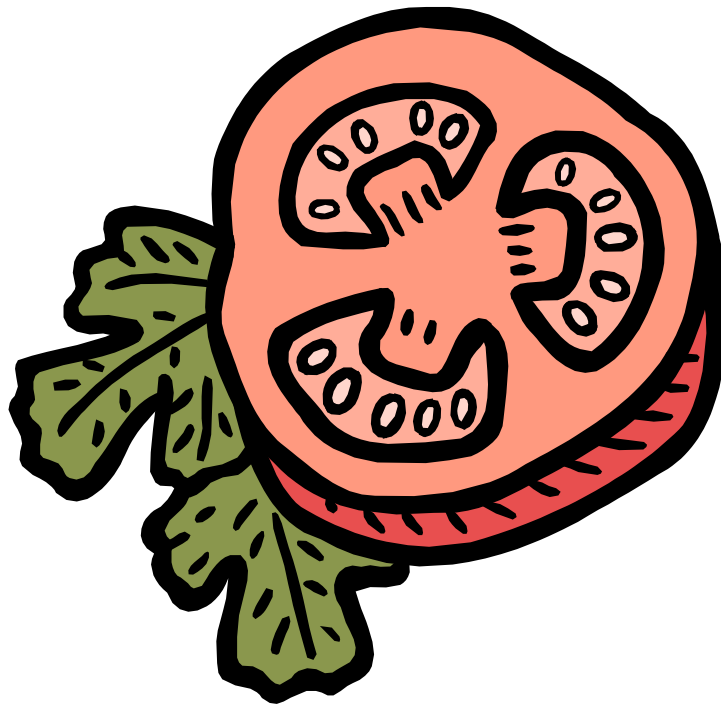


2000 SMALL FARM
FRESH MARKET
TOMATO
VARIETY TRIAL
in San Joaquin County



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2000 SMALL FARM FRESH MARKET TOMATO VARIETY TRIAL

in

SAN JOAQUIN COUNTY

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Cooperating with Mary & Terry Cake A Country Garden

This year's experimental plot evaluated 6 replicated varieties and 22 observational lines for potential use by small farms in direct marketing situations such as farmers' markets and upscale restaurants. The plots were drip irrigated and staked. The grower was certified organic and used plastic mulch and hand pulling for weed control. The seed was grown in the greenhouse on the farm and transplants were set out on May 1.

Results from harvests beginning on July 7 and ending on September 23 are shown in **Table 1** for the replicated lines.

Results for the observational varieties are shown in **Table 2**.

A compacted layer of soil 6 inches deep resulted in a severe outbreak of Pythium root rot and resulted in plant mortality in many of the plots. **Table 3** lists the surviving plants at the end of the season. The tomato suck bug, *Cyrtopeltis modesta* was present throughout much of the season and probably had some impact on yields.

One blind taste testing was performed on the ripe fruit at the UCCE office involving 9 individual evaluations of the 10 varieties available at that time. These results are in **Table 4**.

The second set of taste testings were performed at the Danville Farmers' Market and involved 49 individuals evaluating 6 of the large varieties and is reported in **Table 5**. In the second test at the Danville Farmers' Market, 43 people evaluated the same 6 large varieties but a 7th cherry type of tomato was included for comparison.

Table 1. Small Farm Fresh Market Tomato Variety Trial - 2000									
Replicated Varieties									Avg. Tons per Acre #1 & #2
Variety	# of 1's	wt. of 1's	# of 2's	wt of 2's	wt of Culls	Avg. fruit wt. #1 & #2	Total Fruit wt. #1 & #2	Plants per Variety	
Hawaiian	139	35.96	804	174.49	297.21	0.24	210.45	39	23.59AB
First Prize	97	28.63	451	130.20	230.44	0.29	158.83	30	23.12AB
QualiT 23	27	10.54	385	96.50	375.26	0.32	107.04	36	12.93 B
Cabernet	178	66.65	581	197.70	254.32	0.36	265.92	40	29.03A
QualiT 21	106	20.66	458	169.58	317.02	0.28	190.24	31	26.72A
Sunbright	224	100.65	693	292.54	368.38	0.44	393.19	51	33.48A

Means followed by the same letter were not significantly different at the 5% level. (Fishers LSD)

