

2016 University of California UPLAND / ACALA COTTON VARIETY TRIAL

Dec. 21, 2016 update

Seed cotton yields, mini-gin calculated lint percent and gin turnout, calculated lint yield averages

Questions?	Cooperative Project by:
contact: Bob Hutmacher (Univ. CA) Cell: (559) 260-8957 email: rbhutmacher@ucdavis.edu	University of CA Coop. Extension (UC-ANR) / Univ. CA Davis Plant Sci Dept. / Univ. CA West Side REC Funding by: CA Cotton Growers&Ginners Assoc., CA Cotton Alliance, Cotton Incorporated, UC-ANR/UCCE, UC Davis Plant Sci. Dept. Cooperators: multiple growers, Steve Wright, Dan Munk, Brian Marsh, Bill Weir, Mark Keeley, Raul Delgado, TariLee Frigulti, SJV Quality Cotton Growers Assoc.-Shafter, Univ CA Cooperative Extension Tulare, Kings, Fresno, Kern, Merced Counties

LOCATION: **West Side Research & Extension Center - Fresno County (FIELD 16)**

HARVEST DATE: 10/14

row spacing = 40 inches

VARIETY	SEED COMPANY	SEED COTTON (lbs/acre)	MINI-GIN LINT PERCENT (%)	MINI-GIN GIN TURNOUT (%)	LINT YIELD* *(calculated as seed cotton yield times Mini-Gin Turnout)	LINT YIELD (as % of Phy-725RF yield)	SEEDCOTTON YIELD (as % of Phy-725 RF yield)
PHY 725RF	Phytogen	6118	42.1	40.8	2496	100	100
PHY 764WRF	Phytogen	5555	46.1	45.0	2499	100	91
DAYTONA RF	Bayer	5444	46.5	45.2	2461	99	89
FM 1830GLT	Bayer	5852	47.2	45.1	2637	106	96
FM 1900GLT	Bayer	5745	45.1	44.2	2542	102	94
FM 1911GLT	Bayer	5436	46.6	45.2	2456	98	89
FM 2007GLT	Bayer	5998	44.4	43.1	2586	104	98
FM 2334GLT	Bayer	5530	46.4	45.2	2502	100	90
DP 1614B2XF	Monsanto / Delta Pine	5874	48.9	47.4	2782	111	96
DP 1555B2RF	Monsanto / Delta Pine	5888	48.5	46.2	2717	109	96
DP 1646B2XF	Monsanto / Delta Pine	6452	48.7	47.1	3039	122	105
DP 1639B2XF	Monsanto / Delta Pine	6055	49.3	47.8	2896	116	99
BX 1739GLT	Bayer	5079	47.7	46.4	2358	94	83
MEAN		5771	46.7	45.3	2613		
^a LSD 0.05		338	0.8	0.8	154		
^b %CV		4.1	1.2	1.2	4.1		
^c P		0.000	0.000	0.000	0.000		

* **NOTE: LINT YIELD VALUES** shown were calculated using a mini-gin. This simple ginning method differs from UCCE methods in prior years (mini-gin does not have commercial gin style cleaners. Corrections were calculated for moisture loss/gain between field harvest weight timing and ginning timing, and basic gin loss estimates are typically lower with use of mini-gin. All samples were handled in an identical manner in terms of mini-gin operations, so gin turnout and lint percent numbers represent relative variety differences.

^a LSD = least significant difference at 5% level (differences in mean values shown that differ by more than LSD value shown are significantly different)

^b C.V. = coefficient of variation across replications

^c P = probability (if value shown is 0.05 or less, there is greater than a 95% probability of significant differences between mean values shown)

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LOCATION: West Side Research & Extension Center - Fresno County (FIELD 16)

