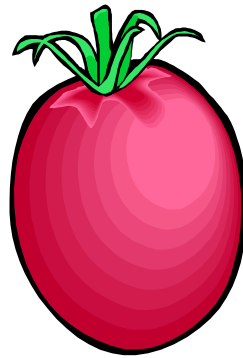


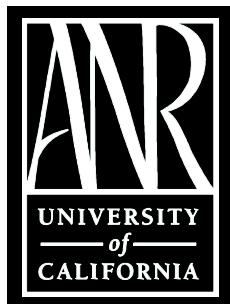
# PROCESSING TOMATOES

IN

SAN JOAQUIN & CONTRA COSTA  
COUNTIES



2006 VARIETY TRIALS SUMMARY  
RESEARCH PROGRESS REPORT



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**2006**  
**SAN JOAQUIN and CONTRA COSTA COUNTIES**  
**PROCESSING TOMATO VARIETY TRIAL REPORT**

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The processing tomato industry in California depends on the availability of consistently dependable varieties that provide maximum yield and quality, yet conform to the demands of mechanical harvest and handling. In recent years, great emphasis has been placed on developing varieties with improved processing qualities as well as horticultural characteristics, including field vine storage, disease and nematode resistance, transportability and early plant emergence under cool climatic conditions. Breeding programs (public and private) are attempting to provide varieties with high soluble solids, better consistency (viscosity of juice and puree), improved firmness and color, jointlessness, easier peelability, better flavor, improved foliar cover to reduce losses from sunburn/scald, insect, nematode and disease resistance.

Tomato variety trials provide a good opportunity to realistically evaluate and make side-by-side comparisons of various new and standard lines under actual grower field conditions. Standardized procedures for variety trials in a number of counties allow for greater variety comparisons over a wider geographical area. This greatly improves the value of variety trials and the information derived from them.

The 2006 California processing tomato growing season posed many problems for growers, beginning with a wet and cold spring that caused a considerable delay in crop planting. That was followed by an incredibly hot two-week period in July that caused the loss of fruit set in many fields. This resulted in an extended harvest season, with a little bit of rain, which went into November. The crop yielded 10.1 million tons, which was considerably below early season forecasts.

Locally, crop yields were generally good but some variability due to heat stress and some disease pressure from Verticillium, Fusarium, and Powdery Mildew. A limited amount of Late Blight appeared in October. Insect pressure from worms and stinkbugs was high this year while aphid pressure was only light to moderate. A significant amount of mite activity occurred later in the season. Two processing tomato variety trials were conducted locally in 2006. One was an early-maturity trial, done cooperatively with Janet Caprile, Contra Costa County Horticulture Farm Advisor, near Brentwood, California.

### GROWTH, DEVELOPMENT and YIELD

The early season maturity trial was conducted at Simoni and Massoni Farms (Anthony Massoni and Paul Simoni) southeast of Brentwood, California. The trial was direct seeded, using Earthway hand-push planters on March 27, 2006. Prior to planting, the growers had left a preworked, prepared bed area that had already been fertilized with a preplant starter solution, and herbicide had already been applied for the trial area, as well as the rest of the field. The soil type of the field was a Brentwood clay loam and the field variety was Halley 3155, the beds were double row and 66 inches wide. Spring rain, sprinkler irrigation and furrow irrigation were used over the course of the growing season. Due to favorable growing conditions in the Brentwood/Byron area, unlike many other locations, plant growth and fruit set were excellent. Yields in the twelve variety replicated trial averaged 54.8 tons/acre. Brix yield average was 2.812 tons/acre, while soluble solids (°Brix), averaged 5.12, pH levels averaged 4.29 and fruit color averaged 22.7. The trial was mechanically harvested on August 18, 2006.

