

VegNet Vol. 13, No. 16. August 17, 2006

Ohio State University Extension Vegetable Crops On
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Crop Reports by Ron Becker, Hal Kneen and Brad
Bergefurd

Wayne County Report 8/16/06, Ron Becker

Corn earworm counts have gone down from what they were last week (from 7 down to 2 in Wayne County). Corn borer counts went down in the traps as well, but we are finding fresh egg masses in the sweet corn fields. Fall armyworm is being found in various stages of development. Two spotted spider mites were found in watermelon fields with numbers high enough to warrant treatment. Cucumber beetles and rootworm adults are now starting to damage the stems and fruit surfaces of pumpkins, winter squash and watermelons to the point where sprays are needed. Downy and powdery mildew are also continuing to increase in many of the vine crops with downy now being found in cucumbers, muskmelons, pumpkins, summer squash and winter squash. Several pepper fields are showing bacterial spot as well as

anthracnose. In several different crops, grasshoppers are causing considerable defoliation as well as damage to the fruit. Aphids are also starting to become more active in tomatoes, sweet corn and peppers.

Southeast Ohio August 16th 2006 Hal Kneen

Cooler weather arrived, highs in mid eighties and lows in the mid sixties. No rain to speak of, one tenth of an inch in the past week. Late summer and fall crops being irrigated when needed.

Finishing up on field grown tomatoes. Some growers opened their fields for You Pick. Gleaning of tomatoes fields by non-profit organizations will be starting next week.

Some disappointment in July tomato price returns. Few tomatoes on market and still receipts under \$4.00 a ten pound box (store prices \$1.00 plus a pound). Sweet corn wholesale price tumbled to \$2.00 per dozen and lower due to quantity on the local market increased, homegrown came on and homeowners have had their fill of sweet corn every night. White corn seems to be hard to sell this year. Bicolor corn has taken over the local market.

Watermelon and cantaloupe have been moving well. Later in picking than normal due to cooler May. Also the fruit seemed to mature later due to heat stress of July,

temperatures in the mid to high nineties. Some fruit rot noticed in watermelon especially in low lying areas and where vine crops have been in the past few years. Remember that crop rotation needed in vine crops.

Insect trap counts for Week of August 9-16, 2006:

European Corn borer- 3; Corn earworm - 13

Beet Army Worn - 0

Southwest OH 8/15 and 8/17 by Brad Bergefurd

Downy Mildew is being seen in many acres of southern Ohio pumpkins, winter squash, cucumbers, pickles, melons and watermelon. Growers have been following Michigan State Downy Mildew research results and have been including sprays of Previcur Flex in their spray programs. Several growers have also been including Oxidate sprays where they are reporting good results, with growers saying more research based information and testing is needed on the Hydrogen Dioxide based type products on this disease. Yellow vine decline and bacterial wilt has also been found in several pumpkin fields. Harvest of all fresh market vegetables, melons and watermelon continue with very strong prices being seen in the retail and wholesale markets for cucumbers, summer squash, tomatoes, and good quality sweet corn. Late plantings of fresh market cucumbers are just at vine tip and late planted sweet corn is knee high. Growers are planting cover crops with many planting cow peas as cover crops

this fall for nitrogen fixation as well as a cover crop.

Report ADDITION: on 8/17/06 Severe virus infections have been detected in one grower's fields with lighter infections being found in other fields. Samples will be sent out next week to determine exactly what virus this may be. Plants and leaves as well as fruit are showing severe infections

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Virus in Pumpkins by Bob Precheur

Virus in commercial pumpkin fields is widespread throughout most of southern and central OH. No virus was found in pumpkin fields in a recent trip to northeast OH. There has been little virus in pumpkins during the previous two growing seasons consequently, growers seem surprised by the extent of the problem this year. Virus that comes in early can cause severe stunting and significant yield loss. When it comes in late, it usually doesn't affect total yield but will mark up and distort the fruit. There is a small market for this very ugly fruit but few growers want to see whole fields of distorted fruit. In the late 90s and later on, this disease was considered a major problem in pumpkin production. Research into management and control has shown that insecticides for aphid control, stilet oil, insect barriers (row covers) and reflective mulch were not effective or economical in managing the disease. Reflective mulches work well in repelling aphids but the surface is quickly covered by the vines. Row covers have to be removed at flowering to insure pollination and fruit set. Early planting of pumpkins allows you to get some vine growth and fruit set before the virus comes in. The disadvantage is that early plantings will be more susceptible to bacterial wilt and cucumber beetle damage because of heavy beetle populations at that time of year. Late plantings leave you much more susceptible to virus and severe vine stunting and loss of fruit set, but there is less of a threat from bacterial wilt. The best avenue for defense is genetic resistance but

these varieties have been slow to get to the marketplace. We have two resistant lines in our cultivar trial this year so it will be interesting to see how they hold up. In the late 90s, Dr. Celeste Welty headed up a 3 year survey of pumpkin viruses on OH farms and found the predominant virus was WMV (watermelon mosaic virus). The report can be found at the VegNet website:

<http://vegnet.osu.edu/reports/virus96.htm>

For vine symptoms go to: Problem of the Week from 1999 at the VegNet website:

<http://vegnet.osu.edu/problem/pb81899.htm> Leaf and Fruit examples are below:





A powerpoint presentation by Dr. Welty on the results of this study was on the CD-Rom that came with copies of the 2005 OH Vegetable Production Guide

Zea Map. provided by Jim Jasinski

The network for insect resistance monitoring and management in North America. To see current earworm flight activity across the midwest, migration forecasts, resistance monitoring, newsletter articles, or research updates and bibliographies, visit:

<http://www.vegedge.umn.edu/ZeaMap/zeamap.htm>.

Trap counts can be seen for each site (click on Flight Updates: Midwestern US, then trap summary) but they have not been linked to county level maps yet. Site developed by: Bill Hutchison and Eric Burkness of MN (and others).