2011 Mississippi Cotton Variety Trials

Darrin M. Dodds and Angus L. Catchot

Mississippi State University Extension Service





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2011 County Trial Locations and Cooperators

Trials arranged and conducted by: Dr. Darrin Dodds

Assistance provided by: Andy Brown, Lanna Durst, Robert Hill, Daniel Lowry, and Zack Reynolds Special thanks to: Dr. Angus L. Catchot Jr.; Dr. Chris Main – University of Tennessee, Jackson, TN.

Table 1. Locations, growers, and cooperating agronomists for 2011 Mississippi State University County Variety Trial Program.

Location	Trial Type	Grower	Mississippi State University Agronomist
Bellefontaine	RR Flex	Mr. Matt Knight	Dr. Dennis Reginelli
Belzoni	RR Flex	Mr. Brooks Aycock III	Mr. Jerry Singleton
Bolton	RR Flex	Mr. David Barton	Mr. Bill Maily
Caledonia	RR Flex	Mr. William Darnell	Mr. Charlie Stokes
Dundee	RR Flex	Mr. Douglas and Chris Hood	Mr. Art Smith
Edwards	RR Flex	Mr. Kendall Garraway	Mr. Bill Maily
Ellistown	RR Flex	Mr. Larry Coker	Mr. Charlie Stokes
Glendora	RR Flex	Mr. Mike Sturdivant Jr.	Mr. Jerry Singleton
Goodman	RR Flex	Seneasha Farms	Dr. Ernest Flint
Greenwood	RR Flex	Mr. John Moor	Mr. Jerry Singleton
Itta Bena	RR Flex	Mr. Travis Dunn	Mr. Jerry Singleton
Leesburg	RR Flex	Merchant Farms	Dr. Ernest Flint
Louise	RR Flex	Mr. Byron Seward	Dr. Darrin Dodds
Lucedale	RR Flex	Mr. Clayton Lawrence	Mr. Mike Howell
Madden	RR Flex	Kemp Farms	Dr. Ernest Flint
Morgan City	RR Flex	Mr. Justin Jefcoat	Mr. Jerry Singleton
Rich	RR Flex	Mr. Jack Laney	Dr. Darrin Dodds
Sledge	RR Flex	Mr. David Taylor	Dr. Darrin Dodds
Carlisle	Liberty Link	Mr. Lonnie Fortner	Dr. Darrin Dodds
Friars Point	Liberty Link	Mr. John McKee	Dr. Darrin Dodds
Starkville	Liberty Link	Dr. Darrin Dodds	Dr. Darin Dodds

The Mississippi State University Extension Service sincerely appreciates the time and effort of the cooperating growers and Mississippi State University Agronomists. In addition, several Independent Consultants provided a tremendous level of assistance with these trials including: Mr. Trey Bullock, Mr. Bert Falkner, Mr. Trent LaMastus, Mr. Tucker Miller, Mr. Bruce Pittman, Mr. Tim Richards, Mr. Mike Sartor, Mr. Stoney Stonestreet, and Mr. Joe Townsend.

Sincere gratitude is also extended to the following seed companies and representatives for providing seed for these trials: Americot – Mr. Chris Booker, Bayer CropScience – Dr. Andy White, Crop Production Services/Dyna-Gro – Mr. Wade Thompson, Dow AgroSciences/Phytogen Cottonseed – Mr. Reed Parker, and Monsanto Company/Delta and Pine Land – Mr. Greg Ferguson.

Cooperation from all aforementioned parties is essential for success of the Mississippi State University County Research and Demonstration Yield Trial Program.

Introduction

The decision making process regarding variety selection is often difficult and, in many cases, leaves growers wondering for the remainder of the growing season whether they made the right variety selection decisions. Further complicating this process has been the rapid introduction of new varieties and the passing of "older" varieties over the past several years. Historically, a premier variety would remain in the marketplace for a long period of time. However, a variety that performs well today may have a life span of four to six years. One that does not perform well will likely remain on the market for less than three to four years. In addition, the historical standard for variety testing information was to have two to three years of data prior to release of any given variety. Today, one to two years of variety testing information on a "broad scale" is common prior to a new variety being released. Therefore, greater demand has been placed upon testing a variety in as many environments as possible as a substitute for multiple years of data. In nearly all cases, variety testing prior to release is conducted by private industry through a series of testing methods and through University Official Variety Trial (OVT) programs. In many cases OVT data is only available for one year prior to release of a given variety.

In response to aforementioned changes in variety testing, the Mississippi State University Extension Service personnel expanded it's on-farm testing program in order to provide growers with information on variety performance under a wide array of management systems in as many environments as possible. Our onfarm testing program is not designed to replace or compete with small-plot OVT testing programs, rather it is designed to complement the data that is provided by OVT programs to provide growers with as complete a data package as possible to assist with variety selection.

Methodology

The on-farm testing program at Mississippi State University is designed to test varieties in as many environments as possible. Limiting the number of entries allows for efficient planting and harvest operations and requires a minimum amount of time from cooperating growers. The number of variety entries each given company is given is dependent upon market share. In addition, two at-large entries are given to smaller companies in order to provide equal opportunity to as many seed providers as possible. Our on-farm variety tests are usually planted in 8- or 12-row sets utilizing planting equipment provided by each respective grower. In some cases, 4- or 6-row sets are used depending on site characteristics and grower preference. In addition, two replications of each variety are planted and harvested in most locations. Plot lengths ranged from 300 to 3000 feet in 2011 depending on the characteristics of the field the trial was conducted in. Seed treatments are at the discretion of the company providing seed. A premium package including insecticide, fungicide, and nematacide seed treatments was provided for each variety. In-season management is at the discretion of the grower and each is encouraged to manage the plot area as he/she would manage any given field on their farm.