The top yielding variety in the replicated early season trial was SUN 6366 at 60.31 tons/acre, followed by BOS 66508 (58.67 tons/acre), HMX 5833 (57.86 tons/acre), H-5003 (57.56 tons/acre), ATP 410 (56.68 tons/acre) and BOS 66509 (56.39 tons/acre). Yield figures for all the varieties in the early season replicated trial are presented in **Table 1**, along with fruit quality data on Brix Yield, soluble solids (°Brix), fruit color and pH.

The mid-maturity processing tomato variety trial was established with nursery grown transplants on May 24, 2006 on 60-inch, single row beds at Robertson Farms (Hal and Keith Robertson) southeast of Tracy, California. The soil type at the site was a Sorrento silty clay and the field variety was H-9780. Once again the trial site had been prepared by the growers prior to the transplanting and a preplant herbicide had been soil incorporated into the beds, along with preplant fertilizer in a band. Furrow irrigation was used throughout the growing season. Growing conditions were quite favorable with good plant growth and early fruit set in the trial. However a 15-day long heat spell in July caused a loss of blooms and a split set condition in the field. Fortunately, mid and late summer weather, along with excellent grower management, resulted in a very good crop at harvest. The trial was mechanically harvested with the grower's equipment on October 13, 2006. Yields in the 16-variety replicated trial averaged 38.2 tons/acre, while the five observation lines averaged 33.7 tons/acre. Brix Yield in the replicated trial averaged 2.16 tons/acre, while soluble solids (°Brix) averaged 5.66, fruit color averaged 19.92 and pH was a bit high with an average of 4.44. The five observation lines gave an average of 1.96 tons/acre in Brix Yield, soluble solids (°Brix) averaged 5.82, fruit color averaged 19.60 and pH was a bit high with an average of 4.49.

The best yielding varieties in the midseason maturity replicated trial occurred with Sun 6368 at 45.5 tons/acre followed by DRI 8058 (45.3 tons/acre), PS 384 (40.9 tons/acre), U886 (40.6 tons/acre), PS 345 (39.6 tons/acre), AB2 (38.7 tons/acre), H-9780 (38.5 tons/acre) and H-8004 (38.3 tons/acre). Yield figures for all the varieties in the replicated trial, along with quality data on Brix yield, soluble solids (°Brix), fruit color and pH, are shown in **Table 2**.

In the midseason maturity observational trial area, highest yield among the five lines evaluated was attained by HMX 5893 (39.6 tons/acre), followed by NDM 4464 (39.1 tons/acre) and BOS 212 (36.3 tons/acre). Yield figures for all the lines in the observation block, including fruit quality data on Brix yield, soluble solids (°Brix), fruit color and pH, are presented in **Table 3**. The reader of this report is cautioned to remember that results shown in the observation trial are only from one replication of each line.

Fruit quality samples from all replications for all varieties in each trial were taken just prior to trial harvest and sent to the local Processing Tomato Advisory Board Inspection Station at Panella Trucking, Incorporated, for soluble solids (°Brix), pH and color evaluation. Samples from both trials were also taken by Sam Matoba of the Department of Food Science and Technology at UC Davis, where Dr. Diane Barrett ran °Brix, pH, Bostwick, Titratable acidity (% citric), USDA color, Predicted Past Bostwick, Predicted Paste Yield and Predicted Catsup Yield. Two replications were sampled out of the replicated variety block of each trial, while one sample was taken from each observational line in the trials. The data for all trials sampled by the Department of Food Science and Technology in the Statewide Farm Advisor Tomato Variety Evaluation Project will be provided in Diane Barrett's California League of Food Processors T-4 Project Report.

