University of California Cooperative Extension

Vegetable Crop Facts

Merced and Madera Counties

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Special Note:

A Vegetable Notes newsletter about onions and garlic is available at http://cetulare.ucdavis.edu/Vegetable_Crops/

UPCOMING UCCE PRODUCTION MEETINGS:

South Sacramento Processing Tomato Production Meeting

Heidrick Agriculture History Center
1962 Hays Lane, Woodland, CA
January 10, 2006
8:00 am to Noon
contact: Gene Miyao 530-666-8143

59th California Tomato Growers Association Annual Meeting & UCCE Production Meeting

Doubletree Hotel, Modesto CA
January 25, 2006
8:00 am to 2:00 pm
contact: Jan Mickler 209-525-6800

Vegetable Production Meeting South San Joaquin Valley

UC WSREC, Five Points CA
TUESDAY Morning - January 31, 2006
8:00 am to Noon
contact: Michelle LeStrange 559-685-3309

Foliar fungicides for tomatoes

Remember how bad the bacterial speck was last year? Even resistant varieties were showing a lot of symptoms from this disease depending on when the field was transplanted. Or how about 2004 when powdery mildew was hitting fields with a vengeance. History tells us that it is unlikely that we will have another spring with this high of bacterial speck or powdery mildew pressure in 2006—it will be something else instead. Below is a table summarizing fungicide efficacy on various diseases than can impact tomatoes in California.

Fungicides registered for use on California tomatoes and a summary of UC fungicide efficacy trials 1999 – 2004.

Fungicide	Trade Names	Frac code	Efficacy	Resistance Potential	Mode of Action	Bacterial speck/spot	Powdery mildew	Late blight	Black mold	Major Use
Ampelomyces quisqualis	AQ10	Biological agent	Protectant	?	Parasitic		**+/-**			
Azoxystrobin	Amistar Quadris	11	Protectant/ penetrant	High	Single-site		**++**	**++**	**++**	
Bacillus subtilis	Serenade	Natural product	Protectant	Low	?		**+/-**			
Benomyl	Benlate SP	1		High	Single-site	**-**	**-**	**-**	-	grey mold
Boscalid	Endura 7	Protectant/ penetrant	Moderate	Multi-site					**++**	
Chlorothalonil	Bravo Echo Equus	Y	Protectant	Low	Multi-site	**-**	**-**	**++**	**+++**	
Copper	Kocide Cuprix Nordox	Y	Protectant	Low	Multi-site	**+**	**+/-**	**+**	**+/-**	
famoxadone & cymoxanil	Tanos	11/X	Protectant/ systemic/curative	Low	Multi-site	**?**		**+++**		
dicloran	Botran 75W	14	Mod- Low							grey mold
dimethomorph	Acrobat 50W	15	Protectant/ systemic/ curative	Moderate	unknown			**+++**		
Fenamidone	Reason	11	Protectant/ penetrant	High			**+**	**++**		
fosetyl-al	Aliette	Y		Low	unknown					soil use
harpin protein	Messenger									
EBDC (maneb /mancozeb)	Dithane ManexII Manzate Pencozeb /Maneb Manex	Y	Protectant	Low	Multi-site	** only with copper		**++**	**+++**	
Mefenoxam	Ridomil gold Ultra Flouish	4	Protectant/ systemic/curative	High	Single-site					soil use
Myclobutanil	Rally	3	Protectant/ penetrant	High	Single-site	**-**	**++**	**-**		
neem oil	Trilogy		Natural product	Low	unknown					
PCNB	Terraclor	14		Mod- Low						seed treat-ment
phos-acid-mp salt	EksPunge/ Nutrol									
potassium bicarbonate	Armicarb 100	Y	Protectant	Low	Multi-site		**+/-**			
potassium phosphate	ProPhyt									
pyraclostrobin	Cabrio EG	11	Protectant/ penetrant	High	Single-site	**-**	**++**	**++**	**+++**	
sodium tetraborohydrated.	Prev-Am Ultra									
sulfur		Y	Protectant	Low	Multi-site	**-**	**++**	**-**	**-**	
trifloxystrobin	Flint	11	Protectant/ penetrant	High	Single-site	**-**	**++**	**?**	**?**	

Rating system: ++++ = excellent and consistent, +++ = good and reliable, ++ = moderate and variable, + = limited and/or erratic
+/- = minimal and often ineffective, -- = ineffective, ? = unknown. NR = not registered, (blank) = no data

Frac Code: Resistance management grouping - products having the same number have a common mode of action

Statewide Fresh Market Tomato Variety Trials
Field Evaluations for 2005

Scott Stoddard, Michelle LeStrange, Bob Mullen (Emeritus) and Jan Mickler
Farm Advisors, Merced & Madera, Tulare & Kings, San Joaquin, and Stanislaus Counties
University of California Cooperative Extension

Introduction

UCCE conducts fresh market tomato variety trials in three areas in the San Joaquin Valley to evaluate the performance of new varieties and breeding lies from commercial plant breeders for the mature green market. These variety trials evaluate and compare fruit quality characteristics and yield in commercial production fields with different types of soil, management, and growing conditions. This market includes both round and "roma" type tomatoes.