Each replication for each variety was individually harvested using standard harvest equipment. Harvest weights were collected using a boll buggy or trailer modified to display the weight of seed cotton contained therein. Prior to all harvest operations, each boll buggy or trailer was calibrated by Master Scale in Greenwood, MS to ensure that correct harvest weights are collected. An 8- to 10-pound seed cotton sample was collected for each variety tested. In order to reduce ginning time, one-half of the sample was collected from replication number one and one-half was collected from replication number two. The entire 8- to 10-pound sample was collected from a single replication in locations that only have one replication per variety. Seed cotton was ginned at the West Tennessee Research and Education Center (WTREC) in Jackson, TN. Ginning equipment at the WTREC consists of a 20-saw Continental Eagle gin equipped with a stick machine, incline cleaners, two lint cleaners, and a condenser. Fiber quality for each ginned sample was determined by the United State Department of Agriculture – Agriculture Marketing Service (USDA-AMS) classing office in Memphis, TN.

Entries

As previously mentioned, a maximum of 10 entries per year are limited. Entries are allotted by market share from respective companies. One entry per year is automatically given to the variety planted on the highest acreage in the previous year based on the annual Varieties Planted Report from USDA-AMS. In 2010, Monsanto/Delta and Pine Land was allotted three spots; Bayer CropScience including the FiberMax and Stoneville brands were allotted a total of three spots; Dow AgroSciences/Phytogen Cottonseed was allotted two spots with one additional entry for locations south of U.S. Highway 82, and the two additional spots were given "at-large" in order to provide parody between smaller companies with less resources and larger companies. Entries in the 2011 Mississippi State University County Trial Program were as follows:

Table 2. 2011 Mississippi State University Roundup Ready Flex County Variety Trial Program entry list.

Slot #	Criteria/Company	Variety
1	Top Planted Variety in 2010	ST 5288B2F
2	At – Large Entry – Americot	AM 1550 B2RF
3	At – Large Entry – Crop Production Services/Dyna-Gro	DG 2570 B2RF
4	Bayer CropScience	ST 4288B2F
5	Bayer CropScience	ST 5458B2RF
6	Dow AgroSciences/Phytogen Cottonseed	PHY 375 WRF
7	Dow AgroSciences/Phytogen Cottonseed	PHY 499 WRF
8	Dow AgroSciences/Phytogen Cottonseed (South of HWY. 82 only)	PHY 565 WRF
9	Monsanto/Delta and Pine Land	DP 0912 B2RF
10	Monsanto/Delta and Pine Land	DP 1034 B2RF
11	Monsanto/Delta and Pine Land	DP 1137 B2RF

Table 3. 2011 Mississippi State University Liberty Link County Variety Trial Program entry list.

Slot #	Criteria/Company	Variety
1	BX 1252LLB2	Bayer Crop Science
2	FM 1773LLB2	Bayer Crop Science
3	FM 1845LLB2	Bayer Crop Science
4	FM 1944GLB2 (Tested as BX 1244 in Carlisle and Starkville)	Bayer Crop Science
5	PHY 375 WRF (Friars Point only)	Dow AgroSciences
6	PHY 499 WRF	Dow AgroSciences
7	ST 4145LLB2	Bayer Crop Science
8	ST 4145LLB2 – Treated with Poncho + Votivo	Bayer Crop Science
9	ST 5445LLB2 (tested as BX 1254)	Bayer CropScience

Site Characteristics

Locations for the 2011 Mississippi State University County Yield Trial Program are listed on page 3. Yield trials were conducted at a total of 21 locations in 2011. Roundup Ready Flex trials were conducted in 18 locations in 2011. Nine locations were located in the Delta and nine were in the hills. All Delta locations were either pivot- or furrow-irrigated. All Hill locations were grown under dryland conditions. Liberty Link trials were conducted in three locations in 2011. Two locations were in the hills and one was in the Delta. The Carlisle location in the hills was pivot irrigated whereas all other locations were dryland. Field sites were chosen based upon grower preference and required elements to conduct a yield trial.

Reported Data & Analysis

Each data table includes the following: variety, lint yield, lint percent, micronaire, staple length (in inches) fiber strength, and fiber uniformity. Data analysis using SAS v. 9.2 was conducted on all replicated trials. Grand means (averages) are presented as well as Least Significant Differences (LSD). Least Significant Differences are the smallest value with which we can confidently say there is a difference between two means. Differences in means less than the given LSD value are likely due to variability within a given field or environment. For non-replicated trials and fiber data at individual locations, LSD's are not applicable. Some varieties such as PHY 565 WRF, ST 4288B2F, and ST 5288B2F were not included at all locations. Data for these varieties was included in overall summary data as they were included in the majority of locations. For locations that were replicated and data from one replication of a given variety was lost, SAS will interpret these data as missing and provided data analysis based on estimates. Therefore, average data for a given location may be slightly different than data reported.

