



TOMATO INFO

**RODENT CONTROL WORKSHOP
IRRIGATION SCHEDULING WORKSHOP
FRESH TOMATO & PEPPER MTG.
VARIETY DISEASE SUSCEPTIBILITY**

MEETINGS

Rodent Control Workshop for Row Crops
(target is gophers and include meadow mice (voles) especially under buried drip irrigation system)
9:30 am to noon, Friday, 5 March 2010
UC Farm Advisors office (Norton Hall)
70 Cottonwood Street, Woodland 95695
2.5 hrs. PCA credits requested including 0.5 hrs Laws & Regs

Concerns have been expressed with rodent control especially from growers with buried drip irrigation systems. Our meeting is open to the public.

- 9:30 to 10:00 *Rodent control field baiting regulations:* Dennis Chambers/Jenny King, Agricultural Commissioners office, Yolo County.
- 10:00 to 11:00 *Gopher and meadow mice control techniques and strategies:* Roger Baldwin, UC IPM Wildlife Pest Management Advisor, UC Kearney Ag Center.
- 11:00 to noon *Field viewing and demonstration:* Roger Baldwin

A local field trip is planned to provide some hands-on training on control techniques and signs for baiting as well as trapping. A select field will be identified within a few miles from our Woodland office. If fields are too wet due to rainy weather, this session will be covered in-doors.

IRRIGATION SCHEDULING WORKSHOP

Drip irrigation for tomato production is clearly gaining in popularity in our production area. The ability to more precisely apply water to meet the crop water requirement has generally been rewarded with higher crop yield as well as some level of water savings.

To assist with irrigation scheduling with drip systems, individual sessions at our Woodland office are planned for the week of Monday, March 8th through Wednesday, March 10th for local grower operations.

What will be discussed and demonstrated:

- average historical reference evapotranspiration information
- accessing current, local ET data
- estimating tomato crop water requirement
- using electronic worksheets for weekly adjusting for real time crop ET

Irrigation Scheduling Workshop
1 hour, individual session
Monday March 8th through Wed March 10th
call for appointment @ 530 666-8732

Pepper growers may be interested in a regional meeting at the UC Cooperative Extension San Joaquin County office in Stockton. The meeting also includes topics on fresh market tomato production. Note: lunch is provided by the California Pepper Commission at this educational event. Please call to reserve a lunch so that appropriate quantities can be ordered.

Fresh Market Tomato and Pepper Production Meeting

Fresh Market Tomato & Pepper Production Meeting

8 am to noon, Tuesday, March 2, 2010

UC Farm Advisors office, Stockton

2101 E. Earhart Ave, Stockton, CA 95206

From Highway 99, exit on Arch Airport Road west, then left on Pock Lane to Earhart. South end of town near airport.

3 hrs PCA credits requested

RSVP for lunch by Feb 26th - (209) 953-6100

Robert J. Cabral Ag Center, UCCE San Joaquin office

Assembly Room 1

- 8:00 am Registration and coffee-
- 8:15 Update on diseases of tomatoes and peppers
Brenna Aegerter, Farm Advisor, UCCE San Joaquin County
- 8:40 Fertigation and nutrient analysis for tomatoes and peppers
Tim Hartz, CE Vegetable Crops Specialist, UC Davis
- 9:05 Recent research on management of Tomato spotted wilt virus
Tom Turini, Farm Advisor, UCCE Fresno County
- 9:30 Pre-emergence herbicides for field grown peppers
Michelle Le Strange, Farm Advisor, UCCE Tulare & Kings counties
- 10:00 Break
- 10:15 Evaluation of insect repellents and barriers to control CMV of bell peppers
Joe Nunez, Farm Advisor, UCCE Kern County
- 10:40 Making CT work in fresh market tomatoes
Jeff Mitchell, CE Cropping Systems Specialist, Kearney Ag Center
- 11:05 Recent work in worm control insecticides, herbicides, and TSWV resistant tomato varieties
Scott Stoddard, Farm Advisor, UCCE Merced & Madera counties
- 11:30 Industry Update: Label updates, new products, and good stewardship
Syngenta, BASF, Dow, and DuPont.
- 12:15 pm Lunch, sponsored by the *California Pepper Commission*

3 hours of continuing education credit have been requested.

