2018 University of California PIMA COTTON VARIETY TRIALS *February 2, 2019 update*

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

Questions?

contact: Bob Hutmacher (Univ. CA)

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Cooperative Project by:

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, UC-ANR/UCCE, UC Davis Plant Sci. Dept.

Cooperators: multiple growers, Steve Wright, Dan Munk, Brian Marsh, Lynn Sosnoskie, Bill Weir, Mark Keeley, Raul Delgado, Tarilee Frigulti-Schramm, Univ. CA ANR - Cooperative Extension Tulare, Kings, Fresno, Kern, Merced Counties; San Joaquin Quality Cotton Growers Assoc.-Shafter Research Station

LOCATION: **LOS BANOS area - Merced County (Bowles Farms)**

HARVEST DATE: 10/29

row spacing = 30 inches

VARIETY	SEED COMPANY	SEED COTTON LBS/A	Mini-Gin LINT %	Mini-Gin GIN T.O. %	LINT YIELD* (calculated as seed cotton yield times mini-gin turnout) LBS/A	LINT YIELD (calculated as a % of Phy-881 RF Yield) [d]	SEEDCOTTON YIELD (calculated as a % of Phy-881 RF Yield) [d]
DP 341RF	Monsanto / DPL	4503	42.6	41.0	1844	89	89
DP 348RF	Monsanto / DPL	5132	42.3	40.5	2076	100	101
PHY 841RF	Phytogen	5102	43.0	41.3	2109	102	101
PHY 881RF	Phytogen	5071	42.6	40.8	2069	100	100
PHY 888RF	Phytogen	5017	42.0	40.4	2024	98	99
HA 1432	Hazera	7676	39.3	38.0	2916	141	151
MEAN		5417	42.0	40.3	2173		
LSD 0.05 [a]		539	0.9	0.8	214		
%CV [b]		6.6	1.5	1.3	6.5		
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

[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)

[d] = *PHY 881 RF used for comparison since it was the Pima variety with the largest commercial acreage planted in the San Joaquin Valley in 2018*

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LOCATION: **CORCORAN area - Kings County (Hansen Ranches)**

Harvest Date: 10/27

row spacing = 30 inches

VARIETY	SEED COMPANY	SEED COTTON LBS/A	Mini-Gin LINT %	Mini-Gin GIN T.O. %	LINT YIELD* (calculated as seed cotton yield times mini-gin turnout) LBS/A	LINT YIELD (calculated as a % of Phy-881 RF Yield) [d]	SEEDCOTTON YIELD (calculated as a % of Phy-881 RF Yield) [d]
DP 341RF	Monsanto / DPL	5834	41.4	40.0	2332	91	94
DP 348RF	Monsanto / DPL	5985	42.1	40.9	2446	95	97
PHY 841RF	Phytogen	5923	42.8	41.3	2448	95	96
PHY 881RF	Phytogen	6185	42.7	41.6	2572	100	100
PHY 888RF	Phytogen	5837	42.3	40.9	2389	93	94
DP 358RF	Monsanto / DPL	6045	41.6	40.3	2438	95	98
MEAN		5968	42.2	40.8	2438		
LSD 0.05 [a]			0.9	0.8	124		
LSD 0.10 [a]		203					
%CV [b]		2.7	1.4	1.3	3.4		
P [c]		0.062	0.015	0.010	0.021		

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LOCATION: **STRATFORD / HURON area - Fresno County (AZCAL Mgmt - Sheely Farms)** — HARVEST DATE: 10/30

row spacing = 40 inches

VARIETY	SEED COMPANY	SEED COTTON LBS/A	Mini-Gin LINT %	Mini-Gin GIN T.O. %	LINT YIELD* (calculated as seed cotton yield times mini-gin turnout) LBS/A	LINT YIELD (calculated as a % of Phy-881 RF Yield) [d]	SEEDCOTTON YIELD (calculated as a % of Phy-881 RF Yield) [d]
DP 341RF	Monsanto / DPL	6928	42.1	39.9	2768	96	103
DP 348RF	Monsanto / DPL	7055	42.9	41.3	2917	101	105
PHY 841RF	Phytogen	7064	44.3	42.5	3004	104	105
PHY 881RF	Phytogen	6746	44.4	42.8	2887	100	100
PHY 888RF	Phytogen	6932	43.1	41.4	2868	99	103
PHY 802 RF	Phytogen	6907	42.7	41.0	2828	98	102
MEAN		6939	43.3	41.5	2879		
LSD 0.05 [a]		NS	1.4	1.2	NS		
%CV [b]		3.4	1.8	1.6	3.2		
P [c]		0.612	0.026	0.003	0.122		

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LOCATION: **WEST SIDE RESEARCH CENTER - Five Points area - Fresno County**

HARVEST DATE: 11/05

row spacing = 40 inches

** very high early season lygus pressure*

VARIETY	SEED COMPANY	SEED COTTON LBS/A	Mini-Gin LINT %	Mini-Gin GIN T.O. %	LINT YIELD* (calculated as seed cotton yield times mini-gin turnout) LBS/A	LINT YIELD (calculated as a % of Phy-881 RF Yield) [d]	SEEDCOTTON YIELD (calculated as a % of Phy-881 RF Yield) [d]
DP 341RF	Monsanto / DPL	4323	41.1	39.6	1711	132	133
DP 348RF	Monsanto / DPL	3838	42.4	40.8	1557	120	118
PHY 841RF	Phytogen	3231	41.8	40.1	1294	100	100
PHY 881RF	Phytogen	3245	41.8	40.0	1296	100	100
PHY 888RF	Phytogen	3715	42.3	40.7	1510	117	114
HA 1432	Hazera	5467	37.6	36.4	1993	154	168
PHY 802RF	Phytogen	3660	41.8	39.7	1451	112	113
DP 358RF	Monsanto / DPL	3074	41.4	40.0	1228	95	95
PHY 805RF	Phytogen	2932	42.9	41.2	1209	93	90
MEAN		3721	41.5	39.8	1472		
LSD 0.05 [a]		729	1.7	1.6	265		
%CV [b]		13.4	2.8	2.7	12.3		
P [c]		0.000	0.000	0.000	0.000		

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