2006 STATEWIDE UNIFORM PROCESSING TOMATO VARIETY TRIALS

EARLY SEASON MATURITY VARIETY LIST

Seminis Seeds

APT 410 \$VFFNP  
Hypeel 45 \$VFFNP  
PS 438 \$VFFF3NP

Orsetti Seeds

BOS 66508 \$VFFNP  
BOS 66509 \$VFFNP  
BOX 7026 \$VFFNP

H. J. Heinz Seed

H-9280 \$VFFN  
H-5003 \$VFFNP

Harris Moran Seed

HMX 5883 \$VFFF3NP

Nunhems USA

Sun 6366 \$VFFNP

Unilever Seed

U 250 \$VFFNP  
U 462 \$VFFNP

DISEASE RESISTANCE AND HYBRID CODES

O.P. = Open Pollinated  
\$ = Hybrid  
V = Verticillium Wilt Race I Resistant  
F = Fusarium Wilt – Race I Resistant  
FF = Fusarium Wilt – Race I and II Resistant  
FFF3 = Fusarium Wilt – Race I, II, and III Resistant

T = Tobacco Mosaic Resistance  
N = Root Knot Nematode Resistant  
P = Bacterial Speck Resistant

**Table 1. 2006 Early Season Processing Tomato Variety Trial**  
 Simoni-Massoni Farms – Brentwood, California

Variety	Yield (tons/Acre)	Soluble Solids ° Brix	Brix Yield (Tons/Acre)	pH	Fruit Color
Sun 6366	60.31A	5.48	3.305	4.25	25.8
BOS 66508	58.67AB	4.90	2.875	4.27	22.0
HMX 5833	57.86AB	5.08	2.939	4.34	25.5
H-5003	57.68AB	5.45	3.137	4.30	20.8
APT 410	56.68AB	5.08	2.879	4.27	22.3
BOS 66509	56.39ABC	5.03	2.836	4.29	22.0
PX 438	54.59 BCD	5.20	2.839	4.39	21.5
BOS 7026	54.49 BCD	4.73	2.577	4.27	22.0
Hypeel 45	51.95 CDE	5.48	2.847	4.20	23.5
H-9280	51.61 DE	4.78	2.467	4.27	22.5
U-250	50.27 DE	5.10	2.564	4.34	23.0
U-462	47.72 DE	5.20	2.481	4.36	21.8
LSD @ 0.05 =	4.54				
C.V. (%) =	5.7%				
Mean	54.84	5.12	2.812	4.29	22.7

2006 STATEWIDE UNIFORM PROCESSING TOMATO VARIETY TRIALS

MID SEASON MATURITY VARIETY LIST

AB/TS & L Seeds

AB2 \$VFFP  
DRI 4610 \$VFFN  
DRI 8058 \$VFFNTSWV

H. J. Heinz Seed

H 2005 \$VFFNP                      H 9780 \$VFFNP  
H 2601 \$VFFNP                      H 8004 \$VFFNP

Harris Moran

HMX 4802 \$VFFF3NP  
HMX 5893 \$VFFNP

Lipton/Unilever Seed

U 567 \$VFFNPTS WV              U 892 \$VFFN  
U 886 \$VFFN                      U 898 \$VFFNLV

Nippon/Del Monte

NDM 4464 \$VFFNP

Orsetti Seeds

BOS 67374 \$VFFNPJ  
BOS 212 \$VFFNP

Seminis Seeds

PS 345 \$VFFP  
PS 384 \$VFFN

Nunhems USA

Red Spring \$VFFNP  
Sun 6368 \$VFFNP  
Sun 6374 \$VFFNP

DISEASE RESISTANCE AND HYBRID CODES

\$ = Hybrid	LV = Powdery Mildew (Leveillula)
V = Verticillium Wilt Race I Resistant	N = Root Knot Nematode Resistant
F = Fusarium Wilt – Race I Resistant	P = Bacterial Speck Resistant
FF = Fusarium Wilt – Race I and II Resistant	J = Jointless
FFF3 = Fusarium Wilt – Race I, II, and III Resistant	TSWV = Tomato Spotted Wilt Virus

