INTEGRATED PEST MANAGEMENT

Runnels & Tom Green
IPM Program
2016

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RUNNELS – TOM GREEN COUNTIES

INTEGRATED PEST MANAGEMENT PROGRAM

2016 Annual Report

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Runnels and Tom Green Counties Producers

Runnels-Tom Green Counties Pest Management Steering Committee

Southern Rolling Plains Cotton Growers Association

and

Texas Pest Management Association

PREFACE

Integrated pest management (IPM) refers to a broad-based system or approach that utilizes all suitable practices and methods of pest suppression to maintain profits for the producer. Integrated pest management includes cultural control, biological control, crop management, variety selection, and the application of pesticides.

The Runnels-Tom Green Counties Pest Management Program began in 1976 and has been operated since 1978 in cooperation with the Texas Pest Management Association. The Texas Pest Management Association is comprised of producer organizations across Texas and is responsible for administering the funds of the local Pest Management Program. Each member organization solicits funds from participating producers to pay salaries and travel expenses of field scouts and interns who are hired, trained, and supervised by the Extension Agent-IPM of Texas AgriLife Extension Service. The SRP-PRIDE program was initiated in 2007 and the Southern Rolling Plains Cotton Growers Association provide funding for this program. A local steering committee of producers and agri-businessmen provide guidance and direction to the Pest Management Program.

The goals of the Integrated Pest Management program are to:

1. Provide current information on plant growth and development
2. Provide timely updates on pest and natural enemy status
3. Emphasize applied research and demonstration of new technologies

Trade names of commercial products used in this report are 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 endorsements by Texas AgriLife Extension Service and the Texas A&M University is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.

ACKNOWLEDGEMENTS

The success of the Runnels – Tom Green Pest Management Program is greatly influenced by the individual producers who participate and give their support. The program greatly appreciates the support of each participant. Appreciation is also extended to the following people for their help in providing program support, assistance, and collaboration efforts:

Dr. Charles Allen……IPM Coordinator and Extension Entomologist, San Angelo

Dr. David Kerns……IPM Coordinator and Extension Specialist, College Station

Dr. David Drake……..Extension Agronomist, District 7, San Angelo

Dr. Thomas Isakeit……Professor & Extension Specialist, College Station

Dr. Jason Woodward……..Professor & Extension Specialist, Lubbock

Mr. Marvin Ensor……..Regional Program Leader, San Angelo

Mr. Marty Gibbs……District Extension Administrator, District 7, San Angelo

Mr. Garrett Cline……..County Extension Agent-AG/NR, Runnels County

Mr. Josh Blanek……..County Extension Agent-AG/NR, Tom Green County

Mr. Tanner Wieghat……County Extension Agent-AG/NR, Concho County

Thank you is also extended to the Texas Pest Management Association for their support and to the Southern Rolling Plains Cotton Growers Association for their continued financial support and leadership to the program.

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Runnels – Tom Green Pest Management Program 2016

INTRODUCTION

The Southern Rolling Plains (SRP) is one of the major cotton producing regions of Texas, Runnels and Tom Green Counties account for 70% of the acreage in the SRP. Cotton is the primary crop produced in both Runnels and Tom Green Counties. Grain sorghum, corn, pecans, wheat and other small grains also contribute to the local economies. The Runnels-Tom Green Pest Management Program predominantly concentrates on cotton because of the complex of insects, weeds, and diseases that plague the crop. Educational programs and result demonstrations are also conducted in other crops of interest as needs arise.

The insect pests that most often infest cotton in this area are thrips, cotton fleahopper, cotton bollworm/tobacco budworm, and cotton aphid. Occasionally, beet armyworm and/or grasshopper outbreaks can occur and cause economic damage one out of every four to five years. Weed pests such as herbicide resistant Palmer amaranth also infest cotton fields and are essential to control. Cotton root rot is an economically important disease to manage in most cotton fields for both Runnels and Tom Green counties.

Weather conditions were challenging for the 2016 cotton crop. Early season rains forced most producers to have an early planted and a later planted crop. The peak of the growing season was stressed by a long stretch of little to no rain. The dry spell was broken by late season rains that unfortunately were not at the best time for cotton lint production. Warm temperatures in the fall followed by an overdue freeze provided ample opportunities for late-season regrowth and made for tough management decisions.

Pest problems during 2016 were generally light. Thrips and cotton fleahopper numbers were low and not a widespread problem. There were isolated fields which did require an insecticide treatment for cotton fleahopper and cotton aphid. The Boll Weevil Eradication Program did not catch any weevils in the Region 4 area.

Program Steering Committee

The Runnels – Tom Green Pest Management Steering Committee provided guidance, direction, and support to the pest management program and to the Extension Agent – IPM. The committee made decisions about educational programs and the focus of applied research. The success of the program can be attributed to the leadership of the following committee members:

Mr. Rodney Ripple…….Chairman
Mr. Dennis Minzenmayer…….Secretary
Mr. Howard Pruser…….Committee Member
Mr. Bruce Gully…….Committee Member
Mr. Glen Kellermeier…….Committee Member

SRP-PRIDE Program

The SRP-PRIDE Program was initiated in 2007 and the board of directors for the Southern Rolling Plains Cotton Growers Association provide funding and direction for the Pest Management Program. The success of the Runnels – Tom Green Pest Management Program is also accredited to the efforts of the following board members:

Mrs. Karin Kuykendall…….Executive Director
Mr. Robert Englert…….President
Mr. Douglas Wilde…….Vice-President
Mr. Curtis Wilde…….Secretary
Mr. Bill Belew…….Treasurer
Mr. Kenneth Gully…….Reporter
Mr. Kenneth Dierschke…….Committee Member
Mr. Stuart Lehr…….Committee Member
Mr. Ron Niehues…….Committee Member
Mr. Richard Pelzel…….Committee Member
Mr. Doyle Schniers…….Committee Member
Mr. Brett Mikeska…….Committee Member

Educational Activities

Educational activities are very important to the overall IPM program in Runnels and Tom Green Counties. The result demonstration program and applied research projects are also an integral component. Turnrow meetings and newsletters are offered throughout the growing season to discuss current pest problems and provide updates on crop conditions.

Education activities conducted in Runnels and/or Tom Green during 2016 were:

09	Newsletters
07	News articles released
09	TDA CEU credits offered
11	Turnrow meetings
10	Pest Management Steering/Runnels County Field Crops/Tom Green County Field Crops/SRPCGA meetings
15	Total educational activities conducted
795	Total individual contacts
1,232	Total contact hours in support of county programs
03	Crop tours and information programs
04	Professional improvement meetings
12	Applied research projects and result demonstrations

Total Planted Acres in Runnels and Tom Green Counties

Runnels County

	2016	2015	2014	2013	2012
Cotton	59,583	49,971	57,945	41,314	65,854
Wheat	119,497	142,668	136,876	140,870	112,553
Grain Sorghum	10,599	6,056	4,285	11,644	5,537
Corn	1,088	273	168	683	217
Sesame	1,307	1,124	0	1,251	157
Oats	1,584	1,375	2,411	3,051	3,363
Barley	796	657	2,267	2,267	5,689

Tom Green County

	2016	2015	2014	2013	2012
Cotton	89,008	92,087	107,844	77,547	109,118
Wheat	56,281	63,226	55,921	69,649	36,264
Grain Sorghum	26,879	20,720	18,287	32,264	21,356
Corn	4,232	2,875	2,594	3,686	2,831
Sesame	0	1,522	678	292	359
Oats	617	447	358	1,060	757
Barley	0	0	579	1,846	2,359

Cotton Production in the Southern Rolling Plains

Planted cotton acreage for the two-county area totaled approximately 148,591 acres during 2016. This was a 4.6% increase compared to 2015 planted acres. The Southern Rolling Plains is comprised of Coke, Coleman, Concho, Irion, Mason, McCulloch, Menard, Runnels, Schleicher, and Tom Green counties. The following information on bales ginned in the Southern Rolling Plains was obtained from the USDA Cotton Classing Office in Abilene:

Year	Number of Bales	Land Acres	Lint lbs/A
2000	13,596	40,000[a]	167[b]
2001	93,410	250,000	183
2002	115,100	208,000	271
2003	119,643	208,000	282
2004	232,952	235,000	486
2005	274,885	249,000	541
2006	82,634	140,000[c]	289[d]
2007	301,848	200,000	740
2008	170,384	198,000	422
2009	135,801	195,000	341
2010	187,000	212,000	432
2011	26,526	359,092[e]	36
2012	141,921	278,541[f]	334
2013	150,332	195,000[g]	407
2014	313,542	254,243[h]	616
2015	162,585	187404	434
2016	211,039[i]	192415[j]	548

[a] *400,000 acres planted in 2000, only 40, 000 harvested*

[b] *Yield on 400,000 acres planted would be 17 lint lbs./acre*

[c] *274,471 acres planted in 2006, only 140,000 harvested*

[d] *Yield on 274,471 would be 147.5 lint lbs./acre*

[e] *Harvested approximately 18,000 acres due to severe drought*

[f] *278,541 acres planted in 2012, only 208,000 harvested*

[g] *195,000 acres planted in 2013, 185,000 harvested*

[h] *254,243 acres planted in 2014, 247,000 harvested.*

i 211,039 bales ginned to date (2/7/17).

j 1,231 acres failed.