The trials are broken into two components: replicated and observation. Seed companies are asked to submit lines that have been previously tested in grower fields in California for the replicated trial. The observation lines usually represent the plant breeder's most promising lines for central California's commercial growing conditions and markets.

Procedure

Trials are laid out as randomized complete block designs with 4 replications (observation lines are not replicated but are planted adjacent to the replicated plots). Plots are transplanted and managed concurrently as the commercial field in which they are located. Harvest is done by hand at the same time as the rest of the field, picking from a 10 foot section from the center of the plot. At harvest, fruit are sorted by culls, color, and size. Small fruit (2 – 2.25") are picked but are not included in the total market yield. The Merced location is drip irrigated; the other two are furrow irrigated.

Results

Replicated Lines

Fruit yield and size for Merced are shown in Table 1. AT-37 had significantly higher yields than all other varieties. Two new lines from Syngenta/Rogers Seeds, RFT 500-311 and –312 also performed well in the trial this year. Overall, the production of XL fruit was significantly lower in Merced compared to the other locations.

Results for marketable yield and fruit size for Fresno, Merced, and San Joaquin Counties are shown in Figure 1. Shady Lady and Quali T-21 are the standards to which the other varieties are compared. In Fresno, BHN 580 was the clear standout with regard to yield, with a mean yield over 2400 boxes/A. This was largely a result of an over-production of jumbo sized fruit.

There was no variety in San Joaquin County that was so markedly higher yielding than the rest. At-37, Q-21, Catalyst, and RFT 500-311 all yielded similar to each other at around 2000 boxes per acre.

The marketable yield LSD's for Fresno, Merced, and San Joaquin Counties were 211, 424, and 360 boxes per acre, respectively. Additional information about this trial can be found in the full report posted on the Merced County website at http://cemerced.ucdavis.edu.

Observed Lines

Results from the observation plots for Merced are shown in Table 2. No variety really stood out this year; rather, most lines had a lot of blossom end rot, pointed ends, and gold flecking. The cull rate was almost 40% compared to 22% in the replicated lines. Yields in general were also less than the replicated varieties.

The combined market yields for each county are shown in Figure 2. Because there is no replication in the observed lines, statistical analysis could be performed only on the combined data set. SRT 6784 did particularly well in Fresno, while BHN 525 and PX 2942 yielded well in Merced and San Joaquin locations. Combining locations, no significant differences among varieties were found for yield or size, mainly because of the large amount of variability in the data.

Romas

A replicated roma trial was conducted only in San Joaquin County. At that location, Miroma performed better than the other lines. Jan Mickler or Bob Mullen may be contacted directly for additional information about this trial, or in the complete report at http://cemerced.ucdavis.edu.

Acknowledgements

Many thanks to Bob Giampaoli with Live Oak Farms and Daniel Acevedo with Growers Transplants for their help and cooperation with this test. This trial received financial support from the California Tomato Commission and various seed companies.

Table 1. Fresh market tomato variety trial yield and grade results, MERCED COUNTY, 2005. REPLICATED varieties.

		Market Yield		XL	L	M	S	Total	Total Yield	
Code	Variety	Tons/A	Boxes/A	--- % Marketable Yield ---			Tons/A	Tons/A	Culls %	Red %
1	**AT-37**	31.5	2523	27.8	51.5	20.6	5.5	47.4	22.0	12.2
11	**RFT 500-312**	27.7	2217	21.2	53.4	25.4	6.1	39.8	14.6	17.2
10	**RFT 500-311**	27.3	2187	34.3	50.8	14.9	3.6	37.6	18.1	10.1
7	**Bobcat**	25.2	2013	30.8	43.3	25.9	4.7	39.5	24.4	10.2
12	**STM 0115**	25.0	2000	18.1	47.2	34.7	6.7	39.2	19.1	22.2
8	**Catalyst**	24.6	1968	24.5	45.3	30.2	6.2	38.6	20.3	6.5
13	**SVR 2935**	24.4	1951	18.5	50.1	31.4	5.6	41.6	23.6	9.7
9	**RFT 500-305**	24.0	1917	40.0	44.7	15.3	2.6	33.9	20.5	12.6
5	**QualiT 21**	23.1	1845	24.1	53.7	22.3	3.8	35.9	25.8	4.1
6	**QualiT 23**	22.0	1762	21.0	54.6	24.5	4.6	38.6	31.0	9.1
3	**BHN 654**	21.2	1699	20.6	49.8	29.6	6.9	35.4	20.5	9.4
2	**BHN 580**	21.1	1688	18.8	50.4	30.9	6.3	37.4	27.1	8.9
4	**Shady Lady**	20.1	1607	12.5	55.1	32.4	7.8	39.0	28.9	14.9
	Average	**24.4**	**1952**	**24.0**	**50.0**	**26.0**	**5.4**	**38.7**	**22.8**	**11.3**
	LSD 0.05	5.3	424	9.8	NS	11.9	2.9	NS	7.6	NS
	CV %	13.0	13	23.8	12.6	27.5	32.9	11.0	20.0	55.6