Table 2. Small Farm Fresh Market Tomato Variety Trial - 2000

OBSERVATION VARIETIES						
Variety	Total wt of 1's	Total wt of 2's	Total wt of culls	Plants/ Plot	Adjusted wt of 1's&2's	Projected tons/acre
Black Plum	19.89	21.08	38.3	8	102.43	22.36
Russian Black	7	6.19	43.63	6	43.97	9.60
SVR 151636	95.91	21.22	2.46	20	117.13	25.57
Black Prince	20.29	40.72	55.42	8	152.53	33.30
PSR 151112	1.09	58.36	109.89	18	66.06	14.42
Radiator Charlie	8.6	0	59.3	17	10.12	2.21
Paul Robeson	14.92	23.27	77.04	6	127.30	27.79
PX 150843	151.38	31.57	27.38	13	281.46	61.45
Tiger	0	0	8	5	0.00	0.00
Sonnet	46.74	81.35	107.23	15	170.79	37.29
PSR 150817	51.49	40.21	122.23	16	114.63	25.03
Russian Black	18.18	28.24	84.61	4	232.10	50.68
Black Seamen	0	8.86	27.11	6	29.53	6.45
PSR150674	133.33	16.01	0	20	149.34	32.61
SVR 151639	26.52	77.75	96.04	20	104.27	22.77
Perfection	7.58	18.28	46.14	8	64.65	14.12
PSR 150823	108.9	25.1	25.56	8	335.00	73.14
PS 150051	3.92	12.6	28.04	0	0.00	0.00
Dona	70.94	83.28	55.37	18	171.36	37.41
Italian Gourmet	0	43.69	94.74	19	45.99	10.04
PSR 150059	0	29.07	30.8	7	83.06	18.13
Black from Tula	12.18	25.02	77.26	17	43.76	9.56

Table 3. Small Farm Fresh Market Tomato Variety Trial Pythium/Compaction Tolerance	
Variety	# of Plants Surviving Out of 20 Planted
Sunbright	17 A
Cabernet	13.3 A
Hawaiian	13.0 A
QualiT 23	12.0 AB
QualiT 21	10.3 AB
First Prize	10.0 AB
Means followed by the same letter were not significantly different at the 5% level. (Fishers LSD)	

Table 4. Taste Evaluation - UCCE Office	
Variety	Rating
Hawaiian	3.4 A
PSR 151112	3.4 A
First Prize	3.3 AB
Tiger	3.3 AB
Italian Gourmet	3.1 AB
Sonnet	2.9 AB
Sunbright	2.9 AB
Black From Tula	2.8 AB
Cabernet	2.7 AB
QualiT 21	2.3 B
Means followed by the same letter were not significantly different at the 5% level (Fishers LSD)	

Table 5. Taste Evaluation - Danville Farmers' Market	
Variety	Rating
Sunbright	3.8 A
PSR 151112	3.5 AB
PX 150843	3.3 B
QualiT 23	3.3 B
SVR 150823	3.2 B
Means followed by the same letter were not significantly different at the 5% level (Fishers LSD)	

Table 6. Taste Evaluation - Danville Farmers' Market with Cherry Tomato	
Variety	Rating
PSR 150674	4.4 A
PSR 151112	3.6 B
Sunbright	3.5 BC
QualiT 21	3.3 BCD
QualiT 23	3.1 CDE
PX 150843	2.9 DE
PSR 150823	2.8 E
Means followed by the same letter were not significantly different at the 5% level (Fishers LSD)	

Cooperator's Notes

Variety	Observations
QualiT 21	A good eating tomato. Pretty and very acceptable to my customers. Production was not very good in that we got an occasional box once in a while. So didn't have enough to develop a following with.
QualiT 23	My notes are the same for this tomato as for the Qualit 21.
Sunbright	A very large tomato and a long time to ripening for a determinate. A good producer and consistently beautiful fruit. Too large for a tomato that does not have the beefsteak interior. That is, the gel cells are very large and fall out when slicing to use for sandwiches. Flavor bland.
Sonnet	My favorite in terms of production, flavor, and appearance. My customers seemed to like them too.
PSR 150817	A run-of-the-mill Roma
PS 150674	Red Cherry tomato with OK flavor. Very productive. But I compare all red cherry tomatoes to Sweet 100's and it is better than PS 150674. Flavor is a little watery in comparison.
PSR 150823	Small gold tomato. Excellent flavor, but it is too small for my markets.
PSR 151112	I think this one a Brandywine. Production certainly better than Brandywine, but still not enough to make this a good production tomato. Flavor was fine.
Italian Gourmet	My favorite of all of them this year. Customers loved it. Didn't have enough. Production is OK for an heirloom, but not for a hybrid.
Tiger	A very good tasting striped tomato. It got smaller as the season wore on.
Perfection	Was very good. Not enough production.
SVR 151639	Is an OK tomato. Nothing outstanding about it.
PSR 150059	A small red. Very good flavor and comparable to Early Girl in taste. Perhaps a little too small, but excellent production.

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