

# The University of Arizona 2022 Cotton Variety Testing Program

UArizona Cooperative Extension and  
Experiment Station

Trial Results

Funded in part by the Arizona Cotton Growers Association,  
Cotton Incorporated, and Participating Seed Companies

Prepared by:  
Dr. Randy Norton

## Introduction

Variety selection is one of the most important decisions a grower will make contributing to the success of a cotton crop. It is critical, that a grower have as much information as possible in order to make an informed decision regarding variety selection. In an effort to help supply reliable variety performance information, the University of Arizona conducts a statewide cotton variety testing program. This program consists of a few different types of trials. The first is a small plot evaluation of commercially available varieties along with experimental varieties and is conducted in 3 locations across Arizona including Yuma, Maricopa, and Safford. This testing program is called the University of Arizona Upland Cotton Advanced Strains Testing Program.

Another type of university sponsored trial is a large plot, replicated strip trial conducted on grower-cooperator farms in a wide variety of locations across Arizona. These large plot strip trials consist of replicated plots extending the full length of the irrigation run at each location. This program is titled the University of Arizona Upland Cotton Variety Testing Program (UCVT). Seven locations across the state were conducted in 2022.

Testing of commercial and experimental ELS (Pima) varieties were also conducted in 3 locations in 2022. Two of the locations were small plot trials (Pima Cotton Advanced Strain Testing Program – PCAST), while the other location was a strip trial conducted on a grower cooperator field (Pima Cotton Variety Testing Program – PCVT).

Each trial is summarized in this publication with a series of tables and graphs. The first table contains location, planting date, along with various other location characteristics for each of the trials conducted across Arizona in 2022. The second table for each location contains early season data collected including early season stand count (plants per foot) and plant vigor rating (1-9 low-high). The third table for each location contains yield and fiber quality data. Statistical analysis for all parameters is also presented at the bottom of each table. Finally, for each location a figure plotting lint yield as a function of fiber premium/discount is presented. The vertical line in the figure represents the average of the trial for fiber premium and the horizontal line represents the trial average for yield. Any varieties falling in the upper right quadrant performed better than average for both lint yield and fiber quality at that location.

If you have any questions regarding these trials or this publication please direct them to Dr. Randy Norton, Regional Extension Specialist and Director of the Safford Ag Center at [rnorton@arizona.edu](mailto:rnorton@arizona.edu).

The work performed over the course of the 2022 cotton season to produce the results contained in this booklet was funded in part by Cotton Incorporated through the Arizona Cotton Growers Association and also by participating seed companies. A special Thank You is extended to the Grower-Cooperators who participate in these testing programs. This program would not be successful without them.

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# 2022 Upland Cotton Variety Testing Program

University of Arizona

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Prepared by:  
Dr. Randy Norton

Yuma, AZ	
Soil Type	Clay
Irrigation	Furrow/flood
Tillage	Conventional
Planting Rate	46,000
Planting Date	3/12/22
Defoliation Date	8/12/22
Harvest Date	9/7/22

Variety	Plant Population (plants/foot)	Plant Vigor Rating (0-9 L-H)
DG3511B3XF	2.7	4.7
DG3535B3XF	2.5	5.0
DP2012B3XF	3.3	7.0
DP2020B3XF	3.2	7.0
PHY350W3FE	3.0	5.3
PHY400W3F3	3.6	6.5
ST4595B3XF	2.9	5.7
ST5091B3XF	2.8	7.3
<b>Mean</b>	<b>3.0</b>	<b>6.1</b>

Yield and fiber quality results from the University of Arizona Upland Cotton Variety Testing (UCVT) program, Yuma, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value** (\$/acre)
Stoneville	ST5091B3XF	1992.6 a*	36.9	31	36	5.1	27.3	1.11	3	80.1	1.2	\$1,060.21
Deltapine	DP2020B3XF	1912.4 ab	36.0	21	37	4.5	29.7	1.17	3	81.6	4.8	\$1,085.75
Deltapine	DP2012B3XF	1784.6 bc	37.5	31	38	4.7	31.8	1.17	2	81.7	1.1	\$947.61
Phytogen	PHY400W3F3	1768.8 bc	35.9	31	37	4.5	33.4	1.14	4	82.2	3.7	\$984.43
Stoneville	ST4595B3XF	1667.1 cd	36.2	31	38	5.1	31.2	1.18	5	81.9	-1.1	\$848.60
DynaGro	DG3535B3XF	1557.0 d	33.0	21	37	4.9	30.8	1.15	2	81.9	5.1	\$889.06
DynaGro	DG3511B3XF	1521.3 d	39.7	21	37	5.1	33.0	1.15	2	82.3	2.7	\$832.46
Phytogen	PHY350W3FE	1486.5 d	34.0	31	38	4.5	31.9	1.17	3	83.0	4.7	\$842.10
<b>Mean</b>		1711.3	36.1	---	37	4.8	31.1	1.15	3.0	81.8	2.8	936.28
<b>LSD<sup>§</sup></b>		196.3	1.0	---	NS	NS	2.3	NS	NS	1.2	1.3	117.0
<b>OSL<sup>†</sup></b>		0.0001	<0.0001	---	0.2079	0.0762	0.0067	0.3568	0.1520	0.0228	<0.0001	0.0005
<b>CV<sup>‡</sup></b>		7.8	1.9	---	2.2	4.5	3.1	2.4	33.0	0.6	31.6	8.5

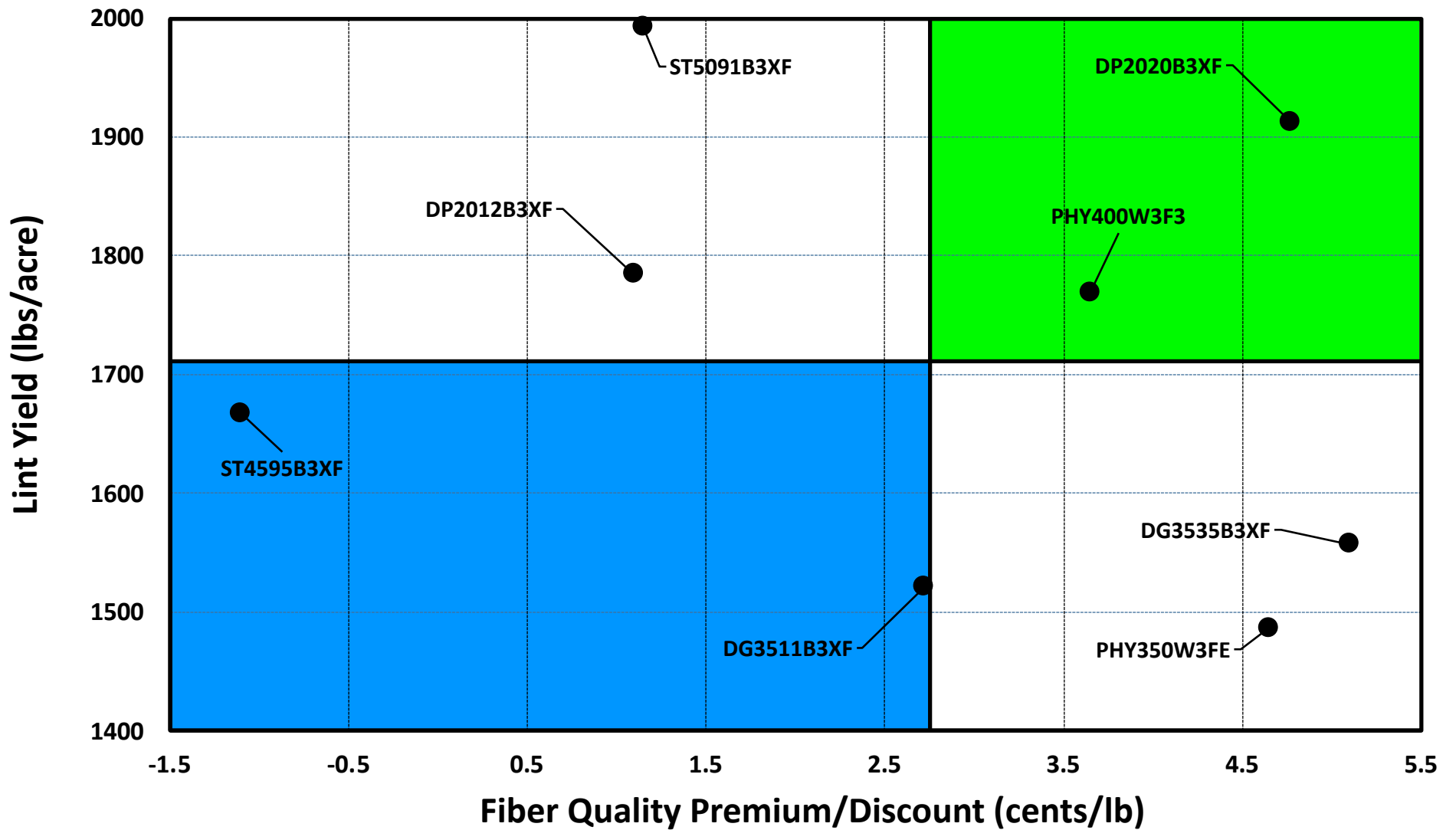
\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Yield and fiber quality graph for the University of Arizona Upland Cotton Variety Testing (UCVT) program, Yuma, AZ, 2022.

Goodyear, AZ	
Soil Type	Loam
Irrigation	Flat/Flood
Tillage	Minimum
Planting Rate	56,000
Planting Date	5/31/22
Defoliation Date	11/12/22
Harvest Date	12/21/22

Yield and fiber quality results from the University of Arizona Upland Cotton Variety Testing (UCVT) program, Goodyear, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value** (\$/acre)	
Phytogen	PHY400W3FE	1490.3	a*	34.0	31	39	4.3	34.6	1.23	4	81.7	4.0	\$833.92
Phytogen	PHY350W3FE	1443.6	a	31.9	31	39	4.4	32.5	1.20	4	82.4	3.9	\$806.76
Deltapine	DP2012B3XF	1422.4	ab	32.4	32	41	4.2	33.1	1.28	4	82.5	4.0	\$796.05
Deltapine	DP2115B3XF	1327.8	bc	33.9	31	39	4.8	32.2	1.21	3	82.4	4.6	\$750.84
Stoneville	ST4595B3XF	1276.8	cd	33.5	31	39	4.7	31.6	1.21	4	80.8	2.7	\$697.19
DynaGro	DG3511B3XF	1204.4	de	34.8	31	39	4.5	35.1	1.21	3	81.8	4.6	\$681.97
Stoneville	ST4993B3XF	1199.7	de	35.2	31	40	4.4	36.6	1.23	3	83.8	4.7	\$680.21
DynaGro	DG3469B3XF	1107.6	e	32.2	31	39	4.0	31.9	1.20	3	82.3	4.6	\$626.88
<b>Mean</b>		1309.1		33.5	---	39	4.4	33.4	1.22	3.0	82.2	4.1	734.23
<b>LSD<sup>§</sup></b>		99.2		0.9	---	0.8	0.2	1.2	0.03	NS	0.8	NS	48.0
<b>OSL<sup>†</sup></b>		<0.0001		<0.0001	---	<0.0001	<0.0001	<0.0001	0.0004	0.1907	0.0001	0.1129	<0.0001
<b>CV<sup>‡</sup></b>		4.3		1.6	---	1.2	2.2	2.1	1.2	15.0	0.6	19.6	3.8

