

2019 University of California PIMA COTTON VARIETY TRIALS					February 13, 2020 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)		University of CA Coop. Extension (UC-ANR) / Univ. CA Davis Plant Sci Dept. / Univ. CA West Side REC					
Cell: (559) 260-8957		Funding by: CA Cotton Growers&Ginners Assoc., CA Cotton Alliance, UC-ANR/UCCE, UC Davis Plant Sci. Dept.					
email: rbhutmacher@ucdavis.edu		Cooperators: multiple growers, Dan Munk, Brian Marsh, Lynn Sosnoskie, Bill Weir, Mark Keeley, Raul Delgado, Jorge Angeles, Tarilee Frigulti-Schramm, Univ. CA ANR - Cooperative Extension Tulare, Kings, Fresno, Kern, Merced Counties;					
		San Joaquin Quality Cotton Growers Assoc.-Shafter Research Station; Various Seed Companies					
LOCATION: WEST SIDE RESEARCH CENTER - Five Points area - Fresno County					HARVEST DATE: 10/28		
row spacing = 40 inches		* moderate to high early season lygus pressure					
PLANTING DATE: 4/19					LINT YIELD*		
		SEED		Mini-Gin	(calculated as seed cotton yield	LINT YIELD	SEEDCOTTON YIELD
		COTTON	Mini-Gin	GIN	times mini-gin turnout)	(calculated as a % of	(calculated as a % of
VARIETY	SEED COMPANY	LBS/A	LINT %	T.O. %	LBS/A	Phy-881 RF Yield) ^d	Phy-881 RF Yield) ^d
DP 341 RF	Monsanto / DPL	4417	41.5	40.9	1807	104	108
DP 348 RF	Monsanto / DPL	4020	42.2	41.4	1665	96	98
DP 359 RF	Monsanto / DPL	3712	42.8	42.0	1559	90	91
PHY PX8504 RF	Phytogen	3914	43.4	42.9	1677	97	96
PHY 881 RF	Phytogen	4092	42.8	42.4	1733	100	100
PHY 888 RF	Phytogen	4090	42.4	41.8	1711	99	100
HA 1432	Hazera	5940	38.9	38.7	2303	133	145
PHY 841 RF	Phytogen	4047	43.2	42.8	1732	100	99
MEAN		4279	42.2	41.6	1773		
LSD 0.05 ^a		528	0.8	0.7	213		
%CV ^b		8.4	1.4	1.1	8.2		
P ^c		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							
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			San Joaquin Quality Cotton Growers Assoc.-Shafter Research Station; Various Seed Companies					
LOCATION: HANSEN RANCHES - Corcoran area - Kings County					HARVEST DATE: 11/15			
row spacing = 30 inches		*some early season hail damage to field						
PLANTING DATE: 4/17					LINT YIELD*			
		SEED		Mini-Gin	(calculated as seed cotton yield	LINT YIELD	SEEDCOTTON YIELD	
		COTTON	Mini-Gin	GIN	times mini-gin turnout)	(calculated as a % of	(calculated as a % of	
VARIETY	SEED COMPANY	LBS/A	LINT %	T.O. %	LBS/A	Phy-881 RF Yield) ^d	Phy-881 RF Yield) ^d	
DP 341 RF	Monsanto / DPL	4953	40.4	39.6	1959	95	96	
DP 348 RF	Monsanto / DPL	5120	39.4	38.7	1982	96	99	
DP 359 RF	Monsanto / DPL	5174	41.3	40.5	2093	102	100	
PHY PX8504 RF	Phytogen	5104	41.3	40.5	2068	101	99	
PHY 881 RF	Phytogen	5164	40.4	39.8	2057	100	100	
PHY 888 RF	Phytogen	5011	40.2	39.5	1977	96	97	
MEAN		5088	40.5	39.8	2023			
LSD 0.05 ^a			0.7	0.8	80			
LSD 0.10 ^a		132						
%CV ^b		2.1	1.2	1.4	2.6			
P ^c		0.061	0.001	0.002	0.010			