Lint pounds/acre determined by using 500 lb. bales.

Annual Rainfall Since 1916

San Angelo, Texas

Year	PCPN	Year	PCPN	Year	PCPN
1916	14.41	1950	15.27	1984	19.16
1917	08.29	1951	12.00	1985	21.83
1918	15.27	1952	09.01	1986	32.92
1919	40.88	1953	21.06	1987	31.90
1920	20.51	1954	09.92	1988	14.06
1921	12.31	1955	12.87	1989	17.64
1922	22.64	1956	07.41	1990	28.80
1923	23.99	1957	22.16	1991	24.29
1924	13.50	1958	18.35	1992	21.03
1925	27.09	1959	33.86	1993	15.63
1926	31.19	1960	14.74	1994	19.40
1927	21.19	1961	21.39	1995	21.15
1928	22.69	1962	10.53	1996	22.50
1929	16.56	1963	13.95	1997	23.38
1930	19.21	1964	12.18	1998	12.98
1931	15.96	1965	16.25	1999	13.52
1932	32.57	1966	15.82	2000	15.19
1933	08.57	1967	19.98	2001	18.53
1934	16.40	1968	23.30	2002	14.41
1935	27.91	1969	30.04	2003	19.76
1936	40.40	1970	12.88	2004	30.48
1937	24.17	1971	24.25	2005	20.40
1938	17.42	1972	22.93	2006	17.65
1939	17.45	1973	18.41	2007	32.05
1940	25.21	1974	25.10	2008	19.00
1941	19.21	1975	21.58	2009	25.54
1942	25.82*	1976	21.80	2010	20.13
1943	14.61	1977	12.95	2011	09.21
1944	19.51	1978	14.67	2012	21.96
1945	18.97	1979	16.16	2013	19.80
1946	10.84	1980	30.09	2014	16.71
1947	13.46	1981	30.17	2015	26.79
1948	12.51	1982	18.18	2016	35.67
1949	24.51	1983	15.26		

*-some missing data

Result and Demonstration Reports

Result Demonstration Report

Dryland Cotton Variety Test

Paul Minzenmayer Farm, 2016
Joel Webb, EA-IPM
Garrett Cline, CEA-AGNR
Dr. David Drake, Extension Agronomist

Summary

Fifteen cotton varieties were evaluated under similar growing conditions to compare yield and fiber quality. Deltapine 1646 B2XF and FiberMax 1900 GLT topped this test in Net Value ($/acre) with $177 and $176 per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility, irrigation, and management practices.

Objective

Commercial cotton varieties require testing each year for determinations of consistency for both yield and fiber quality. Field tests allow for side by side comparisons between new and proven cotton varieties. Field testing varieties within a geographic area of production is important to provide local cotton producers with the latest information on new varieties.

Materials and Methods

Each cotton variety consisted of eight planted rows and was replicated one time.

Varieties were individually harvested and weights were determined using a platform scale.

Planting Date:	June 11, 2016
Planting Rate:	30,000 Seeds/Acre
Row Width:	36” centers
Rows Planted:	8 row plots (rows were approximately 4,000 ft.)
Planting Pattern:	Every Row
Last Year’s Crop:	Wheat
Irrigated:	Dryland
Fungicide:	TopGaurd Terra, 8 oz/A
Herbicide:	Treflan, 1 qt/A
	RoundUp PowerMax, 21 oz/A
Insecticide:	Macho, 2 oz/A
PGR:	Pix, 2 oz/A
Harvest Aid:	Ginstar, 5 oz/A – Prep, 24 oz/A
	Paraquat, 12 oz/A – Aim 2/3 oz/A
Harvest Date:	October 21, 2016

Results and Discussion

Table 1 contains the Agronomic data for each of the fifteen cotton varieties evaluated. Table 2 contains the HVI fiber property results. Fiber quality analysis was determined by the Fiber & Biopolymer Research Institute in Lubbock.

Table 1. Agronomic Data from the Dryland Cotton Variety Test, Paul Minzenmayer, Rowena, TX, 2016.

Entry	Lint Turnout	Seed Turnout	Bur Cotton Yield	Lint Yield	Seed Yield	Lint Loan Value	Lint Value	Seed Value	Total Value	Harvest & Moduling Cost	Ginning Cost	Net Value
	-------- % --------		---------- lb/acre ----------			$/lb	---------- $/acre--- ----------					
DP 1646 B2XF	33.3	47.0	1106	368	520	0.5660	208	48	256	35	44	177
FM 1900 GLT	31.3	44.2	1192	373	527	0.5620	210	49	259	38	45	176
NG 4545 B2XF	31.9	45.1	1196	382	539	0.5165	197	50	247	38	46	163
DG 3445 B2XF	30.1	42.5	1153	347	490	0.5685	197	45	242	37	42	163
PHY 444 WRF	32.5	45.9	1117	363	513	0.5320	193	47	240	36	44	160
DG 3385 B2XF	33.3	47.0	1080	360	508	0.5165	186	47	233	35	43	155
FM 2334 GLT	31.3	44.3	1050	329	465	0.5620	185	43	228	34	39	155
FM 1830 GLT	31.2	44.0	1036	323	456	0.5710	184	42	226	33	39	154
DP 1639 B2XF	33.7	47.5	972	327	462	0.5490	180	43	223	31	39	153
DG 3635 B2XF	32.7	46.2	1110	363	513	0.5050	183	47	230	36	44	150
NG 3406 B2XF	32.4	45.8	1077	349	493	0.5010	175	46	221	34	42	145
PHY 499 WRF	31.7	44.8	1048	333	470	0.5295	176	43	219	34	40	145
ST 5115 GLT	30.1	42.6	1205	363	513	0.4955	180	47	227	39	44	144
DP 1549 B2XF	32.1	45.5	1010	325	459	0.5050	164	42	206	32	39	135
PHY 333 WRF	31.7	44.8	1005	319	450	0.5120	163	42	205	32	38	135

Assumes: $3.20/cwt ginning cost and $185/ton for seed.
Value for lint based on CCC loan value from grab samples and FBRI HVI results.

Table 2. HVI Fiber Property Results from the Dryland Cotton Variety Test, Paul Minzenmayer, Rowena, TX, 2016.

Entry	Micronaire	Staple	Uniformity	Strength	Elongation	Leaf	Color grade
	units	32nds inches	%	g/tex	%	grade	CG
DP 1646 B2XF	4.4	37.12	80.5	28.7	8.9	2	31
DP 1549 B2XF	4.1	32.96	79.0	28.3	7.5	2	31
DP 1639 B2XF	4.8	34.56	81.9	28.6	9.0	3	31
NG 3406 B2XF	4.6	32.64	81.8	27.1	10.2	2	32
NG 4545 B2XF	4.9	33.60	81.0	28.6	6.1	2	32
DG 3385 B2XF	4.6	33.92	81.1	28.2	10.1	2	32
DG 3445 B2XF	4.5	35.84	82.1	31.9	6.9	2	31
DG 3635 B2XF	4.4	33.60	78.0	28.2	8.0	3	32
PHY 333 WRF	4.4	34.56	80.8	28.1	7.7	3	42
PHY 499 WRF	4.3	33.60	80.4	28.9	9.0	3	31
PHY 444 WRF	3.5	36.16	80.6	30.1	7.6	1	32
FM 1830 GLT	4.2	36.80	82.2	32.6	6.7	3	21
FM 2334 GLT	4.5	36.16	81.3	30.7	6.5	3	31
ST 5115 GLT	4.2	33.28	79.1	29.1	7.8	4	31
ST 1900 GLT	4.5	36.16	81.2	30.1	6.4	3	31

Conclusions

Greatest yields in pounds of lint/A was produced by NexGen 4545 B2XF and FiberMax 1900 GLT with 382 and 373 pounds of lint/A respectively. Stoneville 5115 GLT produced the greatest amount of seed cotton at 1,205 lbs/A.