2011 Mississippi State University County Yield Trial Program

Roundup Ready Flex Yield and Fiber Quality Data Averaged Across 18 Locations

Table 4. Yield and fiber quality data pooled across all 18 locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5458B2RF	1078^*	36.3	4.6	1.14	32.6	81.5	4
ST 5288B2F	1075^*	36.9	4.6	1.14	30.4	81.9	4.4
DP 0912 B2RF	1065 [*]	35.5	4.6	1.1	31.2	82.0	3.7
PHY 499 WRF	1043^*	38.6	4.4	1.15	34.2	82.9	4.1
DP 1133 B2RF	1040^*	38.9	4.6	1.16	32.9	83.0	3.2
DP 1034 B2RF	1035*	38.4	4.5	1.16	31.3	82.6	3.1
DG 2570 B2RF	1019	36.5	4.4	1.12	32	82.3	2.9
AM 1550 B2RF	1008	36.5	4.3	1.11	30.2	81.9	2.9
PHY 375 WRF	985	36.9	4.2	1.14	31.5	82.2	3.4
ST 4288B2F	956	33.7	4.4	1.16	32.2	82.4	3.5
PHY 565 WRF	908	36.1	4.3	1.16	34.3	82.9	4
Grand Mean	1019	36.8	4.4	1.14	32.1	82.3	3.6
LSD (0.05)	52	0.02	0.2	0.02	0.8	0.5	0.4

Yield not statistically different than the highest yielding variety.

2011 Mississippi State University County Yield Trial Program - Flex Varieties Delta Region Locations Included: Belzoni, Dundee, Glendora, Greenwood, Itta Bena, Louise, Morgan City, Rich, Sledge

Table 5. Yield and fiber quality data pooled over nine Delta (all irrigated) locations

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5458 B2RF	1248*	35.3	4.7	1.17	33.1	81.9	4.1
ST 5288B2F	1198*	35.7	4.6	1.16	30.7	82.4	5.1
DP 0912 B2RF	1183*	34.2	4.5	1.13	31.8	82.6	3.9
DP 1133 B2RF	1112	38	4.5	1.18	32.2	83.3	3.2
DG 2570 B2RF	1105	35.6	4.3	1.13	32.3	82.5	2.8
DP 1034 B2RF	1091	37.5	4.5	1.17	31.5	82.7	3.0
AM 1550 B2RF	1089	35.2	4.2	1.13	30.9	82.5	2.9
PHY 499 WRF	1077	37.2	4.4	1.17	34.7	83.7	4.1
PHY 375 WRF	1051	35.6	4.1	1.16	31.8	82.6	3.7
ST 4288B2F	1025	32.5	4.4	1.18	32.4	82.7	3.4
PHY 565 WRF	918	34.6	4.1	1.19	35.2	83.3	4.5
Grand Mean	1100	35.6	4.4	1.16	32.4	82.8	3.7
LSD (0.05)	74	0.01	0.2	0.02	1.2	0.8	0.5

Yield not statistically different than the highest yielding variety.

Hill Region Locations Included: Bellefontaine, Bolton, Caledonia, Edwards, Ellistown, Goodman, Leesburg, Lucedale, Madden

Table 6. Yield and fiber quality data pooled over nine Hill region (all dryland) locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
PHY 499 WRF	1015*	40.2	4.5	1.12	33.7	82.0	4.1
DP 1034 B2RF	982^*	39.2	4.5	1.14	31.1	82.4	3.1
DP 1133 B2RF	970 [*]	39.7	4.6	1.13	32.5	82.6	3.2
ST 5288B2F	954	38.1	4.5	1.11	30.1	81.5	3.8
DP 0912 B2RF	944	36.7	4.7	1.08	30.7	81.5	3.4
DG 2570 B2RF	932	37.5	4.5	1.11	31.7	82.1	3.1
AM 1550 B2RF	927	37.8	4.4	1.10	29.5	81.4	3.0
PHY 375 WRF	922	38.2	4.2	1.11	31.2	81.8	3.2
ST 5458 B2RF	904	37.2	4.6	1.11	32.2	81.1	3.9
ST 4288B2F	887	34.9	4.5	1.13	32.0	82.2	3.7
PHY 565 WRF	875	37.5	4.4	1.13	33.6	82.4	3.6
Grand Mean	937	37.9	4.5	1.12	31.7	81.9	3.5
LSD (0.05)	60	0.01	0.3	0.02	1.2	0.7	0.6

^{*} Yield not statistically different than the highest yielding variety.

Location: Bellefontaine

Grower: Matt Knight

Row width: 38"

Harvest date: October 25, 2011

Soil series: Oaklimeter silt loam

MSU Agronomist: D. Reginelli Planting date: May 9, 2011

Table 7. Yield and fiber quality at Bellefontaine.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
PHY 499 WRF	1205	41.4	5.2	1.08	32.6	81.8	4.0
DP 1133 B2RF	1069	39.4	5.1	1.13	31.5	82.5	4.0
DP 1034 B2RF	1069	40.0	4.9	1.16	31.6	82.6	3.0
ST 5288B2F	1029	39.0	5.1	1.10	29.8	82.1	4.0
AM 1550 B2RF	1012	38.8	4.6	1.11	30.1	82.5	3.0
ST 5458 B2RF	998	39.7	5.4	1.09	32.2	81.3	4.0
ST 4288B2F	983	35.0	5.0	1.13	32.0	81.9	4.0
PHY 565 WRF	948	37.3	5.0	1.12	33.1	81.8	5.0
PHY 375 WRF	928	38.8	4.3	1.10	31.5	82.2	4.0
DG 2570 B2RF	902	34.6	4.8	1.11	32.3	82.9	4.0
DP 0912 B2RF	878	34.5	5.1	1.05	30.1	81.2	5.0
Grand Mean	1002	38.0	5.0	1.11	31.5	82.1	4.0
LSD (0.05)	112	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety.

