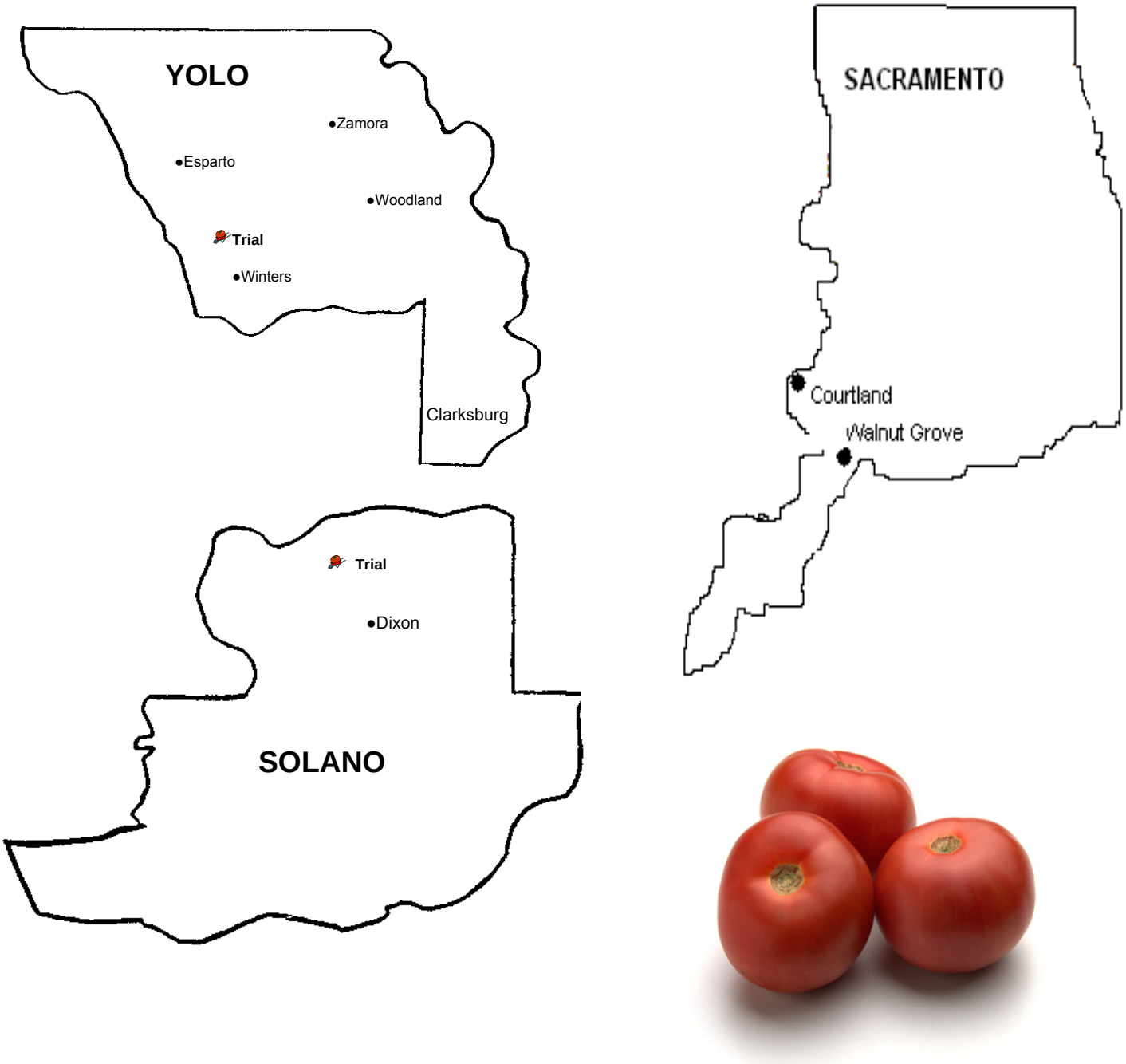
2007 Processing Tomato Variety Trials



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Special appreciation to our cooperating growers. Their generous donation of resources (management, land, labor and equipment) remains essential.

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Statewide compile variety report is located on the Internet at:
http://vric.ucdavis.edu/

Local report is also electronically available at UCCE Yolo web site**:**

http://ceyolo.ucdavis.edu/Vegetable_Crops/PROCESSING_TOMATO_VARIETY_TRIALS.htm

Summary of Yolo/Solano/Sacramento Counties
2007 Processing Tomato Variety Evaluation Trials

by

Gene Miyao, UC Farm Advisor, and Mark Kochi, Field Assistant, Yolo County

Statewide production in 2007 was 12.08 million tons, the second highest volume behind the 12.24 million ton pack in 1999.