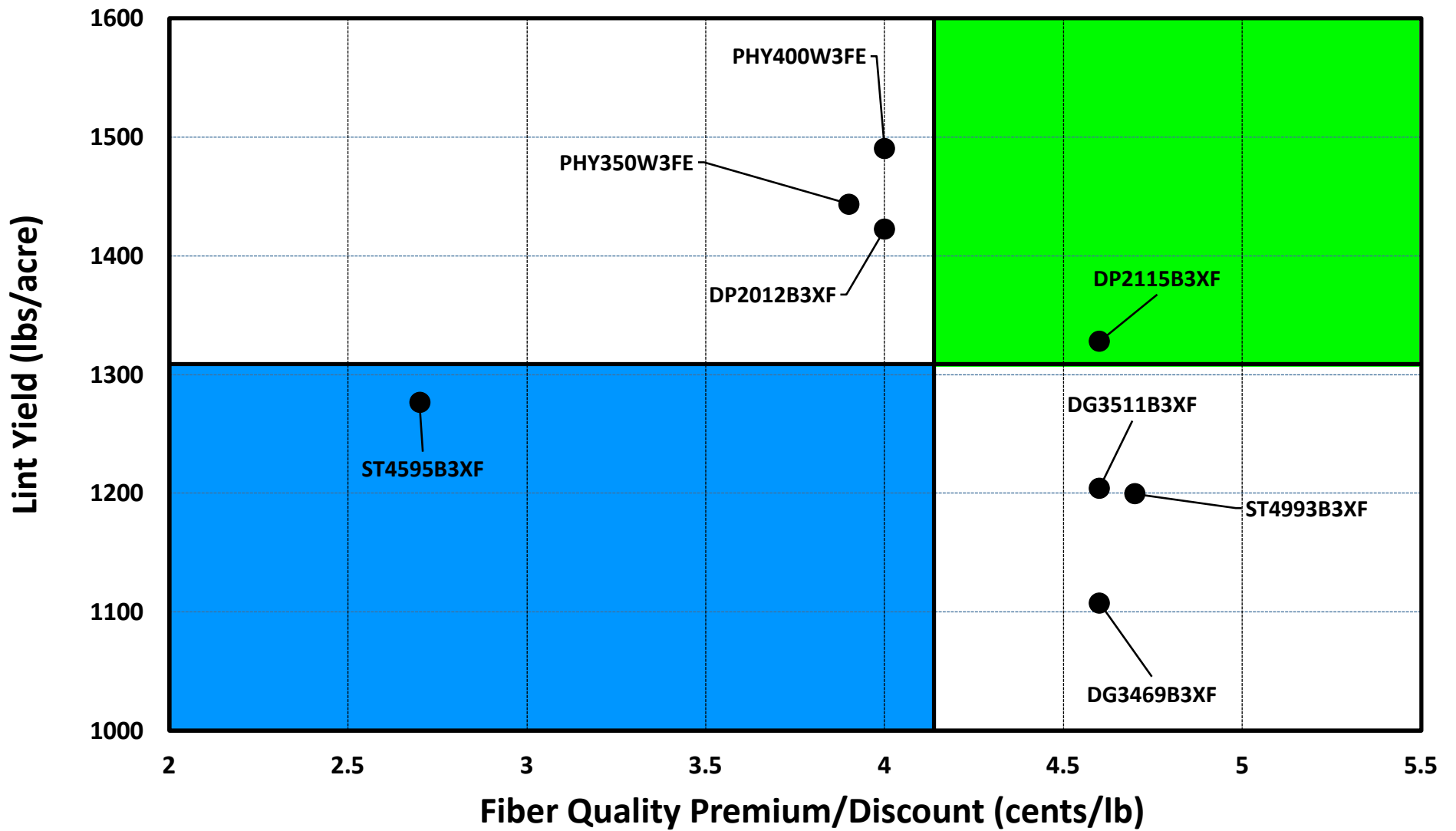
\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Yield and fiber quality graph for the University of Arizona Upland Cotton Variety Testing (UCVT) program, Goodyear, AZ, 2022.



Eloy, AZ	
Soil Type	Silty loam
Irrigation	Furrow/Flood
Tillage	Conventional
Planting Rate	48,000
Planting Date	5/4/22
Defoliation Date	9/15/22
Harvest Date	11/15/22

Variety	Plant Population (plants/foot)	Plant Vigor Rating (0-9 L-H)
DG3469B3XF	3.0	7.5
DG3511B3XF	3.1	7.5
DP2012B3XF	2.9	8.0
DP2020B3XF	3.1	7.0
PHY400W3FE	3.0	8.0
PHY580W3FE	3.0	7.5
ST4595B3XF	2.7	6.0
ST5091B3XF	2.8	6.7
<b>Mean</b>	<b>2.9</b>	<b>7.2</b>

Yield and fiber quality results from the University of Arizona Upland Cotton Variety Testing (UCVT) program, Eloy, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value** (\$/acre)
Stoneville	ST4595B3XF	1932.0 a*	36.2	31	39	4.6	31.9	1.22	4	82.1	4.0	\$1,081.04
Deltapine	DP2012B3XF	1856.5 ab	36.8	31	39	4.4	33.1	1.21	3	81.9	4.8	\$1,053.53
DynaGro	DG3469B3XF	1765.4 bc	35.5	31	38	4.2	32.3	1.19	3	81.9	4.6	\$998.77
Deltapine	DP2020B3XF	1746.6 bc	33.9	21	38	4.7	31.1	1.18	2	81.5	5.2	\$999.55
Stoneville	ST5091B3XF	1704.8 c	36.9	21	37	4.6	29.8	1.17	2	80.1	4.8	\$967.41
DynaGro	DG3511B3XF	1704.3 c	36.3	31	39	4.3	35.0	1.22	3	83.6	4.8	\$967.20
	<b>Mean</b>	1784.9	35.9	---	38	4.4	32.2	1.20	3	81.8	4.7	1011.25
	<b>LSD<sup>§</sup></b>	126.5	NS	---	NS	0.3	1.4	NS	0.7	1.8	NS	NS
	<b>OSL<sup>†</sup></b>	0.0272	0.0727	---	0.1687	0.0453	0.0023	0.1082	0.0154	0.0495	0.3624	0.0673
	<b>CV<sup>‡</sup></b>	2.8	2.2	---	2.0	2.7	1.7	1.56	10	0.9	10.6	3.13

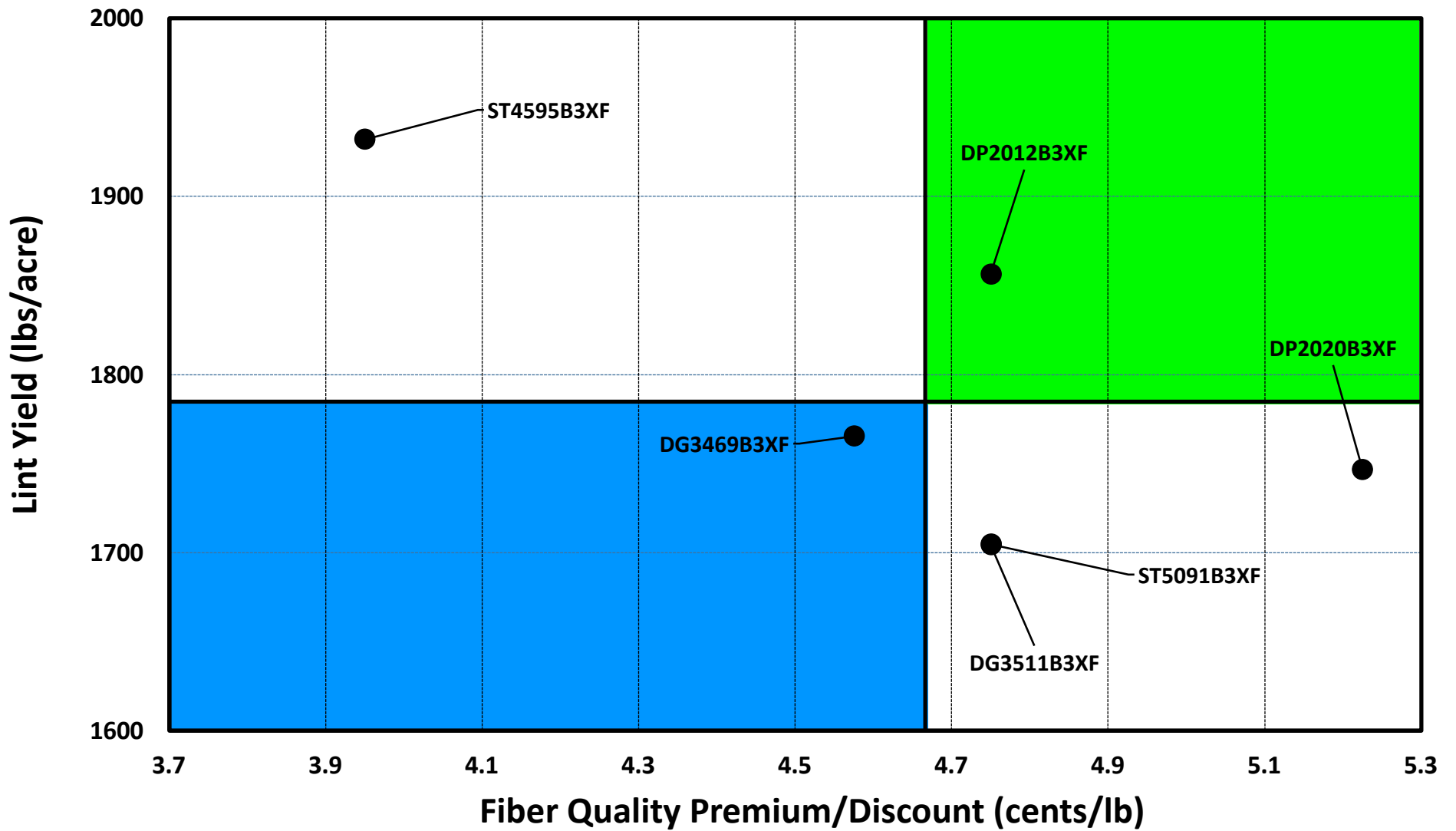
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\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Yield and fiber quality graph for the University of Arizona Upland Cotton Variety Testing (UCVT) program, Eloy, AZ, 2022.