Market yield = XL + L + M size fruit, average of four replications. One box = 25 lbs.
XL, L, M% = weight of respective fruit sizes divided by marketable yield.
Red% = weight of all red fruit divided by total yield. Indicates relative maturity among tested varieties.
Culls, %: Any fruit so disfigured (due to rot, cat facing, insect damage, etc.) as to be unmarketable.
XL = 3 inches and larger in diameter
L = 2.5 to 3"
M = 2.25 to 2.5"
S = 2 to 2.25"
LSD 0.05 = least significant difference at the 95% probablility level.
Means within the same column that differ by less than this amount are not significantly different.
NS = not significant at the 95% probability level.
CV = coefficient of variation, a measure of the variability in the experiment.

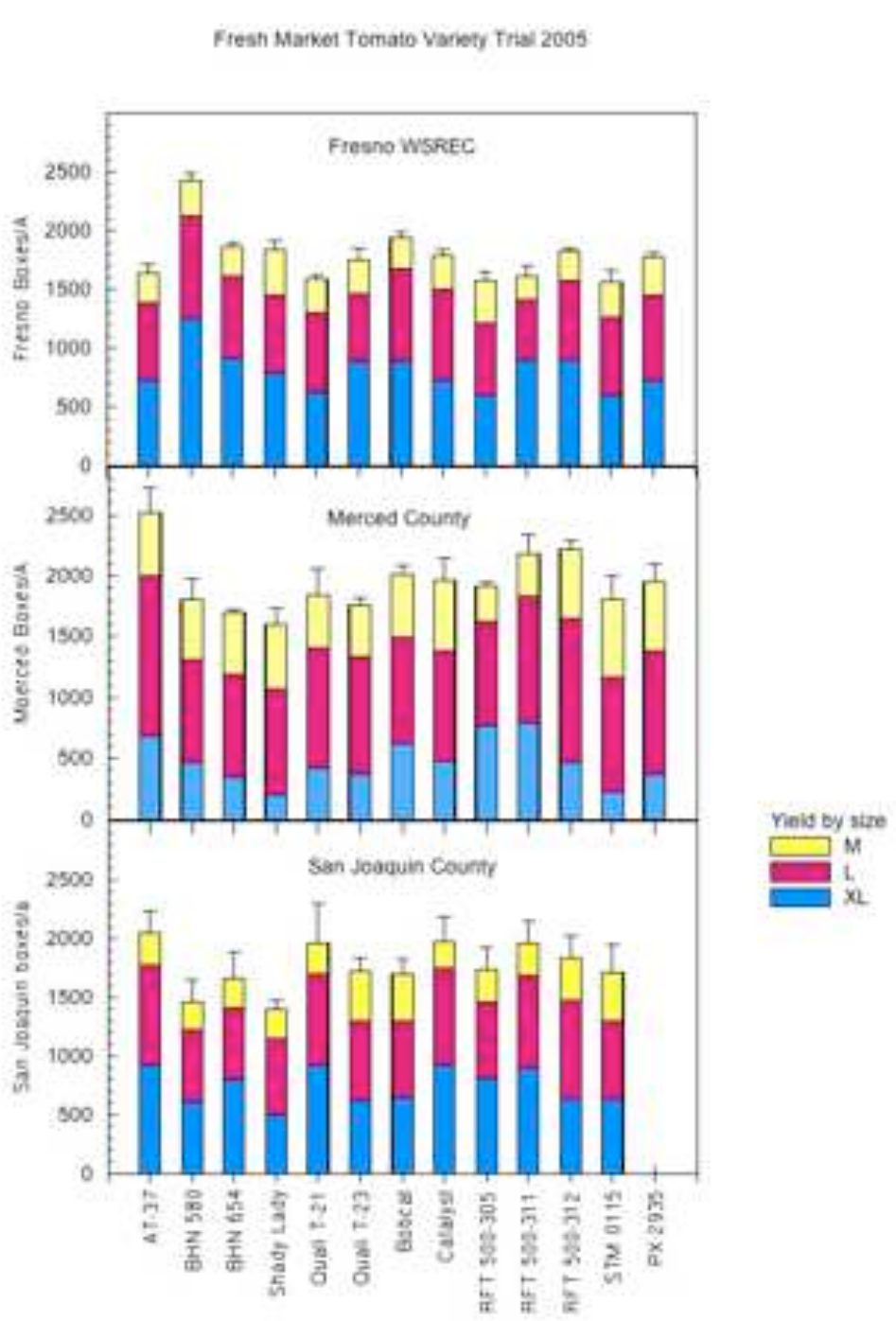


Figure 1. Yield by size class for all three locations in the fresh market tomato variety trial, 2005. Error bars are the standard error of the mean for each variety. The total height of the bar is the total market yield.

Table 2. Fresh market tomato variety trial yield and grade results, MERCED COUNTY, 2005.
OBSERVED Varieties

Code	Variety	Market Yield Tons/A	Boxes/A	XL	L	M	S Tons/A	Total Tons/A	Culls	Red
				--- % Marketable Yield ---					---% Total Yield---	
21	**BHN 525**	28.2	2256	20.1	57.9	22.0	5.5	45.7	26.2	6.8
