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Special Note:

Powdery mildew severity has increased dramatically in the last 2 weeks.

Thrips populations are extremely high right now.

Fall 2011
Happy Harvesting



Upcoming Meetings:

- There are no tomato meetings planned for this fall; however, I am planning to hold my processing tomato variety trial “open house” at both the Patterson and Los Banos locations. The Patterson location (Del Mar Farms) will be on Thursday, Sept 8, from 1:00 - 4:00 pm. Location: About 3 miles north of Fruit Ave on Vineyard, east side of field. The Los Banos location (A-Bar Ranch) will be on Thursday, Sept 15, from 1:00 - 4:00 pm. Location: south of Woo Rd, south of the Delta Mendota canal. These events are intended to let the seed companies and processors evaluate the different varieties just prior to harvest.
- February 2, 2012 - 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.
- Continuing education for pest management professionals, a 6 week course for PCAs and growers, will be held in the UCCE classroom Sept 27 - Nov 1 on Tuesday morning from 8:00 - 11:00 am. 18 continuation hours, 4 hours of laws and regs. CCA credits have also been granted. \$120, due at time of sign up. Contact Larry Burrow at our office for more information.
- 2nd annual overhead irrigation and conservation tillage twilight field tour and BBQ, Sept 8, 2011, 4 - 7 pm at the UC Westside Research and Extension Center in Five Pints, CA. Call Jeff Mitchell at 559-884-2411 for more information.

General Notes:

Powdery mildew incidence in tomatoes has quickly gone from non-existent to being a problem in some fields, usually with SUN 6366 and 6368. Late season fresh market fields are also likely to see significant disease pressure. Q-21 and Q-27 seem to be more susceptible. What I have seen this year is more traditional symptoms: yellow spotting that leads to brown necrosis. Before noon, the fluffy white mycelium can often be observed, but it's not as apparent as two years ago.

August, 2011

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Controlling powdery mildew is all about prevention, not cure. Sulfur, Rally, and Quadris/Cabrio/Flint fungicides keep the disease in check if applied before it becomes a problem. Fields to be harvested in late September and beyond are at reduced risk of severe crop impact from mildew. At that late period, leaf drying won't be as much of a concern because of generally lower temperatures and shorter days.

Broad-spectrum fungicides have greater utility to cover **blackmold** fruit rot as a preventive as well as mildew. Merced County is traditionally a late harvest area, and as a result delayed harvests here are the norm. While powdery mildew activity is low to moderate, that disease should remain a concern. Selecting fungicides such as Quadris Top® as part of the fungicidal program will provide suppression of both mold and mildew.

Our surveys in Fresno/Kings, Merced and Yolo/Colusa production areas have shown scattered presence of **tomato spotted wilt virus (TSWV)**. Although thrips counts are high, overall levels of TSWV remain low (<1-5% in most fields), but one field in Merced County was greater than 15%. It is unlikely that TSWV infection now will cause economic loss in processing tomatoes, even with delayed harvest. Late season fresh market fields are still vulnerable, however.

At this time in the season, management of TSWV depends largely on effective sanitation (destroying old harvested crops) and management of susceptible bridge crops, such as fall lettuce or radicchio. These crops are most vulnerable to infection if planted adjacent or nearby (e.g., less than ½ mile away) from plantings of pepper or tomato with known TSWV infections. Also note that resistant tomato varieties do not show symptoms of TSWV infection, but may be infected with the virus.



Scott Stoddard
Farm Advisor

Late season fresh market tomato fields will probably benefit from insecticide sprays to control thrips. Counts are very high right now. Recent test results from Tom Turini, UCCE Farm Advisor in Fresno County, has shown TSWV reduction with foliar applications of dimethoate, Radiant, Lannate, Beleaf, and Agrimek. Be aware that insecticide tank mixes with fungicides to control powdery mildew may result in crop phytotoxicity (leaf burn), especially if a surfactant is also added to the mix.

Both Gene Miyao and myself have noted a lot of late season severe **vine-decline** in the past few years. We are working to identify some of the issues together with Extension Specialists Mike Davis and Tim Hartz. There are many different factors at play, including Verticillium race II, Fusarium race III, corky root, nematodes, and potassium deficiency. Verticillium wilt is widespread as usual, but with greater severity in many fields. Fusarium wilt is increasing and should be noted to help guide management decisions in future years. Bacterial speck from the late spring has clearly had a major impact in many fields. Largely due to drip irrigation and planting back-to-back tomatoes, there is more corky root rot in some fields as well. Also due to drip irrigation, root growth is limited to a smaller zone in the soil, which can result in nutrient deficiencies that would not normally occur under furrow irrigation.

In Yolo County, we've discovered another field planted to a nematode resistant variety with severe **nematode damage** in concentrated spots.

Overall, the level of leaf drying, vine collapse and sun-exposed fruit is high. Within a field, it appears there are several factors involved, including nutrition, compaction, and water management. Thus, identification is a challenge, but is important to determine economic remedies.