Acknowledgements

Sincere appreciation is expressed to Paul Minzenmayer for establishing and managing the Runnels County dryland variety test.

Thank you to the seed companies that provided cotton seed and financial support, they include:

Bayer CropScience who provided Stoneville 5115 GLT, FiberMax 1900 GLT, FiberMax 2334 GLT, and FiberMax 1830 GLT

Dow AgroScience who provided PhytoGen 499 WRF, PhytoGen 333 WRF, and PhytoGen 444 WRF

Monsanto Company who provided Deltapine 1646 B2XF, Deltapine 1549 B2XF, and Deltapine 1639 B2XF

Americot Inc. who provided NexGen 3406 B2XF and NexGen 4545 B2XF

Crop Production Services who provided Dyna-Gro 3635 B2XF, Dyna-Gro 3445 B2XF, and Dyna-Gro 3385 B2XF

Result Demonstration Report

Irrigated Cotton Variety Test

Doug Wilde Farm, 2016
Joel Webb, EA-IPM
Josh Blanek, CEA-AGNR
Dr. David Drake, Extension Agronomist

Summary

Sixteen cotton varieties were evaluated under similar growing conditions to compare yield and fiber quality. Deltapine 1553 B2XF and Deltapine 1646 B2XF topped this test in Net Value ($/acre) with $656 and $632 per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility, irrigation, and management practices.

Objective

Commercial cotton varieties require testing each year for determinations of consistency for both yield and fiber quality. Field tests allow for side by side comparisons between new and proven cotton varieties. Field testing varieties within a geographic area of production is important to provide local cotton producers with the latest information on new varieties.

Materials and Methods

Each cotton variety consisted of eight planted rows and was replicated one time.
Varieties were individually harvested and weights were determined using a weigh wagon.

Planting Date:	May 24, 2016
Planting Rate:	45,477 Seeds/Acre
Row Width:	40” centers
Rows Planted:	8 row plots (rows were approximately 1,200 ft.)
Planting Pattern:	Every Row
Last Year’s Crop:	Grain Sorghum
Irrigated:	Drip Irrigation
Nematocide:	Temik, 5 lbs/A
Herbicide:	Prowl, 3 pt/A
	RoundUp PowerMax, 32 oz/A
Harvest Aid:	Helmquat, 23 oz/A
	Ginstar, 6 oz/A
	Finish, 10 oz/A
	Ethephon, 16 oz/A
Harvest Date:	November 30, 2016

Results and Discussion

Table 1 contains the Agronomic data for each of the sixteen cotton varieties evaluated. Table 2 contains the HVI fiber property results. Fiber quality analysis was determined by the Fiber & Biopolymer Research Institute in Lubbock.

Table 1. Agronomic Data from the Irrigated Cotton Variety Test, Doug Wilde, Wall, TX, 2016.

Entry	Lint Turnout	Seed Turnout	Bur Cotton Yield	Lint Yield	Seed Yield	Lint Loan Value	Lint Value	Seed Value	Total Value	Harvest & Moduling Cost	Ginning Cost	Net Value
	-------- % --------		---------- lb/acre ----------			$/lb	---------- $/acre--- ----------					
DP 1553 B2XF	28.1	39.7	5241	1475	2083	0.5475	808	193	1001	168	177	656
DP 1646 B2XF	28.4	40.1	5017	1426	2014	0.5455	778	186	964	161	171	632
DP 1549 B2XF	26.0	36.7	5052	1312	1853	0.5475	718	171	889	161	157	571
FM 2334 GLT	26.3	37.1	4954	1303	1840	0.5490	715	170	885	159	156	570
DG 3445 B2XF	25.8	36.5	5325	1375	1942	0.5255	723	180	903	171	165	567
DG 3635 B2XF	24.9	35.2	5130	1278	1805	0.5525	706	167	873	164	153	556
DG 3385 B2XF	28.9	40.8	4798	1386	1957	0.4970	689	181	870	153	166	551
PHY 333 WRF	29.4	41.5	4460	1310	1850	0.5170	677	171	848	143	157	548
DP 1614 B2XF	28.9	40.8	4414	1274	1799	0.5250	669	166	835	141	153	541
FM 1830 GLT	25.9	36.6	4898	1269	1792	0.5230	664	166	830	157	152	521
PHY 444 WRF	25.5	36.0	4860	1239	1749	0.5225	647	162	809	155	149	505
ST 4848 GLT	25.5	36.0	4741	1209	1707	0.5185	627	158	785	152	145	488
ST 5115 GLT	25.1	35.4	5044	1265	1786	0.4845	613	165	778	161	152	465
NG 4545 B2XF	25.0	35.3	4557	1139	1608	0.5225	595	149	744	146	137	461
PHY 312 WRF	22.1	31.3	4249	940	1327	0.5465	514	123	637	136	113	388
NG 3406	22.4	31.7	4338	973	1374	0.4930	480	127	607	139	117	351

Assumes: $3.20/cwt ginning cost and $185/ton for seed.
Value for lint based on CCC loan value from grab samples and FBRI HVI results.

Table 2. HVI Fiber Property Results from the Irrigated Cotton Variety Test, Doug Wilde, Wall, TX, 2016.

Entry	Micronaire	Staple	Uniformity	Strength	Elongation	Leaf	Color grade
	units	32nds inches	%	g/tex	%	grade	CG
DP 1614 B2XF	4.0	37.44	83.3	31.2	8.6	5	41-2
DP 1646 B2XF	4.6	38.40	80.7	30.2	8.6	4	41-2
DP 1553 B2XF	4.5	37.44	80.9	29.2	9.4	1	41-1
DP 1549 B2XF	3.9	36.80	80.8	32.9	7.3	4	41-1
DG 3635 B2XF	3.8	36.48	80.5	31.4	7.5	3	41-3
DG 3445 B2XF	4.2	39.36	83.0	34.2	6.4	5	41-1
DG 3385 B2XF	4.0	36.80	81.9	30.0	8.8	5	42-1
NG 3406 B2XF	3.6	35.52	80.9	28.9	8.7	5	42-1
NG 4545 B2XF	4.3	36.16	81.1	34.1	6.2	5	41-3
PHY 312 WRF	4.1	36.48	82.7	30.9	7.2	4	41-4
PHY 333 WRF	3.9	37.12	81.3	30.2	7.0	4	42-1
PHY 444 WRF	3.7	40.64	82.2	31.8	6.7	5	41-3
ST 5115 GLT	4.1	36.48	81.2	31.5	8.1	7	41-1
ST 4848 GLT	3.9	36.80	80.7	32.6	7.4	4	42-1
FM 2334 GLT	4.1	39.68	82.8	32.9	6.5	4	41-1
FM 1830 GLT	4.4	39.36	82.9	35.4	6.0	5	41-2

Conclusions

Greatest yields in pounds of lint/A was produced by Deltapine 1553 B2XF and Deltapine 1646 B2XF with 1,475 and 1,426 pounds respectively. PhytoGen 333 produced the highest lint turnout at 29.4 percent. Dyna-Gro 3445 yielded the greatest amount of seed cotton at 5,325 lbs/A.

Acknowledgements

Sincere appreciation is expressed to Doug Wilde for establishing and managing the Tom Green County irrigated variety test.