Marana, AZ	
Soil Type	Silt loam
Irrigation	Furrow/Flood
Tillage	Conventional
Planting Rate	42,000
Planting Date	4/20/22
Defoliation Date	10/12/22
Harvest Date	11/16/22

Variety	Plant Population (plants/foot)	Plant Vigor Rating (0-9 L-H)
DG3469B3XF	2.2	6.3
DG3511B3XF	2.4	6.3
DP2012B3XF	2.4	6.0
DP2038B3XF	2.2	5.3
FM1730GLTP	2.7	7.0
PHY400W3F3	2.8	7.0
PHY411W3FE	2.9	7.7
ST4993B3XF	1.9	5.3
<b>Mean</b>	<b>2.4</b>	<b>6.4</b>

Yield and fiber quality results from the University of Arizona Upland Cotton Variety Testing (UCVT) program, Marana, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value** (\$/acre)	
Deltapine	DP2038B3XF	1956.8	a*	36.2	31	38	3.6	32.0	1.19	3	81.4	4.9	\$1,113.34
Deltapine	DP2012B3XF	1816.3	ab	34.4	31	40	3.9	32.1	1.23	3	81.7	4.6	\$1,027.44
Phytogen	PHY411W3FE	1775.8	abc	35.0	31	38	3.6	33.9	1.18	4	82.3	3.2	\$980.61
DynaGro	DG3511B3XF	1771.0	abc	36.9	31	38	4.2	34.1	1.19	3	82.4	5.1	\$1,010.68
FiberMax	FM1730GLTP	1712.6	bcd	34.0	31	40	4.1	34.8	1.25	4	82.9	3.4	\$947.90
Stoneville	ST4993B3XF	1679.7	bcd	36.6	31	39	4.1	35.1	1.20	2	82.6	5.3	\$962.62
DynaGro	DG3469B3XF	1552.0	cd	35.2	31	39	3.9	32.6	1.21	3	82.2	5.1	\$885.47
Phytogen	PHY400W3F3	1497.1	c	33.4	31	39	3.3	33.8	1.21	4	81.4	-0.8	\$765.76
<b>Mean</b>		1720.2		35.2	---	39	3.8	33.5	1.20	3	82.1	3.8	961.73
<b>LSD<sup>§</sup></b>		229.5		NS	---	NS	0.34	NS	NS	1.2	NS	1.1	123.6
<b>OSL<sup>†</sup></b>		0.0315		0.0877	---	0.5263	0.0055	0.3662	0.5723	0.0314	0.7909	<0.0001	0.0074
<b>CV<sup>‡</sup></b>		5.6		3.0	---	3.1	3.8	4.4	2.8	16.7	1.3	12.0	5.4

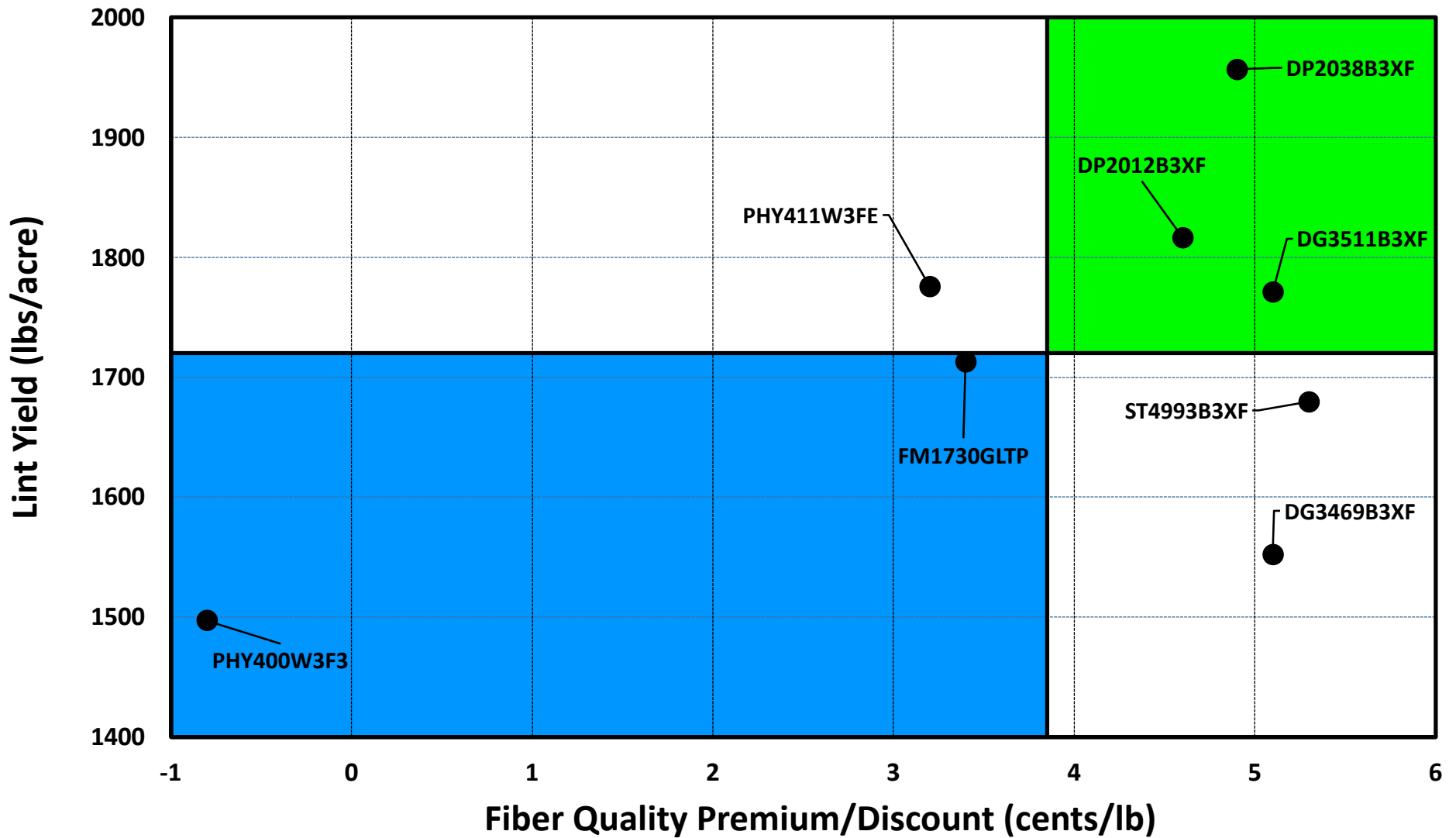
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\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Yield and fiber quality graph for the University of Arizona Upland Cotton Variety Testing (UCVT) program, Marana, AZ, 2022.

Thatcher, AZ	
Soil Type	Clay loam
Irrigation	Sub-surface drip
Tillage	Minimum
Planting Rate	70,000
Planting Date	5/9/22
Defoliation Date	10/16/22
Harvest Date	10/31/22

Variety	Plant Population (plants/foot)	Plant Vigor Rating (0-9 L-H)
DG3469B3XF	3.3	6.7
DG3511B3XF	3.1	6.3
DP2012B3XF	3.8	6.7
DP2038B3XF	3.1	5.7
FM1730GLTP	3.9	6.7
PHY332W3FE	4.3	6.7
PHY580W3F3	3.6	6.0
ST4993B3XF	3.2	6.0
<b>Mean</b>	<b>3.5</b>	<b>6.3</b>

Yield and fiber quality results from the University of Arizona Upland Cotton Variety Testing (UCVT) program, Thatcher, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value** (\$/acre)
Deltapine	DP2038B3XF	2270.6 a*	43.1	21	36	4.8	28.1	1.11	1	80.5	1.7	\$1,219.06
Stoneville	ST4993B3XF	2009.2 b	40.7	21	37	4.4	33.1	1.17	2	83.2	5.5	\$1,154.26
DynaGro	DG3469B3XF	1984.8 b	38.5	21	37	4.6	28.8	1.15	2	82.5	4.7	\$1,124.54
DynaGro	DG3511B3XF	1931.1 b	41.1	21	37	5.0	31.8	1.16	2	82.8	3.8	\$1,076.77
Deltapine	DP2012B3XF	1910.0 bc	38.0	21	37	4.7	30.5	1.16	2	82.2	3.8	\$1,065.16
Phytogen	PHY580W3F3	1835.0 bcd	38.0	21	37	4.5	31.4	1.15	2	81.5	4.9	\$1,044.26
Phytogen	PHY332W3FE	1788.9 cd	34.9	21	38	4.5	31.1	1.19	2	81.2	5.1	\$1,021.15
FiberMax	FM1730GLTP	1737.4 d	35.1	21	39	4.4	34.1	1.21	2	83.0	5.2	\$994.39
<b>Mean</b>		1938.9	38.7	---	37	4.6	31.1	1.16	2	82.1	4.3	1090.42
<b>LSD<sup>§</sup></b>		168.5	3.1	---	1.1	NS	2.2	0.03	NS	0.9	NS	131.9
<b>OSL<sup>†</sup></b>		0.0004	0.0007	---	0.0009	0.0970	0.0007	0.0004	0.6335	0.0002	0.3963	0.0485
<b>CV<sup>‡</sup></b>		4.9	4.6	---	1.7	5.3	4.0	1.6	33.7	0.6	45.4	6.9

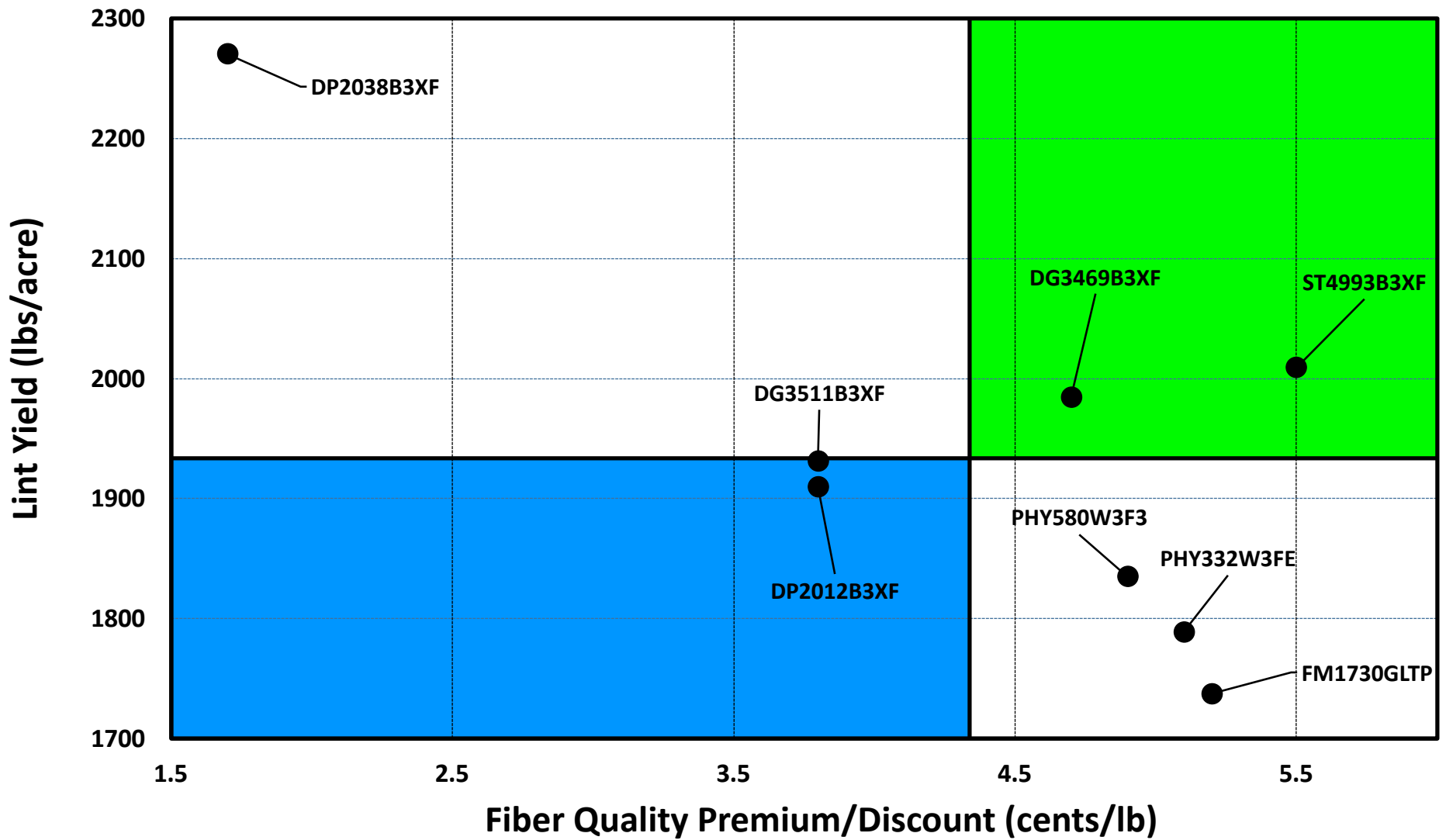
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\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Yield and fiber quality graph for the University of Arizona Upland Cotton Variety Testing (UCVT) program, Thatcher, AZ, 2022.

