University of California Cooperative Extension, Yolo County
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# TOMATO INFO

**Meeting, Wednesday, January 9**
**Variety Trial Reports, 2012**

## GENERAL NOTES

Bacterial speck was almost a non-existent problem in 2012, especially compared to the previous year. Clearly, the pathogen is very dependent on favorably wet, cool conditions that exist with multiple rainy spring storm events.

Soilborne diseases persist as a concern. Fusarium wilt, race 3, continues to spread. In a small-scale test on the UC Davis campus, Pathologist Mike Davis and I buried pieces of *Fusarium oxysporum* infested tissue that readily established in the new soil environment and infected tomatoes plants in the succeeding growing season. Once established, the multi-year survival of the pathogen is highly likely. Bottom line: limit spread of this type of pathogen by removing debris on equipment, especially harvesters, when moving from infested to clean fields.

Fusarium crown and root rot (*Fusarium oxysporum* f. sp. *radicis-lycopersici*) has dominated as a new production problem in a number of local fields. The conditions that prompted this rise in recent years remain unclear. The problem is not restricted to drip irrigated fields. The idea of limiting movement of infested soil into clean fields may also be an important strategy.

Root knot nematode resistance-breaking populations continued to be identified in several additional local fields in 2012. UCD Nematologist Valerie Williamson discovered that several wheat lines (developed for stripe rust resistance by UCD wheat geneticist Jorge Dubcovsky) showed resistance to several species of root knot nematode. While a test with potted wheat plants grown outdoors reduced root knot population levels, the promising results (in my view) are not convincing to recommend these wheat lines be grown in rotation to allow successful tomato production to follow in nematode infested fields. Two commercial varieties with the resistance are Lassik and Patwin. I'm interested in conducting field experiments to evaluate nematode control beginning in the fall of 2013. As a short season winter cover crop, the results were poor in a CTRI-funded field trial near Woodland. Plantings apparently need to be full season with wheat allowed to reach grain production.

Weed ecologist Tom Lanini and I visited 2 tomato fields with a grower in the Clarksburg area where it appears nightshade is now highly tolerant to the herbicide Matrix® (rimsulfuron). Tom conducted an on-site test as well as more extensive greenhouse evaluations. Since rotation to tomatoes and apparent historical use of similar types of sulfonylurea herbicides was low, the discovery is a concern and a surprise. Hopefully the outbreak is isolated and not an indicator of future further loss of nightshade control. This example points to the need to have an array of herbicide choices and options to alternate in a resistance management approach to weed control, in this case.

**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 Highway113, exit on CR 25A, head west to East Street. Right turn on East St. for ~1 mile)
Rooms A, B, C & D are located toward south side of main building

**8 am to noon, Wednesday, January 9, 2013**

| | |
|---|---|
| 7:45- | Doors will open — Coffee and refreshments will be ready |
| 8:15 | 1) *Evaluation of Mechanical Spread of Fusarium Wilt and*<br>*2) An Evaluation of a Five Points Soil in a Yolo Field*<br>Gene Miyao, Farm Advisor, Yolo/Solano/Sacramento counties |
| 8:35 | *Chemigation Evaluations of Root Health & Tomato Disease Control Update:*<br>Mike Davis, Plant Pathologist, UCD |
| 8:55 | *Local Pesticide Regulation Update*:<br>Yolo County Ag Commission's office |
| 9:15 | *Weed Control Review*:<br>Tom Lanini, Weed Management Specialist, UCD |
| 9:40 | ——————— Short Break——————————— |
| 10:00 | *Evaluation of Double-Row Tomatoes on 80-inch Beds:*<br>Scott Stoddard, Farm Advisor, Merced-Madera counties |
| 10:20 | *Powdery Mildew Control Summary*:<br>Brenna Aegerter, Farm Advisor, San Joaquin County |
| 10:40 | *Efficiency of Alternate Row Irrigation- Is it an alternative?*<br>Felipe Barrios-Masias and Louise Jackson, Dept of Land, Air and Water, UCD |
| 11:00 | *Nitrogen Management and Water Quality in Tomato Production*:<br>Tim Hartz, Vegetable Crop Specialist, UCD |
| 11:20 | *Tomato Spotted Wilt Virus Management Update:*<br>Bob Gilbertson, Plant Pathology Dept., UC Davis |
| 11:50 | end |

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

Dow AgroSciences (Jill LeVake)
Syngenta (Derrick Hammonds)
Bayer (Bob Austin)
Valent USA (JR Gallagher)
BASF (Dawn Brunmeier)
DuPont (Tim Gallagher)
FMC (Mac Learned)
Gowan (James Brazzle)

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

**PCA Credit: 0.5 laws and 2 hours other**
**Meeting Code M-0136-13**

## EARLY MATURITY VARIETY TRIAL, LOCAL RESULTS

An early maturity variety evaluation trial was conducted with Joe Rominger of D.A. Rominger and Sons in a field north of Winters. We transplanted on April 6 and harvested on August 2 (118 days later). The field had double lines per bed and was exclusively furrow irrigated. A limited water supply during fruit sizing was responsible for the small fruit size and low yield.

