MID-MATURITY, TOMATO VARIETY TRIAL

Field Meeting Notice
Mid Maturity Variety Evaluation Trial
with plant disease sample display
¼ mile west of SW corner of CR 27 x Highway 113
10:30am to noon, Wednesday, 23 Aug 2006
Light lunch will be available for the first 20 attendees.

Major differences in canopy cover can be seen amongst varieties in our trial. Sixteen replicated and 5 observational, mid-maturity processing tomato varieties were transplanted on a twin lines per bed on May 9 in a commercial field of AB 2. Cooperators are Steve Meek and John Pon of J.H. Meek and Sons. Stand establishment was challenging in the Reiff very fine sandy loam soil during a heat spell. The bulk of the flowering was during extended high temperatures. Harvest is anticipated in late August.

Included in the planting is HMX 4802, a Fusarium wilt, race 3 resistant variety. Spotted wilt resistance is incorporated into varieties DRI 8058 and Unilever U 567 (although our area has a long history of low incidence of TSWV). We also are comparing double plants per plug vs singles with varieties AB 2 and H 9780.

All of the varieties in the trial are root knot nematode resistant lines, with the exception of AB 2. We have some severe galling across several lines. The infestation appears scattered at this point. Another case of a nematode population overcoming the plant resistance? We hope to have input with lab work from UC nematologists.

Hope you have time to stop to view the trial and to visit.

Directions: Our field is west of Highway 113 about mid way between Woodland and Davis. From Highway 113, take the CR 27 exit, head west ¼ mile. Field is on the south side of CR 27.

Local Field Observations
Armyworms have been active in a number of fields.

UC Entomologist Frank Zalom assures us that alfalfa caterpillars are a minor nuisance of tomatoes that do not feed on fruit. Unlike armyworms and the tomato fruit worm that damage fruit, these velvety-green appearing, worms are foliage feeders. We often see high number of yellow and white colored butterflies migrating from alfalfa, a preferred host, as it is being cut. The butterfly phase of
the cycle is not a problem. Extensive foliage feeding would be needed in tomato fields before a treatment would be justified. Insecticides like BT or Entrust would be the preferred choices since they are not disruptive of beneficials. Tomatoes are not a preferred host.

As we hope our extreme heat spell is over, some thought might be placed on soluble solids management by manipulating irrigations.

As a reminder, UC Veg Crops Specialist Tim Hartz demonstrated that an evaluation of the brix level of the earliest maturing fruit could provide a relative gauge of how to manipulate late irrigations to improve soluble solids while balancing fruit tonnage yield. Select very pink fruit as early as a gallon-volume batch can be collected. As some of the fruit can be collected about 5 weeks before harvest, this early indicator can determine if further irrigations should target boosting fruit yields or if irrigation should be decreased to elevate fruit sugars. A PTAB inspection station or perhaps your canner can help determine the Brix sugar level.

Blackmold reduction as a preventive fungicidal treatment has been effective as a single-timed application 6 to 4 weeks prior to anticipated harvest. Fruit rot levels compared to non-treated controls have been reduced by about 50% in our tests.

Submitted by,

Gene Miyao
Farm Advisor, Yolo, Solano & Sacramento counties