As we've come to expect and accept, weather conditions in 2007 were so different from the previous year when a series of springtime rains prevented planting from March through mid May. Comparatively, the 2007 planting season was a cakewalk because of the drier spring with only 0.15 inches of rainfall in March, 1.81 inches in April and 0.24 inches in May. This seasonal total of 9.44 inches is less than half of our recent 10-year average annual rainfall recorded at our Woodland weather station. Temperatures were generally more favorable as well, although we recorded temperatures above 100°F for 2 days in June, 3 days in July, 6 days in August and 3 days in September. We had rainfall in the harvest period with 0.11 inches in July, 0.46 inches on September 20, and 1.13 inches on October 10.

Variety Evaluation Trials

Evaluation of varieties for local adaptation continued to be a part of the University of California farm advisor program. Our objective was to identify dependable, high yielding and high quality variety releases that can be grown over a wide geographic area under varying environmental conditions. The varieties were compared side-by-side in an experimentally sound designed test within local counties in the Central Valley from Yolo to Kern. Tests were conducted in a similar fashion to compare local results with tests by UC farm advisors in other locations.

Entries:

Varieties were selected in consultation with processors and seed companies.

The early-maturity trial included 9 varieties (table 1A). Variety standards were Heinz 9280 and APT 410. All early varieties were evaluated in a replicated design. All varieties in the early trial had VFFNP resistance, except H 2006 with only VF. HMX 5883 also had Fusarium wilt race 3 resistance. Additionally, the standard varieties were evaluated as double plants per plug vs. singles.

In the mid-maturity trial, 11 replicated and 11 observational varieties were included (table 1B). Mid-maturity standards were AB 2, H 9780 and H 2601. In the replicated trial, all except AB 2 had nematode resistance. AB 8058 and N 567 are reported as resistant to spotted wilt.

Locations:

The local early trial was north of Winters with Don Rominger and Sons. The mid maturity trial was northwest of Dixon with J.H. Meek and Sons.

Other UC tests were conducted by farm advisors representing San Joaquin, Contra Costa, Stanislaus, Merced, Fresno and Kern counties.

Methods:

Both the early and mid-maturity trials were established from commercially grown greenhouse transplants. Plants were pulled from trays, counted, bundled and bagged ahead of the field planting. The grower's equipment and crew mechanically set the transplants. Skips were filled within a day of the planting. The few transplants that did not survive were replaced over a 2-week period.

Both trials were transplanted on twin lines, a foot apart from each other, centered on a 5' bed. All plots were 100' long. A short alley separated each replicate block.

All cultural practices in these ~1 acre experimental sites were those of the cooperating grower and matched management of the remaining larger area of their commercial tomato field.

Field meetings were held at each site as fruit ripened to provide an opportunity to examine the performance of the varieties in side-by-side comparisons.

To measure yield, fruit from the entire plot were harvested into special weigh trailers using the grower's harvesting equipment and crew. A 5-gallon volumetric sample of unsorted fruit was collected from the mechanical harvester to evaluate fruit defects. Fruit was sampled along the length of the plot. These fruit were graded into categories of marketable red, pink, green, sun-damage, mold and blossom end rot and measured by weight.

From the marketable reds, an ~7 pound sample from each plot was bagged and delivered to a local inspection station of the Processing Tomato Advisory Board. Color, °Brix (soluble solids) and pH were determined by PTAB with a procedure consistent with commercial grading. Additionally, similar samples were hand picked by the Diane Barrett Lab from the UC Davis Food Science and Technology Department to evaluate processing quality.

Statistical analysis of variance methods were used to help interpret the data. Conclusions derived from non-replicated data should be viewed with much less confidence.

EARLY-MATURITY EVALUATION: WINTERS (TRANSPLANTS)

Early-maturity varieties were evaluated with Joe Rominger in a Don Rominger and Sons field north of Winters. We transplanted on March 17 into twin seed lines per bed in a class 1, Yolo silt loam soil with good soil conditions (Table 2A). Vines grew well during the season. Irrigation was frequent in alternating, every-other furrow sequence and maintained close to harvest. Fruit set was good. Rain during fruit ripening caused some blackmold damage. Harvested was delayed and occurred on July 20.