The trial averaged 20.6 tons per acre while our standard APT 410, was one of the lowest yielding. The highest yielding variety was SVR 0599 with 24.8 tons/a but also included 9 of the 15 varieties in this highest yielding group. Conversely, Brix averaged 6.8 with SVR 0541 at 7.6 and included HMX 1893 and UG 15308 in this top Brix group. Fruit rots were high, dominated by blossom end rot. The earliest maturing variety was our standard H 2206, estimated to be 6 days earlier than APT 410 (Note: maturity estimate was miscalculated using variety SVR 0599 as the standard instead of APT 410 as listed. The column is corrected from the earlier version posted).

Table 1. Yield, fruit quality and percent culls from tomato variety evaluation, D.A. Rominger and Sons, Winters, 2012.

| | Variety | Yield tons/A | | °Brix | PTAB color | pH | % green | % sun burn | % rots | lbs./ 50 fruit | % bed cover | % fruit canopy cover | estimated maturity relative to APT 410 (days) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SVR 0599 | 24.8 | A | 7.1 | 21.8 | 4.48 | 2 | 4 | 7 | 4.44 | 83 | 66 | 1 |
| 2 | BOS 602 | 24.4 | A | 6.6 | 20.5 | 4.50 | 4 | 5 | 9 | 5.18 | 90 | 71 | 5 |
| 3 | HMX 1893 | 22.1 | AB | 7.3 | 21.3 | 4.40 | 3 | 8 | 14 | 4.82 | 81 | 64 | 5 |
| 4 | K 2769 | 22.0 | ABC | 6.6 | 21.5 | 4.53 | 2 | 6 | 3 | 3.52 | 71 | 60 | -3 |
| 5 | N 6397 | 21.9 | ABC | 7.0 | 20.3 | 4.55 | 5 | 2 | 16 | 4.21 | 95 | 80 | 5 |
| 6 | **H 2206** | 21.3 | ABCD | 6.9 | 21.8 | 4.53 | 2 | 3 | 3 | 3.90 | 69 | 50 | -6 |
| 7 | BQ 287 | 20.6 | ABCD | 6.5 | 20.5 | 4.54 | 3 | 6 | 11 | 4.02 | 78 | 56 | 1 |
| 8 | H 1015 | 20.4 | ABCD | 6.8 | 20.3 | 4.54 | 3 | 5 | 17 | 4.35 | 83 | 58 | 1 |
| 9 | SVR 0541 | 20.4 | ABCD | 7.6 | 20.0 | 4.52 | 7 | 4 | 12 | 4.31 | 95 | 74 | 5 |
| 10 | K 2770 | 19.7 | BCD | 6.2 | 21.5 | 4.49 | 3 | 8 | 5 | 3.54 | 78 | 43 | 0 |
| 11 | BQ 204 | 19.4 | BCD | 6.5 | 22.0 | 4.56 | 2 | 4 | 9 | 4.24 | 68 | 50 | -3 |
| 12 | H 3044 | 19.4 | BCD | 6.0 | 20.0 | 4.51 | 2 | 9 | 11 | 5.38 | 73 | 48 | -2 |
| 13 | UG 15908 | 18.4 | BCD | 6.8 | 20.3 | 4.49 | 3 | 4 | 19 | 4.42 | 85 | 70 | 4 |
| 14 | **APT 410** | 17.6 | CD | 6.7 | 20.5 | 4.52 | 3 | 8 | 13 | 4.74 | 76 | 59 | 0 |
| 15 | UG 15308 | 17.1 | D | 7.2 | 19.8 | 4.55 | 3 | 8 | 20 | 3.79 | 90 | 68 | 5 |
| | LSD 0.05 | 4.4 | | 0.46 | 1.05 | NS | 1.3 | NS | 5.6 | 0.77 | 8 | 10 | 2.4 |
| | CV | 15 | | 5 | 4 | 2 | 31 | 87 | 34 | 13 | 7 | 11 | 7 |
| | Average | 20.6 | | 6.8 | 20.8 | 4.51 | 3.0 | 5.5 | 12.4 | 4.3 | 72.2 | 55.1 | 1.2 |
| | ^ non-additivity problem | | | | | | | | ^ | | | | |

