HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

University of California
Agriculture and Natural Resources
Making a Difference for California

Vegetable Crops Facts

UCCE

Merced & Madera Counties Vol. 1, Jan, 2012

2145 Wardrobe Ave. • Merced, CA 95341 • (209) 385-7403
FAX (209) 722-8856 • cemerced@ucdavis.edu • http://cemerced.ucdavis.edu

IN THIS ISSUE:

Special Note:

The processing tomato statewide variety trial report is posted on our website

January 2012
Happy New Year

Scott Stoddard
Farm Advisor

Upcoming Tomato Meetings:

• 10 January 2012 (Tuesday) - S. Sacramento Valley Processing Tomato Production Meeting, Woodland Community & Senior Center, 2001 East Street, Woodland, 95776. 8:00 am to 12:00 noon. Banquet room on north side of building. For more information see http://ceyolo.ucdavis.edu.

• 2 Feb 2012 (Thursday) - N. San Joaquin Valley processing tomato production meeting in conjunction with CA Tomato Growers Association meeting 65th Annual Membership Meeting, DoubleTree Hotel, 1150 9th St, Modesto. 8:00 am to 11:00 am. Registration required for CTGA luncheon.

• Jan 31 - Feb 1, 2012 (Tues-Wed) - CA League of Food Processors Showcase, Sacramento Convention Center, 1400 J Street, Sacramento. Registration required. http://www.clfp.com/.

General Notes:

Despite the cool and damp spring, the California processing tomato industry managed to produce nearly 12 million tons in year 2011. There were large differences in production, however, between the northern and southern production areas. In general, north of Stockton experienced delayed planting and harvest due to rain and cool weather. According to farm advisors Gene Miyao and Brenna Aegerter, the spring rains also caused severe **bacterial speck** damage in numerous fields. Speck, when severe, stunts plants and thus also delays harvest and reduces yield. Furthermore, October rainstorms disrupted the late season harvest as well as produced fruit rots. From about Patterson to the south, however, missed the brunt of this bad weather, and production was excellent. Yields in our variety trials were above 50 tons per acre at each location.

If you experienced bad bacterial speck last season, one of the management practices is to make sure that crop is thoroughly buried and incorporated into the soil. The bacteria responsible for this disease survives on plant debris. Additional management strategies are posted on the UC IPM website at http://www.ipm.ucdavis.edu/.

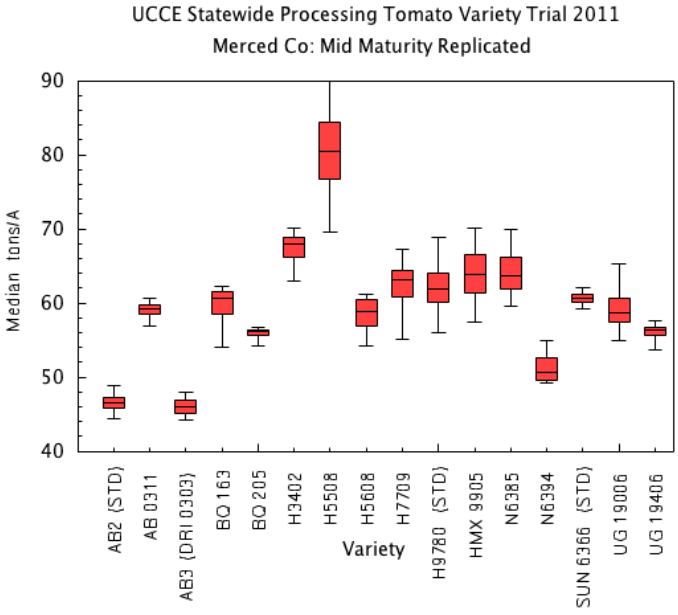
Wide bed production (double-row tomatoes on 72 - 80" beds) continues to expand and generate interest in other production areas. I have just learned that it will be tested in Australia this year, for example. This system, which uses both single and double drip lines depending on the crop rotation, has been successfully