Table 4 early replicated—yield, fruit quality and culls: The highest yielding group was led by BOS 66509 with 56.1 tons per acre, but included 4 other varieties in the top group. H 9280 was the lowest yielding with 37 tons.

BOS 1411 and Sun 6366 lead the high solids group with 5.1, but included 5 others in the group. BOS 66508 had the best color at 23.3, but included 4 others as well. Fruit pH was lowest with BOS 1411 with 4.39, but included 5 others.

The level of below-colored fruit was minimal with only a few percent for pink and for green fruit. Sunburn damage was also low. Mold was highest with H 9280, H 2206 and HMX 5883 with levels of 9, 7 and 6%, respectively. H 2206 had the smallest fruit while several varieties led by HMX 5883 had large fruit.

Double plants per plug averaged almost 10 tons more per acre compared to the single plant configuration. When plants per plug were doubles, fruit size was smaller, fruit pH was slightly better and sunburn fruit level was slightly lower.

Table 5 early replicated— emergence, vine size, canopy cover and estimated maturity: Plant population on the double row planting was about 9,200 plugs per acre. Transplant stands were comparable to each other amongst the varieties.

Vine size was difficult to judge with the twin row planting. Overall vine size was smaller than expected. The smallest-vine varieties in this test were H 9280 and H 2206 at or below 75% of the row width. The largest-vine varieties were H 5003, Sun 6366, BOS 1411 and BOS 66509. Double seeded plugs produced slightly larger vines compared to the single-plants.

Canopy cover for fruit protection from sun damage ranged from 58 to 90%. The sparsest canopied variety was H 2206 with a 58% rating. A number of varieties had canopy cover above 85% fruit protection level led by BOS 1411 with 90%.

Visual rating of 'days-to-estimated-harvest' date was made relative to APT 410. The differences appeared to range from -5 to 9 days later on average. The earliest variety in the test was H 2206, estimated to be 5 days earlier than APT 410. The later maturing varieties were BOS 4411 and H 5003, 9 to 7 days behind APT 410, respectively.

MID-MATURITY EVALUATION: DIXON (TRANSPLANTS)

Our local mid-maturity variety trial evaluation was transplanted with J.H. Meek and Sons northwest of Dixon on a class 1, Yolo silty clay loam soil. Seedling plugs were mechanically transplanted on April 25th in double lines per bed (Table 2B). Seedbed condition was very good. The field was only furrow irrigated. Vine growth was always very good and required vine training. Harvest was timely on August 23.

REPLICATED ENTRIES (DIXON)

Table 6A mid replicated— yield, fruit quality and culls: The top two varieties in the high yield category were AB 2 and AB 8058 with yield at or above 64 tons per acre. Nine of the 14 entries had yields above 59 tons per acre. The lowest yielding varieties were HMX 5893 and H 2506 with 47.2 and 49.1 tons/A, respectively. Overall yields were high.

Brix was moderate. The high Brix group was led by AB 2 and H 8004 with 5.0, but included two other varieties.

H 2506 had the best color with 22.5.

Fruit pH was lowest with H 9780 at 4.31, AB 2 at 4.38, but included H 8004 with 4.44 in the statistically similar group. Fruit pH tended to be elevated with several varieties above 4.50.

Culls of pink, green, and mold fruit tended to be low to moderate. H 9780 had 9% pink fruit plus 6% greens. Sunburn level ranged from 2 to 6%. Mold level was highest with Nun 567 at 10% (but was also high in sun damage with 6%). Nun 567 had the highest level of blossom end rot at 1.3%, and H 2601, the pear, had 0.8%. Otherwise blossom end rot (BER) was not prevalent.

As a double plant per plug, H 2601 produced over 6 tons per acre more, while yield was similar between doubles and singles with AB 2 and H 9780.

Table 6B mid replicated— vine size, canopy cover and estimated maturity: The larger-vine varieties which spanned the full row width were AB 2, AB 8058, H 2005 and Sun 6368. HMX 5893 was the smallest-vined variety at 83% row-width.

Canopy cover was evaluated shortly before harvest. Canopy cover at time of harvest of 80% or more is desirable, while levels below 50% are usually problematic for fruit protection from sun damage. Canopy was poorest with HMX 5893 at 49%. Canopy cover was 80% or better with AB 2 and Sun 6368 at 86% and 84%, respectively. Double plants per plug improved canopy cover over singles especially for H 2601 as well as for H 9780, but not for AB 2 .