## MID MATURITY VARIETY TRIAL, LOCAL RESULTS

Our local mid maturity variety evaluation trial was conducted with Steve and Sam Meek and John Pon of JH Meek and Sons in a field west of Davis. The trial was transplanted on May 9 and harvested on Sept 12 (126 days later). The field was planted with double lines per bed and was exclusively irrigated with a buried drip system. Plants established quickly and grew well.

The trial averaged 63.4 tons per acre. The highest yielding group averaged over 65 tons per acre and included UG 19406, N 6402, N 6404, AB 2, UG 19306, HM 9905 and BQ 205. The highest Brix group included DRI 0319 and AB 0311 with 5.58 and 5.35 °Brix, respectively. Fruit pH levels were overall good with an average of 4.33. Interestingly, the high fruit pH levels (above 4.40) were measured from N 6402, N 6404 and Sun 6366 and also included H 5608 and HM 9905.

Overall cull levels were low.

Table 2. REPLICATED, Yield, fruit quality and percent culls from tomato variety evaluation, J.H. Meek and Sons, Woodland, 2012.

| | **Replicated** Variety | | Yield tons/A | LSD 5% yield | °Brix | PTAB color | pH | % pink | % green | % sun burn | % mold | % BER | lbs. per. 50 fruit | fruit w/ spotted wilt (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | UG 19406 | VFFNP | 69.6 | a | 4.93 | 23.3 | 4.21 | 1 | 0 | 4 | 2 | 0 | 7.60 | 0.1 |
| 2 | N 6402 | VFFN SW | 67.9 | ab | 4.80 | 22.5 | 4.47 | 0 | 0 | 3 | 2 | 0 | 7.50 | 0.1 |
| 3 | N 6404 | VFFN SW | 67.7 | ab | 5.00 | 23.0 | 4.42 | 1 | 1 | 4 | 2 | 0 | 7.95 | 0.2 |
| 4 | **AB 2** | VFFP | 67.2 | ab | 5.23 | 23.8 | 4.29 | 1 | 1 | 6 | 3 | 0 | 9.03 | 0.3 |
| 5 | UG 19306 | VFFNP | 66.9 | ab | 5.00 | 23.0 | 4.29 | 5 | 2 | 3 | 1 | 1 | 7.87 | 0.2 |
| 6 | HM 9905 | VFFN | 66.6 | abc | 4.60 | 24.3 | 4.42 | 1 | 0 | 4 | 1 | 0 | 7.45 | 0.7 |
| 7 | BQ 205 | VFFNP | 65.5 | abcd | 5.05 | 24.5 | 4.28 | 0 | 1 | 3 | 4 | 1 | 8.22 | 0.0 |
| 8 | H 5508 | VFFN SW | 64.1 | bcde | 4.30 | 23.3 | 4.27 | 1 | 1 | 4 | 0 | 1 | 6.91 | 0.0 |
| 9 | DRI 0319 | VFFNP SW | 63.8 | bcde | 5.58 | 23.3 | 4.34 | 1 | 0 | 5 | 3 | 0 | 7.75 | 0.1 |
| 10 | **SUN 6366** | VFFNP | 63.2 | bcde | 4.63 | 23.3 | 4.44 | 0 | 0 | 4 | 4 | 0 | 7.31 | 0.2 |
| 11 | AB 0311 | VFFNP SW | 62.6 | bcde | 5.35 | 22.0 | 4.33 | 0 | 0 | 4 | 4 | 1 | 8.21 | 0.0 |
| 12 | UG 19006 | VFFNP | 61.5 | cde | 5.03 | 23.5 | 4.25 | 1 | 1 | 5 | 1 | 0 | 7.44 | 0.0 |
| 13 | H 5608 | VFFNP SW | 60.9 | de | 4.35 | 21.5 | 4.43 | 0 | 0 | 7 | 2 | 1 | 7.25 | 0.2 |
| 14 | BQ 163 | VFFNP | 59.1 | ef | 5.03 | 23.5 | 4.33 | 0 | 0 | 5 | 4 | 0 | 8.74 | 0.0 |
| 15 | PX 1245 | VFFNP | 54.0 | f | 4.65 | 24.3 | 4.26 | 0 | 0 | 8 | 4 | 0 | 7.63 | 0.8 |
| 16 | **H 9780** | VFFNP | 53.7 | f | 5.08 | 22.8 | 4.34 | 1 | 1 | 5 | 2 | 1 | 7.92 | 0.2 |
| | LSD 5% | | 5.3 | | 0.3 | 1.3 | 0.09 | 1.4 | NS | NS | 2.3 | 0.6 | 0.62 | 0.5 |
| | % CV | | 6 | | 5 | 4 | 1 | 113 | 125 | 47 | 65 | 106 | 6 | 188 |
| | average | | 63.4 | | 4.9 | 23.2 | 4.33 | 0.9 | 0.6 | 4.7 | 2.5 | 0.4 | 7.8 | 0.2 |
| | ^ statistical non-additivity | | | | | | | ^ | | | | ^ | | |