Thank you to the seed companies that provided cotton seed and financial support, they include:

Bayer CropScience who provided Stoneville 5115 GLT, Stoneville 4848 GLT, FiberMax 2334 GLT, and FiberMax 1830 GLT

Dow AgroScience who provided PhytoGen 312 WRF, PhytoGen 333 WRF, and PhytoGen 444 WRF

Monsanto Company who provided Deltapine 1614 B2XF, Deltapine 1646 B2XF, Deltapine 1553 B2XF, and Deltapine 1549 B2XF

Americot Inc. who provided NexGen 3406 B2XF and NexGen 4545 B2XF

Crop Production Services who provided Dyna-Gro 3635 B2XF, Dyna-Gro 3445 B2XF, and Dyna-Gro 3385 B2XF

Result Demonstration Report

Agronomic Performance Trial

Bayer CropScience
Paul Minzenmayer Farm, 2016
Joel Webb, EA-IPM
Garrett Cline, CEA-AGNR

Summary

Twelve cotton varieties were evaluated under similar growing conditions to compare yield and fiber quality. FiberMax 1900GLT and Stoneville 5115GLT topped this test in yields at 373 and 363 pounds of lint per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility, irrigation, and management practices.

Objective

Commercial cotton varieties require testing each year for determinations of consistency for both yield and fiber quality. Field tests allow for side by side comparisons between new and proven cotton varieties. Field testing varieties within a geographic area of production is important to provide local cotton producers with the latest information on new varieties.

Materials and Methods

Each cotton variety consisted of eight planted rows and was replicated one time.

Varieties were individually harvested and weights were determined using a platform scale.

Planting Date:	June 11, 2016
Planting Rate:	30,000 Seeds/Acre
Row Width:	36” centers
Rows Planted:	8 row plots (rows were approximately 4,000 ft.)
Planting Pattern:	Every Row
Last Year’s Crop:	Wheat
Irrigated:	Dryland
Fungicide:	TopGaurd Terra, 8 oz/A
Herbicide:	Treflan, 1 qt/A
	RoundUp PowerMax, 21 oz/A
Insecticide:	Macho, 2 oz/A
PGR:	Pix, 2 oz/A
Harvest Aid:	Ginstar, 5 oz/A – Prep, 24 oz/A
	Paraquat, 12 oz/A – Aim 2/3 oz/A
Harvest Date:	October 21, 201

Results and Discussion

Table 1 contains the HVI fiber property results. Table 2 contains the variety data for each of the twelve varieties evaluated.

Table 1. HVI Fiber Property Results from the Agronomic Performance Trial

Variety	Yield	Lint %	Mic	Length	Strength	Uniformity	Loan Value	Value/A
FM 1900GLT	373	0.31	4.5	1.12	30.1	81.2	56.20	$210
ST 5115GLT	363	0.30	4.2	1.04	29.1	79.1	49.55	$180
ST 4946GLB2	350	0.29	4.5	1.07	29.2	80.6	50.90	$178
ST 5517GLTP	348	0.30	4.3	1.11	31.9	81.6	56.50	$197
FM 1911GLT	344	0.30	4.6	1.06	30.0	79.8	52.45	$181
FM 1953GLTP	342	0.30	4.3	1.14	30.0	81.8	56.50	$193
FM 2334GLT	329	0.31	4.5	1.12	30.7	81.3	56.90	$187
FM 1830GLT	323	0.31	4.2	1.15	32.6	82.2	57.10	$185
ST 4747GLB2	308	0.28	4.2	1.10	27.9	78.7	50.35	$155
FM 2007GLT	304	0.28	3.9	1.14	30.8	80.5	55.10	$168
ST 4848GLT	272	0.28	4.5	1.08	29.2	79.3	53.05	$144
ST 4949GLT	246	0.29	4.1	1.07	29.0	80.2	52.70	$130
Trial Average	**325**	**0.30**	**4.3**	**1.10**	**30.0**	**80.5**	**53.94**	**$176**

Table 2. Variety Data from the Agronomic Performance Trial

Variety	Plants / 10' of Row	Node of First Fruiting Branch	Total Number of Nodes	Total Bolls 12'of Row	Height (in)
FM 1900GLT	22	7	15	109	19.0
ST 5115GLT	25	6	15	91	18.2
ST 4946GLB2	23	7	15	102	18.7
ST 5517GLTP	24	6	15	121	20.9
FM 1911GLT	20	6	15	103	18.5
FM 1953GLTP	23	7	16	112	18.6
FM 2334GLT	24	6	16	129	19.7
FM 1830GLT	25	6	16	119	17.8
ST 4747GLB2	29	7	17	132	20.4
FM 2007GLT	21	6	15	141	18.9
ST 4848GLT	24	6	15	99	20.3
ST 4949GLT	20	6	16	116	22.1
Trial Average	**23.3**	**6.3**	**15.5**	**114.5**	**19.4**

Conclusions

Greatest return in value/A was produced by FM 1900GLT, ST 5517GLTP, and FM 1953GLTP at $210, $197, and $193 per acre respectively.

Acknowledgements

Sincere appreciation is expressed to Paul Minzenmayer for establishing and managing this Agronomic Performance Test.

Thank you to Bayer CropScience who provided cotton seed and financial support.

Result Demonstration Report

Agronomic Performance Trial

Bayer CropScience
Doug Wilde Farm, 2016
Joel Webb, EA-IPM
Josh Blanek, CEA-AGNR

Summary

Twelve cotton varieties were evaluated under similar growing conditions to compare yield and fiber quality. FiberMax 2334GLT and FiberMax 1830GLT topped this test in yields at 1,030 and 937 pounds of lint per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility, irrigation, and management practices.

Objective

Commercial cotton varieties require testing each year for determinations of consistency for both yield and fiber quality. Field tests allow for side by side comparisons between new and proven cotton varieties. Field testing varieties within a geographic area of production is important to provide local cotton producers with the latest information on new varieties.

Materials and Methods

Each cotton variety consisted of eight planted rows and was replicated one time.

Varieties were individually harvested and weights were determined using a platform scale.

Planting Date:	May 24, 2016
Planting Rate:	45,000 Seeds/Acre
Row Width:	40” centers
Rows Planted:	8 row plots (rows were approximately 1,200 ft.)
Planting Pattern:	Every Row
Last Year’s Crop:	Grain Sorghum
Irrigated:	Drip Irrigation
Nematocide:	Temik, 5 lbs/A
Herbicide:	Prowl, 3 pt/A
	RoundUp PowerMax, 32 oz/A
Harvest Aid:	Ginstar, 6 oz/A
	Finish, 10 oz/A
	Ethephon, 16 oz/A
Harvest Date:	November 29, 2016

Results and Discussion

Table 1 contains the HVI fiber property results. Table 2 contains the variety data for each of the twelve varieties evaluated.

Table 1. HVI Fiber Property Results from the Agronomic Performance Trial

Variety	Yield	Lint %	Mic	Length	Strength	Uniformity	Loan Value	Value/A
FM 2334GLT	1030	0.30	3.7	1.15	30.4	81.3	55.35	$570
FM 1830GLT	937	0.27	3.4	1.25	31.3	82.8	53.45	$501
ST 5115GLT	931	0.27	3.4	1.12	31.7	79.7	52.45	$488
ST 5517GLTP	889	0.27	3.2	1.13	31.1	79.6	50.75	$451
FM 1900GLT	787	0.26	3.0	1.17	32.0	80.1	49.00	$386
ST 4949GLT	758	0.28	3.3	1.03	25.2	76.6	50.55	$383
ST 4848GLT	738	0.25	2.7	1.09	26.5	79.0	44.90	$331
FM 1911GLT	738	0.25	3.0	1.15	29.4	79.4	48.15	$355
FM 2007GLT	715	0.25	3.4	1.14	29.1	78.8	52.05	$372
ST 4747GLB2	680	0.24	3.1	1.12	28.0	76.0	50.10	$341
ST 4946GLB2	661	0.24	3.3	1.11	30.3	80.2	51.35	$340
FM 1953GLTP	591	0.23	3.5	1.12	29.5	79.9	52.10	$308
Trial Average	**788**	**0.26**	**3.2**	**1.13**	**29.5**	**79.5**	**50.85**	**$402**

Table 2. Variety Data from the Agronomic Performance Trial

Variety	Plants / 10' of Row	Node of First Fruiting Branch	Total Number of Nodes	Total Bolls 12'of Row	Height (in)
FM 2334GLT	22	7	22	313	29.5
FM 1830GLT	25	7	25	310	33.2
ST 5115GLT	23	7	23	339	30.6
ST 5517GLTP	24	7	23	298	34.2
FM 1900GLT	20	7	24	305	33.9
ST 4949GLT	23	7	23	294	36.5
ST 4848GLT	24	6	22	312	35.6
FM 1911GLT	25	6	24	348	33.9
FM 2007GLT	29	7	23	266	31.8
ST 4747GLB2	21	7	24	308	35.6
ST 4946GLB2	24	7	24	293	35.5
FM 1953GLTP	20	7	26	356	33.8
Trial Average	**23.3**	**6.8**	**23.5**	**312**	**33.7**

Conclusions

Greatest return in value/A was produced by FM 2334GLT, FM 1830GLT, and ST 5115GLT at $570, $501, and $488 per acre respectively.