A visual estimate of days to harvest was assessed and compared to the standard AB 2. HMX 5893 appeared to be the earliest maturing variety, 4 days earlier than AB 2. The latest variety in our test appeared to be H 9780, 5 days later maturing than AB 2.

NON-REPLICATED ENTRIES (DIXON)

Table 7A: mid observational—Dixon: The highest yielding non-replicated variety was BOS 67374 with 64.8 tons per acre, 5.0 Brix, low pH and very few culls.

The Brix average was 4.4. HT 1075 (from new seed company HED) had the highest Brix at 5.2° and the best color, 23. U 889 also had a 23 color reading.

Sunburn level was low amongst several varieties, but extreme with NDM 4464, HT 1058 and UG 36003 with 25, 23 and 17%, respectively.

Pink and green levels were relatively low. Mold was high with UG 36003, U 889 and HT 1058 at 10, 9 and 7%.

Table 7B mid observational— vine size, canopy, and estimated maturity: All vines covered 90% or more of the row width, except for HM 5894, HT 1058 and UG 36003 at 80 to 85%. BOS 67374 had exceptionally good canopy cover while UG 36003 was poor at 50%. UG 36003 and HT 1058 were misplaced in the mid maturity test, as both were 10 days or earlier than AB 2.

UC STATEWIDE VARIETY REPORT: Statewide compiled variety report with other UC advisor tests is posted at UC Vegetable Research and Information Center at:

http://vric.ucdavis.edu/

Table 1A. Early Maturity Entries, 2007 Statewide UC Processing Tomato Variety Trial, D.A. Rominger and Sons, Winters.

	Company	Replicated (9)	
1	Harris Moran	HMX 5883	$VFFF3NP
2	Heinz	H 5003	$VFFNP
		H 9280	$VFFNP
		H 2206	$VF
3	Nunhems	SUN 6366	$VFFNP
4	Orsetti Seeds	BOS 66508	$VFFNP
		BOS 66509	$VFFNP
		BOS 1411	$VFFNP
5	Seminis	**APT 410**	$VFFNP

BOLD LETTERS = trial standards

Code: Disease Resistance and Hybrid Status*****

¢	=	OPEN POLLINATED
$	=	HYBRID
V	=	VERTICILLIUM WILT RESISTANT
F	=	RACE 1 FUSARIUM WILT RESISTANT
FF	=	RACE 1 AND 2 FUSARIUM WILT RESISTANT
FFF_3	=	RACE 1, 2 AND 3 FUSARIUM WILT RESISTANT
N	=	ROOT KNOT NEMATODE RESISTANT (SOME SPECIES)
P	=	BACTERIAL SPECK RESISTANT (RACE 0)
D	=	DODDER TOLERANCE
TMV	=	TOBACCO MOSAIC VIRUS
Lv	=	POWDERY MILDEW
Sw		SPOTTED WILT VIRUS

*** Check with seed company to confirm disease resistance.**

Table 1B. Mid-Maturity Varieties, 2007 UC Processing Tomato Variety Trial, JH Meek and Sons.

	Company	11 replicated		11 observational	
1	DeRuiter	**AB 2**	$VFFP		
		AB 8058	$VFFN TSW		
2	Harris Moran	HMX 5893	$VFFNP	HMX 5894	$VFFNP
3	HED Seeds			HT 1058	$FN
				HT 1075	$VFFN
4	Heinz	H 2005	$VFFNP		
		H 2506	$VFFNP		
		H 2601	$VFFNP		
		H 8004	$VFFNP		
		H 9780	$VFFNP		
5	Nippon Del Monte			NDM 4464	$VFFNP
				NDM 5578	$VFFP
6	Nunhems	Red Spring	$VFFNP	Nun 877	$VFFNP
		Sun 6368	$VFFNP	Nun 889	$VFFP
		N 567	$VFFNP TSW		
7	Orsetti			BOS 67374	$VFFNP
8	Seminis			PX 1723	$VFFNP
9	United Genetics			UG 4305	$VFFN
				UG 36003	$VFFN

