TAM 114. Percent Moisture varied from a low of 11.0% for Grainfield, TAM 204, TAM 111, and Weathermaster, to a high of 11.8% for TAM 113. All moisture readings were below the allowable limits. Test weights ranged from a high of 61.6 for Winterhawk, to a low of 58.0 for Grainfield. Leaf rust, and also to a lesser extent, stripe rust was a factor in the trial this year. All plots had some amount of rust present. In Table 2 are my end of year rust notes for the trial.

Conclusions

Wheat can be grown in the St. Lawrence area, but proper variety selection, fertility, and moisture are keys. As was seen in this trial, limited irrigation with a well-timed watering can lead to some above average yields. Of course, above average rainfall helps as well.

Acknowledgements

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

Table 1

Kellermeier Wheat Variety Trial

Variety	% Moisture	Test Wt.	Bu/AC
TAM 114	11.7	61.4	53.54
Winterhawk	11.7	61.6	50.14
TAM 401	11.4	58.9	49.33
WB 4458	11.2	59.9	47.97
Deliver	11.2	60.4	47.48
Grainfield	11.0	58.0	47.35
TAM 204	11.0	58.6	43.91
TAM 111	11.0	60.6	41.70
Duster	11.2	60.9	39.65
TAM 113	11.8	61.5	38.65
Weathermaster	11.0	59.6	35.33
Average	11.29	60.13	45.01
Minimum	11	58.0	35.33
Maximum	11.8	61.6	53.54

Table 2

Wheat Disease Notes

	Leaf rust	Stripe rust	Notes
Winterhawk	MS	MR	Fair amount of LR
TAM 204	MS	MR	LR in lower canopy, none in upper
Grainfield	MR	R	very little LR in lower canopy, none in upper
TAM 401	MR	R	very little LR in lower canopy, none in upper
Weathermaster	MR	MS	large amount of LR
TAM 111	S	S	Fair amount of LR
WB 4458	MS	MR	Almost no LR
Duster	R	MS	Some LR, moving up in canopy
TAM 113	R	R	some infection
TAM 114	MR	R	very slight amount
Deliver	R	R	very little LR

R-Resistant
S- Susceptible
MR- Moderately Resistant
MS- Moderately Susceptible

Result Demonstration Report

EVALUATION OF COTTON VARIETIES

COOPERATORS:

Carlos Dusek, Paul Schwartz, 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, Paul Schwartz, and Chris Matschek.

ACKNOWLEDGMENTS

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

2015 CAP Trial

Midkiff, Upton County, TX

Grower – Carlos Dusek
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Rick Minzenmayer (325) 365-1292

CAP TRIAL
COTTON AGRONOMIC PERFORMANCE TRIAL

Drip Irrigated

Variety	Seed Cotton/Acre	GTO	Lint/Acre
ST 4946GLB2	3,664	0.398	1,458
FM 2007GLT	3,562	0.368	1,311
FM 2334GLT	3,391	0.383	1,299
ST 6182GLT	3,085	0.418	1,289
ST 4747GLB2	3,408	0.361	1,230
FM 2484B2F	3,425	0.355	1,216
FM 1830GLT	2,948	0.399	1,176
FM 1900GLT	3,477	0.338	1,175
FM 1911GLT*	2,761	0.374	1,033
ST 5115GLT	2,778	0.372	1,033
FM 1944GLB2	2,693	0.349	940

*FM 1911GLT was tested as BX 1635GLT.