HARVEST DATE: 10/14

row spacing = 40 inches

VARIETY	SEED COMPANY	SEED COTTON (lbs/acre)	2016 MINI-GIN LINT PERCENT (%)	2016 MINI-GIN GIN TURNOUT (%)	for comparison:	
					GIN TURNOUTS PERCENT from 2015 COTTON TRIALS (**2015 analyses done using Shafter Research Gin)	
					West Side REC	Shafter REC
PHY 725RF	Phytogen	6118	42.1	40.8	32.6	32.1
PHY 764WRF	Phytogen	5555	46.1	45.0	34.8	33.9
DAYTONA RF	Bayer	5444	46.5	45.2	35.8	36.2
FM 1830GLT	Bayer	5852	47.2	45.1	35.9	37.4
FM 1900GLT	Bayer	5745	45.1	44.2	34.7	35.7
FM 1911GLT	Bayer	5436	46.6	45.2		
FM 2007GLT	Bayer	5998	44.4	43.1	33.1	34
FM 2334GLT	Bayer	5530	46.4	45.2	35.7	37.2
DP 1614B2XF	Monsanto / Delta Pine	5874	48.9	47.4		
DP 1555B2RF	Monsanto / Delta Pine	5888	48.5	46.2		
DP 1646B2XF	Monsanto / Delta Pine	6452	48.7	47.1		
DP 1639B2XF	Monsanto / Delta Pine	6055	49.3	47.8		
BX 1739GLT	Bayer	5079	47.7	46.4		
MEAN		5771	46.7	45.3	* if values not shown, not in 2015 trials	

** Shafter Research Gin is a smaller scale, commercial type gin with lint cleaners. The lint yields shown on the SUMMARY PAGE for this site were determined using the mini-gin turnout % data, which tends to be significantly higher than a more standard type of gin (such as the "Shafter Research Gin" which incorporates lint cleaners). 2015 trial gin turnouts determined using the "Shafter Research Gin" are provided for information only. Since they were determined using different fields in a different year, there is no expectation that the same gin turnouts would apply for 2016 field sites.

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LOCATION: Shafter Research Station - Kern County

HARVEST DATE: 10/27

row spacing = 40 inches

VARIETY	SEED COMPANY	SEED COTTON (lbs/acre)	MINI-GIN LINT PERCENT (%)	MINI-GIN GIN TURNOUT (%)	LINT YIELD* *(calculated as seed cotton yield times Mini-Gin Turnout)	LINT YIELD (as % of Phy-725RF yield)	SEEDCOTTON YIELD (as % of Phy-725 RF yield)
PHY 725RF	Phytogen	4278	39.7	38.3	1644	100	100
PHY 764WRF	Phytogen	4718	41.7	40.3	1905	116	110
DAYTONA RF	Bayer	4416	40.0	38.7	1710	104	103
FM 1830GLT	Bayer	3460	44.7	43.5	1499	91	81
FM 1900GLT	Bayer	4275	42.8	41.7	1781	108	100
FM 1911GLT	Bayer	4535	43.9	42.8	1939	118	106
FM 2007GLT	Bayer	4232	41.4	40.2	1699	103	99
FM 2334GLT	Bayer	4161	44.1	43.0	1791	109	97
DP 1614B2XF	Monsanto / Delta Pine	4789	46.0	44.7	2140	130	112
DP 1555B2RF	Monsanto / Delta Pine	4190	45.9	44.8	1872	114	98
DP 1646B2XF	Monsanto / Delta Pine	4453	45.4	44.2	1965	120	104
DP 1639B2XF	Monsanto / Delta Pine	3827	44.4	43.0	1644	100	89
BX 1739GLT	Bayer	3377	45.3	43.9	1481	90	79
MEAN		4209	43.5	42.2	1775		
^a LSD 0.05		688	1.0	1.2	273		
^b %CV		11.4	1.7	2.0	10.7		
^c P		0.003	0.000	0.000	0.001		

*** NOTE: LINT YIELD VALUES** shown were calculated using a mini-gin. This simple ginning method differs from UCCE methods in prior years (mini-gin does not have commercial gin style cleaners. Corrections were calculated for moisture loss/gain between field harvest weight timing and ginning timing, and basic gin loss estimates are typically lower with use of mini-gin. All samples were handled in an identical manner in terms of mini-gin operations, so gin turnout and lint percent numbers represent relative variety differences.

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LOCATION: Shafter Research Station - Kern County

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FM 2334GLT	Bayer	4161	44.1	43.0	35.7	37.2
DP 1614B2XF	Monsanto / Delta Pine	4789	46.0	44.7		
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DP 1646B2XF	Monsanto / Delta Pine	4453	45.4	44.2		
DP 1639B2XF	Monsanto / Delta Pine	3827	44.4	43.0		
BX 1739GLT	Bayer	3377	45.3	43.9		

* if values not shown, not in 2015 trials

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