Bonita, AZ	
Soil Type	Sandy loam
Irrigation	Center Pivot
Tillage	Minimum
Planting Rate	48,000
Planting Date	4/28/22
Defoliation Date	10/15/22
Harvest Date	11/7/22

Variety	Plant Population (plants/foot)	Plant Vigor Rating (0-9 L-H)
DG3385B3XF	2.8	6.5
DG3511B3XF	2.8	5.5
DP2012B3XF	3.0	6.5
DP2115B3XF	3.0	5.5
FM1621GL	3.2	8.0
FM1730GLTP	3.3	7.0
PHY332W3FE	3.1	6.0
PHY411W3FE	3.2	6.5
<b>Mean</b>	<b>3.0</b>	<b>6.4</b>

Yield and fiber quality results from the University of Arizona Upland Cotton Variety Testing (UCVT) program, Bonita, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value** (\$/acre)
DynaGro	DG3511B3XF	1542.2 a*	39.5	21	39.0	4.0	33.8	1.22	2	82.9	5.6	\$887.94
FiberMax	FM1621GL	1498.2 ab	40.6	31	39.0	4.2	33.2	1.22	4	82.6	4.0	\$838.08
Deltapine	DP2012B3XF	1409.6 bc	36.7	21	38.5	3.8	30.3	1.21	2	81.6	5.3	\$807.81
Deltapine	DP2115B3XF	1389.8 bc	37.3	21	39.0	3.7	31.9	1.22	2	82.3	5.4	\$797.76
FiberMax	FM1830GLT	1371.4 c	43.2	21	39.0	4.2	33.4	1.23	2	81.9	5.5	\$788.53
DynaGro	DG3385B3XF	1340.3 c	35.8	21	38.5	4.0	30.9	1.21	2	82.8	5.4	\$769.44
Phytogen	PHY332W3FE	1336.8 c	35.0	21	39.5	4.0	33.8	1.24	2	82.0	5.5	\$768.99
Phytogen	PHY411W3FE	1224.2 d	37.1	31	37.5	3.8	32.5	1.17	4	82.1	1.7	\$656.19
FiberMax	FM1730GLTP	1190.8 d	35.1	21	40.5	3.9	34.0	1.27	3	82.5	5.3	\$682.44
<b>Mean</b>		1366.8	37.5	---	39	3.9	32.6	1.22	2	82.3	4.8	\$776.82
<b>LSD<sup>§</sup></b>		108.6	2.1	---	1.5	NS	1.8	0.04	1.3	NS	NS	101.1
<b>OSL<sup>†</sup></b>		0.0012	0.0009	---	0.0492	0.3488	0.0118	0.0156	0.0424	0.7151	0.3748	0.0128
<b>CV<sup>‡</sup></b>		3.2	2.2	---	1.5	5.7	2.2	1.3	21.3	2.8	33.3	5.2

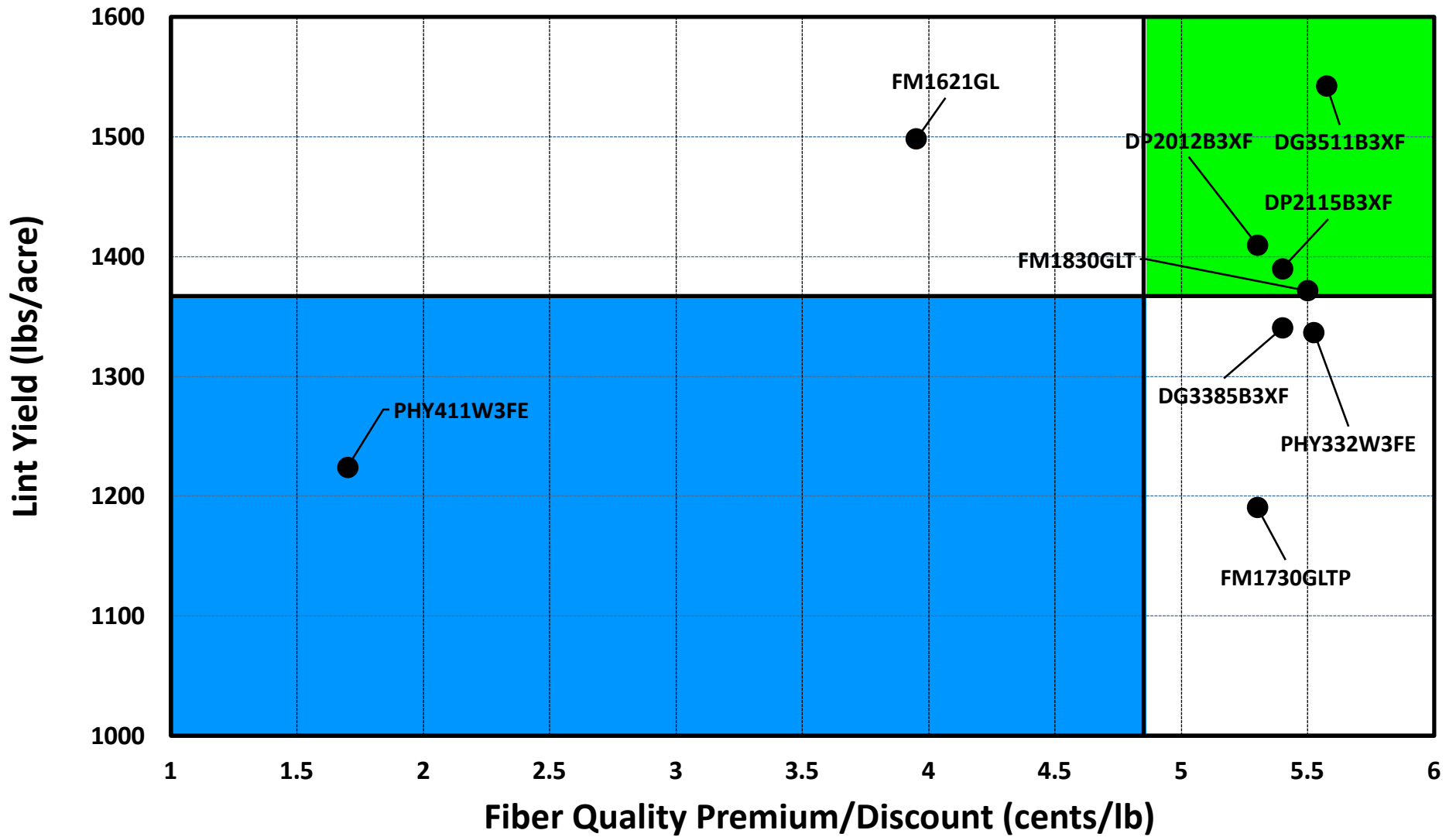
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†Observed Significance Level

‡Coefficient of Variation



Yield and fiber quality graph for the University of Arizona Upland Cotton Variety Testing (UCVT) program, Bonita, AZ, 2022.



# 2022 Upland Cotton Advanced Strain Testing Program

## University of Arizona

Cooperative Extension  
Experiment Station

### Trial Results

Funded in part by the Arizona Cotton Growers Association,  
Cotton Incorporated, and Participating Seed Companies

Prepared by:  
Dr. Randy Norton

Significant crop management dates and soil classification for each Upland Advanced Strain evaluation location conducted during the 2022 production season.

	<b>Yuma, AZ</b>	<b>Maricopa, AZ</b>	<b>Safford, AZ</b>
<b>County:</b>	Yuma	Pinal	Graham
<b>City:</b>	Yuma	Maricopa	Safford
<b>GPS Coordinates:</b>	32.7093, -114.7093	33.0618, -111.9739	32.8131, -109.6786
<b>Planting Date:</b>	3/24/22	4/21/22	5/2/22
<b>Defoliation Date:</b>	9/5/22	10/12/22	10/12/22
<b>Harvest Date:</b>	10/6/22	12/2/22	11/18/22
<b>Tillage:</b>	Conventional	Conventional	Conventional
<b>Soil Class:</b>	Holtville clay	Casa Grande sandy loam	Grabe clay loam
<b>Irrigation System:</b>	Furrow/Flood	Furrow/flood	Furrow/flood
<b>Harvester Type:</b>	Plot harvester	Plot harvester	Plot harvester
<b>Gin Type:</b>	Table-top gin	Table-top gin	Table-top gin

Early season emergence (plants/foot), vigor evaluations (1-9, L-H), and mid-season plant height and nodes above white flower (NAWF) for each entry in the Upland Advanced Strain evaluation, Yuma, AZ, 2022.

Seed Company	Variety	Plant Population (plants/foot)	Plant Vigor Rating (1-9 L-H)
Gowan Cottonseed	1432	3.7	7.3
Phytogen	1130B333-04W3FE	4.5	4.3
Phytogen	1130B336-04W3FE	4.8	7.3
Phytogen	1140A383-04W3FE	5.3	8.5
Phytogen	1140A385-04W3FE	4.3	7.0
Phytogen	1140B373-04W3FE	5.9	5.8
Phytogen	1150A450-04W3FE	4.3	6.8
Phytogen	1150B431-04W3FE	4.4	4.8
Phytogen	1150B434-04W3FE	4.4	4.5
Phytogen	1150B435-04W3FE	4.9	4.5
Phytogen	1150B437-04W3FE	4.5	5.3
Deltapine	DP2333B3XF	3.2	4.8
Deltapine	20R745NRB3XF	3.5	6.8
Deltapine	21R521XF	4.3	5.3
Deltapine	21R536XF	3.6	4.8
Deltapine	21R618B3XF	3.7	4.5
Deltapine	21R622B3XF	4.4	5.8
Deltapine	21R634B3XF	3.4	5.3
Deltapine	DP2335B3XF	4.9	7.3
Deltapine	DP2349NRB3XF	3.6	3.8
Deltapine	DP1044B2RF	2.6	3.5
Deltapine	DP1549B2RF	4.6	6.8
Deltapine	DP2012B3XF	4.7	6.8
FiberMax	FM1730GLTP	4.4	7.3
FiberMax	FM2398GLTP	3.9	4.3
NexGen	NG4936B3XF	3.8	4.3
Stoneville	ST4595B3XF	4.5	6.0
Stoneville	ST4990B3XF	4.5	7.8
Stoneville	ST4993B3XF	4.1	7.5
Stoneville	ST5091B3XF	4.8	6.5
<b>MEAN</b>		<b>4.3</b>	<b>5.8</b>