22	**BHN 678**	19.7	1577	20.6	43.1	36.3	5.7	43.7	41.9	2.6
23	**BHN 703**	25.0	2004	22.3	43.0	34.6	3.7	49.6	41.9	11.6
24	**SXT 6763**	13.6	1089	8.8	29.3	61.9	8.1	36.7	41.0	3.0
25	**SXT 6764**	22.4	1795	22.2	45.3	32.5	7.3	47.4	37.2	13.0
26	**SRT 6783**	20.3	1626	25.0	48.2	26.8	3.2	33.5	29.8	10.7
27	**SRT 6784**	13.7	1095	13.3	39.3	47.5	7.1	38.9	46.6	7.0
28	**STM 2203**	12.8	1022	15.9	49.7	34.4	4.3	34.5	50.5	2.1
29	**PX 2942**	28.6	2285	24.1	48.5	27.3	3.8	49.3	34.2	6.8
	AVERAGE	20.5	1638.8	19.1	44.9	35.9	5.4	42.1	38.8	7.1

One plot per variety.
See notes from Table 1.

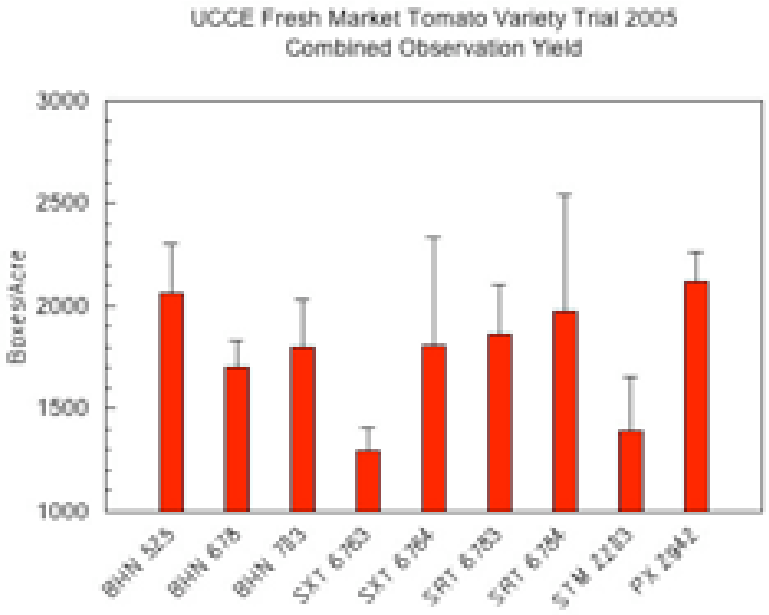


Figure 2. Total market yield results for the observation varieties, combined across location. Error bars represent one standard error of the mean. Variety yields are not significantly different.

Processing Tomato Variety Trial, Mid-Season Field Evaluations for 2005

Scott Stoddard, Farm Advisor
University of California Cooperative Extension

OBJECTIVE: Yield and fruit quality evaluation of various process tomato varieties as part of the UCCE Regional Variety Trial. Results allow producers and processors to evaluate the relative performance of new lines with established varieties and see how well they perform across a wide range of growing conditions in the San Joaquin Valley.