**Table 2. 2006 Midseason Processing Tomato Variety Trial**  
K & H Farms (Hal & Keith Robertson) – Tracy, California

Replicated Varieties

Variety	Seed Co.	Yield <sup>1</sup> (tons/Acre)	Brix Yield <sup>1</sup> (tons/Acre)	Soluble <sup>1</sup> Solids (° Brix)	Color <sup>1</sup> PTAB	pH <sup>1</sup>
Sun 6368	Nunhems USA	45.48A	2.706	5.95	20.50	4.47
DRI 8058	AB/TS & L Seeds	45.26A	2.390	5.28	18.75	4.56
PS 384	Seminis Seeds	40.90 B	2.462	6.02	22.00	4.47
U886	Lipton/ Unilever Best Foods	40.55 BC	2.218	5.47	18.50	4.49
PS 345	Seminis Seeds	39.64 BCD	2.101	5.30	23.25	4.36
AB2	AB/TS & L Seeds	38.68 BCDE	2.243	5.80	20.00	4.32
H-9780	Heinz Seeds	38.52 BCDE	2.138	5.55	19.50	4.43
H-8004	Heinz Seeds	38.33 BCDE	2.261	5.90	18.50	4.41
HMX 4802	Harris Moran Seeds	37.55 BCDEF	1.971	5.25	20.50	4.48
H-2005	Heinz Seeds	36.81 CDEFG	2.172	5.90	19.50	4.47
Sun 6374	Nunhems USA	36.46 DEFG	2.414	6.62	20.25	4.39
BOS 67374	Orsetti Seeds	36.37 DEFG	1.946	5.35	19.75	4.40
DRI 4610	AB/TS & L Seeds	35.41 EFG	2.061	5.82	18.75	4.44
U567	Lipton/ Unilever Best Foods	34.24 FG	1.770	5.17	20.00	4.47
Red Spring	Nunhems USA	33.61 G	1.849	5.50	19.50	4.45
H-2601	Heinz Seeds	33.20 G	1.876	5.65	19.50	4.38
LSD @ 0.05 = 3.77			0.210	0.34	1.02	0.10
C.V. (%) = 6.93%			6.84%	4.19%	3.60%	1.55%
Mean 38.18			2.161	5.66	19.92	4.44

<sup>1</sup> Average of four replications



**Table 3. 2006 Midseason Processing Tomato Variety Trial**  
 K & H Farms (Hal & Keith Robertson) – Tracy, California

Observation Varieties

Variety	Seed Co.	Yield <sup>1</sup> (tons/Acre)	Brix Yield <sup>1</sup> (tons/Acre)	Soluble <sup>1</sup> Solids (° Brix)	Color <sup>1</sup> PTAB	pH <sup>1</sup>
HMX 5893	Harris Moran Seeds	39.64	2.339	5.90	21.0	4.51
NDM 4464	Nippon Del Monte	39.12	2.230	5.70	19.0	4.37
BOS 212	Orsetti Seeds	36.33	2.107	5.80	19.0	4.49
U892	Lipton / Unilever Best Foods	29.62	1.688	5.70	19.0	4.60
U898	Lipton / Unilever Best Foods	23.52	1.411	6.00	20.0	4.46
Mean		33.65	1.955	5.82	19.6	4.49

<sup>1</sup> Average of only one replication

## MANY THANKS

Many thanks to Anthony Massoni and Paul Simoni and Hal and Keith Robertson for their participation and cooperation in these variety trials. These trials can be a disruption in normal grower operations, but these gentlemen put up with these interruptions to increase their own knowledge and to benefit the tomato industry.

Appreciation is also expressed to Chuck Rivara and the California Tomato Research Institute Board for their continued support over 34 years for the Uniform Quality Determinations and Statewide Processing Tomato Variety Trials project conducted by University of California Cooperative Extension.

Thanks also to Tom Ramme, Gary Grant, Kay Ricketts, Kim Stroud and Sheri Campbell of the Processing Tomato Advisory Board Inspection System for all their help and cooperation in running tomato fruit quality samples from the trials. Appreciation is also expressed to Panella Trucking, Inc. (Bob Panella and Art Pratt) for allowing the quality samples to be run and analyzed at their grading station facility in Stockton, California.