Yield and fiber quality data along with statistical analysis for each entry in the Upland Advanced Strain evaluation, Yuma, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Lint (%)	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Uniform (%)	Prem. (ct/lb)	Value** (\$/acre)	
Deltapine	DP2012B3XF	1948.7	a*	42.9	36	4.3	27.3	1.12	81.7	1.3	\$894.75
FiberMax	FM1730GLTP	1771.5	ab	42.8	36	4.9	30.3	1.11	82.8	-0.5	\$842.80
Stoneville	ST4595B3XF	1717.9	abc	43.6	35	5.1	29.5	1.10	81.2	-1.3	\$774.82
Deltapine	DP1549B2RF	1668.4	bcd	41.9	35	4.4	29.0	1.09	80.8	0.7	\$805.18
Stoneville	ST4990B3XF	1658.0	bcd	40.5	37	4.4	28.8	1.16	81.7	1.5	\$880.48
NexGen	NG4936B3XF	1634.0	bcde	41.8	37	4.3	27.7	1.14	81.8	1.5	\$831.28
Deltapine	21R521XF	1615.0	bcdef	44.8	37	5.0	33.8	1.15	84.0	0.7	\$864.58
Stoneville	ST5091B3XF	1607.0	bcdefg	42.9	35	4.6	27.0	1.09	81.2	-0.9	\$772.85
Gowen	1432	1600.2	bcdefg	36.3	41	3.9	40.9	1.28	84.9	2.2	\$751.28
Deltapine	DP1044B2RF	1559.1	bcdefgh	40.8	35	4.5	30.7	1.10	81.2	0.9	\$734.52
Phytogen	1150A450-04W3FE	1506.5	cdefghi	42.1	36	4.2	30.8	1.11	83.1	1.1	\$740.84
Deltapine	DP2335B3XF	1503.3	cdefghi	44.3	36	4.4	29.7	1.11	80.9	1.1	\$722.88
Stoneville	ST4993B3XF	1499.9	cdefghi	44.0	36	4.9	33.2	1.11	82.8	0.7	\$729.99
Deltapine	DP2349NRB3XF	1489.7	cdefghi	43.0	35	4.6	28.8	1.08	82.3	0.4	\$759.49
Deltapine	DP2333B3XF	1484.8	cdefghi	41.6	35	4.6	27.7	1.10	80.9	0.8	\$702.65
Phytogen	1140B373-04W3FE	1471.1	cdefghij	41.0	36	3.9	31.7	1.11	82.9	1.4	\$689.96
Deltapine	21R536XF	1462.8	cdefghij	41.1	36	4.6	30.5	1.11	82.4	1.3	\$733.49
Deltapine	21R622B3XF	1456.8	cdefghij	42.9	35	4.5	26.0	1.10	81.0	-2.2	\$707.31
FiberMax	FM2398GLTP	1429.8	defghij	41.7	36	5.0	31.2	1.11	82.3	0.6	\$654.70
Phytogen	1150B435-04W3FE	1423.4	defghij	40.1	34	4.7	31.3	1.07	81.4	0.4	\$682.02
Deltapine	20R745NRB3XF	1413.5	defghij	42.0	36	4.8	32.6	1.11	83.2	0.7	\$651.66
Phytogen	1140A385-04W3FE	1403.9	defghij	43.7	35	4.2	30.2	1.08	82.0	0.5	\$728.41
Phytogen	1150B434-04W3FE	1383.8	efghij	40.1	34	4.3	31.1	1.07	81.7	-0.7	\$620.87
Phytogen	1130B336-04W3FE	1361.6	fghijk	42.4	35	3.9	31.0	1.09	82.2	0.8	\$646.16
Phytogen	1150B437-04W3FE	1342.8	ghijk	39.8	35	4.8	31.9	1.08	82.3	0.7	\$649.14
Phytogen	1140A383-04W3FE	1307.0	hijk	41.7	36	3.9	30.3	1.13	81.4	1.6	\$626.91
Phytogen	1130B333-04W3FE	1277.5	ijk	42.2	36	4.2	31.4	1.12	83.2	1.5	\$661.89
Deltapine	21R634B3XF	1251.2	ijk	42.1	36	4.4	30.0	1.14	81.1	1.5	\$598.96
Deltapine	21R618B3XF	1209.6	jk	42.4	36	4.1	28.5	1.11	81.1	1.4	\$627.79
Phytogen	1150B431-04W3FE	1099.5	k	40.0	34	4.6	31.2	1.05	81.7	-0.7	\$530.76
<b>Mean</b>		1485.3		41.9	36	4.5	30.5	1.11	82.0	0.6	\$720.61
<b>LSD<sup>§</sup></b>		267.2		2.7	1.3	0.3	2.4	0.04	1.2	2.1	140.2
<b>OSL<sup>†</sup></b>		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0310	<0.0001
<b>CV<sup>‡</sup></b>		12.8		4.5	2.2	4.4	4.8	2.0	0.9	202.8	11.9

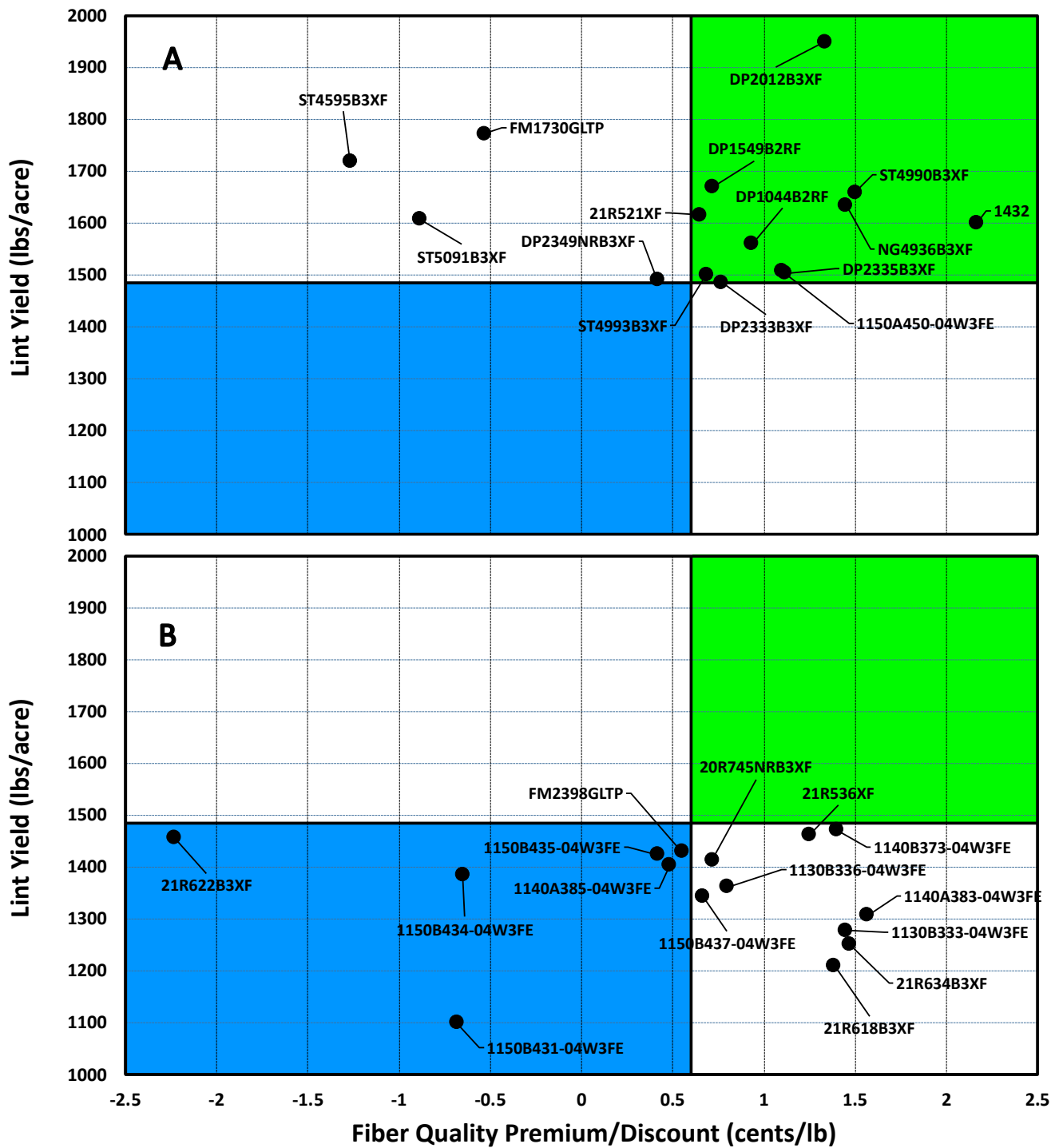
\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Lint yield (lbs./acre) plotted as a function of fiber quality premium/discount (cents/lb) for the top half (A), and bottom half (B). Vertical and horizontal lines represent the mean value for the two parameters. Varieties that fall in the upper right quadrant formed by the mean lines produced higher than average lint yield and fiber quality. Each entry for the Upland Advanced Strain evaluation is plotted for the Yuma, AZ location in 2022.

Early season emergence (plants/foot), vigor evaluations (1-9, L-H) for each entry in the Upland Advanced Strain evaluation, Maricopa, AZ, 2022.

Seed Company	Variety	Plant Population (plants/foot)	Plant Vigor Rating (1-9 L-H)
Phytogen	1130B333-04W3FE	4.6	6.5
Phytogen	1130B336-04W3FE	4.1	6.0
Phytogen	1140A383-04W3FE	4.4	6.8
Phytogen	1140A385-04W3FE	3.6	5.0
Phytogen	1140B373-04W3FE	4.6	6.0
Phytogen	1150A450-04W3FE	4.3	5.8
Phytogen	1150B431-04W3FE	3.7	6.3
Phytogen	1150B434-04W3FE	4.1	5.5
Phytogen	1150B435-04W3FE	3.4	5.0
Phytogen	1150B437-04W3FE	3.3	4.8
Deltapine	DP2333B3XF	2.8	4.5
Deltapine	20R745NRB3XF	4.2	4.3
Deltapine	21R521XF	3.4	4.5
Deltapine	21R536XF	3.3	4.8
Deltapine	21R618B3XF	3.7	5.5
Deltapine	21R622B3XF	3.8	5.3
Deltapine	21R634B3XF	3.9	4.8
Deltapine	DP2335B3XF	3.6	5.3
Deltapine	DP2349NRB3XF	3.2	5.3
Brownfield Seed	4X	3.1	5.3
Brownfield Seed	9X	4.2	5.8
BASF	BX2392B3XF	3.7	5.0
BASF	BX2394B3XF	4.2	5.0
BASF	BX2396B3XF	4.3	5.3
BASF	BX2398B3XF	3.5	5.3
Deltapine	DP1044B2RF	2.5	4.5
Deltapine	DP1549B2RF	4.1	6.5
Deltapine	DP2012B3XF	4.3	6.0
FiberMax	FM1730GLTP	3.9	6.0
FiberMax	FM2398GLTP	3.7	5.0
NexGen	NG4936B3XF	4.0	5.8
Stoneville	ST4595B3XF	4.2	6.0
Stoneville	ST4990B3XF	4.1	6.5
Stoneville	ST4993B3XF	3.6	5.5
Stoneville	ST5091B3XF	4.5	6.3
Brownfield Seed	TBE	3.6	6.5
Brownfield Seed	TBM	3.8	5.5
<b>MEAN</b>		<b>3.8</b>	<b>5.5</b>