LOCATION: San Juan Ranch Firebaugh ranch, off Oxalis Rd in Fresno County. Dan Burns, cooperator.

METHODS:
Sixteen process tomato varieties were grown for the replicated plots, and 15 lines for the observational trial. Plants were seeded March 10, 2005, and transplanted May 23. Plot size was 1 bed (5 feet) by 100 feet long, with plants on a 12" spacing. The replicated trial was replicated four times. Transplanting was performed with the grower's equipment. Field was furrow irrigated. Field and plots were sprayed with ethephon to hasten ripening.

Varieties:

REPLICATED	OBSERVATION
1. AB2	A. PS 607
2. SUN 6366	B. H9780
3. U232	C. U567
4. HMX 3859	D. H 8004
5. PS 345	E. BOS 67374
6. H5803	F. HMX 4799
7. H9665	G. HMX 4802
8. UG 151	H. CTRI 4863-N
9. H8892	I. DRI 9730
10. 3155	J. SUN 6371
11. H2401	K. U 519
12. U 005	L. HMX 4798
13. H 2601	M. HMX 4801
14. Red Spring	N. NDM 3379
15. SUN 6360	O. SUN 6374
16. SUN 6368	

Fruit samples were taken September 27 and submitted to the PTAB station at the Morningstar Liberty plant in Los Banos for soluble solids (SS), color, and pH. Plots were harvest September 29 using a Johnson tomato harvester equipped with electronic eye sorters and weighed using a modified grape harvest wagon (tomato weigh wagon).

RESULTS:
Results for the replicated and observation trials are shown in Tables 1 and 2. Overall yields were low this year because the trial was negatively impacted by extreme heat during the period of fruit set. This was the hottest summer on record for the Merced-Fresno area, with over 45 days above 100° F during July and August. Most plots yielded between 20 and 30 tons per acre. Soluble solids and pH were very good, averaging 5.71% and 4.39, respectively.

The combined statewide results for the replicated lines are shown in Table 3. This table shows the overall performance of the varieties from all counties involved (Yolo, Stanislaus, Merced, Fresno, and Kern).

ACKNOWLEDGEMENTS
Many thanks to Daniel Acevedo with Growers Transplants in Gustine for raising the plants from seed, and Daniel Burns with San Juan Ranch for planting and harvesting the field trial.

Table 1. 2005 Merced County process tomato variety trial results, mid-season replicated lines.

Variety	Yield tons/A				SS	PTAB color	pH
1. AB2	28.55	a			5.88	21.5	4.32
11. H2401	28.44	a			5.60	21.8	4.25
6. H5803	27.39	a	b		6.15	20.8	4.39
9. H8892	27.36	a	b		5.53	20.3	4.39
3. U232	27.32	a	b		5.88	20.0	4.33
5. PS 345	26.81	a	b		5.48	22.8	4.41
7. H9665	26.71	a	b		5.30	21.3	4.35
4. HMX 3859	25.27	a	b	c	6.25	21.8	4.39
2. SUN 6366	24.83	a	b	c	5.88	21.0	4.43
16. SUN 6368	24.68	a	b	c	6.20	21.5	4.44
15. SUN 6360	23.49		b	c d	5.38	20.0	4.42
10. 3155	22.92		b	c d	5.33	21.5	4.42
8. UG 151	21.30			c d	5.65	21.0	4.44
12. U 005	21.22			c d	5.60	22.3	4.38
13. H 2601	21.01			c d	5.73	20.5	4.37
14. Red Spring	19.26			d	5.50	19.8	4.49
Average	24.736				5.71	21.1	4.39
LSD 0.05	4.75				0.34	1.7	0.06
CV, %	13.5				4.2	5.5	1.0

LSD = Least significant difference. Means separated by less than this amount are not significantly different. Yield means followed by the same letter are not significantly different.

CV = coefficient of variation, a measure of the variablity in the experiment. CV's > 10 indicate a high level of variability.

Yields are estimated from four machine picked 100 ft plots. Sorted using electronic sorters.
SS = soluble solids, measured as % Brix.
PTAB color used LED. Lower values = redder fruit.

Table 2. 2005 Merced County process tomato variety trial results, mid-season observational lines.