Location: Belzoni Row width: 38" – 4 x 1 Skip

Grower: Brooks Aycock Irrigated: Yes

MSU Agronomist: J. Singleton Planting date: May 10, 2011

Harvest date: October 10, 2011 Soil series: Forrestdale silt loam/

silty clay loam

Table 8. Yield and fiber quality at Belzoni.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DP 1034 B2RF	939 [*]	40.9	4.9	1.13	29.9	81.4	3.0
ST 5458 B2RF	929^*	36.3	4.8	1.12	31.4	82.5	4.0
DP 1133 B2RF	884*	39.4	4.9	1.13	32.0	81.9	4.0
DG 2570 B2RF	860*	38.1	4.4	1.11	31.7	82.3	3.0
PHY 375 WRF	857*	37.5	3.9	1.12	30.4	81.0	4.0
DP 0912 B2RF	852 [*]	36.4	4.6	1.11	31.2	82.6	4.0
ST 5288B2F	822	37.4	5.0	1.11	29.0	82.1	5.0
PHY 499 WRF	797	38.4	4.6	1.12	33.8	83.6	4.0
ST 4288B2F	773	33.5	4.6	1.13	30.4	81.0	3.0
PHY 565 WRF	756	36.7	4.4	1.16	36.0	83.0	4.0
AM 1550 B2RF	672	36.3	4.2	1.17	32.9	82.4	4.0
Grand Mean	831	37.3	4.6	1.13	31.7	82.2	3.8
LSD (0.05)	115	•	•	•	•	•	•

^{*} Yield not statistically different than the highest yielding variety.

Location: Bolton Row width: 38" Harvest date: October 14, 2011
Grower: David Barton Irrigated: No Soil series: Memphis/Grenada

MSU Agronomist: B. Maily Planting date: May 11, 2011 silt loam

Table 9. Yield and fiber quality at Bolton.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DG 2570 B2RF	1524*	37.8	4.3	1.11	29.9	82.0	3.0
DP 0912 B2RF	1469 [*]	35.6	4.4	1.12	31.9	81.5	3.0
PHY 499 WRF	1456*	37.4	4.5	1.12	32.5	82.1	4.0
PHY 375 WRF	1436 [*]	36.3	4.1	1.11	29.1	80.7	4.0
DP 1034 B2RF	1402	36.8	4.5	1.12	29.8	80.4	4.0
AM 1550 B2RF	1392	35.7	4.3	1.09	28.6	80.6	4.0
ST 5458 B2RF	1376	35.9	4.5	1.11	31.0	80.1	4.0
PHY 565 WRF	1371	39.1	4.4	1.12	32.1	82.1	4.0
DP 1133 B2RF	1364	37.2	4.0	1.10	29.6	80.5	3.0
ST 5288B2F	1301	34.1	4.3	1.10	28.4	80.6	4.0
ST 4288B2F	1300	34.8	4.2	1.14	31.4	81.9	4.0
Grand Mean	1399	36.4	4.3	1.11	30.4	81.1	3.7
LSD (0.05)	115	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety.

Location: Caledonia Row width: 38" Harvest date: September 28, 2011
Grower: William Darnell Irrigated: No Soil series: Paden silt loam

MSU Agronomist: C. Stokes Planting date: May 10, 2011

Table 10. Yield and fiber quality at Caledonia.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DP 1133 B2RF	709	42.3	4.9	1.08	32.1	81.8	3.0
AM 1550 B2RF	694	41.6	5.0	1.03	26.7	79.6	3.0
PHY 499 WRF	682	42.3	4.8	1.07	33.9	82.6	4.0
DG 2570 B2RF	652	41.2	4.6	1.04	31.1	81.1	3.0
DP 1034 B2RF	652	41.8	4.9	1.07	30.1	81.9	3.0
DP 0912 B2RF	646	39.2	5.0	1.03	29.5	80.7	4.0
ST 5458B2RF	622	40.6	4.9	1.06	30.4	80.8	3.0
ST 4288B2F	613	37.2	4.8	1.07	29.8	80.8	3.0
PHY 375 WRF	606	40.9	4.4	1.02	28.8	80.1	3.0
ST 5288B2F	599	41.5	4.7	1.04	28.5	81.3	4.0
Grand Mean	638	40.9	4.8	1.05	30.1	81.1	3.3

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Dundee Grower: Douglas & Chris Hood Row width: 38" Irrigated: Yes

Harvest date: October 20, 2011 Soil series: Dundee silt loam

MSU Agronomist: D. Dodds

Planting date: May 12, 2011

Table 11. Yield and fiber quality at Dundee.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
PHY 499 WRF	834*	38.1	4.0	1.17	34.6	84.5	4.0
ST 5458 B2RF	791 [*]	35.5	4.8	1.14	34.8	81.5	5.0
ST 5288B2F	777*	36.7	4.7	1.14	32.3	81.5	5.0
AM 1550 B2RF	765 [*]	34.3	3.9	1.09	29.5	81.5	2.0
PHY 375 WRF	725*	36.5	4.0	1.13	32.7	82.4	4.0
DG 2570 B2RF	686	34.9	4.2	1.06	29.6	80.2	2.0
DP 0912 B2RF	609	31.1	4.4	1.12	32.5	83.1	3.0
ST 4288B2F	572	33.1	4.2	1.18	34.1	83.9	2.0
DP 1034 B2RF	401	35.9	4.3	1.14	33.5	82.1	3.0
DP 1133 B2RF	372	37.5	4.6	1.17	30.9	83.3	4.0
Grand Mean	653	35.4	4.3	1.13	32.5	82.1	3.4
LSD (0.05)	111	•	•	•	•	•	•

^{*} Yield not statistically different than the highest yielding variety.