Yield and fiber quality data along with statistical analysis for each entry in the Upland Advanced Strain evaluation, Maricopa, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Lint (%)	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Uniform (%)	Prem. (ct/lb)	Value** (\$/acre)	
Deltapine	DP1549B2RF	3564.0	a*	39.0	38	4.5	35.6	1.20	83.6	2.1	\$1,936.99
Deltapine	DP2349NRB3XF	3540.3	ab	44.4	38	4.8	34.2	1.20	84.4	1.3	\$1,796.14
Deltapine	21R536XF	3520.6	ab	41.9	38	4.7	33.8	1.19	84.4	1.3	\$1,890.68
Phytogen	1140A385-04W3FE	3458.1	abc	43.0	38	4.2	38.3	1.19	84.4	2.1	\$1,801.89
BASF	BX2394B3XF	3295.7	bcd	38.1	38	4.8	32.4	1.19	82.4	1.1	\$1,761.11
Stoneville	ST4595B3XF	3202.4	cde	42.4	39	4.7	32.7	1.22	83.7	2.0	\$1,681.45
Deltapine	20R745NRB3XF	3155.5	def	42.5	39	4.6	35.3	1.23	81.4	1.2	\$1,634.93
Phytogen	1140A383-04W3FE	3100.9	defg	41.3	39	4.4	35.1	1.24	83.5	2.1	\$1,650.31
Stoneville	ST4993B3XF	3095.2	defg	42.5	39	5.0	35.7	1.21	84.5	0.0	\$1,621.23
Deltapine	21R618B3XF	3092.1	defg	40.2	40	4.6	32.1	1.23	83.1	2.0	\$1,674.03
NexGen	NG4936B3XF	3080.2	defg	38.6	40	4.5	31.7	1.24	83.6	2.0	\$1,653.53
Deltapine	DP2335B3XF	3068.7	defgh	42.0	39	4.2	34.9	1.23	82.4	2.0	\$1,618.31
Stoneville	ST5091B3XF	3056.0	defgh	40.9	38	4.3	31.5	1.18	82.0	1.9	\$1,636.77
Deltapine	DP2333B3XF	3033.7	efghi	41.6	38	4.7	33.4	1.20	83.6	1.3	\$1,571.74
Deltapine	21R521XF	3024.8	efghij	45.6	38	5.2	36.7	1.18	84.8	-0.5	\$1,539.16
Stoneville	ST4990B3XF	3002.3	efghij	39.1	39	4.4	32.3	1.23	83.5	2.0	\$1,547.13
Phytogen	1130B333-04W3FE	2988.3	efghij	41.3	40	4.2	36.3	1.24	84.3	2.1	\$1,601.73
Deltapine	21R622B3XF	2985.0	efghij	41.1	40	4.9	34.0	1.24	84.2	1.3	\$1,583.15
Phytogen	1150A450-04W3FE	2979.3	efghij	40.2	40	4.4	36.1	1.24	84.8	2.1	\$1,582.38
Deltapine	21R634B3XF	2954.8	efghij	42.5	39	4.5	35.2	1.23	83.1	1.3	\$1,499.97
BASF	BX2396B3XF	2949.6	efghij	42.2	39	4.4	31.6	1.21	82.8	1.9	\$1,572.34
Deltapine	1150B437-04W3FE	2905.6	fghijk	38.6	37	4.8	37.0	1.15	83.4	1.9	\$1,582.51
BASF	BX2398B3XF	2903.7	fghijk	38.2	40	4.4	31.8	1.25	83.2	2.0	\$1,560.26
BASF	BX2392B3XF	2854.6	ghijkl	40.1	38	4.3	32.5	1.19	83.2	2.0	\$1,547.49
Phytogen	1150B435-04W3FE	2816.4	hijkl	38.0	37	4.5	37.5	1.18	83.3	1.9	\$1,469.94
Phytogen	1140B373-04W3FE	2774.9	ijkl	39.5	38	4.2	37.5	1.20	84.9	2.2	\$1,470.08
Deltapine	DP2012B3XF	2773.0	jkl	38.4	39	4.0	32.8	1.21	82.4	2.0	\$1,509.58
Deltapine	DP1044B2RF	2679.8	klm	39.2	38	4.7	33.3	1.18	83.6	2.0	\$1,470.42
FiberMax	FM2398GLTP	2677.5	klm	41.4	38	4.8	34.2	1.20	82.9	1.2	\$1,383.88
Phytogen	1150B434-04W3FE	2666.6	klm	38.2	37	4.8	36.8	1.17	83.7	1.2	\$1,424.40
Phytogen	1150B431-04W3FE	2661.9	klm	39.7	37	4.8	37.0	1.13	83.7	1.1	\$1,417.94
FiberMax	FM1730GLTP	2628.5	lmn	38.9	39	4.2	35.7	1.23	84.4	2.1	\$1,428.49
Phytogen	1130B336-04W3FE	2619.2	lmn	39.4	39	4.3	36.8	1.22	85.4	2.2	\$1,379.26
BSD	4X	2466.4	mno	36.1	38	4.3	34.0	1.18	82.2	2.0	\$1,345.72
BSD	TBE	2395.6	no	34.9	38	4.6	32.4	1.19	83.5	2.0	\$1,288.24
BSD	TBM	2378.3	no	35.7	37	4.4	33.9	1.17	84.2	2.0	\$1,215.55
BSD	9X	2274.6	o	36.0	38	4.4	34.9	1.20	83.5	2.0	\$1,213.94
<b>Mean</b>		2935.8		40.1	39.0	4.5	34.5	1.20	83.6	1.7	\$1,555.75
<b>LSD<sup>§</sup></b>		260.5		1.5	1.3	0.5	1.8	0.04	1.3	NS	1.4
<b>OSL<sup>†</sup></b>		<0.0001		<0.0001	<0.0001	0.0069	<0.0001	<0.0001	<0.0001	0.0729	<0.0001
<b>CV<sup>‡</sup></b>		6.3		2.6	2.1	7.3	3.2	2.0	1.0	50.6	6.4

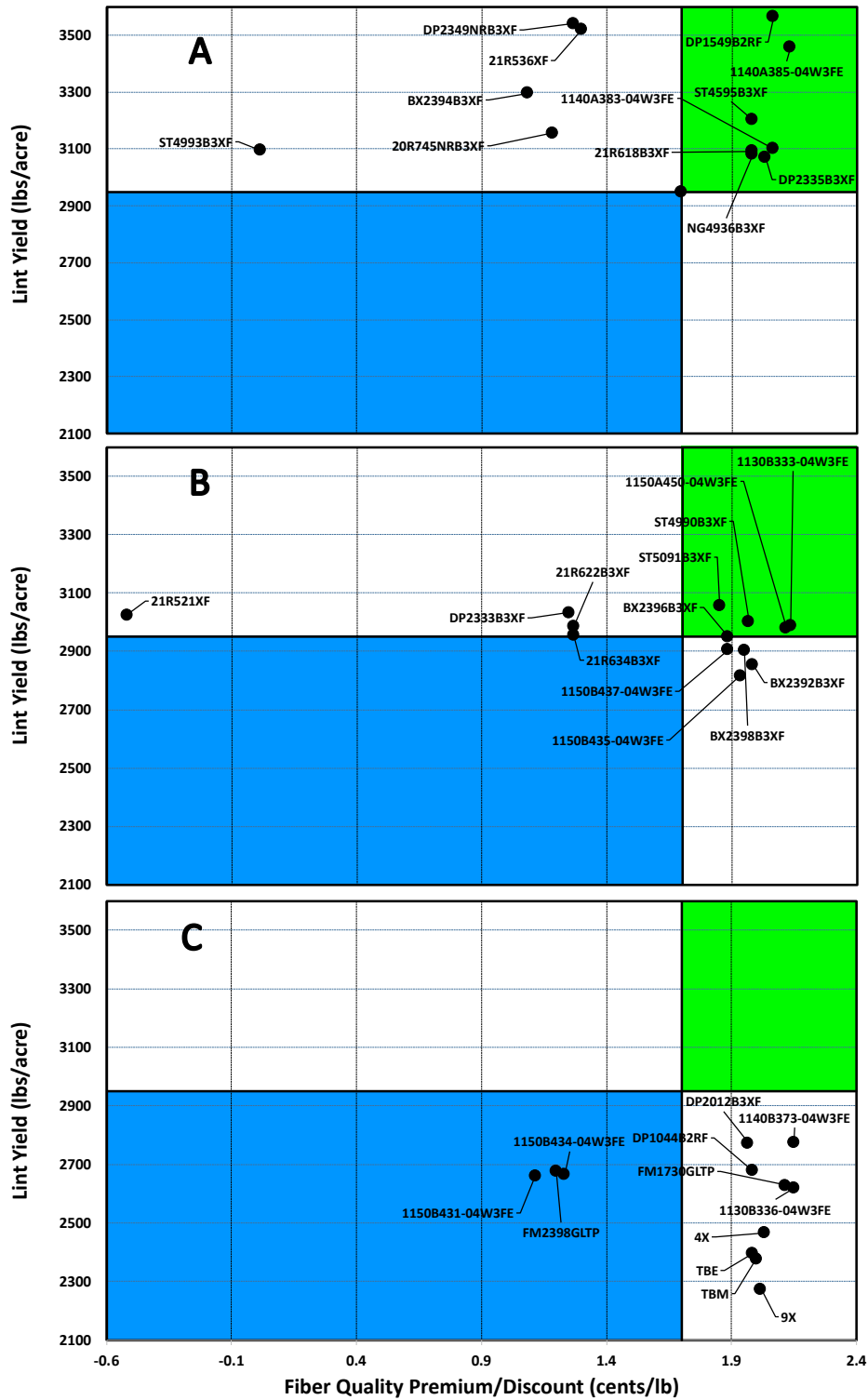
\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Lint yield (lbs./acre) plotted as a function of fiber quality premium/discount (cents/lb) for the top third (A), middle third (B), and bottom third (C). Vertical and horizontal lines represent the mean value for the two parameters. Varieties that fall in the upper right quadrant formed by the mean lines produced higher than average lint yield and fiber quality. Each entry for the Upland Advanced Strain evaluation is plotted for the Maricopa, AZ location in 2022.



Early season emergence (plants/foot) and vigor evaluations (1-9, L-H) for each entry in the Upland Advanced Strain evaluation, Safford, AZ, 2022.

