



## TOMATO INFO

January 12 Meeting Agenda  
Variety Trial Report, 2010

### GENERAL NOTES

The California processing tomato industry had a restrained production year with 12.3 million tons. Even with limited harvest activity in July from our area due to cooler weather, seasonal production remained high. High disease pressure from bacterial speck with rainy weather conditions was a major concern during spring.

Drip irrigation use continues to expand. Irrigation via drip for California processing tomato production may currently exceed 2/3rds of the acres. In those fields with a history of buried drip, annual soil sampling for nutrient levels becomes more important. UC Extension Specialist Tim Hartz cautioned that as nutrient extract is confined primarily to the smaller wetted area, expect an accelerated depletion especially of soil P and K compared to the conventional furrow-irrigated system. Given this limited rooting zone, and the higher yield usually achieved with drip, higher rates of fertilization may be necessary as dictated by soil nutrient levels.

Note: soil samples should be taken, as well as fertilizer applications made, in the wetted area of the drip tape.

Bacterial speck infested fields from 2010 will pose a greater disease risk where crop rotation is scheduled immediately back into tomatoes. Speck can survive on plant debris. Risk may be higher with buried drip irrigation systems where bed tillage between tomato crops is likely reduced. Infested plant debris that is not buried into the soil will be slower to disinfect. Bacterial speck resistant race 0 in our varieties is no longer effective. Hopefully, our 2011 spring weather will be dry and warm to discourage speck development.

Powdery mildew disease pressure in 2010 was more moderate compared to the last several years. Perhaps because of the milder summer and fall temperatures, the impact from leaf defoliation and resulting sunburn damage was less than our normal expectations.

### Upcoming Tomato Meetings:

- ✓ 12 January 2011 (Wed) S. Sacramento Valley Processing Tomato Production Meeting, Woodland Community & Senior Center, 2001 East Street, Woodland, 95776
- ✓ 26 January 2011 (Wed)- N. San Joaquin Valley processing tomato production meeting (AM) follows with CA Tomato Growers Association meeting, DoubleTree Hotel, 1150 9th St, Modesto. Registration required for CTGA luncheon.
- ✓ 1-2 Feb 2011 (Tues-Wed) - CA League of Food Processors Showcase, Sacramento Convention Center, 1400 J Street, Sacramento. Registration required.

## **SOUTH SACRAMENTO VALLEY PROCESSING TOMATO PRODUCTION MEETING**

University of California Cooperative Extension Farm Advisors  
Colusa/Sutter/Yuba and Yolo/Solano/Sacramento Counties

### **Woodland Community & Senior Center**

2001 East Street, Woodland 95776

(From Highway 113, exit on CR 25A, head west to East Street. Right on East St. for ~1 mile)

**Note Change:** meeting in **Banquet Room** located toward north side of main building

**8 am to noon, Wednesday, January 12, 2011**

- 
- 
- 7:45- Doors will open — Coffee and refreshments will be ready  
Moderator: Mike Murray, County Director/ Farm Advisor, Colusa/Sutter/Yuba
- 8:30 *Tomato transplant field studies: age, root-ball orientation, doubles*  
Gene Miyao, Farm Advisor, Yolo/Solano/Sacramento counties
- 8:50 *Disease management update including Fusarium crown and root rot:*  
Mike Davis, Plant Pathologist, UC Davis.
- 9:10 *Weed control update including bindweed:*  
Tom Lanini, Weed Management Specialist, UC Davis
- 9:30 *Nutrient management for drip irrigated tomatoes:*  
Tim Hartz, Vegetable Crop Specialist, UC Davis
- 9:50 ————— Short Break —————
- 10:10 *UCD Powdery Mildew Control Update:*  
Brenna Aegerter, Farm Advisor, San Joaquin County
- 10:30 *Evaluation of double-row tomatoes on 80-inch beds: A progress report*  
Scott Stoddard, Farm Advisor, Merced-Madera counties
- 10:50 *Pesticide Regulation Update for Processing Tomatoes:*  
Jenni King, Biologist, Yolo County Agricultural Commissioner's Office.
- 11:10 *Conservation tillage opportunities in canning tomatoes:* Jeff Mitchell,  
Veg Crop Specialist, UC Kearney Ag Center & UC Davis
- 11:30 end

#### ***Hall Rental and Refreshments Courtesy of:***

Dow AgroSciences (Jill LeVake-Scott)

Syngenta (Josie Hugie)

Bayer (Bob Austin)

Valent USA (JR Gallagher)

BASF (Ben Duesterhaus)

DuPont (Tim Gallagher)

FMC (Mike Howard)

Meeting is open to any interested party. Meeting facility is handicap accessible. 

**PCA Credits: applied for hours**

## MID MATURITY VARIETY TRIAL, LOCAL RESULTS

Our local variety evaluation trial was conducted with Steve Meek and John Pon of JH Meek and Sons in a field between Woodland and Davis. The trial was transplanted on April 26 and followed with a timely harvest on Sept 2 (128 days later). The field had double lines per bed and was exclusively furrow irrigated.

Yields were high coupled with high Brix levels. Cull levels were low except for sunburn and blossom end rot. Verticillium wilt was prevalent and affected many varieties as did moderate levels of powdery mildew. Incidence of Tomato spotted wilt virus was low, averaging below 1%.