Location: Edwards Grower: Kendall Garraway MSU Agronomist: B. Maily Row width: 38" Irrigated: No

Planting date: May 8, 2011

Harvest date: October 30, 2011 Soil series: Memphis/Reidtown

silt loam

Table 12. Yield and fiber quality at Edwards.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
PHY 499 WRF	1071*	42.1	4.6	1.10	33.1	81.6	2.0
AM 1550 B2RF	988^*	38.4	4.2	1.05	27.6	80.1	3.0
DG 2570 B2RF	985*	37.6	4.3	1.11	31.9	82.5	3.0
DP 1133 B2RF	974*	40.7	4.8	1.10	32.3	81.8	3.0
DP 0912 B2RF	973*	36.6	4.4	1.06	30.8	81.0	3.0
PHY 375 WRF	963*	38.9	4.3	1.11	30.4	82.2	3.0
DP 1034 B2RF	961*	38.8	4.4	1.12	30.1	82.8	3.0
ST 5288B2F	885	36.5	4.5	1.08	28.7	80.9	3.0
ST 4288B2F	854	33.8	4.4	1.13	31.4	82.4	3.0
ST 5458 B2RF	819	35.4	4.6	1.10	30.3	80.6	3.0
PHY 565 WRF	807	36.1	4.1	1.13	33.0	82.7	3.0
Grand Mean	934	37.7	4.4	1.10	30.9	81.7	2.9
LSD (0.05)	117	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety.

Location: Ellistown Grower: Larry Coker MSU Agronomist: C. Stokes Row width: 38" Irrigated: No

Harvest date: October 20, 2011 Soil series: Mantachie/Talla

es Planting date: May 12, 2011 silt loam

Table 13. Yield and fiber quality at Ellistown.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
PHY 499 WRF	1079	42.3	4.9	1.11	33.2	82.8	5.0
DP 0912 B2RF	1004	41.6	5.3	1.03	28.1	80.9	3.0
DP 1034 B2RF	989	41.2	5.1	1.14	31.0	83.1	3.0
ST 5288B2F	963	40.8	5.4	1.09	29.6	82.2	3.0
DG 2570 B2RF	953	41.1	5.2	1.09	31.4	81.9	3.0
ST 4288B2F	930	38.5	5.0	1.11	31.3	82.7	4.0
AM 1550 B2RF	924	39.8	5.1	1.08	28.2	81.4	2.0
PHY 375 WRF	906	42.0	5.1	1.05	29.2	81.4	3.0
DP 1133 B2RF	886	42.0	5.2	1.13	32.6	83.2	4.0
ST 5458 B2RF	836	39.6	5.2	1.10	32.2	81.9	4.0
Grand Mean	947	40.9	5.2	1.09	30.7	82.2	3.4
LSD (0.05)	N.S.	•	•	•	•	•	•

^{*} Yield not statistically different than the highest yielding variety.

Location: Glendora

Row width: 38" Irrigated: Yes

Harvest date:

Grower: Mike Sturdivant Jr. MSU Agronomist: D. Dodds

Planting date: May 11, 2011

Soil series: Dundee silt loam/ Dubbs very fine sandy loam

Table 14. Yield and fiber quality at Glendora.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5458 B2RF	1513	34.6	4.9	1.21	34.5	81.9	5.0
DP 0912 B2RF	1461	31.3	4.4	1.12	31.5	81.9	4.0
DP 1034 B2RF	1369	35.8	4.4	1.18	30.9	83.8	3.0
DG 2570 B2RF	1341	34.6	4.5	1.11	31.9	82.3	3.0
AM 1550 B2RF	1326	38.0	4.5	1.11	30.1	82.1	2.0
ST 4288B2F	1277	31.0	4.8	1.16	32.7	82.9	3.0
PHY 499 WRF	1220	38.2	4.6	1.16	34.6	83.9	4.0
DP 1133 B2RF	1128	37.0	4.6	1.16	32.6	83.9	3.0
PHY 375 WRF	1128	33.7	4.2	1.17	32.6	82.7	4.0
Grand Mean	1307	34.9	4.5	1.15	32.4	82.8	3.4

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Goodman

Row width: 38"

Harvest date: October 10, 2011

Grower: Seneasha Farms

Irrigated: No

Soil series: Oaklimeter loamy

MSU Agronomist: E. Flint Planting date: May 16, 2011 sand

Table 15. Yield and fiber quality at Goodman.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DP 1034 B2RF	646	37.4	4.1	1.18	34.2	82.5	3.0
ST 5288B2F	586	37.0	4.2	1.10	29.7	81.2	4.0
DP 1133 B2RF	573	39.5	4.3	1.15	34.9	82.6	3.0
AM 1550 B2RF	564	36.4	3.7	1.08	29.1	81.1	3.0
DP 0912 B2RF	545	34.9	4.3	1.06	30.3	81.7	3.0
PHY 375 WRF	540	35.9	3.9	1.17	36.2	82.3	4.0
PHY 499 WRF	526	39.0	4.2	1.19	34.2	81.0	4.0
PHY 565 WRF	498	35.4	3.6	1.16	34.6	81.9	4.0
ST 4288B2F	473	31.6	3.7	1.15	33.7	81.1	4.0
ST 5458B2RF	456	33.3	4.0	1.13	32.4	80.7	4.0
DG 2570 B2RF	445	33.5	3.7	1.11	31.9	81.7	3.0
Grand Mean	532	35.8	4.0	1.13	32.8	81.6	3.5

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Greenwood Grower: John Moor MSU Agronomist: J. Singelton Row width: 38" Irrigated: Yes

Planting date: May 9, 2011

Harvest date: October 19, 2011 Soil series: Dubbs silt loam /

Tensas silty clay loam

Table 16. Yield and fiber quality at Greenwood.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
-	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5458 B2RF	1333	35.2	4.8	1.19	32.5	81.4	4.0
DP 1034 B2RF	1113	36.8	4.5	1.19	31.0	82.4	3.0
DP 0912 B2RF	1095	33.2	4.6	1.14	33.0	83.2	4.0
PHY 499 WRF	1073	38.3	4.7	1.20	35.1	84.9	4.0
DP 1133 B2RF	1063	36.5	4.7	1.20	32.2	83.7	3.0
AM 1550 B2RF	1003	35.1	4.3	1.12	30.4	81.3	3.0
DG 2570 B2RF	920	32.9	4.3	1.16	33.8	83.3	3.0
PHY 375 WRF	838	33.3	4.0	1.21	32.7	83.7	4.0
Grand Mean	1054	35.2	4.5	1.18	32.6	83.0	3.6
LSD (0.05)	77	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety.