Seed Company	Variety	Plant Population (plants/foot)	Plant Vigor Rating (1-9 L-H)
Phytogen	1130B333-04W3FE	3.0	5.3
Phytogen	1130B336-04W3FE	3.2	4.0
Phytogen	1140A383-04W3FE	3.9	7.0
Phytogen	1140A385-04W3FE	3.8	7.0
Phytogen	1140B373-04W3FE	3.7	6.5
Phytogen	1150A450-04W3FE	3.6	6.3
Phytogen	1150B431-04W3FE	3.2	5.3
Phytogen	1150B434-04W3FE	3.5	5.5
Phytogen	1150B435-04W3FE	3.6	6.3
Phytogen	1150B437-04W3FE	3.0	5.8
Deltapine	DP2333B3XF	3.0	6.5
Deltapine	20R745NRB3XF	2.7	3.5
Deltapine	21R521XF	2.4	5.5
Deltapine	21R536XF	2.3	4.3
Deltapine	21R618B3XF	2.4	4.3
Deltapine	21R622B3XF	3.2	5.5
Deltapine	21R634B3XF	3.5	5.5
Deltapine	DP2335B3XF	3.9	7.3
Deltapine	DP2349NRB3XF	2.3	5.3
Brownfield Seed	4X	3.2	6.3
Brownfield Seed	9X	3.3	7.0
BASF	BX2392B3XF	2.8	4.5
BASF	BX2394B3XF	3.7	5.8
BASF	BX2396B3XF	3.8	6.5
BASF	BX2398B3XF	3.0	5.5
Deltapine	DP1044B2RF	2.2	3.5
Deltapine	DP1549B2RF	3.8	6.3
Deltapine	DP2012B3XF	3.4	6.5
FiberMax	FM1730GLTP	4.0	6.8
FiberMax	FM2398GLTP	3.4	5.0
NexGen	NG4936B3XF	2.8	4.3
Stoneville	ST4595B3XF	3.5	6.0
Stoneville	ST4990B3XF	3.5	6.5
Stoneville	ST4993B3XF	2.2	4.0
Stoneville	ST5091B3XF	2.9	4.0
Brownfield Seed	TBE	3.0	5.0
Brownfield Seed	TBM	2.6	5.0
<b>MEAN</b>		<b>3.2</b>	<b>5.5</b>

Yield and fiber quality data along with statistical analysis for each entry in the Upland Advanced Strain evaluation, Safford, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)		Lint (%)	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Uniform (%)	Prem. (ct/lb)	Value** (\$/acre)
Deltapine	DP2335B3XF	2540.6	a*	47.3	38	4.5	33.4	1.19	82.3	1.1	\$1,377.22
Deltapine	21R521XF	2523.4	a	48.7	37	5.4	34.6	1.15	84.6	-1.4	\$1,311.48
BASF	BX2396B3XF	2284.3	b	46.9	38	4.9	30.5	1.17	83.8	0.4	\$1,203.18
Deltapine	21R634B3XF	2243.8	bc	46.5	39	4.8	35.1	1.21	82.9	1.2	\$1,186.41
Stoneville	ST4595B3XF	2210.2	bcd	48.1	38	4.9	32.0	1.19	83.4	1.1	\$1,204.68
Deltapine	DP2349NRB3XF	2179.1	bcde	47.9	37	5.2	32.7	1.16	84.0	-0.4	\$1,159.31
Deltapine	DP2333B3XF	2131.0	bcdef	47.4	37	5.3	32.2	1.17	82.6	-0.3	\$1,107.26
FiberMax	FM1730GLTP	2123.4	bcdef	47.3	38	5.0	34.3	1.19	84.5	0.5	\$1,145.24
Phytogen	1150B434-04W3FE	2105.0	bcdefg	44.9	36	4.9	34.6	1.11	82.6	0.7	\$1,116.66
Deltapine	DP1549B2RF	2084.3	bcdefgh	46.0	37	4.7	33.3	1.15	82.6	1.9	\$1,112.84
Deltapine	20R745NRB3XF	2048.1	cdefghi	47.6	38	4.9	32.5	1.17	81.9	0.3	\$1,094.14
Phytogen	1140B373-04W3FE	2035.6	cdefghi	45.3	37	4.9	34.4	1.17	84.9	0.5	\$1,055.29
Phytogen	1150B431-04W3FE	1996.1	defghij	43.9	36	4.9	35.2	1.10	82.6	-0.8	\$1,035.07
FiberMax	FM2398GLTP	1995.3	efghij	46.2	38	5.3	33.0	1.19	84.3	-1.3	\$1,011.05
BASF	BX2398B3XF	1975.4	efghijk	44.6	38	5.2	31.7	1.19	83.0	-1.5	\$990.45
Phytogen	1150A450-04W3FE	1951.3	fghijk	46.1	37	5.1	32.7	1.15	83.8	-0.6	\$1,032.11
Phytogen	1140A383-04W3FE	1919.3	fghijkl	45.7	39	5.0	35.1	1.21	84.2	0.5	\$967.43
Deltapine	DP1044B2RF	1894.0	ghijklm	44.7	36	5.1	31.2	1.13	83.4	0.3	\$973.81
Phytogen	1150B435-04W3FE	1888.1	hijklm	43.9	35	5.3	33.1	1.10	82.1	-1.3	\$946.74
Phytogen	1140A385-04W3FE	1876.5	hijklm	46.9	37	5.0	34.5	1.14	84.1	0.4	\$974.16
BSD	9X	1863.6	ijklm	43.2	37	4.9	35.1	1.15	83.4	1.2	\$1,011.49
BSD	4X	1857.5	ijklm	44.0	37	4.7	33.0	1.18	82.2	1.9	\$995.45
Phytogen	1130B336-04W3FE	1856.4	ijklm	44.4	37	4.9	33.7	1.16	84.7	0.3	\$1,004.25
BASF	BX2394B3XF	1842.2	ijklm	46.0	37	4.9	30.6	1.15	83.2	-0.6	\$907.51
Phytogen	1150B437-04W3FE	1841.9	ijklm	45.3	36	5.2	33.8	1.12	82.2	-1.3	\$925.00
Phytogen	1130B333-04W3FE	1819.0	jklm	45.1	37	4.9	33.2	1.15	83.6	0.4	\$924.69
Deltapine	DP2012B3XF	1817.0	jklm	45.5	38	5.0	32.0	1.18	84.0	-1.0	\$901.95
Deltapine	21R536XF	1771.1	klmn	47.8	37	5.1	33.4	1.15	84.1	-0.4	\$959.41
Stoneville	ST4990B3XF	1763.8	klmn	45.3	38	5.0	32.9	1.20	84.4	-0.4	\$912.34
Deltapine	21R622B3XF	1719.2	lmno	47.7	36	5.1	29.6	1.14	83.1	-0.1	\$928.66
Stoneville	ST5091B3XF	1710.9	lmno	47.6	37	5.1	30.4	1.16	82.3	-0.7	\$896.81
BSD	TBE	1704.2	mno	42.7	37	5.0	31.6	1.16	83.8	0.3	\$866.82
Deltapine	21R618B3XF	1691.5	mno	48.0	38	4.8	30.9	1.18	82.9	1.0	\$900.45
Stoneville	ST4993B3XF	1686.4	mno	46.9	37	5.2	34.2	1.15	84.6	-0.6	\$860.37
BASF	BX2392B3XF	1598.6	nop	46.0	37	5.0	31.4	1.16	83.5	-0.4	\$846.53
BSD	TBM	1545.6	op	43.2	37	4.9	31.8	1.14	82.9	0.2	\$791.54
NexGen	NG4936B3XF	1398.3	p	44.0	39	4.8	32.7	1.22	84.0	0.7	\$690.11
<b>Mean</b>		1932.2		45.9	37	5.0	32.9	1.16	83.4	0.04	\$1,008.86
<b>LSD<sup>§</sup></b>		214.2		2.1	1.2	0.3	2.0	0.03	1.1	1.9	141.2
<b>OSL<sup>†</sup></b>		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0263	<0.0001
<b>CV<sup>‡</sup></b>		7.9		3.2	1.9	3.4	3.7	1.7	0.8	2778.2	8.6

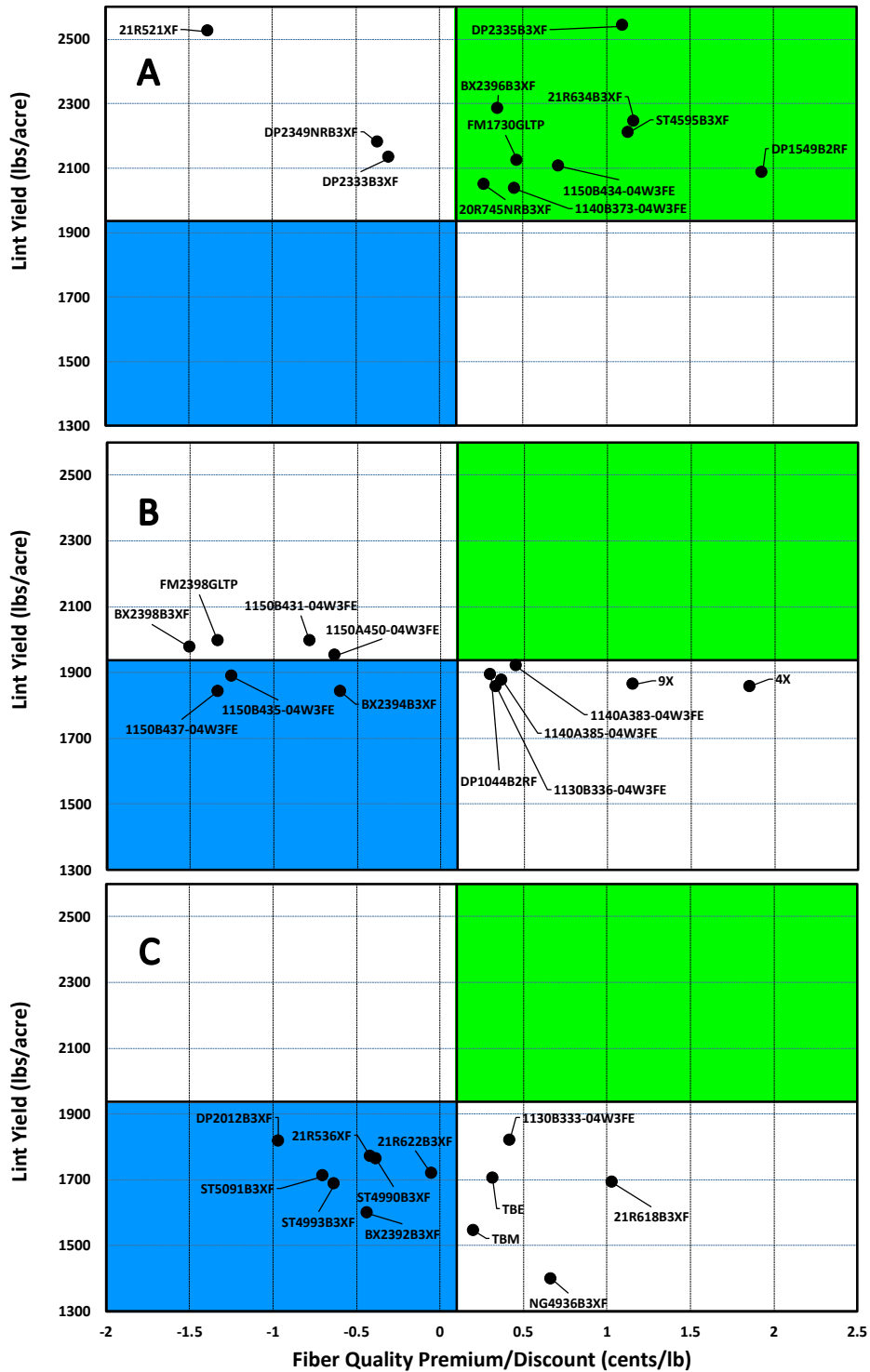
\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation



Lint yield (lbs./acre) plotted as a function of fiber quality premium/discount (cents/lb) for the top third (A), middle third (B), and bottom third (C). Vertical and horizontal lines represent the mean value for the two parameters. Varieties that fall in the upper right quadrant formed by the mean lines produced higher than average lint yield and fiber quality. Each entry for the Upland Advanced Strain evaluation is plotted for the Safford, AZ location in 2022.