Non-replicated yield and other measurements from our local mid maturity variety trial are listed in table 3. Much less confidence should be placed on the non-replicated data.

Table 3. Non-Replicated: Yield, fruit quality and percent culls from tomato variety evaluation, J.H. Meek and Sons, Woodland, 2012.

| **Observational** variety | | Yield tons/A | °Brix | PTAB color | | % | % | % sun | % | % | lbs./ 50 | fruit w/ spotted wilt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 4.6 | 24 | 4.48 | 0 | 0 | 10 | 2 | 0 | 7.6 | 0.0 |
| 15 C 316 | VFFFNP | 50.8 | 5.5 | 21 | 4.40 | 1 | 0 | 3 | 1 | 1 | 6.3 | 0.4 |

## ORGANIC, MID MATURITY VARIETY TRIALS, LOCAL RESULTS

In coordination with OLAM Foods, canning tomato variety evaluation trials were conducted in certified organic production fields. One test was located south of Meridian with Scott and Brian Park on a Shanghai silt loam soil. We transplanted on April 30 on single lines per bed. The second site was north of Winters with Joe Rominger of D.A. Rominger and Sons on a Brentwood silty clay loam soil. The transplanting was on May 1 using double lines per bed. Temperatures were warm at the time and we repeatedly replaced numerous plants lost primarily to heat damage, but included darkling ground beetle feeding as well. Both locations were furrow irrigated exclusively. At Meridian, temporary split beds were initially used to irrigate the seedlings. Soil tilth was exceptionally good at the Meridian site. Overall plant health was good at both locations. Incidence of spotted wilt was moderately low at Meridian. Purslane growth was abundant in the furrows at the Winters locale during the late irrigation stages.

Both sites included the same set of varieties. The Park field was harvested on August 31 (123 days after planting) and the Rominger field was harvested on September 4 (126 days after planting).

At Meridian, the highest yielding varieties were H 5608 and H 5508 with 51.2 and 47.3 tons/a, respectively, and with few culls. Brix was moderate with an average of 4.6. The high Brix performer was AB 311 with 5.0, and also included BQ 163, N 6397, AB 2, BQ 206 and H 3402. Blackmold fruit rot was an issue. Sun 6366, PS 002 and AB 2 had levels at or exceeding 13%. Fruit rot levels were lowest with H 5508, H 3042 and H 5608, with 1, 3 and 4%, respectively. Fruit size was large.

Table 4. ORGANIC PRODUCTION: yield, fruit quality and percent culls from tomato variety evaluation, Scott Park Farming, Meridian, 2012.