Location: Itta Bena Row width: 38" Harvest date: October 11, 2011
Grower: Travis Dunn Irrigated: Yes Soil series: Dundee silt loam
MSU Agronomist: J. Singleton Planting date: May 10, 2011

Table 17. Yield and fiber quality at Itta Bena.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5288B2F	1577	37.2	4.8	1.17	30.8	83.0	5.0
DP 1133 B2RF	1458	37.1	4.7	1.18	33.7	84.2	3.0
DP 0912 B2RF	1420	35.3	4.5	1.14	32.0	82.9	4.0
DP 1034 B2RF	1415	38.1	4.8	1.18	32.3	83.6	4.0
PHY 499 WRF	1411	38.3	4.5	1.19	35.3	83.7	4.0
DG 2570 B2RF	1373	36.8	4.4	1.15	33.1	82.3	3.0
ST 5458 B2RF	1365	34.7	4.9	1.19	34.5	82.7	4.0
AM 1550 B2RF	1262	36.1	4.2	1.12	30.5	82.7	3.0
ST 4288B2F	1255	32.2	4.6	1.20	33.2	83.1	4.0
PHY 375 WRF	1162	35.0	4.2	1.14	31.9	82.6	4.0
PHY 565 WRF	1060	32.9	4.2	1.20	35.8	83.7	5.0
Grand Mean	1342	35.8	4.5	1.17	33.0	83.1	3.9

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Leesburg Grower: Merchant Farms MSU Agronomist: E. Flint Row width: 38" Irrigated: No

Harvest date: October 26, 2011 Soil series: Faulkner silty clay

Planting date: May 5, 2011 loam

Table 18. Yield and fiber quality at Leesburg.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5288B2F	1413	43.1	4.8	1.13	30.3	81.3	4.0
DP 1133 B2RF	1328	39.2	4.8	1.16	33.0	83.0	3.0
ST 4288B2F	1208	33.9	4.4	1.15	32.1	82.8	3.0
ST 5458 B2RF	1203	38.1	4.7	1.13	32.0	80.7	4.0
DP 1034 B2RF	1156	39.4	4.6	1.14	30.1	82.3	3.0
DP 0912 B2RF	1104	35.6	4.7	1.10	31.0	81.3	4.0
AM 1550 B2RF	1099	36.1	4.3	1.11	28.2	79.7	3.0
PHY 375 WRF	1087	35.0	4.1	1.14	31.2	81.6	3.0
DG 2570 B2RF	1087	36.4	4.3	1.16	31.6	83.0	4.0
PHY 499 WRF	1064	39.4	4.5	1.11	33.3	81.6	4.0
Grand Mean	1175	37.6	4.5	1.13	31.3	81.7	3.5

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Louise Row width: 38" Harvest date: October 10, 2011
Grower: Byron Seward Irrigated: Yes Soil series: Forestdale-Brittain

MSU Agronomist: J. Singleton Planting date: May 10, 2011 silt loam

Table 19. Yield and fiber quality at Louise.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	_
DP 1133 B2RF	1470*	41.7	4.8	1.13	32.2	81.0	3.0
ST 5288B2F	1423*	37.5	4.8	1.15	30.1	82.1	5.0
DP 0912 B2RF	1406*	36.6	4.9	1.10	30.1	81.8	4.0
ST 5458 B2RF	1403	37.1	4.9	1.16	32.3	81.8	4.0
DP 1034 B2RF	1377	39.6	4.7	1.16	30.6	83.0	3.0
DG 2570 B2RF	1304	38.1	4.6	1.12	32.3	83.4	3.0
AM 1550 B2RF	1290	36.8	4.5	1.12	29.8	82.1	3.0
PHY 375 WRF	1273	36.6	4.6	1.10	29.7	81.3	4.0
PHY 499 WRF	1250	39.1	4.6	1.16	35.8	83.1	4.0
ST 4288B2F	1135	32.9	4.7	1.15	30.1	81.6	4.0
PHY 565 WRF	1093	36.2	4.4	1.16	34.7	82.2	4.0
Grand Mean	1311	37.5	4.7	1.14	31.6	82.1	3.7
LSD (0.05)	66	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety.

Location: Lucdeale Row width: 38"
Grower: Clayton Lawrence Irrigated: No

MSU Agronomist: M. Howell Planting date: June 8, 2011

Harvest date: December 3, 2011 Soil series: Benndale/McLaurin

fine sandy loam

Table 20. Yield and fiber quality at Lucedale.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DP 1133 B2RF	1249 [*]	39.6	4.2	1.16	33.1	84.3	3.0
DP 1034 B2RF	1237*	41.2	4.6	1.13	29.7	82.5	3.0
ST 5288B2F	1206*	38.1	4.0	1.17	33.1	81.7	3.0
ST 5458 B2RF	1176	37.1	4.7	1.10	33.7	81.9	5.0
PHY 499 WRF	1169	38.7	3.9	1.14	34.6	81.9	3.0
DP 0912 B2RF	1164	36.6	5.1	1.12	31.1	82.1	2.0
DG 2570 B2RF	1139	38.4	5.6	1.10	32.3	80.9	2.0
PHY 375 WRF	1112	37.2	4.6	1.14	30.9	82.7	2.0
PHY 565 WRF	1061	36.2	5.1	1.12	33.0	83.1	3.0
AM 1550 B2RF	1052	36.5	4.9	1.17	36.0	84.3	3.0
ST 4288B2F	1046	34.4	5.1	1.13	31.1	83.7	4.0
Grand Mean	1147	37.6	4.7	1.13	32.6	82.7	3.0
LSD (0.05)	47	•	•	•	•	•	•

^{*} Yield not statistically different than the highest yielding variety.

