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<p>IN THIS ISSUE:</p> <ul style="list-style-type: none"> ✓ UCCE/CTGA meeting ✓ Production Notes ✓ Fusarium race 3, TSWV, & Southern Blight <p>Special Note:</p> <p>CA Processing Tomato Production: 2013: 12.11 million tons 2014: 14.01 million 2015: 14.36 million 2016: 12.64 million 2017: 10.46 million</p> <p><u>Merced rainfall:</u> 2012 - 13: 8.3" 2013 - 14: 5.2" 2014 - 15: 7.2" 2015 - 16: 16.7" 2016 - 17: 18.2 to date: almost 0</p> <p>Scott Stoddard Farm Advisor</p> 	<p style="text-align: center;">UC Cooperative Extension</p> <p style="text-align: center;">Northern San Joaquin Valley Processing Tomato Meeting <i>held in conjunction with</i></p> <p style="text-align: center;">The California Tomato Growers Association (CTGA) Annual Meeting</p> <p style="text-align: center;">Wednesday, January 24, 2018 8:00 - 11:00 am Modesto Double Tree Hotel 1150 9th St, Modesto, CA, 95354</p> <p>PROGRAM</p> <p>7:00 am. Registration desk open</p> <p>8:00 Tom Turini, Farm Advisor, UCCE Fresno County. <i>Stink bug management and efficacy of insecticides for control.</i></p> <p>8:15 Gene Miyao, Farm Advisor, UCCE Yolo, Solano, & Sacramento Counties. <i>Grafted plants for processing tomato production: a progress report.</i></p> <p>8:30 Cassandra Swett, CE Specialist in Vegetable and Field Crop Pathology. <i>Fusarium wilt management in tomatoes.</i></p> <p>8:50 Bob Gilbertson, Professor Plant Pathology, UC Davis. <i>Resistance breaking strains of TSWV and implications for tomato growers.</i></p> <p>9:10 Laura Tourte, Farm Management Advisor, Santa Cruz, Monterey, & San Benito Counties. <i>Automated weed management adoption survey.</i></p> <p>9:30 Break</p> <p>9:50 Daniel Geissler, CE Nutrient Management Specialist, UC Davis. <i>Site specific nitrogen management in processing tomatoes.</i></p> <p>10:10 Alex Putman, CE Specialist in Plant Pathology. <i>Management of Southern Blight in tomatoes.</i></p> <p>10:30 David Slaughter, Professor Agriculture Engineering UC Davis. <i>New UC Davis Tomato Juice Inspection System.</i></p> <p>10:50 Scott Stoddard, Farm Advisor, Merced and Madera Counties. <i>F3 control with varieties and fungicides.</i></p> <p>11:10 visit vendors.</p> <p>12:00 CTGA lunch and program</p>
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January, 2018

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The California Tomato Growers Association (CTGA) Annual Meeting: for information and registration, see www.ctga.org. Note that the UCCE educational meeting is free and open to the public, no registration is required.

1.5 Continuing Education Units (CEUs) approved

This Cooperative Extension sponsored meeting is free and open to the public. The meeting room and refreshments are generously provided by the California Tomato Growers Association, Inc. Pre-registration is required to attend the California Tomato Growers Association Annual Meeting. Please contact CTGA at (916) 925-0225 or ctga@sbcglobal.net

Other Meetings of Interest:

- Feb 8, 2018 (Thurs), UCCE Classroom, 1:30 pm - 3:30 pm. 2nd metam stewardship class. Required for all growers/applicators who will use metam (metam sodium and metam potassium) this year. Contact Merced County Agriculture Commissioner for more information at 209-385-7431.
- Feb 6 - 7, 2018 (Tues-Weds). CA Plant and Soil Conference and CA CCA Annual Meeting. Double Tree Hotel and Fresno Convention Center. Registration required, \$195 includes lunch both days. <http://calasa.ucdavis.edu>.
- Feb 28, 2016 (Wednesday), 9:00 - 12:00 noon. Fresh Market Tomato Meeting, Pea Soup Andersen's, Santa Nella. Lunch provided. More details coming soon. RSVP to Brenna Aegerter, UCCE San Joaquin County, at 209-953-6100 or bjaegerter@ucanr.edu.

General Notes:

In 2016 I commented here that I thought state processing tomato production would decline 1 million tons (2015 production was 14.4 million). Actually it was closer to 1.5 million tons, as state production was 12.64 million in 2016. In 2017 my guess was that production would be down again because of high inventories, to 12 million tons. Actual state production ended up at 10.46 million tons from 230,000 acres. Why?