Acknowledgements

Sincere appreciation is expressed to Doug Wilde for establishing and managing this Agronomic Performance Test.

Thank you to Bayer CropScience who provided cotton seed and financial support.

Result Demonstration Report

Agronomic Performance Trial

Bayer CropScience
Kevin Schniers Farm, 2016
Joel Webb, EA-IPM
Josh Blanek, CEA-AGNR

Summary

Twelve cotton varieties were evaluated under similar growing conditions to compare yield and fiber quality. Stoneville 4848GLT and Stoneville 4747GLB2 topped this test in yields at 1,778 and 1,763 pounds of lint per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility, irrigation, and management practices.

Objective

Commercial cotton varieties require testing each year for determinations of consistency for both yield and fiber quality. Field tests allow for side by side comparisons between new and proven cotton varieties. Field testing varieties within a geographic area of production is important to provide local cotton producers with the latest information on new varieties.

Materials and Methods

Each cotton variety consisted of eight planted rows and was replicated one time.

Varieties were individually harvested and weights were determined using a platform scale.

Planting Date:	June 8, 2016	Planting Rate:	40,000 Seeds/Acre
Rows Planted:	8 row plots	Row Width:	40” centers
Last Year’s Crop:	Cotton	Planting Pattern:	Every Row
Irrigated:	Drip Irrigation		
Nematocide:	Temik, 5 lbs/A		
Fungicide:	TopGaurd Terra, 4 oz/A		
Insecticide:	Imidacloprid, 4 oz/A		
Herbicide:	RoundUp PowerMax, 32 oz/A		
	RoundUp PowerMax, 32 oz/A		
	RoundUp PowerMax, 32 oz/A		
Harvest Aid:	Ginstar, 6 oz/A		
	Ethephon, 24 oz/A		
	Ginstar, 5 oz/A		

Ethephon, 21 oz/A
Harvest Date: November 30, 2016

Results and Discussion

Table 1 contains the HVI fiber property results. Table 2 contains the variety data for each of the twelve varieties evaluated.

Table 1. HVI Fiber Property Results from the Agronomic Performance Trial

Variety	Yield	Lint %	Mic	Length	Strength	Uniformity	Loan Value	Value/A
ST 4848GLT	1778	0.36	3.8	1.21	29.9	82.8	55.05	$979
ST 4747GLB2	1763	0.33	4.2	1.26	29.2	82.2	55.05	$970
ST 4949GLT	1648	0.37	4.0	1.13	30.2	80.1	56.80	$936
ST 5115GLT	1631	0.34	3.8	1.17	30.5	80.9	55.20	$900
ST 4848GLT	1617	0.37	3.8	1.16	27.7	82.2	56.30	$910
ST 4946GLB2	1570	0.32	4.3	1.21	30.1	83.5	56.90	$893
FM 1911GLT	1550	0.34	4.3	1.18	30.4	81.5	55.05	$853
FM 1900GLT	1517	0.33	4.3	1.28	31.7	82.9	55.25	$838
FM 1830GLT	1488	0.33	4.0	1.26	31.4	81.9	57.25	$852
FM 2334GLT	1466	0.34	4.2	1.21	29.7	82.4	56.95	$835
FM 1953GLTP	1430	0.32	4.0	1.23	29.8	83.2	55.15	$788
FM 2007GLT	1139	0.29	3.8	1.23	29.9	82.7	55.05	$627
Trial Average	**1550**	**0.34**	**4.0**	**1.21**	**30.0**	**82.2**	**55.83**	**$865**

Table 2. Variety Data from the Agronomic Performance Trial

Variety	Plants / 10' of Row	Node of First Fruiting Branch	Total Number of Nodes	Total Bolls 12'of Row	Height (in)
ST 4848GLT	28	7	21	489	34.9
ST 4747GLB2	29	7	21	465	32.0
ST 4949GLT	25	6	21	386	36.4
ST 5115GLT	31	7	22	471	32.7
ST 4848GLT	28	7	21	473	36.1
ST 4946GLB2	32	6	22	429	32.1
FM 1911GLT	35	7	23	405	36.0
FM 1900GLT	33	7	23	319	35.2
FM 1830GLT	33	7	23	426	35.9
FM 2334GLT	34	7	26	352	37.4
FM 1953GLTP	36	7	22	398	32.0
FM 2007GLT	33	7	24	416	35.5
Trial Average	**31.4**	**6.8**	**22.4**	**420**	**34.7**

Conclusions

Greatest return in value/A was produced by ST 4848GLT, ST 4747GLB2, and ST 4949GLT at $979, $970, and $936 per acre respectively.

Acknowledgements

Sincere appreciation is expressed to Kevin Schniers for establishing and managing this Agronomic Performance Test. Thank you to Bayer CropScience who provided cotton seed and financial support.

Result Demonstration Report

Reniform Nematode Test

Doug Wilde Farm, 2016
Joel Webb, EA-IPM
Dr. Jason Woodward, Extension Specialist

Summary

Reniform nematodes (Rotylenchulus reniformis) are an economically important pest to cotton producers in the Southern Rolling Plains of Texas. New management options for reniform nematodes such as variety selection are being considered in combination with traditional methods such as soil applied fumigants.

Objective

Field experiments were conducted in 2016 at the Wilde Farm in Tom Green County to evaluate PhytoGen 417 WRF and PhytoGen 499 WRF when planted in reniform nematode infested fields. The first objective of this research was to evaluate yield response. The second objective was to evaluate response of PhytoGen 417 WRF and PhytoGen 499 WRF to the granular nematicide Temik.

Materials and Methods

Each cotton variety consisted of four planted rows and was replicated three times.

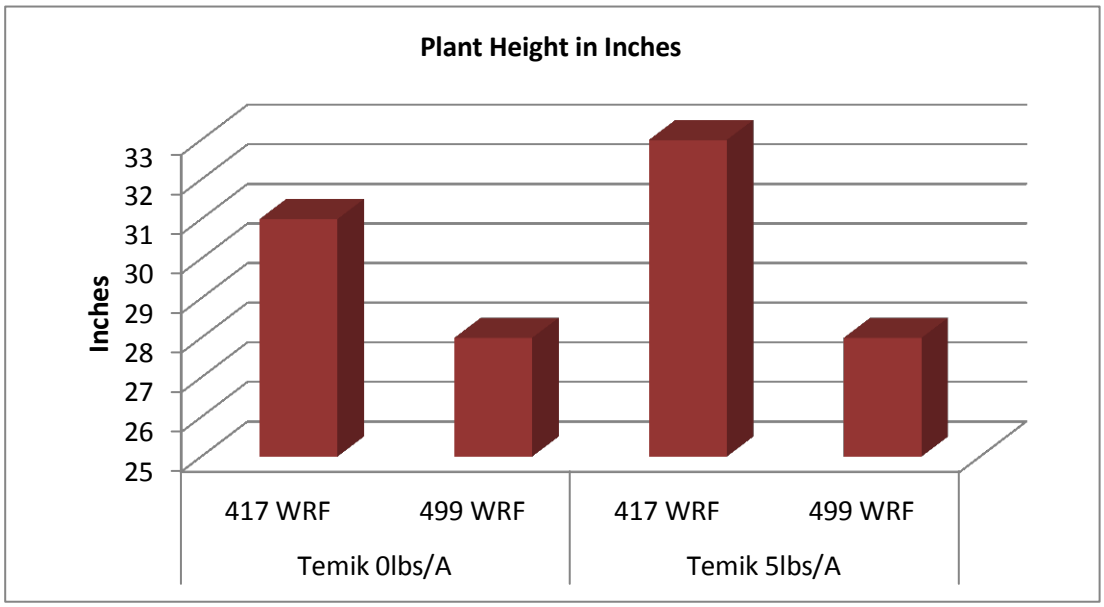
Varieties were individually harvested and weights were determined using a weigh wagon.