BOLD LETTERS = trial standards

*** Check with seed company to confirm disease resistance.**

Table 2A. Plot Specifications, Early-Maturity, Winters, 2007

Cooperator:	Joe Rominger, D.A. Rominger and Sons, Winters
Location:	NW of Winters. ~ ½ mile west of CR 89 & ½ mile north of CR 31. NW 1/4 of SE 1/4, Section 4, T8N, R1W, MDM. SCS sheet #66.
Field Variety:	APT 410, double lines on 5'-centered beds.
Plot Design:	Randomized complete block, 4 reps. Individual plots were 500 square feet, 100' x 5'.
Planting Date:	17 March as transplants, #338 tray from Westside Transplants
Population:	~9200 plugs per acre
Field Meeting:	12 July
Fruit Quality Sample:	16 July, UCD Food Science Project 20 July, PTAB
Harvest:	20 July (125 days after planting with delayed harvest)
Soil type:	Yolo silt loam, Class 1, Storie Index 100.
Soil Sample	25 March 2007

O-1 foot depth	Rep 1-2	Rep 3-4
pH	6.3	6.3
NO_3-N (ppm)	12	16
P (ppm)	22	21
K exchangeable (ppm)	196	225
Na exchangeable (meq/100 g)	0.15	0.17
Ca exchangeable (meq/100 g)	12	12
Mg exchangeable (meq/100 g)	8	8
SO_4-S (ppm)	9	11
Zn (DPTA) (ppm)	1.0	1.0

Previous Crop:	2006 tomatoes
Irrigation method:	furrow
General:	Good planting conditions. Good vine growth during the season. Frequent, every-other-row irrigation. High tonnage, especially for early maturity varieties. Rain at harvest created some blackmold rot. Harvest was delayed.

Table 2B. Plot Specifications, Transplant, Mid-Maturity, Dixon, 2007

Cooperator:	Steve Meek and John Pon, J.H. Meek and Sons, Woodland
Location:	5 miles north x northwest of Dixon. ~1 1/4 mile west of Stevenson Bridge Road, ~0.5 miles south of Campbell Road. MDM SCS map #2.
Field Variety:	AB 2, double lines on 5'-centered beds.
Plot Design:	Randomized complete block with 4 reps Non-replicated plots adjacent to 1st rep. All individual plots 500 square feet (100' x 5')
Greenhouse:	Westside Transplants, Firebaugh in #338 trays for replicated and #392 trays in observational
Planting Date:	25 April
Field Meeting:	15 August
Fruit Quality Sample:	20 August, Food Science 23 August, PTAB
Harvest	23 August (120 days after transplanting)
Soil type:	Yolo silty clay loam, class 1, Storie Index 90
Previous Crop:	2006 wheat
Irrigation method:	furrow
General:	Transplants established and grew well season long. Very high tonnage. Harvest was well timed for the trial.

Table 3. **Fruit Quality Factor Definitions**

SOLUBLE SOLIDS OR °BRIX	A measure of mostly fruit sugars. Soluble solids are directly related to finished processed product yield of pastes and sauces. Soluble solids are estimated with a refractometer, and measured as °Brix.
PH	A measure of acidity. A level below 4.35 is desirable to prevent bacterial spoilage of finished product. pH rises as fruit matures.
COLOR	Measured with a Processing Tomato Advisory Board LED instrument simulating Agtron. Lower numbers correspond to better red fruit color.

FIELD SAMPLING PROCEDURE

Fruit quality determinations were obtained by collecting ~7 pound sample of ripe, non-defect fruit from each plot. A local grade station of the Processing Tomato Advisory Board evaluated our fruit samples for soluble solids (Brix), color and pH.

To determine finished product thickness, additional samples were collected by Sam Matoba and crew and evaluated in the Diane Barrett lab at the UC Davis Food Science and Technology Department as part of a California League of Food Processors-funded project. Two blocks of replicated varieties and all non-replicated plots were evaluated. °Brix, pH, titratable acidity (reported as percent citric acid), and juice Bostwick were the factors measured. The results of the Food Science project are in a separate report.

Fruit defects in the field were estimated by collecting ~5 gallons of unsorted fruit from the mechanical harvester. Fruit were separated into marketable red, pink, green, sun-damaged, mold and blossom end rot categories. Measurements were on a weight basis and reported as percent.

Table 4. Winters, Replicated, Early-Maturity: Yield, quality and cull-out from tomato variety evaluation, D.A. Rominger & Sons, 2007.