Variety	Yield tons/A	SS	PTAB color	pH
G. HMX 4802	41.07	5.20	23	4.47
O. SUN 6374	26.44	5.80	21	4.37
E. BOS 67374	26.06	5.90	20	4.37
K. U 519	25.83	6.10	20	4.41
H. CTRI 4863-N	25.74	5.60	22	4.45
F. HMX 4799	24.55	5.20	20	4.40
D. H 8004	23.46	6.40	20	4.34
N. NDM 3379	22.47	6.20	21	4.40
M. HMX 4801	21.86	5.60	21	4.42
L. HMX 4798	20.33	5.80	21	4.46
C. U567	20.20	5.50	22	4.41
B. H9780	20.02	6.00	20	4.31
J. SUN 6371	19.48	6.50	19	4.33
I. DRI 9730	19.40	6.30	21	4.31
A. PS 607	17.71	6.30	20	4.32
Average	23.64	5.89	20.73	4.38

Yields are estimated from machine picked 100 ft plots with no replication.
SS = soluble solids, measured as % Brix.
PTAB color used LED. Lower values = redder fruit.

Table 3. 2005 regional processing tomato mid-season variety trial, replicated lines combined results.

Variety	Yield tons/A					SS	PTAB color	pH
U 232	42.1	a				5.1	23.2	4.34
SUN 6366	39.6	a	b			5.6	23.8	4.42
UG 151	39.2	a	b	c		5.2	23.1	4.45
SUN 6368	39.0	a	b	c		5.8	24.2	4.44
PX 345	38.8		b	c		5.4	25.2	4.38
H 8892	37.4		b	c	d	5.3	23.1	4.38
SUN 6360	37.2		b	c	d	5.2	22.7	4.41
H 2401	37.2		b	c	d	5.4	23.2	4.28
H 9665	37.1		b	c	d	5.0	24.0	4.34
H 5803	36.7		b	c	d	6.0	22.9	4.38
Red Spring	36.5			c	d	5.2	22.7	4.47
HMX 3859	34.6				d e	5.9	24.3	4.45
H 2601	34.4				d e	5.4	24.2	4.38
U 005	34.3				d e	5.4	24.5	4.35
AB 2	33.3				e	5.9	23.7	4.33
Halley 3155	33.0				e	5.6	23.3	4.35
Mean	36.9					5.5	23.6	4.380
var LSD 0.05	3.1					0.2	1.0	0.030
var x loc LSD	6.9					0.5	NS	0.070
CV, %	13.4					6.5	7.0	1.200

LSD = Least significant difference. Means separated by less than this amount are not significantly different at the 95% confidence level. Yields followed by the same letter are not significantly different.
var x loc LSD = variety by location least significant difference.
CV % = coefficient of variation, a measure of the variability in the experiment.

Herbicide Control of Nightshade and Nutsedge in Processing and Fresh Market Tomatoes

Scott Stoddard, Farm Advisor
University of California Cooperative Extension

Introduction

Yellow nutsedge (*Cyperus esculentus*) and nightshade (both black and hairy, *Solanum nigrum* and *S. sarrachoides*) are two dominant weed problems for tomato growers in Merced and Madera Counties. One of the available herbicides for both of these weeds is metalochlor (Dual Magnum), which received late registration in 2003. While there are a few other herbicides registered to control these weeds, two relatively new chemicals that target these species specifically are rimsulfuron (formerly Shadeout, now marketed under the trade name Matrix) and halosulfuron-methyl (trade name Sandea). Post emergent sprays of Matrix target nightshades, whereas Sandea is almost exclusively a nutsedge herbicide. Efficacy for both is improved through the use of a non-ionic surfactant or crop oil concentrate. Furthermore, tank-mixes of Sandea + Matrix have given exceptionally good weed control of both nutsedge and nightshades.

One disadvantage with Sandea is potential crop phytotoxicity, especially with certain varieties. This sensitivity is exacerbated with the addition of Matrix. In trials on processing tomatoes in 2004, certain varieties showed up to 80% phytotoxicity symptoms with a Sandea + Matrix combination. Yields were not significantly affected, but fruit quality was not evaluated.

In 2005, eight fresh market tomato varieties were screened for sensitivity to various post-application herbicides. In processing tomatoes, nightshade and nutsedge conrol were evaluated with several different pre and post application materials. In both locations, the standard herbicide was Dual Magnum. The objective of these trials was to compare efficacy and crop sensitivity to various herbicides that suppress nutsedge and nightshade in tomatoes.

Procedure

The trials were located in commercial production fields near Gustine (fresh market) and Firebaugh (processing). Plots were furrow irrigated and managed similarly as the rest of the field with the exception that mechanical cultivation and hand weeding were not performed. At the Firebaugh location, the pre-plant herbicides were incorporated with sprinklers, whereas at the Gustine site Dual Magnum was incorporated with a disc. Post emergent herbicides were applied over-the-top when the crop was near first bloom. Following herbicide application, plots were evaluated for weed control on a 0 to 10 scale, where 0 = no weed growth and 10 would indicate complete weed coverage.