Much gratitude is also expressed to Diane Barrett and Sam Matoba of the UC Davis Department of Food Science and Technology for all their efforts in running fruit quality samples from the Farm Advisor variety trials as part of the processor sponsored T-4 Project, and to Gail Nishimoto, Program Analyst at UC Davis for doing the statistical analysis (individual and combined trials) for the Farm Advisor variety trials project.

Final thanks also to the seed industry, which provides the basic material for the trials and continuing financial support in 2006, and to everyone in the tomato industry for their guidance and support.

**2006 STATEWIDE  
PROCESSING TOMATO  
VARIETY TRIALS**

## 2006 STATEWIDE PROCESSING TOMATO VARIETY EVALUATION TRIALS

Since 1972, the California Tomato Research Institute, in cooperation with UC Cooperative Extension, has supported the Statewide UCCE Farm Advisor/Specialist Processing Tomato Variety Evaluation Project. This project has supplied growers, processors, seedsmen and field personnel with valuable information on variety yield performance in field trials over a wide geographical area as well as giving vital data on processing quality characteristics. It has also provided critical data to individual production districts and counties on varietal adaptability to local conditions. This year, the project evaluated 12 replicated early maturing varieties, 16 replicated midseason maturing lines and five single-replication observation midseason maturity selections common to all trial locations. Individual county trial reports should be obtained to get an accurate tabulation of varieties tested in both the early and midseason maturity trials.

This season saw statewide processing tomato production approaching 10.1 million tons at this writing, considerably below the preseason forecast. A prolonged wet spring delayed planting and along with some disease problems in the San Joaquin Valley and elsewhere, plus a very hot July, caused reduction in plant fruit set and yield. Diseases that occurred, although not wide spread, included Bacterial Speck, Verticillium Wilt, Late Blight, Fusarium sp., Powdery Mildew and some minor virus outbreaks. Insect pressure was average with some local problems involving aphids, mites, fruit worm and stinkbugs. Harvest was not completed until early November.

The statewide UCCE variety evaluation project averaged 45.7 tons/acre for the early season replicated variety trials and 34.6 tons/acre for the midseason maturity replicated trials. Early season soluble solids (°Brix) averaged 5.2, while soluble solids in the midseason replicated trials average 5.5. Early season color in the replicated trials was 25.1, which was not as good as 2005, while color in the midseason replicated trials was 23.9, which was a little more than 2005. pH levels in the early season replicated trials were lower (4.35) than 2005 while the pH levels in the midseason replicated trials (4.43) were higher than 2005.

### Results and Discussion

Seven counties (Yolo, Contra Costa, San Joaquin, Stanislaus, Merced, Fresno and Kern) participated in the statewide variety evaluation studies this past season, conducting three early and seven midseason trials. The three following tables represent summaries of combined yield and fruit quality from the 2006 Statewide UCCE Farm Advisor/Specialist Processing Tomato Variety Evaluation Project. These summaries were obtained from the computer trial data analyses done by Gail Nishimoto, Programmer Analyst, at UC Davis and coordinated by Scott Stoddard, Vegetable Crops Farm Advisor in Merced County.

**Table A** represents yield and quality means from the Uniform Replicated Early Season Maturity Variety trials. Results of three trials from Yolo, Contra Costa/San Joaquin and Fresno Counties are contained in this analysis. Highest yield in the combined data was achieved by H5003 at 49.5 tons/acre, followed by Sun 6366 (49.0 tons/acre), BOS 66509 (48.5 tons/acre), BOS 66508 (48.2 tons/acre), APT 410 (47.9 tons/acre) and HMX 5883 and BOS 7026, both at 45.6 tons/acre. In terms