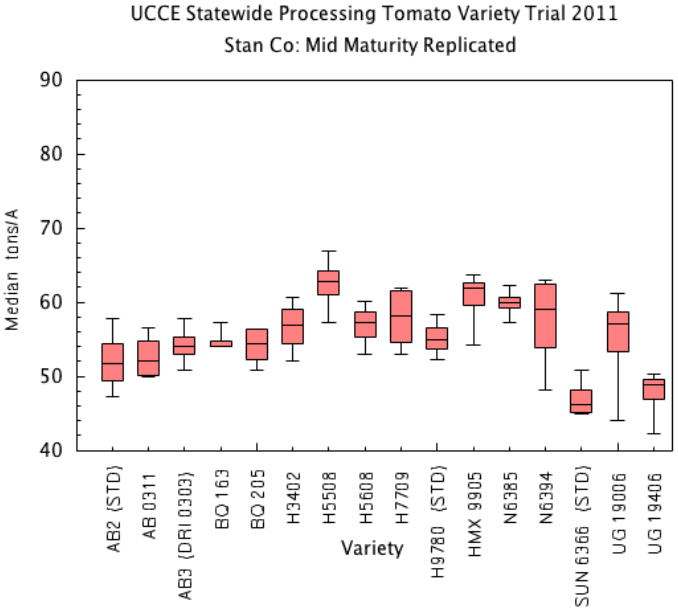
implemented throughout the Los Banos to Firebaugh production area for a few years, where it meshes nicely with melons, lettuce, and onions. Potential benefits include 1) less drip irrigation tape per acre; 2) faster cultivation from increased lateral speed through the field as a result of fewer furrows; 3) lower hand weeding costs because of fewer beds per acre; 4) increased bed top to furrow ratio, which *may* improve resource (sun, fertilizer) efficiency and improve yield; 5) better rotational fit for other crops that use 40 or 80 inch centers, such as melons, lettuce, and cotton; 6) better fit for trailers and trucks driving through the field, reducing shoulder compaction. Potential disadvantages include 1) slower transplanting and harvesting speed; 2) modifications to existing equipment, including transplanters, cultivators, and harvesters; 3) modifications to tractor wheel spacing; 4) likely you will need to trim the vines to keep them out of the furrows.

Tom Turini, farm advisor Fresno County, and I have been evaluating this system for three years as a CTRI funded project and the results have been somewhat inconclusive. Double-row wide beds have not shown any consistent advantage in yield and fruit quality, for example. In 2011, the standard 60-inch single row bed system out-yielded the wide beds with either 1 or 2 drip lines. The reverse was true in 2009 and 2010. Fruit quality has been largely unaffected, though in 2011 there was more rot in the 60-inch beds. The one consistency that has held up is the need for slightly more plants per acre, about 10%, in the wide bed system to maximize yield.

In the end, the real advantage may be very dependent on the grower and the cropping system used on the farm. Growers who already grow alternate crops utilizing 40" or 80" centers will realize the greatest potential benefit from wide-bed tomatoes. The research has shown that tomatoes can be successfully transplanted and harvested without any detrimental impacts to yield and fruit quality.

Processing Tomato Variety Trial. As part of the UC Cooperative Extension statewide variety trial project, I conducted two trials in 2011, one in Merced and the other in Stanislaus County. The varieties are chosen based on recommendations and suggestions from both processors and seed companies, and represent cultivars in early stages of commercial development. In both locations, only mid-maturity lines (118 or more days to maturity) were evaluated. Growers Transplanting at the Gustine location grew transplants for both trials. Each of the field trials were drip irrigated and on double-row wide beds in commercial fields, and were managed by the grower similarly to the rest of the field. The Merced location, with A-Bar Ranch, was harvested about 3 weeks late and was very red with elevated pH, but otherwise had good quality and yields. The Stanislaus location, with Del Mar Farms, had some TSWV, but otherwise overall high uniformity and good yields (Figure 1). In the replicated trial, H5508 was the top yielder at both locations; N6385 and HMX9905 also did well. At both locations, fruit soluble solids decreased linearly as yield increased, about 0.3% per 10 tons.





UCCE Northern SJV Processing Tomato Meeting

University of California Cooperative Extension Farm Advisors
San Joaquin, Stanislaus, and Merced Counties

In conjunction with

The California Tomato Growers Association
65th Annual Meeting of Members and 9th Exhibit

Double Tree Hotel
1150 9th Street
Modesto, CA

Thursday, February 2, 2012
8:00 – 11:00 am

7:30	Registration, coffee and refreshments, courtesy of CTGA.
8:00	Scott Stoddard, UCCE Merced County. Brief intro and acknowledgements.
8:05	Brenna Aegerter, UCCE San Joaquin County. Powdery mildew and bacterial speck management update.
8:20	Gene Miyao, UCCE Yolo, Solano, and Sacramento Counties. Disease management update: 1) fungicidal control of blackmold and 2) drip chemigation studies.
8:40	Steve Schroeder, Nunhems USA. Processing tomato seed development and production issues.
9:00	Dave Meester, California Tomato Machinery, Inc. Tomato Harvesters, Present and Future Challenges.
9:15	Anthony Presto, SJV Air Pollution Control District. Air Quality in the San Joaquin Valley.
9:30	Break
9:45	Sheras Gill, Supervising Air Quality Engineer, SJV Air Pollution Control District. Diesel Engine rules and regs and dust mitigation on farms.
10:00	Tom Lanini, UC Davis Weed Science. Weed control update including bindweed.
10:20	Jeff Mitchell, UC Cooperative Extension Cropping Systems Specialist. Making the CT paradigm work in processing tomatoes.
10:40	Steve Blank, UC Davis Dept of Agriculture and Resource Economics. Agriculture market outlook for California in a global context.
11:00	End. Visit vendors
12:00	Lunch and CTGA program.

Continuing Education Credits requested from Cal DPR and the California CCA Program