	Variety	Yield tons/A		Brix	PTAB color	pH	% pink	% green	% sun burn	% mold	lbs./ 50 fruit
1	BOS 66509	56.1	a	4.4	24.5	4.47	1	0	1	3	6.38
2	410 double	55.9	a	4.7	25.5	4.41	1	1	0	2	6.68
3	H 5003	55.8	a	4.9	23.5	4.40	2	2	1	2	5.65
4	SUN 6366	55.7	a	5.1	26.5	4.43	2	1	0	2	6.76
5	BOS 1411	55.0	ab	5.1	25.8	4.39	3	3	1	1	7.49
6	BOS 66508	50.2	bc	4.6	23.3	4.44	1	1	1	1	6.59
7	9280 double	47.4	cd	4.1	26.0	4.41	0	1	1	4	6.72
8	APT 410	46.6	cd	4.8	24.3	4.45	0	1	1	1	7.21
9	HMX 5883	45.8	cd	4.3	27.0	4.49	1	2	2	6	7.84
10	H 2206	42.6	d	4.7	25.8	4.47	0	1	0	7	4.69
11	H 9280	37.4	e	4.2	25.0	4.43	0	1	2	9	7.29
	LSD .05	5.0		0.6	1.9	0.04	NS	1.4	NS	4.3	0.67
	% CV	7		8	5	1	128	75	83	89	7
	mean	49.9		4.6	25.2	4.4	1.1	7.0	0.8	10.0	6.7
	Single vs.	42.0	a	4.5	24.6	4.44	0.2	0.6	1.3	4.7	7.2
	2 plants/plug	51.7	b	4.4	25.8	4.41	0.7	1.1	0.6	2.9	6.7
	probability	0.00		NS	0.10	0.05	NS	NS	0.06	NS	0.02
	F value	31.0		0.27	3.0	4.24	0.57	1.0	3.8	1.51	5.6

NS = Not Statistically significant at 95% confidence level

Major Points:

- 5 varieties in the top yielding group led by OS 66509
- BOS 1411 and Sun 6366 the top Brix varieties.
- Double plants per plug almost 10 ton per acre yield increase over singles, with slightly less sunburn damage, but smaller fruit size.
  Note: later maturity with doubles.
- H 9280 had (as a single plant/plug) lowest yield, one of the lowest Brix, and high mold (presumably from less canopy cover).

Table 5. Winters, Replicated, Early-Maturity: Stand, vine size, canopy and maturity (twin-row per bed), D.A. Rominger and Sons, 2007.

	Replicated Variety	plants per 100 feet	% bed cover	% fruit canopy cover	estimated harvest days (to APT 410)
1	APT 410	106	81	81	0
2	BOS 1411	105	93	90	9
3	BOS 66508	107	84	80	3
4	BOS 66509	107	90	86	5
5	H 2206	106	75	58	-5
6	H 5003	107	95	86	7
7	H 9280	106	74	68	0
8	HMX 5883	106	80	71	3
9	SUN 6366	107	94	86	5
10	410 dbl	105	90	86	3
11	9280 dbl	105	80	79	2
	LSD .05	NS	5.5	5.3	2.0
	% CV	1	4	5	8
	Single vs.	106	78	74	0
	2 plants per plug	105	85	83	3
	Probability	NS	0.000	NS	0.001
	F value	1.1	15.8	1.8	14.4

Major Points:

- vine size and canopy cover amongst varieties was variable
- H 2206 was 5 days earlier compared to standard APT 410
- Double plants per plug were bigger vined, but later maturing

Table 6A. Dixon, Replicated, Mid-Maturity: Yield, fruit quality and defects from processing tomato variety trial (transplant), JH Meek and Sons, 2007