of fruit quality the top varieties in soluble solids were Sun 6366 and Hypeel 45, both at 5.6, followed by PS 438 (5.5), H 5003 (5.4), APT 410 (5.3), and BOS 7026 and BOS 66508, both at 5.2. Highest Brix Yield occurred with Sun 6366 at 2.74 tons/acre, followed by H5003 (2.67 tons/acre), APT 410 (2.54 tons/acre), BOS 66508 (2.51 tons/acre), and BOS 7026 and Hypeel 45, both at 2.37 tons/acre. The variety with the best fruit color was BOS 66508 at 22.1 followed by H5003 (22.9), PS 438 (23.6) and APT 410 (24.3). An Agrtron color meter is used to determine fruit color, so the lower the numerical value, the better the fruit color. Best pH levels were shown by Hypeel 45 (4.27), APT 410 (4.31), BOS 66508 and H9280, both at 4.32, and Sun 6366 and BOS 7026, both at 4.33. pH levels are best when at 4.35 or lower.

**Table B** presents results from the Midseason Maturity Replicated Variety trials. Data is shown for seven trials in six county locations (Yolo, San Joaquin, Stanislaus, Merced, Fresno (two trials), and Kern. Best combined yield was provided by DRI 8058 at 40.7 tons/acre followed by Sun 6368 (39.3 tons/acre), PS 345 (37.7 tons/acre), U886 (36.8 tons/acre), H8004 (36.1 tons/acre), and H 9780 (35.0 tons/acre). Best soluble solids (°Brix) occurred with Sun 6374 at 6.3, followed by PS 384 (5.9), Sun 6368 (5.8), H8004, DRI 4610 and H2005, all at 5.7, and AB2 (5.6). Best Brix Yield was attained by Sun 6368 at 2.28 tons/acre, followed by DRI 8058 (2.08 tons/acre), H8004 (2.06 tons/acre), Sun 6374 (2.05 tons/acre) and PS 384 (2.04 tons/acre). Varieties showing the best fruit color were led by U886 at 22.4, followed by DRI 4610 (22.8), DRI 8058 and H2005, both at 22.9, Red Spring (23.2) and H8004 (23.3). Best pH levels were given by AB2 at 4.34, followed by BOS 67374 (4.38), Sun 6374 (4.39) and PS 345, H8004, H9780 and DRI 4610, all at 4.40.

**Table C** shows data summarized for the Midseason Maturity Observation Variety trials from seven county locations (Yolo, San Joaquin, Stanislaus, Merced, Fresno [two sites], and Kern). Highest combined yield in the trials for the five observation lines tested was led by HMX 5893 at 35.3 tons/acre, followed by NDM 4464 (34.4 tons/acre), BOS 212 (32.7 tons/acre), U898 (30.2 tons/acre) and U892 (29.5 tons/acre). Best soluble solids were achieved by BOS 212 at 5.5, followed by HMX 5893 and U892, both at 5.4, and NDM 4464 and U898, both at 5.2. Highest Brix Yield was attained by HMX 5893 at 1.91 tons/acre, followed by BOS 212 (1.80 tons/acre), NDM 4464 (1.79 tons/acre), U892 (1.59 tons/acre), and U898 (1.57 tons/acre). Best fruit color occurred with U892 at 22.3, followed by NDM 4464 (23.6), U898 (23.7), BOS 212 (23.9), and HMX 5893 (25.6). Best pH levels were present with NDM 4464 at 4.40, followed by U898 (4.44), U892 (4.46), BOS 212 (4.47) and HMX 5893 (4.48).

**Table A. 2006 Combined Location Means for Yield, Brix, Brix Yield, Color and pH of Replicated Early Maturity Processing Tomato Varieties. Three Locations: Yolo, Contra Costa/San Joaquin and Fresno Counties**