Heinz 5508 was the highest yielding variety with almost 58 tons per acre. A number of varieties were in the 2nd highest yielding group with over 50 tons per acre, led by HyPeel 849 with 53.7 tons. Sun 6366 and N 6394 led the high solids group with 5.9° Brix (while both had high pH and sunburn levels). AB 2 and AB 3 were uncommonly in the lower yielding group.

Our test included an evaluation of a foliar nutrient applied about 30 days prior to harvest on variety HyPeel 849. A foliar color change was seen, but was temporary. We did not detect a benefit from the application.

Table 1. Yield, fruit quality and cull evaluation from **replicated**, mid maturity variety trial, JH Meek and Sons, Woodland-Davis area, 2010

<b>Replicated</b>	Yield	LSD 5%		PTAB	%	%	% sun	%	%	lbs.	
Variety	tons/A	yield	Brix	color	pH	pink	green	burn	mold	BER	per 50 fruit
1 H 5508	57.9	a	5.10	22.8	4.39	1	0	5	1	4	8.6
2 HyPeel 849	53.7	b	5.28	23.8	4.38	1	1	5	3	2	8.7
3 CXD 255	53.3	bc	5.50	23.0	4.42	1	1	9	2	3	8.4
4 H 5608	53.0	bc	5.48	23.0	4.49	0	1	6	1	1	9.0
5 SUN 6366	52.1	bc	5.90	23.3	4.56	0	1	18	4	2	8.8
6 HP 849 w/ foliar	51.7	bcd	5.25	25.0	4.38	0	2	5	2	1	8.7
7 H 8504	50.3	bcde	5.38	23.0	4.32	1	1	5	2	3	8.8
8 N 6385	50.3	bcde	5.40	22.5	4.49	0	1	16	3	1	8.4
9 BQ 163	50.2	bcde	5.83	23.8	4.41	0	1	14	2	1	8.5
10 H 9780	49.8	cde	5.48	24.3	4.36	0	0	11	1	2	8.4
11 H 4007	49.7	cde	5.73	22.8	4.45	0	1	13	2	1	8.6
12 UG 19406	49.5	cdef	5.70	22.8	4.31	1	1	4	4	1	8.8
13 CXD 282	48.2	defg	5.33	21.5	4.46	0	1	9	4	2	8.6
14 BQ 205	47.2	efg	5.83	23.5	4.43	1	1	16	2	1	8.8
15 AB 3	46.6	efg	5.78	24.5	4.43	1	1	14	3	0	8.6
16 AB 2	45.6	fg	5.85	23.3	4.39	1	1	13	3	1	8.6
17 HMX 7885	45.5	g	5.25	24.0	4.59	1	1	10	3	5	8.8
18 N 6394	44.6	g	5.90	22.3	4.56	0	1	21	2	0	8.9
LSD 5%	3.8		0.44	1.1	0.06	1.1	0.8	7.1	2.3	1.9	NS
% CV	5		6	3	1	125	58	46	67	80	5
average	45.4		5.3	21.2	4.0	0.6	3.8	10.8	5.6	5.6	8.7

Foliar fertilizer = 3-1 2-3 plus Fe & Zn @ 1 gpa timed about 30 days from harvest.

The observational portion of the trial contained 13 varieties. The non-replicated entries tended to be lower yielding than the replicated section.

Table 2. Yield, fruit quality and cull evaluation from, **non-replicated**, mid maturity variety trial, JH Meek and Sons, Woodland/Davis, 2010

	<b>Observational</b>	Yield	PTAB		%	%	% sun	%	%	lbs./	
	variety	tons/A	°Brix	color	pH	pink	green	burn	mold	BER	50
											fruit
1	H 7709	49.4	5.5	24	4.49	0	1	5	1	1	8.5
2	CXD 280	49.1	5.5	22	4.39	0	1	7	3	4	8.7
3	HMX 9905	48.2	5.2	25	4.52	0	0	10	1	1	8.7
4	UG 19006	48.1	6.0	25	4.38	0	1	2	1	0	8.7
5	UG 19306	47.5	5.2	22	4.40	0	2	19	3	2	8.3
6	N 6398	47.2	4.9	23	4.36	0	1	12	3	2	8.5
7	BQ 198	47.0	5.5	23	4.52	0	1	26	3	0	8.9
8	HMX 9906	46.1	5.4	23	4.45	0	1	14	1	0	8.6
9	N 6400	44.8	5.3	22	4.60	0	0	19	1	0	8.1
10	BOS 7210246	44.2	5.9	22	4.47	1	3	8	1	1	9.3
11	H 6809	44.1	5.2	23	4.36	0	0	12	0	2	9.1
12	BQ 187	41.4	5.9	24	4.51	0	0	25	0	1	8.6
13	HMX 9903	40.9	5.5	22	4.48	0	0	34	4	0	8.2
	average	46.0	5.5	23.1	4.46	0.1	0.9	14.9	1.7	1.1	8.6

**Note:** Our Woodland office will be closed for holidays from Monday, Dec 20 through January 1. We'll reopen Tuesday, January 4, 2011.

Best wishes for a Happy Holiday Season,

Gene Miyao  
Farm Advisor, Yolo, Solano & Sacramento counties

The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized). University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6<sup>th</sup> Floor, Oakland, CA 94612-3550, (510) 987-0096.

UNIVERSITY OF CALIFORNIA  
COOPERATIVE EXTENSION  
70 COTTONWOOD STREET  
WOODLAND, CALIFORNIA 95695

TOMATO INFO NEWSLETTER  
14 December 2010