# 2022 Pima Cotton Variety Testing Program

University of Arizona  
Cooperative Extension  
Experiment Station

Trial Results

Funded in part by Participating Seed Companies

Prepared by:  
Dr. Randy Norton

Thatcher, AZ	
Soil Type	Clay loam
Irrigation	Furrow/Flood
Tillage	Conventional
Planting Rate	72,000
Planting Date	4/5/22
Defoliation Date	9/20/22
Harvest Date	11/3/22

Variety	Plant Population (plants/foot)	Plant Vigor Rating (0-9 L-H)
21R146R2P	4.7	5.7
DP347RF	5.2	6.3
DP359RF	4.6	6.7
PHY807RF	4.0	6.3
PHY881RF	3.8	5.0
PX1180A101-02RF	4.4	6.0
Mean	4.5	6.0

Yield and fiber quality results from the University of Arizona Pima Cotton Variety Testing (PCVT) program, Thatcher, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Uniformity Index (%)	Price (cents/lb)	Value** (\$/acre)
Am. Pima	DP347RF	1557.6 a*	41.4	1	48	5.1	43.6	1.41	87.8	95.7	\$1,531.18
Phytogen	PHY881RF	1483.0 ab	40.3	1	52	5.0	47.0	1.51	88.5	95.7	\$1,401.64
Phytogen	PX1180A101-02RF	1442.0 b	39.3	1	52	4.5	46.1	1.49	88.6	95.7	\$1,356.94
Am. Pima	DP359RF	1396.2 b	37.7	1	49	4.6	47.1	1.42	87.1	95.7	\$1,334.33
Am. Pima	21R146R2P	1365.3 b	38.5	1	49	4.8	47.1	1.42	87.1	95.7	\$1,294.31
Phytogen	PHY807RF	1350.5 b	37.1	1	48	4.6	47.7	1.42	87.9	95.7	\$1,301.52
<b>Mean</b>		1432.4	39.1	---	50	4.8	46.4	1.4	87.8	95.7	1370.0
<b>LSD<sup>§</sup></b>		108.3	2.0	---	1.9	0.6	1.7	0.05	2.3	---	145.83
<b>OSL<sup>†</sup></b>		0.0129	0.0057	---	0.0068	0.1996	0.0133	0.0163	0.4891	---	0.0545
<b>CV<sup>‡</sup></b>		4.2	2.7	---	1.5	4.8	1.4	1.5	1.0	---	4.1

\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation

Early season emergence (plants/foot) and vigor evaluations (1-9, L-H) for each entry in the Pima Advanced Strain evaluation, Maricopa, AZ, 2022.

Seed Company	Variety	Plant Population (plants/foot)	Plant Vigor Rating (1-9 L-H)
Gowan	1432	1.7	6.0
American Pima	OA-22-01	2.4	6.8
American Pima	OA-22-02	2.1	6.3
American Pima	OA-22-03	2.6	6.5
American Pima	OA-22-04	2.6	6.8
American Pima	OA-22-05	2.1	6.0
American Pima	OA-22-06	2.2	6.8
American Pima	OA-22-07	2.3	6.5
American Pima	OA-22-08	2.3	5.8
American Pima	OA-22-09	2.2	5.8
American Pima	OA-22-10	2.2	6.5
Phytogen	PHY807RF	2.3	7.0
Phytogen	PHY881RF	1.8	6.3
Phytogen	PX1180A101-02RF	2.1	7.8
Phytogen	PX1180A103-02RF	2.4	7.5
Phytogen	PX1180A105-02RF	2.2	6.8
<b>MEAN</b>		<b>2.2</b>	<b>6.5</b>

Yield and fiber quality data along with statistical analysis for each entry in the Pima Advanced Strain evaluation, Maricopa, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Lint (%)	Color	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Uniform (%)	Base Price (cents/lb)	Value** (\$/acre)
Gowan	1432	1919.8 a*	31.0	2	49	5.1	38.9	1.39	86.3	95.5	\$1,777.47
Am. Pima	OA-22-02	1524.2 b	33.1	2	49	5.2	39.8	1.43	87.1	95.5	\$1,437.68
Am. Pima	OA-22-03	1513.3 b	35.5	2	49	5.2	40.9	1.41	87.3	95.5	\$1,306.69
Am. Pima	OA-22-05	1509.8 b	38.3	2	49	4.9	40.1	1.42	87.3	95.5	\$1,334.43
Am. Pima	OA-22-08	1471.7 b	35.8	2	50	5.2	40.4	1.46	87.8	95.5	\$1,400.79
Am. Pima	OA-22-06	1432.6 b	33.3	2	49	4.9	42.4	1.42	87.3	95.5	\$1,412.18
Am. Pima	OA-22-01	1431.5 b	35.5	2	48	5.3	38.6	1.41	87.7	95.5	\$1,357.20
Am. Pima	OA-22-10	1397.7 bc	33.5	2	51	4.9	41.3	1.46	87.6	95.5	\$1,244.60
Am. Pima	OA-22-04	1396.0 bc	34.3	2	49	5.0	39.4	1.42	86.0	95.5	\$1,388.93
Phytogen	PX1180A105-02RF	1392.2 bc	36.0	2	50	5.2	41.3	1.46	88.1	92.6	\$1,182.14
Am. Pima	OA-22-09	1380.0 bc	38.1	2	48	4.8	39.3	1.41	86.9	95.5	\$1,347.14
Phytogen	PX1180A103-02RF	1327.7 bc	36.3	2	51	4.9	41.9	1.48	87.6	95.5	\$1,134.43
Phytogen	PHY807RF	1313.5 bc	34.0	2	49	4.8	42.9	1.43	87.5	95.5	\$1,269.40
Phytogen	PHY881RF	1289.3 bc	34.5	2	51	4.8	42.5	1.47	87.9	95.5	\$1,070.42
Phytogen	PX1180A101-02RF	1100.1 cd	36.3	2	52	4.6	41.4	1.50	87.5	95.5	\$1,037.38
Am. Pima	OA-22-07	984.8 d	34.3	2	51	5.1	40.7	1.47	87.8	95.5	\$915.34
<b>Mean</b>		1399.0	35.0	2	50	5.0	40.7	1.44	87.4	95.3	\$1,292.86
<b>LSD<sup>§</sup></b>		299.01	1.8	---	2.0	NS	3.1	0.04	1.7	NS	333.6
<b>OSL<sup>†</sup></b>		0.0004	<0.0001	---	0.0026	0.3507	0.0144	0.0005	0.4863	0.5382	0.0045
<b>CV<sup>‡</sup></b>		15.0	3.5	---	2.3	6.4	4.4	1.7	1.1	1.3	15.0

\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation

Early season emergence (plants/foot) and vigor evaluations (1-9, L-H) for each entry in the Pima Advanced Strain evaluation, Safford, AZ, 2022.

Seed Company	Variety	Plant Population (plants/foot)	Plant Vigor Rating (1-9 L-H)
Gowan	1432	2.7	6.3
American Pima	OA-22-01	4.3	6.0
American Pima	OA-22-02	4.3	6.0
American Pima	OA-22-03	4.6	6.5
American Pima	OA-22-04	3.9	5.8
American Pima	OA-22-05	4.3	6.3
American Pima	OA-22-06	4.1	6.8
American Pima	OA-22-07	4.4	6.8
American Pima	OA-22-08	4.5	6.3
American Pima	OA-22-09	3.9	5.0
American Pima	OA-22-10	4.2	6.5
Phytogen	PHY807RF	4.3	7.3
Phytogen	PHY881RF	3.2	5.0
Phytogen	PX1180A101-02RF	4.8	7.5
Phytogen	PX1180A103-02RF	4.4	6.3
Phytogen	PX1180A105-02RF	3.9	6.8
<b>MEAN</b>		<b>4.1</b>	<b>6.3</b>



Yield and fiber quality data along with statistical analysis for each entry in the Pima Advanced Strain evaluation, Safford, AZ, 2022.

Seed Company	Variety	Lint Yield (lbs/acre)	Lint (%)	Color	Staple (32nds)	Micro.	Strength (g/tex)	Length (in)	Uniform (%)	Base Price (cents/lb)	Value** (\$/acre)	
Phytogen	PHY807RF	1118.6	a*	39.7	2	48	5.1	43.9	1.40	87.3	95.3	\$1,066.58
Gowan	1432	1117.4	a	35.3	2	46	5.1	40.0	1.35	86.6	92.9	\$1,039.04
Am. Pima	OA-22-05	1031.9	ab	42.1	2	50	5.1	44.2	1.43	88.3	95.5	\$984.92
Am. Pima	OA-22-07	971.3	bc	40.2	2	49	5.5	42.4	1.39	87.4	95.5	\$927.14
Am. Pima	OA-22-01	968.4	bc	41.7	2	49	5.3	44.1	1.42	88.3	95.5	\$924.37
Am. Pima	OA-22-09	938.6	bc	41.1	2	49	5.2	43.5	1.42	88.5	95.5	\$895.86
Phytogen	PHY881RF	868.4	cd	39.4	2	51	5.3	43.5	1.48	88.3	95.5	\$829.42
Am. Pima	OA-22-08	800.7	de	39.9	2	48	5.3	43.0	1.40	86.9	95.3	\$763.26
Phytogen	PX1180A105-02RF	794.2	de	38.9	2	52	5.1	44.7	1.48	88.8	95.5	\$758.03
Am. Pima	OA-22-06	730.8	ef	38.0	2	48	5.1	43.7	1.40	87.1	95.5	\$697.52
Am. Pima	OA-22-10	728.8	ef	37.8	2	49	5.2	44.6	1.42	88.2	95.5	\$695.68
Phytogen	PX1180A101-02RF	685.7	efg	39.0	2	49	5.1	44.7	1.43	87.6	95.5	\$654.45
Am. Pima	OA-22-03	645.7	fg	38.1	2	48	5.1	44.4	1.39	88.2	95.3	\$615.65
Am. Pima	OA-22-02	575.8	gh	39.1	2	48	5.1	42.8	1.39	86.9	95.5	\$549.64
Am. Pima	OA-22-04	574.1	gh	38.6	2	48	5.4	44.1	1.38	87.6	95.5	\$548.01
Phytogen	PX1180A103-02RF	444.1	h	39.5	2	50	5.0	41.7	1.45	87.7	95.5	\$423.89
<b>Mean</b>		812.2		39.3	---	49	5.2	43.4	1.41	87.7	95.3	\$773.34
<b>LSD<sup>§</sup></b>		137.3		1.5	---	1.4	NS	NS	0.0378	1.0096	NS	134.9
<b>OSL<sup>†</sup></b>		<0.0001		<0.0001	---	<0.0001	0.1963	0.1689	<0.0001	0.0010	0.1678	<0.0001
<b>CV<sup>‡</sup></b>		11.9		2.7	---	2.0	4.3	4.8	1.9	0.8	1.1	12.2

\*Lint yield means followed by the same letter are not statistically different according to Fisher's LSD (Least Significance Difference) means separation ( $\alpha = 0.05$ )

\*\*Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§Least Significant Difference

†Observed Significance Level

‡Coefficient of Variation