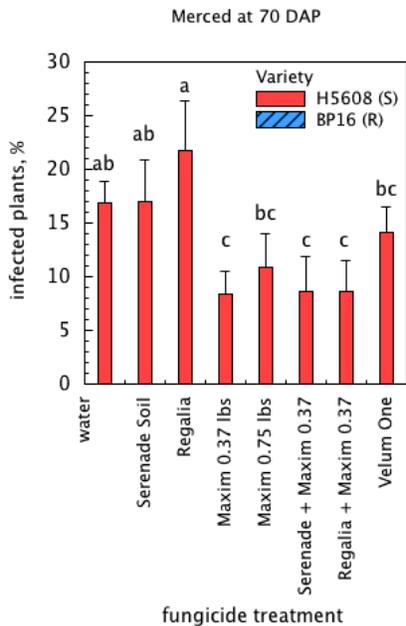


2017 was a tough year for tomato growers in California. A cool wet spring was followed by one of the hottest summers in the last decade. Merced County, for example, had 27 days over 100° F — about twice the average of the previous 10 years. High temperatures reduce fruit production by causing blossoms to abort. High night temperatures stress plants and can lead to accelerated fruit rots and mold problems. Growers had already reduced acreage, and the weather further depressed yield. The result was a crop that was about 1.3 million tons less than contracted.

Despite these challenges, production in Merced County was still very good. Our estimated production was about 900,000 tons from 16,900 acres, which works out to be > 53 tons per acre on average. Yolo County, where mold and

split sets were more extreme, averaged 35.2 tons/A. In Kern County, where Southern Blight has become a major issue, yields were 47 tons/A.

Unfortunately, inventories are still too high, which means acreage will likely be the same or down again slightly in 2018.



Fungicide drench trial to transplants in Merced in 2017 showed suppression of Fusarium wilt in the first 70 days with Maxim and Velum One fungicides. However, by the end of the season almost 100% of the plants were infected regardless of treatment.

problem in California—major impacts are usually restricted to the Kern County area. The widespread distribution we saw this year is NOT likely due to pathogen spread to new fields. Southern blight is favored by high temperatures (over 86 °F), high soil moisture, dense canopies, and frequent irrigation. It seems most plausible that a combination of late planting dates and record high summer temperatures created unusually favorable conditions for the pathogen in the northern part of the valley.

Although not a new disease to the state, the increased damage from the disease this year may mean that this will be a bigger issue next year if the environment is conducive and the disease is not properly managed. Southern blight is caused by the fungus *Sclerotium rolfsii*. The fungus survives in soil as hardened structures called sclerotia for at least five years. Each infected plant can literally produce tens of thousands of sclerotia and then become more widely distributed in a field with each successive field operation. Although this disease may initially only affect a few plants in the field, southern blight can be serious enough to cause significant yield loss within a season or two. With a host range of over 500 plants, this fungus can easily persist from year to year in infected crop debris.

Scott Stoddard, Farm Advisor

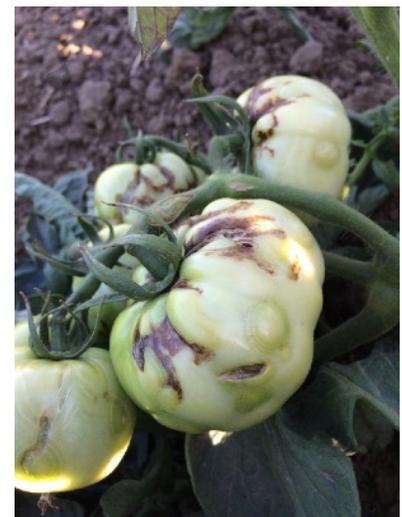
Fusarium race 3 continues to be a problem for tomato growers. This soil fungus has been spreading both in scope and severity for about 10 years in Merced County. Luckily, there are numerous F3 resistant cultivars now available that provide nearly 100% control of this disease. In 2016 trials in the Dos Palos area, N6428, SVS2493, N6429, HM58801, and H1310 all yielded > 60 tons per acre and significantly more than the susceptible control H8504. In 2017, both BP16 and N6428 yielded > 53 tons per acre in a severely infested field. Fungicides provide only short-term suppression of this disease, and impacts on yield have been mixed.

Curly Top was insignificant in 2017, but the rise in TSWV in resistant cultivars is troubling. Fresh market lines appear to be more susceptible to this new, resistance-breaking strain of the virus. Many late season fresh market fields had > 20% infection. Infection rates of more than 3% in a resistant variety suggest infection by the resistant breaking strain. More information about this new development in tomatoes will be discussed by Dr. Robert Gilbertson at the CTGA meeting Jan 24 and again at the fresh market tomato meeting on Feb 28.

Southern blight was also found in Merced County in 2017, but only in very limited amounts. The following is an excerpt from a newsletter by Dr. Cassandra Swett, UC Plant Pathology Specialist:

Southern blight is a very destructive, fast acting crown rot disease that rapidly kills the plant. Over 500 different plants are southern blight hosts. Affected crops in 2017 included pepper, potato, tomato, cucumber, canary bean, chard, and sunflower.

Southern blight is not typically considered to be a widespread



TSWV on resistant, late season fresh market tomatoes increased dramatically from 2016.