| | Variety | resistance | Yield tons/A | | °Brix | color | pH | % pink | % green | % burn | % mold | % BER | lbs. per 50 fruit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | H 5608* | VFFNP SW | 51.2 | a | 4.60 | 22.7 | 4.40 | 4 | 3 | 5 | 4 | 0 | 9.51 |
| 2 | H 5508 | VFFN SW | 47.3 | ab | 4.25 | 23.0 | 4.26 | 5 | 4 | 4 | 1 | 0 | 9.59 |
| 3 | AB 319 | VFFNP SW | 44.9 | bc | 4.65 | 24.3 | 4.34 | 7 | 5 | 5 | 7 | 0 | 9.10 |
| 4 | N 6404 | VFFN SW | 44.0 | bcd | 4.25 | 24.0 | 4.43 | 3 | 4 | 3 | 10 | 1 | 9.09 |
| 5 | N 6397 | VFFN | 42.2 | cd | 4.80 | 23.0 | 4.51 | 1 | 2 | 3 | 11 | 0 | 9.57 |
| 6 | N 6402 | VFFN SW | 41.8 | cd | 4.58 | 24.5 | 4.41 | 2 | 2 | 4 | 11 | 0 | 7.00 |
| 7 | AB 311 | VFFNP SW | 41.2 | cd | 5.00 | 23.8 | 4.30 | 4 | 4 | 3 | 6 | 0 | 8.34 |
| 8 | HM 9905* | VFFN | 40.7 | cd | 4.63 | 25.0 | 4.50 | 3 | 5 | 3 | 9 | 0 | 7.82 |
| 9 | BQ 163 | VFFNP | 39.9 | de | 4.93 | 24.5 | 4.35 | 4 | 6 | 2 | 10 | 0 | 9.56 |
| 10 | AB 2 | VFFP | 35.8 | ef | 4.78 | 27.0 | 4.37 | 4 | 3 | 2 | 13 | 0 | 7.42 |
| 11 | PS 650 | VFFNP | 35.6 | ef | 4.53 | 28.0 | 4.44 | 14 | 4 | 2 | 6 | 0 | 8.34 |
| 12 | BQ 206 | VFFNP | 34.9 | f | 4.78 | 26.0 | 4.36 | 4 | 5 | 2 | 9 | 0 | 9.75 |
| 13 | PS 002* | VFFN SW | 34.3 | f | 4.43 | 23.2 | 4.39 | 2 | 3 | 3 | 13 | 0 | 10.04 |
| 14 | H 3402 | VFFNP | 33.9 | f | 4.70 | 23.8 | 4.40 | 3 | 3 | 3 | 3 | 0 | 9.61 |
| 15 | SUN 6366* | VFFN | 32.5 | f | 4.53 | 24.6 | 4.40 | 4 | 3 | 4 | 15 | 0 | 9.08 |
| | LSD 5% | | 4.3 | | 0.32 | 1.2 | 0.61 | 3.0 | 2.4 | NS | 4.1 | NS | 1.27 |
| | % CV | | 8 | | 5 | 3 | 1 | 49 | 46 | 72 | 33 | 238 | 10 |
| | Average | | 40.0 | | 4.6 | 24.5 | 4.39 | 4 | 4 | 3 | 9 | 0 | 8.9 |

* average of 3 reps
all others average of 4 reps

At Winters, fruit yields were high with an average yield of 50.9 tons per acre. Plants grew vigorously, especially after early bloom. The highest yielding variety in the Winters test was clearly H 5608 with 60.7 tons per acre. Nine of the 15 varieties exceeded 50 tons per acre. Brix levels were moderate with an average of 4.9. The highest Brix varieties were AB 319 with 5.63 and included AB 311, BQ 163 and BQ 206. Harvest was relatively clean. While spotted wilt virus was relatively light at the Winters site, PS 650 appeared to be more prone to damage.

Table 5. ORGANIC PRODUCTION: yield, fruit quality and percent culls from tomato variety evaluation, D.A. Rominger and Sons, Winters, 2012.