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LOCATION: FARMING D - Five Points area - Fresno County					HARVEST DATE: 10/31			
row spacing = 33 inches								
PLANTING DATE: 4/09					LINT YIELD*			
		SEED		Mini-Gin	(calculated as seed cotton yield	LINT YIELD	SEEDCOTTON YIELD	
		COTTON	Mini-Gin	GIN	times mini-gin turnout)	(calculated as a % of	(calculated as a % of	
VARIETY	SEED COMPANY	LBS/A	LINT %	T.O. %	LBS/A	Phy-881 RF Yield) ^d	Phy-881 RF Yield) ^d	
DP 341 RF	Monsanto / DPL	5755	41.8	40.7	2340	105	108	
DP 348 RF	Monsanto / DPL	5326	41.8	40.9	2179	98	100	
DP 359 RF	Monsanto / DPL	5167	42.4	41.5	2143	97	97	
PHY PX8504 RF	Phytogen	5168	42.6	41.7	2154	97	97	
PHY 881 RF	Phytogen	5345	42.6	41.6	2220	100	100	
PHY 888 RF	Phytogen	5425	42.3	41.1	2228	100	101	
MEAN		5364	42.3	41.3	2211			
LSD 0.05 ^a		NS	0.6	0.5	NS			
%CV ^b		6.1	0.9	0.9	6.2			
P ^c		0.180	0.017	0.007	0.406			
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LOCATION: BUTTONWILLOW AREA - Kern County					HARVEST DATE: 10/31			
row spacing = 38 inches		* moderate to high early season lygus pressure						
PLANTING DATE: 4/15					LINT YIELD*			
		SEED		Mini-Gin	(calculated as seed cotton yield	LINT YIELD	SEEDCOTTON YIELD	
		COTTON	Mini-Gin	GIN	times mini-gin turnout)	(calculated as a % of	(calculated as a % of	
VARIETY	SEED COMPANY	LBS/A	LINT %	T.O. %	LBS/A	Phy-881 RF Yield) ^d	Phy-881 RF Yield) ^d	
DP 341 RF	Monsanto / DPL	2864	42.8	41.7	1194	98	99	
DP 348 RF	Monsanto / DPL	2225	42.2	40.9	911	75	77	
DP 359 RF	Monsanto / DPL	2462	42.6	41.7	1026	84	85	
PHY PX8504 RF	Phytogen	2981	43.6	42.9	1280	105	103	
PHY 881 RF	Phytogen	2881	43.1	42.2	1215	100	100	
PHY 888 RF	Phytogen	2551	42.8	41.7	1064	88	89	
MEAN		2661	42.9	41.9	1115			
LSD 0.05 ^a		288	0.8	0.7	120			
%CV ^b		7.2	1.2	1.1	7.1			
P ^c		0.000	0.021	0.001	0.000			
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LOCATION: BOWLES FARMS - Los Banos area - Merced County					HARVEST DATE: 11/04		
row spacing = 30 inches							
PLANTING DATE: 4/10		LINT YIELD*					
		SEED		Mini-Gin	(calculated as seed cotton yield	LINT YIELD	SEEDCOTTON YIELD
		COTTON	Mini-Gin	GIN	times mini-gin turnout)	(calculated as a % of	(calculated as a % of
VARIETY	SEED COMPANY	LBS/A	LINT %	T.O. %	LBS/A	Phy-881 RF Yield) ^d	Phy-881 RF Yield) ^d
DP 341 RF	Monsanto / DPL	3132	40.9	40.2	1259	114	115
DP 348 RF	Monsanto / DPL	2900	41.3	40.4	1171	106	106
DP 359 RF	Monsanto / DPL	2362	41.7	40.9	967	88	87
PHY PX8504 RF	Phytogen	2911	42.0	41.4	1204	109	107
PHY 881 RF	Phytogen	2730	41.3	40.4	1101	100	100
PHY 888 RF	Phytogen	3116	42.0	41.2	1283	117	114
HA 1432	Hazera	4478	38.4	37.8	1695	154	164
PHY 841 RF	Phytogen	2782	41.8	41.2	1147	104	102
MEAN		3051	41.2	40.4	1228		
LSD 0.05 ^a		301	0.8	0.8	127		
%CV ^b		6.7	1.3	1.3	7.0		
P ^c		0.000	0.000	0.000	0.000		
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