Location: Madden Grower: Kemp Farms Row width: 38" Irrigated: No

Harvest date: October 9, 2011 Soil series: Rosebloom/Arkabutla

MSU Agronomist: E. Flint Planting date: May 23, 2011

loamy sand

Table 21. Yield and fiber quality at Madden.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
PHY 375 WRF	721	36.9	3.2	1.18	33.8	83.4	3.0
ST 5288B2F	721	36.8	3.6	1.19	32.6	82.4	5.0
PHY 499 WRF	714	35.6	3.6	1.16	36.2	83.0	6.0
DP 1034 B2RF	713	37.3	3.8	1.20	33.6	83.7	4.0
ST 5458 B2RF	694	37.6	3.5	1.18	35.2	82.3	4.0
DP 0912 B2RF	684	36.7	3.9	1.14	33.3	82.8	4.0
PHY 565 WRF	672	37.7	3.5	1.20	38.0	83.3	3.0
ST 4288B2F	625	33.9	3.6	1.19	35.3	82.5	4.0
AM 1550 B2RF	617	34.4	3.9	1.14	30.8	83.0	3.0
DG 2570 B2RF	592	35.5	3.7	1.14	32.9	82.6	3.0
DP 1133 B2RF	550	35.0	4.3	1.19	33.5	84.0	3.0
Grand Mean	664	36.1	3.7	1.17	34.1	83.0	3.8

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Morgan City Grower: Justin Jefcoat Row width: 38" Irrigated: Yes

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Harvest date: October 27, 2011 Soil series: Dubbs/Dundee loam

MSU Agronomist: J. Singleton

Planting date: May 16, 2011

Table 22. Yield and fiber quality at Morgan City.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DP 0912 B2RF	1241*	33.9	4.6	1.15	32.1	82.1	4.0
ST 5458 B2RF	1214*	33.2	4.5	1.19	33.1	82	3.0
ST 5288B2F	1162*	32.8	4.4	1.21	32.7	82.8	6.0
ST 4288B2F	1090	31.5	4.4	1.22	33.1	82.7	4.0
DG 2570 B2RF	1072	34.2	4.7	1.16	33.7	83.7	3.0
DP 1034 B2RF	1070	36.7	4.4	1.2	31.3	82.4	3.0
AM 1550 B2RF	1065	32.2	4.3	1.16	32.5	83.4	4.0
DP 1133 B2RF	1040	35.3	4.4	1.2	37.2	84.1	3.0
PHY 375 WRF	960	34.7	4	1.21	33.4	83.5	3.0
PHY 499 WRF	955	34.8	4.6	1.17	33.5	83.4	4.0
PHY 565 WRF	864	33.7	4	1.21	33.9	84.1	5.0
Grand Mean	1067	33.9	4.4	1.19	33.3	83.1	3.8
LSD (0.05)	87	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety

Location: Rich
Grower: Jack Laney
MSU Agronomist: D. Dodds

Row width: 38"
Irrigated: Yes
Planting date: May 12, 2011

Harvest date: October 12, 2011
Soil series: Dundee silt loam

Table 23. Yield and fiber quality at Rich.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
DP 1133 B2RF	1440^*	39.4	4.0	1.21	34.6	83.5	3.0
ST 5458 B2RF	1412^{*}	36.0	4.1	1.15	32.5	81.0	4.0
PHY 375 WRF	1406*	37.5	4.2	1.15	30.5	82.7	3.0
DP 0912 B2RF	1401^*	34.9	4.3	1.13	31.6	82.3	4.0
ST 5288B2F	1385*	35.3	4.1	1.16	30.4	82.6	5.0
DG 2570 B2RF	1279	35.8	3.6	1.17	33.3	83.2	3.0
AM 1550 B2RF	1274	35.1	3.8	1.14	30.7	82.9	2.0
DP 1034 B2RF	1220	37.3	3.8	1.23	33.0	84.1	3.0
ST 4288B2F	1183	32.3	3.8	1.20	34.0	83.1	4.0
PHY 499 WRF	1175	34.4	3.6	1.19	35.6	83.1	5.0
Grand Mean	1317	35.8	3.9	1.17	32.6	82.9	3.6
LSD (0.05)	63	•	•	•	•	•	•

Yield not statistically different than the highest yielding variety.