2015 CAP Trial

Midkiff, Upton County, TX

Grower – Carlos Dusek
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Rick Minzenmayer (325) 365-1292

CAP TRIAL
COTTON AGRONOMIC PERFORMANCE TRIAL

Drip Irrigated

Variety	Lint Yield	Turnout	Mic	Staple	Strength	Unif	Loan Value	Value/A
ST 4946GLB2	1,458	0.398	4.8	1.09	29.1	83.3	0.572	$834
FM 2007GLT	1,311	0.368	4.3	1.16	28.9	82.2	0.567	$743
FM 2334GLT	1,299	0.383	5.0	1.16	31.0	83.8	0.546	$709
ST 6182GLT	1,289	0.410	5.2	1.09	27.8	82.7	0.529	$682
ST 4747GLB2	1,230	0.361	4.8	1.14	28.0	82.0	0.567	$698
FM 2484B2F	1,216	0.355	4.3	1.17	31.0	82.9	0.571	$694
FM 1830GLT	1,176	0.399	4.8	1.16	31.3	84.5	0.573	$674
FM 1900GLT	1,175	0.338	4.6	1.16	31.0	82.4	0.571	$671
FM 1911GLT*	1,033	0.372	4.5	1.05	27.7	81.2	0.571	$590
ST 5115GLT	1,033	0.374	5.0	1.15	30.2	83.2	0.544	$562
FM 1944GLB2	940	0.349	4.7	1.13	28.5	81.3	0.569	$534

Loan Value calculated from 2015 CCC Loan Schedule using uniform color grade of 21 and uniform leaf grade of 3.

*** FM 1911GLT was tested as BX 1635GLT in 2015.**

2015 CAP Trial

Garden City, Glasscock County, TX

Grower – Paul Schwartz
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Richard Minzenmayer (325) 365-1292

CAP TRIAL
COTTON AGRONOMIC PERFORMANCE TRIAL

Dryland

Variety	Seed Cotton/Acre	GTO	Lint/Acre
ST 6182GLT	1,050	0.386	405
FM 2334GLT	907	0.374	339
FM 1830GLT	827	0.383	317
ST 4747GLB2	859	0.367	315
FM 1944GLB2	907	0.341	309
FM 2484B2F	859	0.360	309
FM 1911GLT*	875	0.350	306
ST 5115GLT	795	0.360	286
FM 2007GLT	795	0.354	282
FM 1900GLT	684	0.377	258
ST 4747GLB2-FL	716	0.353	253
ST 4946GLB2	429	0.371	159

*FM 1911GLT was tested as BX 1635GLT.

FiberMax cotton
Bayer CropScience
Stoneville

2015 CAP Trial

Garden City, Glasscock County, TX

Grower – Paul Schwartz
Cooperator – Brad Easterling
Sales Rep – Noble Laminack (325) 716-8839
Regional Agronomist - Richard Minzenmayer (325) 365-1292

CAP TRIAL
COTTON AGRONOMIC PERFORMANCE TRIAL

Dryland

Variety	Lint Yield	Turnout	Mic	Staple	Strength	Unif	Loan Value	Value/A
ST 6182GLT	405	0.386	4.8	34	25.5	81.0	0.519	$210
FM 2334GLT	339	0.374	4.7	36	28.9	82.2	0.565	$192
FM 1830GLT	317	0.383	4.6	36	28.4	82.6	0.565	$179
ST 4747GLB2	315	0.367	5.0	35	24.3	80.8	0.537	$169
FM 1944GLB2	309	0.341	4.9	35	27.2	81.0	0.555	$171
FM 2484B2F	309	0.360	4.4	36	28.5	80.4	0.519	$160
FM 1911GLT*	306	0.350	4.8	34	28.0	82.3	0.535	$164
ST 5115GLT	286	0.360	4.7	33	26.9	80.4	0.514	$147
FM 2007GLT	282	0.354	4.5	36	28.3	80.7	0.565	$159
FM 1900GLT	258	0.377	4.7	34	27.5	80.6	0.534	$138
ST 4747GLB2-FL	253	0.353	4.8	35	24.7	78.7	0.528	$133
ST 4946GLB2	159	0.371	4.9	33	29.2	81.4	0.534	$85

Loan Value calculated from 2015 CCC Loan Schedule using uniform color grade of 21 and uniform leaf grade of 3.

***FM 1911GLT was tested as BX 1635GLT.**