VegNet Vol. 11, No. 14. July 15, 2004
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Beet Armyworm Alert (C. Welty)

The beet armyworm is being found in Ohio this year. Pheromone traps at several locations have caught beet armyworm moths for the past 3 weeks, and beet

armyworm larvae were found last week in a pepper field in Greene County and this week in a pepper field in Franklin County.

Beet armyworm is a serious vegetable pest in the Southern USA but does not usually get as far north as Ohio. In September 2002, infestations of beet armyworm larvae were found in both southern and northern Ohio in peppers. After the 2002 infestation, we set up a pheromone trap monitoring program in 2003 but most of the traps never caught any of the target moth in 2003. This year is looking very different than last year, in that we are currently catching the target moth in traps at Greene County (14 moths last week; 17 moths the previous week), Clark County (2 moths last week; 8 moths the previous week), and Franklin County (3 moths last week; 5 moths the previous week). Traps in Meigs County surprisingly have not caught moths yet this year.
If target moths are caught in a trap, then pepper and tomato fields should be scouted for larvae and damage. Look for window-paning damage on upper (young) leaves and buds; sometimes light webbing is present. On peppers, it is important to detect and control larvae while they are feeding on leaves, because they invade fruit later in their development. Other crops that can be infested by beet armyworm are potatoes, snap beans, cole crops, beets, lettuce, onion, peas, and alfalfa. Beet armyworm larvae are usually pale green but can be dark green. They

usually have a thin white stripe on each side and sometimes have a dark stripe on each side. There is usually a black spot on each side of the thorax. The head is usually brown. They reach 1 to 1.25 inches when fully grown.


Photo by Ric Bessin, University of KY

Thresholds: We do not have an action threshold for beet armyworm on peppers or other vegetable crops in Ohio. On cole crops in some areas, the threshold is 3 to 10% of plants infested. On fresh-market tomatoes in some areas, the threshold is 3% fruit feeding. In snap beans in some areas, the threshold is 20-30% defoliation before bloom or 10-15% defoliation after bloom.

Insecticide options: Beet armyworm is difficult to control with insecticides because resistance has developed in most populations. If insecticide treatment is needed, the grower must be aware that many powerful insecticides do NOT work well to control this pest, namely the pyrethroids (Warrior, Baythroid, Asana, etc.) as well as Lannate and

Orthene do NOT work well. During our 2002 infestation of beet armyworm, several growers used pyrethroids with no control obtained. Beet armyworm larvae are more susceptible to insecticides if treated when larvae are young (less than 1/2 inch long) than when they are older. We have several excellent insecticides for control of this pest on peppers, but these are relatively new products that most growers have not used before. They are Intrepid (an improved version of Confirm), Confirm (which probably will be discontinued), Avaunt, Proclaim, and SpinTor. Note that SpinTor is excellent at controlling young worms but is only good, not excellent, for controlling older worms. BT products provide fair control; if BT is used, products that contains the aizawai strain (Agree, XenTari, Ketch) are more effective for beet armyworm control than the standard kurstaki strain (DiPel, CryMax, Javelin).

Powdery Mildew Spotted on Pumpkins Jim Jasinski

Powdery Mildew lesions were found on some volunteer pumpkins in a home garden in central OH. It was also observed at the OARDC Western branch on some pumpkins planted as a trap crop. Now is the time to think about putting on protecting sprays. While PM usually shows up the last week of July, it looks like it is coming in early this year. Consult the OH Vegetable Production

Guide, Bull. 672 for recommended fungicides for pumpkins and other vine crops.


Late blight Reported in Pennsylvania and New York Sally Miller

Late blight was confirmed in processing and fresh market tomatoes and potatoes in Lancaster, Berks and Erie County, PA July 1 and 2. It was also confirmed in two potato fields in Steuben County, NY in July 1. New York growers are being advised to apply Curzate plus Bravo to potatoes in affected and adjacent fields at labeled rates, with a repeat application in 5 days. Seriously diseased areas in fields should be destroyed.
These fungicides are also approved for tomatoes, but fresh market growers should note the pre-harvest intervals. Minimum re-application time for Bravo in tomatoes is 7 days.

It is important to scout tomato and potato fields regularly for late blight symptoms during periods of cool, moist

conditions (including heavy morning fog and dews). Preventative applications of protectant fungicides such as Bravo and mancozeb should be made under these conditions. Organic growers should scout carefully and apply OMRI-approved fungicides such as copper-based materials if cool, rainy conditions persist.

Section 18 Emergency Exemption Approved for Use of Topsin M for White Mold Management in Tomatoes and Peppers Sally Miller

The EPA has granted a specific exemption to the Ohio Department of Agriculture for the use of Topsin M on tomatoes and peppers to control white mold/timber rot, caused by Sclerotinia sclerotiorum, Topsin M WSB (Cerexagri, Inc.) may be applied by ground application only at a maximum rate of 1 lb. formulated product per acre. A maximum of four applications per crop may be made at 7-14 day intervals, not to exceed 3.5 lbs product per acre per crop. Applications through any type of irrigation system are prohibited. Pre-harvest interval is 2 days. Worker re-entry into treated areas during the restricted entry interval of 12 hrs is not allowed. This label expires on September 30, 2004.

White mold/timber rot is most likely to occur under cool, moist conditions. Scout fields regularly for wilted plants. Slice open the stems of wilted plants at the lesion (lesions usually appear dry and tan-white in color) and look for sclerotia - hard, black, irregularly shaped rice-grain (or smaller)- size structures. Sclerotia may also be found under very moist conditions on the outside of affected plants with or without a fluffy white mold. If practical, remove diseased plants and burn, compost or bury them away from production fields since sclerotia survive many years in the soil and serve as a source of inoculum.

The 10 Day Outlook

Temperature: From July 15 to July 20, the mean surface temperature for all of OH will be between 60 to 70 degrees F.

From July 20 to July 25, the mean surface temperature for all of OH will be between 70 to 80 degrees F.

Precipitation:

From July 15 to July 20, rain chances are 0.2 to 0.5 inches for most of OH with the south east quarter of OH with the possibility of 0.5 to 1 inch.

From July 20 to July 25, Rain chances increase for most of OH with the heaviest through central OH. Amounts are 1 inch or greater throughout the central region of the state. The south and northern regions may expect 0.5 to 1.0 inch of rain.
Note: Rainfall amounts during the above periods are usually from scattered thunderstorms and many areas may not receive projected amounts of rainfall.

Consult the Weather Links portion of the VegNet Website and scroll down to the National Weather Service office locations for your part of Ohio. Use the graphical interface section to get more specific forecasts for you county or location.