Location: Sledge Row width: 38" Harvest date: November 2, 2011 Grower: David Taylor Irrigated: Yes Soil series: Collins/Falaya silt

MSU Agronomist: D. Dodds Planting date: May 25, 2011 loam

Table 24. Yield and fiber quality at Sledge.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	- Lbs/Acre -	%		Inches	- grams/tex -	%	
ST 5458 B2RF	1217*	34.5	4.3	1.18	32.0	82.3	4.0
ST 5288B2F	1182*	34.8	4.5	1.17	29.6	82.3	5.0
DP 0912 B2RF	1171*	34.7	4.3	1.15	32.0	83.4	4.0
DG 2570 B2RF	1149*	35.3	4.4	1.11	31.2	81.8	2.0
AM 1550 B2RF	1132*	35.0	4.0	1.17	31.4	84.0	3.0
DP 1133 B2RF	1119*	37.0	4.2	1.21	33.8	84.3	3.0
PHY 375 WRF	1023	34.9	4.0	1.19	32.0	83.4	3.0
DP 1034 B2RF	1005	36.3	4.3	1.13	30.7	81.3	2.0
ST 4288B2F	1005	33.3	4.3	1.19	31.8	82.8	3.0
PHY 499 WRF	1002	36.5	4.4	1.18	33.8	83.5	4.0
Grand Mean	1100	35.2	4.3	1.17	31.8	82.9	3.3
LSD (0.05)	107	•	•	•	•	•	•

^{*} Yield not statistically different than the highest yielding variety.

Yield and Fiber Quality Data Averaged Across 3 Locations Including: Carlisle, Friars Point, and Starkville

Table 25. Yield and fiber quality data for averaged over all locations for Liberty Link trials.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity
	- Lbs/Acre -	%		Inches	- grams/tex -	%
PHY 499 WRF	1528	41.8	4.5	1.17	31.5	83.8
ST 5445LLB2	1422	39.7	4.4	1.20	32.7	83.9
BX 1252LLB2	1294	38.2	4.1	1.20	31.0	84.2
ST 4145LLB2	1280	37.6	3.9	1.16	29.6	83.5
FM 1845LLB2	1232	37.8	4.4	1.22	32.8	84.0
ST 4145LLB2-PV	1207	37.6	3.8	1.15	28.9	82.6
FM 1773LLB2	1197	36.6	4.3	1.24	32.7	84.1
Grand Mean	1309	38.5	4.2	1.19	31.3	83.7
LSD (0.05)	N.S.	2.6	N.S.	N.S.	1.8	N.S.

[•] ST 4145LLB2-PV – Denotes ST 4145LLB2 seed treated with Poncho + Votivo.

Individual Location Data Plots Were Planted As Non-Replicated Strips

Location: Carlisle Row width: 38" Harvest date: October 24, 2011

MSU Agronomist: D. Dodds Planting date: May 16, 2011

Table 26. Yield and fiber quality at Carlisle.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity
	- Lbs/Acre -	%		Inches	- grams/tex -	%
PHY 499 WRF	1338	42.4	4.6	1.14	31.6	84.6
ST 5445LLB2	1221	39.5	4.7	1.19	34.0	82.8
BX 1252LLB2	1160	37.4	4.3	1.20	30.5	84.1
ST 4145LLB2	1150	36.0	4.0	1.10	31.1	83.1
FM 1944GLB2	1145	36.9	4.4	1.19	32.2	83.7
FM 1845LLB2	1131	38.7	4.6	1.15	32.7	82.8
FM 1773LLB2	1110	36.7	4.6	1.22	31.7	83.2
ST 4145LLB2-PV	1016	36.6	4.0	1.13	28.4	83.0
Grand Mean	1159	36.6	4.0	1.13	28.4	83.0

[•] ST 4145LLB2-PV – Denotes ST 4145LLB2 seed treated with Poncho + Votivo.

[•] Trial was not replicated; therefore, no statistics were performed.

Location: Friars Point Row width: 38" Harvest Date: October 21, 2011

Grower: John McKee Irrigated: No Soil Series: silty loam

MSU Agronomist: D. Dodds Planting date: May 17, 2011

Table 27. Yield and fiber quality at Friars Point.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity
	- Lbs/Acre -	%		Inches	- grams/tex -	%
ST 5445LLB2	1913	39.4	4.7	1.23	31.2	84.7
PHY 499 WRF	1772	39.3	4.8	1.19	31.8	83.5
BX 1252LLB2	1654	38.2	4.5	1.20	31.4	84.7
ST 4145LLB2	1620	37.2	4.1	1.21	28.7	85.0
ST 4145LLB2-PV	1567	36.4	3.8	1.16	29.7	83.0
FM 1845LLB2	1521	36.4	4.6	1.25	33.5	85.2
FM 1773LLB2	1461	35.4	4.7	1.24	34.6	84.9
PHY 375 WRF	1460	39.5	3.8	1.17	27.7	82.8
Grand Mean	1621	37.7	4.4	1.21	31.1	84.2

[•] ST 4145LLB2-PV – Denotes ST 4145LLB2 seed treated with Poncho + Votivo.

Location: Starkville Row width: 38" Harvest date: September 30, 2011

Grower: Darrin Dodds Irrigated: No Soil series: silty clay loam

MSU Agronomist: D. Dodds Planting date: May 12, 2011

Table 28. Yield and fiber quality at Starkville.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity
	- Lbs/Acre -	%		Inches	- grams/tex -	%
PHY 499 WRF	1473	43.7	4.1	1.17	31.2	83.4
FM 1944GLB2	1449	38.4	3.5	1.24	32.0	83.2
ST 5445LLB2	1133	40.2	3.9	1.19	32.9	84.2
ST 4145LLB2	1068	39.6	3.6	1.18	29.1	82.5
BX 1252LLB2	1067	39.0	3.6	1.20	31.1	83.7
FM 1845LLB2	1044	38.3	4.1	1.25	32.1	84.0
ST 4145LLB2-PV	1037	39.7	3.6	1.16	28.5	81.9
FM 1773LLB2	1021	37.7	3.7	1.25	31.9	84.1
Grand Mean	1162	39.6	3.8	1.21	31.1	83.4

[•] ST 4145LLB2-PV – Denotes ST 4145LLB2 seed treated with Poncho + Votivo.

[•] Trial was not replicated; therefore, no statistics were performed.

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