Results

At the Gustine location, Dual Magnum, Sandea, and a tank-mix of Sandea + Matrix did the best job controlling nutsedge, especially by the latest evaluation date on July 18 (Figure 1). In Figure 1, herbicide pressure is shown as percentage, though the statistical analysis was performed on the transformed data (0 to 10 scale). At this time, all herbicide treatments provided significantly better control of both nutsedge and broadleaf weeds than the untreated check plots. Sencor did not perform as well as the other herbicides on controlling nutsedge, but did significantly reduce broadleaf weeds as compared to the untreated control.

The main weeds in this trial were purslane (*Portulaca oleracea)* and yellow nutsedge, and as a result Matrix alone had significant less nutsedge control than Sandea, Dual, or Sandea + Matrix (Matrix post emergent is predominantly a nightshade control material). Matrix did significantly reduce purslane as compared to the untreated control. Dual Magnum, however, did not suppress purslane as well as the other weeds, especially later in the season. There were few grass weeds in this location, though there was a trend for more grassy weeds in the untreated plots.

No herbicide treatment was found to cause phytotoxicity problems with any of the varieties used in this test. Furthermore, there was no impact on yield or fruit maturity.

Early season weed growth at the processing tomato trial was dominated by nutsedge. Prior to transplanting at the Firebaugh location, all pre-plant herbicides significantly reduced nutsedge growth as compared to the untreated control treatment, though Dual Magnum did better than Matrix. As a post emergence herbicide, Matrix is mainly effective on nightshades, but as a pre-emergent offers some suppression of nutsedge as well. At the July 19 rating, all herbicide treatments significantly reduced nutsedge compared to the untreated control, though there was no significant difference between pre-plant or post-emergence (Figure 2). There was a trend for reduced broadleaf weeds (mainly nightshade and purslane) as compared to the check plots, but this was not significant. Overall best weed control was observed with V-10142 at 0.5 lbs ai (unregistered herbicide from Valent), Dual Magnum, and the Sandea + Matrix (post) tank mix.

Like the fresh market trial, no crop phytotoxicity was observed (field variety was H9665). Yield was not measured at this location.

Summary

In the trials conducted in 2005 in commercial tomato fields, yellow nutsedge was a greater problem than nightshade. At both locations, Dual Magnum pre-plant incorporated significantly reduced nutsedge as compared to not applying any herbicide. In plots without pre-plant herbicides, best weed control was seen with the Sandea + Matrix tank mix. In three years of trials in various tomato production fields, a tank-mix of Sandea + Matrix has consistently provided excellent weed control as a post-emergent herbicide treatment. A few processing varieties have been found to be sensitive to this mix, but in general most tomato varieties tolerate this tank-mix well and yield nor fruit development are significantly impacted.