| | variety | disease resistance | Yield tons/A | | color | Brix | pH | % pink | % green | % sun burn | % mold | % BER | % SW* | lbs 50 fruit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | H 5608 | VFFNP SW | 60.7 | a | 21.8 | 4.63 | 4.37 | 0 | 1 | 6 | 2 | 0 | 0 | 7.27 |
| 2 | HM 9905 | VFFN | 55.6 | b | 24.3 | 4.85 | 4.41 | 1 | 1 | 5 | 1 | 0 | 1 | 7.04 |
| 3 | AB 311 | VFFNP SW | 54.6 | b | 22.8 | 5.50 | 4.23 | 1 | 1 | 4 | 2 | 0 | 0 | 7.54 |
| 4 | N 6397 | VFFN | 52.8 | bc | 23.0 | 5.03 | 4.31 | 1 | 1 | 6 | 2 | 0 | 0 | 6.37 |
| 5 | N 6404 | VFFN SW | 52.8 | bc | 23.5 | 4.48 | 4.35 | 2 | 2 | 6 | 2 | 0 | 0 | 8.04 |
| 6 | AB 2 | VFFP | 51.9 | bcd | 25.5 | 4.75 | 4.28 | 1 | 2 | 4 | 4 | 0 | 0 | 8.32 |
| 7 | PS 002 | VFFN SW | 51.2 | bcde | 23.0 | 4.73 | 4.34 | 3 | 1 | 3 | 5 | 0 | 1 | 8.60 |
| 8 | H 3402 | VFFNP | 50.9 | bcde | 23.3 | 4.60 | 4.34 | 2 | 1 | 7 | 1 | 0 | 0 | 6.44 |
| 9 | PS 650 | VFFNP | 50.8 | bcde | 26.3 | 4.58 | 4.35 | 3 | 4 | 6 | 3 | 0 | 4 | 8.72 |
| 10 | H 5508 | VFFN SW | 49.6 | cdef | 23.8 | 4.28 | 4.24 | 1 | 2 | 4 | 1 | 0 | 0 | 6.65 |
| 11 | AB 319 | VFFNP SW | 48.8 | cdef | 25.3 | 5.63 | 4.23 | 2 | 1 | 4 | 2 | 0 | 1 | 7.90 |
| 12 | BQ 206 | VFFNP | 47.7 | defg | 24.0 | 5.25 | 4.27 | 1 | 1 | 8 | 2 | 0 | 0 | 8.45 |
| 13 | N 6402 | VFFN SW | 46.9 | efg | 23.5 | 4.90 | 4.34 | 2 | 2 | 4 | 2 | 0 | 0 | 6.62 |
| 14 | SUN 6366 | VFFN | 45.6 | fg | 24.3 | 4.78 | 4.38 | 0 | 1 | 8 | 4 | 0 | 0 | 7.35 |
| 15 | BQ 163 | VFFNP | 44.0 | g | 22.8 | 5.33 | 4.28 | 2 | 2 | 9 | 2 | 0 | 1 | 7.86 |
| | LSD 5% | | 4.8 | | 1.6 | 0.50 | 0.09 | NS | 2 | NS | 2 | NS | NS | 0.76 |
| | % CV | | 7 | | 5 | 7 | 1 | 99 | 83 | 53 | 63 | 440 | 333 | 7 |
| | Average | | 50.9 | | 23.8 | 4.9 | 4.3 | 1.3 | 1.5 | 5.7 | 2.4 | 0.0 | 0.6 | 7.5 |
| | ^ significant non-additivity issue | | | | | | | | ^ | | ^ | ^ | ^ | |
| | * spotted wilt - Not all plots were measured | | | | | | | | | | | | | |
| | BER= blossom end rot defect | | | | | | | | | | | | | |

Summary of variety performance in organic field tests:

Plant growth was vigorous and yield performance was high in both organic field sites in 2012. With the exception of seedling insect pests, pest management did not appear to be a major problem beyond weed control. Transplants provided an advantage over early weed pressure. Both growers delayed their first irrigation until tomato seedlings were well established. Mechanical cultivation and hand weeding were more heavily used to manage weeds in both the fields compared to conventional production. Blackmold fruit rot was a concern in the Meridian site, in spite of a relatively timely harvest.

While comparable tests were not established in conventional production fields to match soil type and planting date, there were no clear, superior varieties that advantageously fit the organic production system. The environmental factors of soil and grower management strongly influenced variety yield performance. For instance while H 5608

was a top yielding variety at both Meridian and Winters, H 5508, AB 319, AB 2, PS 002, BQ 163 and others varied relative to location (field site). Sun 6366 did not yield as well in either location.

Location remains a strong influence on fruit yield performance, regardless of organic or conventional production practice. In our test, the PTAB fruit quality measurements of Brix, color and pH were not so strongly influenced by location. In this case, the high Brix varieties tended to be relatively high performers regardless of location.

A more complete report will be available as a handout at our regional tomato meeting on January 9, 2013 and subsequently posted on our web site. The collective statewide, UC Farm Advisor trial evaluation is listed on our web page at:

http://ceyolo.ucdavis.edu/Vegetable_Crops/Processing_Tomato_Variety_Trials/

**Upcoming Tomato Meetings:**

√ 9 January 2013 (Wednesday) S. Sacramento Valley Processing Tomato Production Meeting, Woodland Community & Senior Center, 2001 East Street, Woodland, 95776

√ 30 January 2013 (Wednesday) 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. ctga@sbcglobal.net (916) 925-0225 phone

√ 5-6 Feb 2013 (Tues-Wed) – EXPO, CA League of Food Processors, Sacramento Convention Center, 1400 J Street, Sacramento. Registration required.

http://www.clfp.com/expo-registration

Best wishes for a Happy Holiday Season,

Gene Miyao
Farm Advisor, Yolo, Solano & Sacramento counties