

VegNet Vol. 12, No. 15. July 29, 2005
Ohio State University Extension Vegetable Crops
On the WEB at: <http://vegnet.osu.edu>
If experiencing problems receiving this fax, Call 614-292-3857

In This Issue

1. Insect Report
2. Crop Reports

Insect Report 7/27/05 by C. Welty European corn borer on peppers

The second generation of European corn borer is starting. In Columbus, there was a slight increase in the number of borer moths caught in blacklight and pheromone traps last week, then larger increases began over the past weekend. Traps at Fremont and Hoytville also detected steady catches over the weekend.

Emergence of the borer moths means that pepper grower need to be ready to begin an insecticide spray program to prevent borer larvae from invading fruit. Once moths emerge, they find mates, and females begin to lay eggs. Eggs hatch in about 4 days. The number of moths active this week is likely to be much smaller than it will be for the following few weeks, but pepper growers in northern Ohio are advised to apply the first spray by early next week. The most effective insecticide for borer control on peppers is Orthene, but because Orthene is allowed for only two applications, it is best to save it for when egg hatch reaches peak, which will probably be in about two weeks. The first spray, during the time that the early eggs are hatching but before egg hatch is reaching a peak, can be a pyrethroid such as Mustang Max, Baythroid, Warrior, Capture, Pounce, Decis, or Proaxis, or the non-pyrethroids Intrepid or SpinTor.

Worms in sweet corn

Sweet corn harvested during the past few weeks has been relatively free from worms, but sweet corn that is beginning to silk this week will be under attack by both European corn borer and corn earworm. The corn earworm population, as detected by moths in pheromone traps, has been low to absent at most Ohio sites until July 15th, when moth catch increased to moderate levels in central Ohio. As mentioned in article on peppers above, new moths of European corn borer are beginning to emerge this week and will be laying eggs in on silking corn. As summarized on page 240 of the Ohio Veg Production Guide, silking sweet corn should be treated with insecticide every 4 days if the moderate number of earworm moths continues to be caught in traps, and if daytime air temperatures exceed 80 degrees.

Are corn earworm and tomato fruitworm resistant to pyrethroids?

There is concern this year that corn earworm populations in the Midwest might be resistant to pyrethroids. Last year in September, in Ohio and other Midwestern States, earworms caused much damage in some late sweet corn and tomato fields where pyrethroids such as Warrior and Baythroid were regularly used, but the

problem was not detected early enough to prevent damage by switching to an insecticide with a different mode of action. The problem in 2004 was likely due to the long-distance migration of moths that were already resistant to pyrethroids before they arrived in Ohio. Once these moths laid eggs on Ohio crops, the resulting larvae carried the resistance traits of the parent moths. Each year in Ohio, there are a small number of moths that overwinter here, but most of the earworm population arrives in mid to late summer by migration from the southern USA. Corn earworm is a common and important pest of many vegetable crops in the southern USA, where it is commonly targeted by frequent pyrethroid applications that have apparently caused insecticide resistance to develop in some populations.

We do not know if the earworm populations that are already here this year, or the populations that will arrive later this year, will show the same susceptibility as last September. There is a good chance that this year's earworm moths have the normal susceptibility to pyrethroids, which would mean that these insecticides are still effective. However, it would be prudent for growers to be on the lookout for resistance and be ready with an alternative management plan if resistance shows up. Growers who use pyrethroids are urged to watch the crop closely, and be ready to switch to another class of insecticide if many live worms are found during the day or two after application of pyrethroids. For sweet corn, alternatives to pyrethroids are SpinTor, Intrepid, and Lannate. For tomatoes, alternatives to pyrethroids are SpinTor, Avaunt, Proclaim, and Intrepid.

New product Oberon for mite and whitefly control

Crop Reports

Wayne County 7/26/05 by Ron Becker

The trap count for European corn borer moths has gone up to 10 near Copley. No ear worm moths were in the trap this week. Most growers are spraying on a 7 day schedule and having good control of both worms and silk clipping beetles. Raccoons and birds are causing more damage than the insects. Powdery mildew is being found in more of the vine crop fields, though infestation levels are still low.

Tomatoes are on a 7-10 day spray schedule for early blight, septoria and bacterial diseases. Buckeye fruit rot was also found in several plantings of tomatoes last week. Bean leaf beetles are being found in almost all crops, though still only causing damage to green beans. Light rust is being found in most fields of sweet corn, however fields are mature enough that the level of infestation should not be a problem. Cabbage plants that are near harvest are developing soft rot both on the outer leaves and in the inner core of the head. Two spotted spider mites continue to be found in melons, green beans and eggplant. Aphids are starting to buildup in peppers and eggplant. Sweet corn harvest is in full swing with good yields coming off where fields were irrigated during dry weather. Melons are also starting to be harvested.

Southeast Ohio 7/27/05 by Hal Kneen

Insect trap counts. Helio traps for European Corn Borer still at -0- moths caught, New York strain lure

Corn earworm caught only one moth. July 19-27.

Beet armyworm moth trapped 7 moths week of July 19-27.

Drought conditions continue in the Letart region of the county. Only three quarters of an inch of rain since early June. Daily temperatures into the mid nineties and lower 100's . Unirrigated crops very poor yield. Irrigated tomatoes, peppers, cucumbers, melons OK. Irrigated sweet corn showing signs of stress-ears not completely filled out. Night temperatures in high seventies and lower eighties. Expect a break Thursday morning July 28th, sixties at night lower eighties during the day. Thunderstorms in area have missed major vegetable regions. Melons have exceptional sweetness due to low moisture conditions. Both watermelon and cantaloupes are being harvested. Prices of vegetables have remained above normal this late into the picking season.

Southwest Ohio 7/28/05 by Brad Bergefurd

Dry and hot weather is still the name of the game in south Central and SW Ohio. Harvest of all produce crops is in full swing including melons, watermelons, bell pepper, hot pepper, cabbage, sweet corn and tomatoes. The market price for all summer squash and cucumbers is still somewhat depressed as it has been the past month. Some fields have been abandoned due to this market glut. Retail demand and prices for all produce items remains very high. Spraying for Powdery Mildew on pumpkins has begun. Last plantings of green beans, sweet corn, and tomatoes have went in the past 2 weeks. Cucumbers, pickles, radishes, turnips and summer squash continue to be seeded. Spraying for cucumber beetles continues. Early Blight is showing up heavy on tomato crops. Sweet corn is being sprayed for borer and earworm.