

University of California Cooperative Extension, Yolo County 1 August, 2006 70 Cottonwood Street, Woodland, CA 95695 530-666-8143

VARIETY MEETING DISEASE SAMPLE DISPLAY LOCAL FIELD NOTES

(Volume 46-3)

EARLY MATURITY, TOMATO VARIETY TRIAL

Field Meeting Notice

Tomato variety trial including display of plant disease samples 10:30am to noon, Thursday, 10 August 2006 Light lunch will be available for the first 20 attendees.

Twelve replicated, early maturing processing tomato varieties were transplanted on twin rows per bed on April 25 in a commercial field of APT 410. Cooperator is Winters area grower Joe Rominger of D.A. Rominger and Sons. Soils were wet at planting due to isolated, untimely rain showers on that ranch. Despite the late start and recent extreme heat, vine growth and fruit set is good. Harvest is anticipated toward mid August.

Varieties planted in the test are: standards APT 410, H 9280, and HyPeel 45, and include PX 438, H 5003, BOS 66508, BOS 66509, BOS 7026, U 250, U 462, Sun 6366 and HMX 5883. The 3 standards are also evaluated as double plants per plug compared to singles.

Plant disease sample displays will include Fusarium foot rot and southern blight (Sclerotium rolfsii). Also shown will be bacterial canker, which is a minor problem in our trial area.

-Section Break (Continuous)-

Directions: From Davis/Woodland, head west on County Road 31/Covell Blvd. Continue west beyond DQU, remaining straight westward over I-505 to CR 89. Turn right (North) at the 'T' intersection at CR 89 for 1/2 mile to a gravel road on the west side. Turn left onto gravel road and continue for $\frac{1}{2}$ mile to west, and another 1/2 mile heading northwest along canal on dirt road. Signs will be posted.



Section Break (Continuous)

LOCAL FIELD OBSERVATIONS

Spring rainy conditions delayed the planting season by a month. With the warmer and drier subsequent weather, the incidence of bacterial speck and spot was low. Disease pressure in general was relatively light through the spring season. Uncommonly high weed pressure from morning glory and nutsedge were noted in the county. Delays in early spring tillage and planting allowed these weeds more establishment opportunities.

Infestations of russet mites are prevalent in many fields this year. Economic crop damage caused by mites is generally limited to the crop interval characterized by green fruit an inch in diameter to 30% ripe fruit, according to research from UC Entomologist Frank Zalom.

Late blight was found in late June as an isolated incidence in the Davis area. This disease is not expected during very hot and dry weather conditions. The favorable microclimate was created with large vines and frequent irrigations, and in this case, a tree-lined creek that blocked air movement so that relative humidity was likely very high. A threatening cloudy, summer storm front developed later. If these high humidity conditions persisted, late blight outbreaks might have been expected.

With the extended high temperatures and demanding irrigation schedules, we're seeing more root rot and collapsing plants, especially at drain-end of fields. Early research by UCD Pathologist John Duniway demonstrated that tomato plants are more susceptible to Phytophthora root rot when preconditioned with low soil moisture stress. Avoid delays in irrigation that greatly deplete soil moisture. Resist following with a heavy-handed irrigation that creates prolonged saturated soil conditions. Attempt to be steadier with maintaining soil moisture regimes.

Depending on the extent of sunburn damage and exposed fruit, a blackmold fungicide spray might be a wise choice to consider for some field situations. Normally not a practice for this time of year, but with heat damage to fruit and if delays in harvest are anticipated, a preventive spray may be economically effective in reducing these rots. The trigger event would be dewy mornings or wet weather. A single spray with a cheap material should be sufficient as a preventive. Don't bother spraying if harvest will be within a week or so.

Submitted by,

Gene Miyao Farm Advisor, Yolo, Solano & Sacramento counties

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