Planting Date:	June 17, 2016
Planting Rate:	39,200 Seeds/Acre
Row Width:	40” centers
Rows Planted:	4 row plots (rows were approximately 1,040 ft.)
Planting Pattern:	Every Row
Last Year’s Crop:	Cotton
Irrigated:	Dryland
Fungicide:	TopGaurd Terra, 7 oz/A
Harvest Date:	December 14, 2016

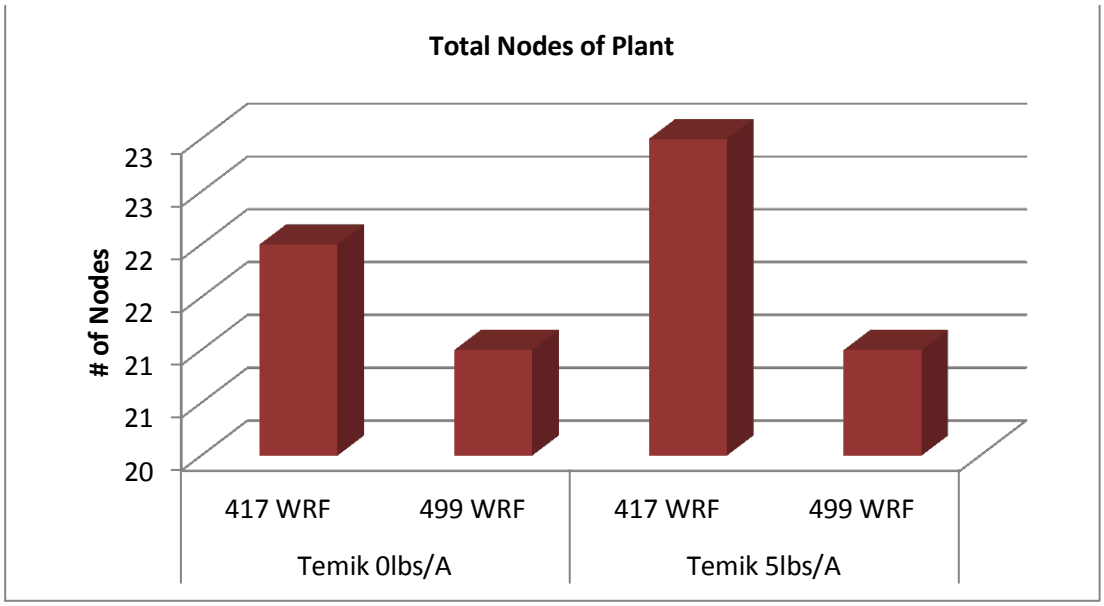
Results and Discussion

Graph 1 contains the plant height data for each of the varieties evaluated. Graph 2 contains the plant node values for each of the varieties evaluated. Graph 3 contains yield data in total pounds of lint per acre for each of the varieties evaluated.

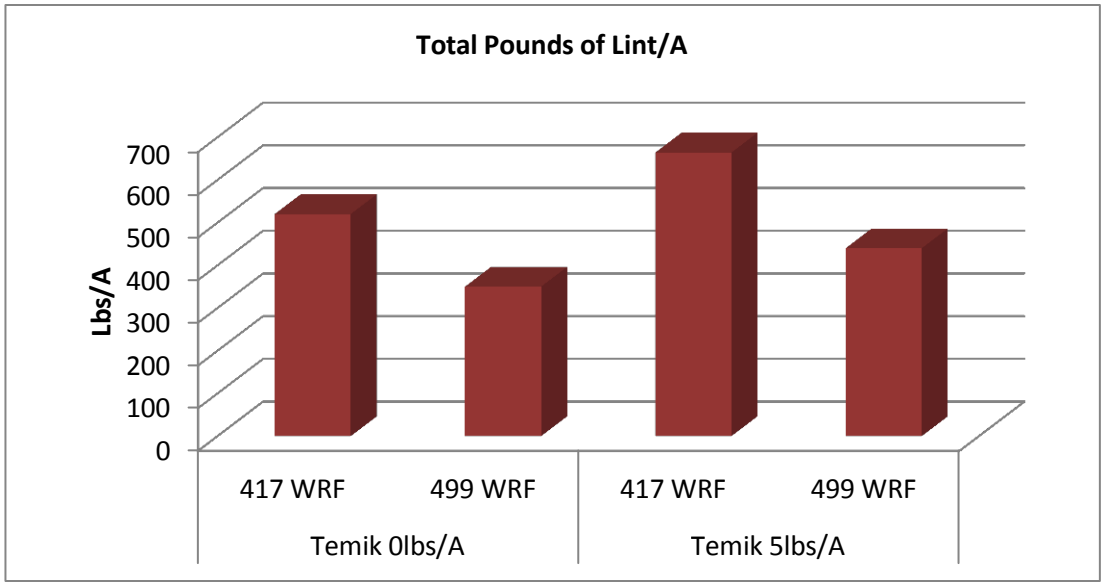
Graph 1. Plant Heights from the Reniform Nematode Test, Doug Wilde, Wall, TX, 2016.



Graph 2. Plant Nodes from the Reniform Nematode Test, Doug Wilde, Wall, TX, 2016.



Graph 3. Total Pounds of Lint/A from the Reniform Nematode Test, Doug Wilde, Wall, TX, 2016.



Conclusions

PhytoGen 417 WRF planted in combination with Temik at 5 lbs/A produced the greatest yield at 664 lbs of lint/A. PhytoGen 417 WRF planted without Temik produced similar yields to PhytoGen 499 planted with Temik at 5 lbs/A. PhytoGen 499 WRF planted without Temik yielded the lowest amount of lint at 350 lbs/A.

Acknowledgements

Sincere appreciation is expressed to Doug Wilde for establishing and managing this field trial.

Thank you to Dow AgroScience who provided PhytoGen 417 WRF and PhytoGen 499 WRF.

Result Demonstration Report

2016 Tom Green County Irrigated Grain Sorghum Performance Test

Cole Mikulik, Cooperator
Josh Blanek, County Extension Agent – Ag/Nr
Joel Webb, Extension Agent – IPM
And Dr. David Drake, Extension Agronomist
Tom Green County

Summary

Ten sorghum hybrids, replicated 3 times, were compared under similar growing conditions to determine which sorghum hybrids consistently have higher grain yields. DKS 51-01, Pioneer 84P80, Pioneer 84G62 and DKS 38-16 topped this test with grain yields of 4,537 lbs. per acre, 4407 lbs. per acre, 4244 lbs. per acre, and 4146 lbs. per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility and irrigation practices. It is suggested you look at the better cultivars on your farm to determine if they are compatible with your management style.

Objective

Commercial sorghum hybrids require testing each year for determinations of consistency of grain yield. Through the use of a field test, a comparison is made of new hybrids of grain sorghum with hybrids that have proven to be successful, long term grain yielders. Testing of said hybrids within a geographic area of production is important to provide local producers with the latest information on old and new hybrids.

Materials and Methods

Ten hybrid sorghum varieties were planted using an 8 row John Deere Maxi-Merge planter. Each of the thirteen varieties was replicated three times. Plots were planted 8 rows by 624 feet long.