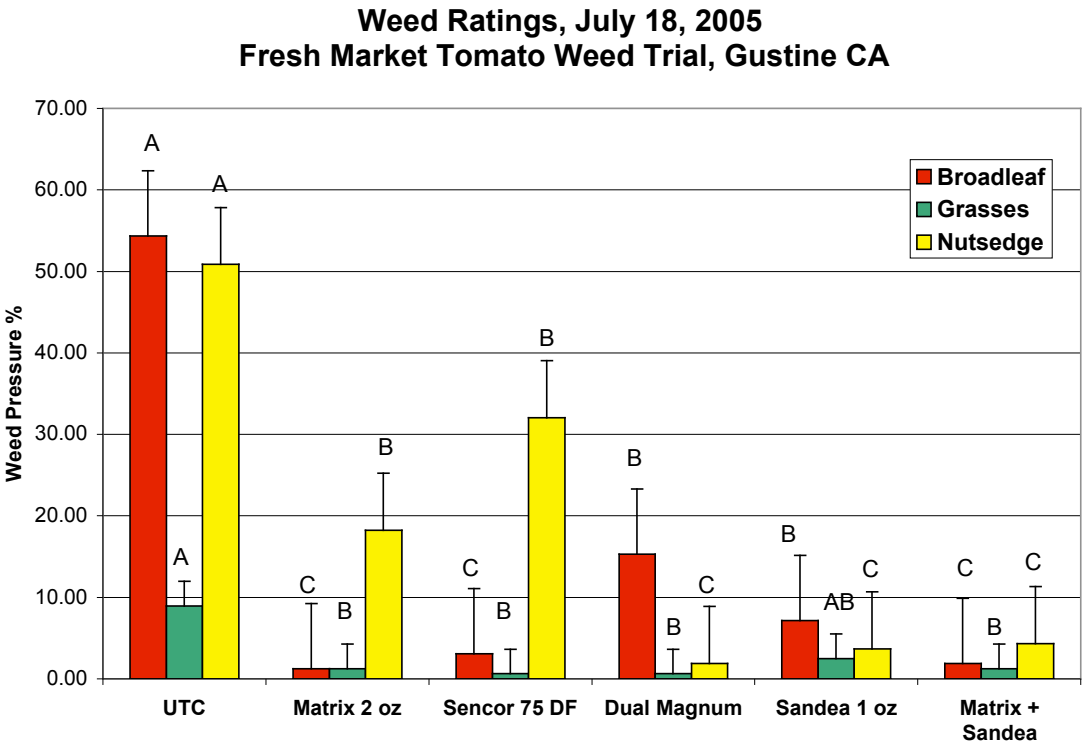


Figure 1. Weed pressure in fresh market tomatoes as affected by herbicide treatment. All herbicides except for Dual Magnum were applied post emergent to the weeds when the crop was near first bloom. UTC = untreated control. Weed categories (broadleaf, grass, and nutsedge) with the same letter are not significantly different at the 95% confidence level. Main broadleaf weed was purslane.

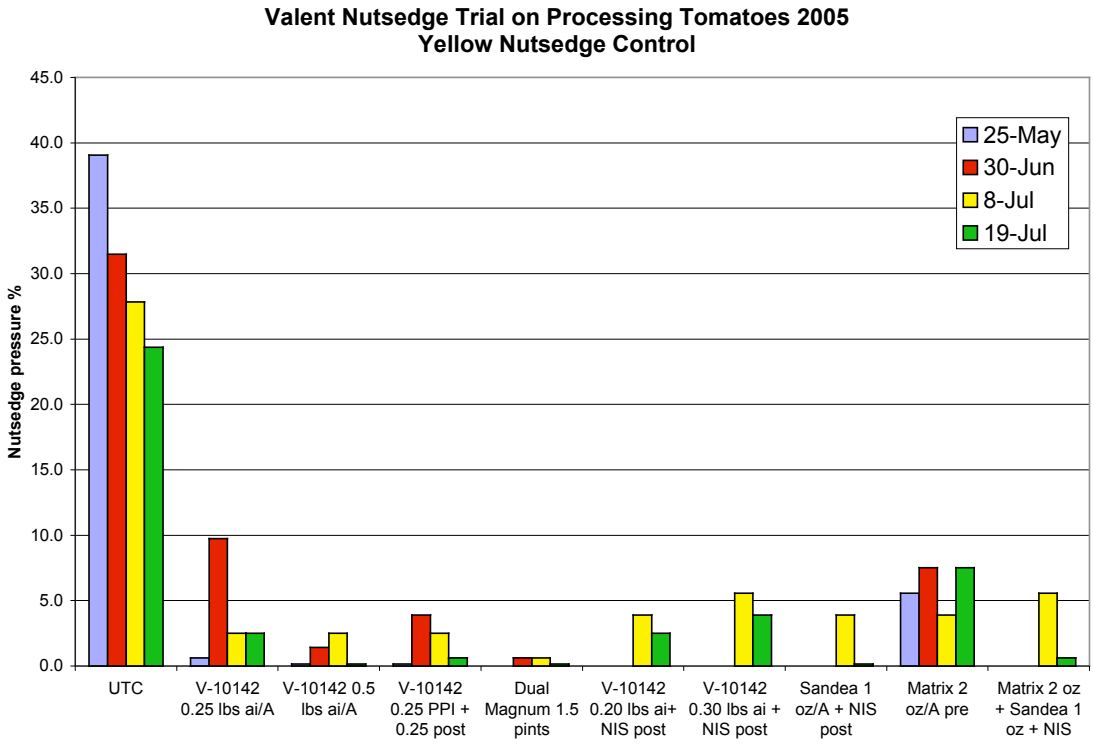
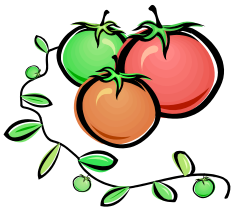


Figure 2. Yellow nutsedge control on various dates as affected by herbicide treatment in processing tomatoes. All herbicide treatments significantly reduced nutsedge growth as compared to the untreated control (UTC). V-10142 is an unregistered herbicide from Valent Corp. Post-emergent treatments were evaluated only after June 30.



Vegetable Crop Facts

UCCE Merced and Madera Counties

Scott Stoddard, Farm Advisor

Newsletter 2005, Issue #7:

2005 Research Summary

Three UCCE Production Meetings this January – see details inside