Variety	Yield (Tons/Acre) Combined Locations	Brix (%)	Brix Yield (Tons/Acre)	Color (PTAB)	pH
H 5003	49.5 A	5.4	2.67	22.9	4.35
Sun 6366	49.0 A	5.6	2.74	27.4	4.33
BOS 66509	48.5 A	4.8	2.33	24.8	4.34
BOS 66508	48.2 A	5.2	2.51	22.1	4.32
APT 410	47.9 AB	5.3	2.54	24.3	4.31
HMX 5883	45.6 BC	5.0	2.28	27.9	4.38
BOS 7026	45.6 BC	5.2	2.37	25.1	4.33
H 9280	44.9 C	4.8	2.16	25.7	4.32
U250	43.2 CD	5.1	2.20	26.8	4.37
PS 438	42.4 D	5.5	2.33	23.6	4.43
Hypeel 45	42.3 D	5.6	2.37	25.8	4.27
U462	41.3 D	5.1	2.11	25.0	4.39
Mean	45.7	5.2	2.38	25.1	4.35
LSD @ 0.05 =	2.4	0.3		1.8	0.03
C.V. (%) =	6.5%	6.4%		8.9%	1.0%
Variety x Location					
LSD @ 0.05 =	4.2	N.S.		N.S.	N.S.

**Table B. 2006 Combined Location Means for Yield, Brix, Brix Yield, Color and pH of Replicated Midseason Maturity Processing Tomato Varieties Indicating Significant Location x Variety Interactions for All Variables. Seven Locations: Yolo, San Joaquin, Stanislaus, Merced, Fresno 1 & 2, and Kern Counties**

Variety	Yield (Tons/Acre) Combined Locations	Brix (%)	Brix Yield (Tons/Acre)	Color (PTAB)	pH
DRI 8058	40.7 A	5.1	2.08	22.9	4.46
Sun 6368	39.3 AB	5.8	2.28	24.7	4.44
PS 345	37.7 BC	5.0	1.89	26.4	4.40
U886	36.8 BCD	5.3	1.95	22.4	4.47
H 8004	36.1 CDE	5.7	2.06	23.3	4.40
H 9780	35.0 DEF	5.4	1.89	24.2	4.40
PS 384	34.6 DEF	5.9	2.04	26.2	4.41
AB2	34.2 EF	5.6	1.92	23.6	4.34
H 2005	34.1 EF	5.7	1.94	22.9	4.48
BOS 67374	33.6 FG	5.5	1.85	23.7	4.38
H 2601	33.5 FG	5.2	1.74	23.9	4.45
DRI 4610	33.4 FG	5.7	1.90	22.8	4.40
Sun 6374	32.6 FGH	6.3	2.05	24.5	4.39
Red Spring	32.5 FGH	5.1	1.66	23.2	4.52
HMX 4802	31.4 GH	5.2	1.63	24.9	4.50
U567	30.6 H	5.0	1.53	23.6	4.46
Mean	34.6	5.5	1.90	23.9	4.43
LSD @ 0.05 =	2.5	0.2		0.7	0.03
C.V. (%) =	13.8%	7.2%		5.2%	1.2%
Variety x Location					
LSD @ 0.05 =	6.7	0.5		1.7	0.07

**Table C. 2006 Combined Location Means for Yield, Brix, Brix Yield, Color and pH of Observation Midseason Maturity Processing Tomato Varieties. Seven Locations: Yolo, San Joaquin, Stanislaus, Merced, Fresno 1 & 2, and Kern Counties**

Variety	Yield (Tons/Acre) Combined Locations	Brix (%)	Brix Yield (Tons/Acre)	Color (PTAB)	pH
HMX 5893	35.3	5.4	1.91	25.6	4.48
NDM 4464	34.4	5.2	1.79	23.6	4.40
BOS 212	32.7	5.5	1.80	23.9	4.47
U 898	30.2	5.2	1.57	23.7	4.44
U 892	29.5	5.4	1.59	22.3	4.46
Mean	32.4	5.3	1.73	23.8	4.45
LSD @ 0.05 =	N.S.	N.S.		1.7	0.05
C.V. (%) =	16.4%	7.3%		6.4%	1.0%



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Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6<sup>th</sup> Floor, Oakland, CA 94607-5200, (510) 987-0096.

**Cooperative Extension Work in Agriculture and Home Economics, U.S. Department of Agriculture,  
University of California and San Joaquin County Cooperating**