Soil Type:	Angelo Clay Loam
Row Width:	40" Centers
Previous Crop:	Cotton
Land Preparation:	Conventional
Date Planted:	March 31, 2016
Seeding Rate:	52,000 seeds per acre
Plot Length:	624 feet
Fertility:	32-0-0 @ 20 gallon/acre pre-plant
Herbicide:	Atrizine @ 1 quart/acre applied April 10th
Rainfall:	14.26 inches during growing season
Irrigation:	Furrow irrigated
Harvest Date:	August 29, 2016
Number of Entries:	10
Number of Replications:	3
Number of Rows/Plot:	8

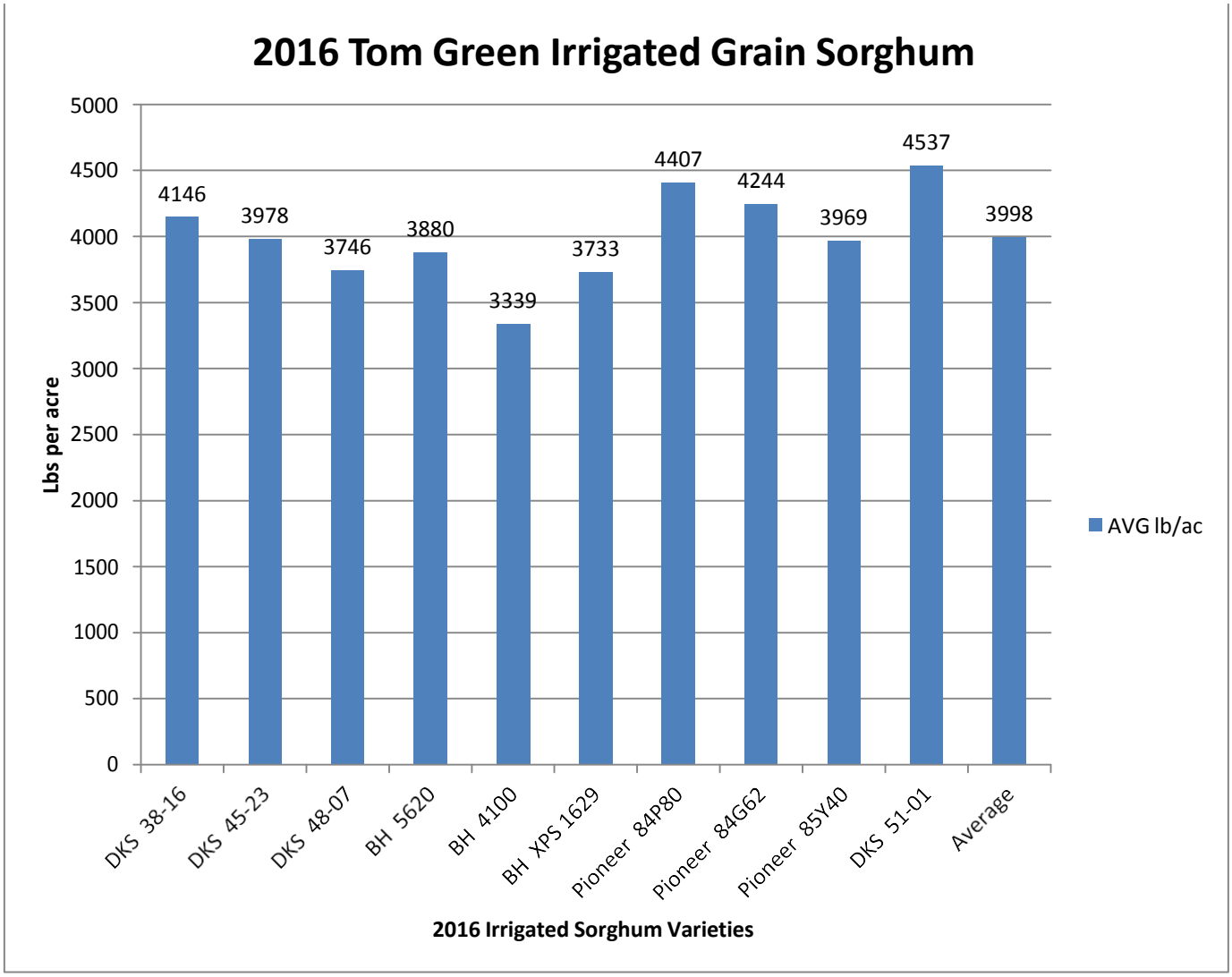
For further information about this report, contact Josh Blanek, CEA – Ag/Nr, (325)-659- 6523, j-blanek@tamu.edu, Joel Webb, Extension Agent-IPM, (325)-650-5531, cjwebb@tamu.edu or Dr. David Drake, Extension Agronomist, San Angelo, (325)-657-4576, drdrake@ag.tamu.edu.

Please visit the Crop Testing webpage http://varietytesting.tamu.edu

Results and Discussion

Table 1 contains the average yields for each of the ten sorghum hybrids evaluated in this test. DKS 51-01, Pioneer 84P80, Pioneer 84G62 and DKS 38-16 topped this test with grain yields of 4,537 lbs. per acre, 4407 lbs. per acre, 4244 lbs. per acre, and 4146 lbs. per acre respectively.

Table 1. Average Yields from the Irrigated Hybrid Grain Sorghum Test



**Average lb. /ac adjusted to 14% moisture*.

Table 2. Agronomic Data from the Irrigated Hybrid Grain Sorghum Variety Test

	Rep. I	Rep. II	Rep. III	AVG lb/ac*		AVG Test Wt.		AVG Moisture %
DKS 38-16	3802	3854	4783	**4146**		**58.3**		**12.6**
DKS 45-23	3606	3476	4850	**3978**		**56.0**		**12.3**
DKS 48-07	3313	3547	4376	**3746**		**56.2**		**12.4**
BH 5620	2909	3955	4777	**3880**		**56.8**		**12.3**
BH 4100	2528	3504	3986	**3339**		**54.7**		**12.4**
BH XPS 1629	2669	4088	4442	**3733**		**54.1**		**12.1**
Pioneer 84P80	3696	4527	4999	**4407**		**54.1**		**12.3**
Pioneer 84G62	3726	4538	4469	**4244**		**55.6**		**12.3**
Pioneer 85Y40	3472	4669	3764	**3969**		**56.7**		**12.7**
DKS 51-01	4678	4601	4333	**4537**		**56.5**		**12.9**
Average	**3440**	**4,075.92**	**4,477.98**	**3998**		**55.9**		**12.4**

**Average lb./ac adjusted to 14% moisture.*

Table 3. Average Plant Population per 13.1 feet and Average Plant Population per acre.

Variety	Average Plant Count per 13.1 ft	Average Plant Population per acre
DKS 38-16	**44**	**44,000**
DKS 45-23	**44**	**44,000**
DKS 48-07	**42.5**	**42,500**
BH 5620	**40**	**40,000**
BH 4100	**49.5**	**49,500**
BH XPS 1629	**40**	**40,000**
PIONEER 84P80	**33**	**33,000**
PIONEER 84G62	**44.5**	**44,500**
PIONEER 85Y40	**39**	**39,000**
DKS 51-01	**45**	**45,000**

Conclusions

DKS 51-01, Pioneer 84P80, Pioneer 84G62 and DKS 38-16 topped this test with grain yields of 4,537 lbs. per acre, 4407 lbs. per acre, 4244 lbs. per acre, and 4146 lbs. per acre respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility and irrigation practices, it is suggested that you look at the better cultivars on your farm to determine if they are compatible with your management style.

Acknowledgements

Sincere appreciation is expressed to Cole Mikulik for establishing and managing the 2016 Tom Green County Irrigated Hybrid Grain Sorghum Variety Trial.

Also, a word of thanks to the seed companies that provided grain sorghum seed and support, they include:

BH Genetics, David Little, who provided BH 5620, BH 4100 and BH XPS 1629.

Monsanto Company, Jearl Holland, who provided DKA 38-16, DKS 45-23, DKS 48-07, and DKS 51-01.

Pioneer Seed, Rod Carpenter, who provided Pioneer 84P80, Pioneer 84G62, and Pioneer 85Y40.

Result Demonstration Report

2016 Tom Green Dryland Grain Sorghum Performance Test

Cole Mikulik Farm, 2016
Josh Blanek County Extension Agent- Ag/Nr
Joel Webb, Extension Agent-IPM
Dr. David Drake, Extension
Agronomist Tom Green County

Summary

Thirteen sorghum varieties, replicated 3 times, were compared under similar growing conditions to determine which sorghum varieties consistently have higher grain yields. DKS 45-23, BH XPS 1503, DKS 38-88 and DKS 49-45 topped this test with grain yields of 5492 lbs. per acre, 5328 lbs. per acre, 5288 lbs. per acre, and 5115 lbs. per acre, respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility and irrigation practices, it is suggested that you look at the better cultivars on your farm to determine if they are compatible with your management style.