PROCESSING TOMATO VARIETY SUSCEPTIBILITY TO POWDERY MILDEW

Fresno Farm Advisor Tom Turini in cooperation with Tulare Farm Advisor Michelle Le Strange have assessed variety response to tomato powdery mildew. The evaluation in 2009 was made from a late planting (May 22) at an UC experiment station near Five Points in western Fresno County. Infection was evident by early August and within 3 weeks, the leaf surfaces covered with mildew ranged from an average of 31 to 88%, depending on variety. The level of statistically significant separation at the 95% confidence level is a bit murky, and this is a single test result out of our production area, but it appears that 1) all varieties were susceptible to infection and spread and 2) there were varieties that were highly susceptible. In general, from table 1 below, H 9780, HMX 7885, CXD 255 and others were in the less susceptible category; while Sun 6368, Sun 6366, H 8004 and others were in the highly susceptible group. In local observations in our area, AB 2 has been more tolerant than the highly susceptible varieties. Note: susceptibility has also been linked to maturity, so that longer maturing varieties in this type of comparative test might initially appear less necrotic.

Table 1. Response of processing tomato varieties to powdery mildew, UC Westside Research and Extension Center, Turini & Le Strange, 2009.

Varieties	Leaf surface (%)				Necrosis rating 0=none 10=total			
	3-Aug		28-Aug		20-Aug		1-Sep	
H 9780	4	abc	31	e	3.1	abcd	3.3	abc
HMX 7885	4	abc	31	e	1.8	d	2.5	c
CXD 255	4	bc	41	de	1.5	d	3.0	abc
H 4007	6	abc	42	de	3.3	abcd	4.0	abc
PX 650	7	abc	45	cde	2.3	bcd	4.0	abc
H 8504	6	abc	45	cde	3.3	abcd	4.0	abc
HMX 7883	5	abc	49	bcde	3.0	abcd	4.3	abc
HMX 6903	2	c	50	bcde	2.0	cd	3.3	abc
PX 002	5	abc	52	bcde	2.8	bcd	3.3	abc
HM 6898	6	abc	62	abcd	4.0	abcd	6.5	a
AB 2	11	a	68	abcd	3.3	abcd	5.0	abc
N 6390	5	abc	69	abc	3.3	abcd	3.5	abc
H 8004	10	ab	73	ab	4.8	ab	5.8	ab
H 2601	6	abc	75	ab	4.0	abcd	4.5	abc
Sun 6366	9	ab	78	ab	5.8	a	6.3	ab
Sun 6368	7	abc	88	a	4.5	abc	6.0	ab

The table might serve as a guide to consider together with a fungicide spray program. Of course, susceptibility to mildew is only one measure of field yield and fruit quality outcome.

Tomato Spotted Wilt Virus Advisor Tom Turini was also actively evaluating varieties for susceptibility to Tomato spotted wilt virus. Our area has been much less impacted by TSWV, but for those growers will this virus concern, his observations from test plots in Fresno over the last 2 years are: 1) H 2601 and H 8004 tend to have higher susceptibility to infection, 2) Sun 6368 has lower incidence of infection and 3) TSWV resistant varieties using SW5 gene are very tolerant.

Tom's field research on chemical control of thrips to reduce vectoring of TSWV is less clear. The insecticide program when soil applied through a drip system reduced thrips in tomato blooms by ~25%, but the numbers remained high and did not greatly reduce disease incidence. Foliar sprays appeared more effective, but are far from complete. A treatment threshold level has not been developed, but an early application is likely preferred.

Submitted by,

Gene Miyao
Farm Advisor, Yolo, Solano & Sacramento counties

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

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