	Replicated Variety	Yield tons/A		Color	PTAB °Brix	pH	% Pink	% Green	% Sun	% Mold	% BER	lbs per 50 fruit
1	AB 2 double	65.9	a	24.8	5.0	4.36	2	2	3	1	0.0	7.68
2	AB 8058	64.3	ab	23.8	4.3	4.52	1	1	3	3	0.0	7.64
3	AB 2	64.0	ab	24.0	5.0	4.38	3	2	2	2	0.0	7.79
4	SUN 6368	61.2	bc	26.0	4.6	4.46	4	2	2	1	0.0	7.35
5	H 9780 double	60.6	c	25.8	4.6	4.34	9	6	3	1	0.2	7.23
6	H 9780	60.5	c	25.0	4.8	4.31	6	5	2	1	0.1	7.44
7	H 2601 double	59.9	c	25.0	4.7	4.45	3	3	4	0	0.0	6.89
8	H 8004	59.9	c	24.3	5.0	4.44	2	1	6	1	0.2	6.89
9	H 2005	59.3	c	24.5	4.8	4.51	5	2	5	2	0.0	6.83
10	H 2601	53.8	d	24.8	4.7	4.55	3	1	4	1	0.8	6.99
11	Red Spring	52.6	d	24.5	4.6	4.55	2	2	5	1	0.0	8.08
12	Nun 567	51.5	de	24.8	4.1	4.57	2	1	6	10	1.3	7.88
13	H 2506	49.1	ef	22.5	4.4	4.51	1	0	6	2	0.3	6.36
14	HMX 5893	47.2	f	25.5	4.4	4.53	3	1	6	2	0.0	7.25
	LSD (5%)	3.2		1.3	0.3	0.15	2.9	1.7	2.9	3.0	0.6	0.7
	% C.V.	4		4	4	2	63	56	52	101	215	6

Table 6B. Dixon, Replicated, Mid-Maturity: stand, vine size, canopy cover and fruit maturity notes (transplant), JH Meek and Sons, 2007.

	Replicated Variety	stand # per 100'	% bed cover	% fruit canopy cover	estimated harvest days (to AB 2)
1	AB 2	105	100	86	0
2	AB 8058	104	100	75	1
3	H 2005	106	100	74	3
4	H 2506	105	88	58	-1
5	H 2601	105	93	75	0
6	H 8004	105	95	69	0
7	H 9780	104	99	78	5
8	HMX 5893	104	83	49	-4
9	Nun 567	104	88	65	1
10	Red Spring	105	90	73	-2
11	SUN 6368	104	100	84	1
12	AB 2 double	104	100	85	1
13	H 2601 double	104	100	86	2
14	H 9780 double	104	100	84	5
	LSD (5%)	NS	3.8	7.7	2.0
	% CV	1	3	7	6
	Average	104	95	66	1

Table 7A. Dixon, Non-Replicated, Mid-Maturity: Yield, fruit quality and defects, JH Meek and Sons, 2007.

	Non Rep Variety	Yield tons/A	Color	PTAB °Brix	pH	% pink	% green	% burn	% mold	% BER	lbs per 50 fruit
1	BOS 67374	64.8	26	5.0	4.29	3	3	1	1	0	7.00
2	U 877	57.9	24	4.4	4.53	2	2	13	0	0	5.80
3	NDM 5578	55.7	24	4.4	4.52	2	1	7	1	0	7.50
4	UG 4305	54.7	24	4.6	4.58	3	1	4	2	0	7.35
5	U 889	54.2	23	4.1	4.57	1	2	7	9	0	6.45
6	PX 1723	53.5	26	4.5	4.50	7	1	3	2	2	8.75
7	HT 1075	53.4	23	5.2	4.52	3	2	2	3	1	6.05
8	NDM 4464	51.3	24	4.0	4.64	0	0	25	1	0	6.20
9	HM 5894	47.9	26	4.2	4.64	0	0	7	3	0	7.80
10	HT 1058	46.6	26	4.2	4.55	0	2	23	7	0	5.60
11	UG 36003	41.6	24	4.1	4.56	0	0	17	10	0	7.00
	Average	52.9	24.5	4.4	4.54	1.9	1.2	9.8	3.6	0.2	6.86

*Data is **non-replicated** and should be viewed with much less confidence than replicated tests.*

Table 7B Dixon, Non-Replicated, Mid-Maturity: Stand, vine size, canopy cover, and fruit maturity notes, transplants, JH Meek and Sons, 2007.

	Non Rep Variety	stand # per 100'	% bed cover	% fruit canopy cover	estimated harvest days (to AB 2)
1	BOS 67374	104	100	95	2
2	UG 36003	103	85	50	-13
3	HT 1058	104	85	65	-10
4	HM 5894	104	80	65	-4
5	NDM 5578	105	100	85	-1
6	PX 1723	102	100	90	2
7	UG 4305	103	100	80	-1
8	U 889	104	95	70	-3
9	HT 1075	105	100	80	-1
10	NDM 4464	106	90	60	0
11	U 877	105	95	75	2
	Average	104	94	74	-2

*Data is **non-replicated** and should be viewed with much less confidence than replicated tests.*