Objective

Commercial sorghum hybrids require testing each year for determinations of consistency of grain yield. Through the use of a field test, a comparison is made of new hybrids of grain sorghum with hybrids that have proven to be successful, long term grain yielders. Testing of said

hybrids within a geographic area of production is important to provide local producers with the latest information on old and new hybrids.

Materials and Methods

Thirteen hybrid sorghum varieties were planted using an 8 row John Deere Maxi-Merge planter. Each of the thirteen varieties was replicated three times. Plots were planted 8 rows by 1118 feet long.

Soil Type:	Angelo Clay Loam
Row Width:	40" Centers
Previous Crop:	Cotton
Land Preparation:	Conventional
Date Planted:	March 30, 2016
Seeding Rate:	28,000-30,000 seeds/acre
Plot Length:	1118 feet
Herbicide:	Atrazine @ 1 quart/acre knifed May 5
Rainfall:	15.38 inches during the growing season
Irrigation:	N/A
Harvest Date:	August 2, 2016
Number of Entries:	13
Number of Replications:	3
Number of Rows/Plot:	8

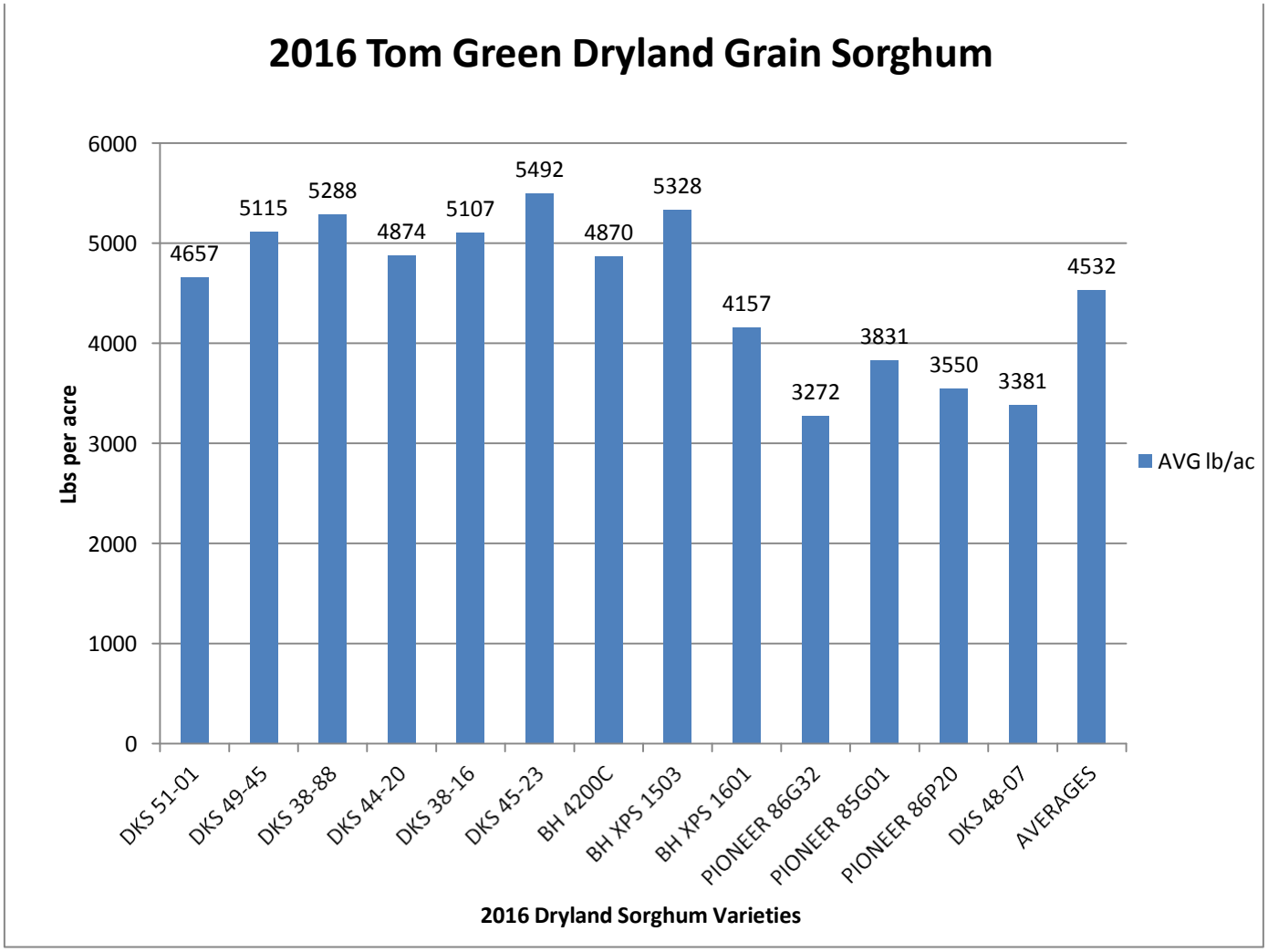
For further information about this report, contact Josh Blanek, CEA – Ag/Nr, (325)-659-6523, j-blanek@tamu.edu, Joel Webb, Extension Agent-IPM, (325)-650-5531, cjwebb@tamu.edu or Dr. David Drake, Extension Agronomist, San Angelo, (325)-657-4576, drdrake@ag.tamu.edu.

Please visit the Crop Testing webpage http://varietytesting.tamu.edu

Results and Discussion

Table 1 contains the average yields for each of the thirteen sorghum hybrids evaluated in this test. DKS 45-23, BH XPS 1503, DKS 38-88 and DKS 49-45 topped this test with grain yields of 5492 lbs. per acre, 5328 lbs. per acre, 5288 lbs. per acre, and 5115 lbs. per acre, respectively.

Table 1. Average Yields from the Dryland Hybrid Grain Sorghum Test



**Average lb. /ac adjusted to 14% moisture*.

Table 2. Agronomic Data from the Dryland Hybrid Grain Sorghum Variety Test

	REP I	REP II	REP III	**AVG lb/ac***		**AVG TEST Wt.**		**AVG MOISTURE %**
DKS 51-01	5001	4241	4729	**4657**		**56.5**		**11.2**
DKS 49-45	6018	4749	4577	**5115**		**52.4**		**10.3**
DKS 38-88	4678	6602	4584	**5288**		**57.0**		**11.9**
DKS 44-20	4516	6722	3385	**4874**		**58.1**		**11.2**
DKS 38-16	4473	6197	4651	**5107**		**59.4**		**11.2**
DKS 45-23	3303	8882	4292	**5492**		**57.5**		**11.4**
BH 4200C	3958	7252	3400	**4870**		**54.6**		**10.1**
BH XPS 1503	2777	9139	4069	**5328**		**54.4**		**9.7**
BH XPS 1601	3029	5143	4298	**4157**		**54.8**		**10.6**
PIONEER 86G32	2543	3540	3732	**3272**		**54.8**		**10.1**
PIONEER 85G01	4723	3043	3726	**3831**		**56.9**		**10.5**
PIONEER 86P20	3962	3967	2720	**3550**		**55.6**		**10.1**
DKS 48-07	4024	2809	3310	**3381**		**57.9**		**10.8**
AVERAGES	**4077.308**	**5560.462**	**3959.462**	**4532**		**56.1**		**10.7**

**Average lb./ac adjusted to 14% moisture.*

Table 3. Average Plant Population per 13.1 feet and Average Plant Population per acre.

Variety	Average Plant Count per 13.1 ft	Average Plant Population per acre
DKS 51-01	34	34,000
DKS 49-45	30	30,000
DKS 38-88	31	31,000
DKS 44-20	30	30,000
DKS 38-16	28	28,000
DKS 45-23	28	28,000
BH 4200C	25	25,000
BH XPS 1503	30	30,000
BH XPS 1601	30	30,000
PIONEER 86G32	26	26,000
PIONEER 85G01	28	28,000
PIONEER 86P20	30	30,000
DKS 48-07	26	26,000

Conclusions

DKS 45-23, BH XPS 1503, DKS 38-88 and DKS 49-45 topped this test with grain yields of 5492 lbs. per acre, 5328 lbs. per acre, 5288 lbs. per acre, and 5115 lbs. per acre, respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility and irrigation practices, it is suggested that you look at the better cultivars on your farm to determine if they are compatible with your management style.

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