Ohio State University Extension Vegetable Crops

Remembering Jim Barrett
R. Precheur

Washington County Extension Agent and Extension Vegetable Educator Jim Barrett was killed in a tractor accident on Sunday. The incident occurred while hauling water to cattle when the tractor upset rolling over him. Jim was in charge of the Washington/Meigs Vegetable Tour and Winter Vegetable school in alternate years along with Hal Kneen. Jim was a member of the OSU Vegetable Team since its beginning and also provided statewide leadership in vegetable production. Each year Jim was a session moderator in the Truck Crops program at the Ohio Fruit and Vegetable Congress and also worked at the Extension Vegetable booth in the trade show. When Jim, called you on the phone, he always had a big 'hello' and immediately you knew who it was. Jim had only one-two years to go until retirement and was looking forward to helping his son in their dairy and cattle business. In the last few years, he also became a pumpkin grower and enjoyed growing the new, small types. We will miss Jim in Cincinnati next year.

Disease Control: Pumpkin and Tomatoes (R. Riedel)
R. Riedel

As mentioned last week, we have an 18E label for the use of Nova on curcurbit crops for control of Powdery Mildew. Growers will need to get a copy of the label from the ODA before using the material. An important change in the label for this year is the expansion of use to cucurbit crops instead of just pumpkins as was the case in 1997 and 1998. Many growers will be using Quadris for control of diseases on pumpkins this year with the development of the new federal label for this fungicide. Quadris does an adequate job of controlling Powdery Mildew and in addition it is a wide spectrum fungicide useful for control of most of the fungal problems occurring on pumpkin in Ohio. However, it can only be used three times consecutively before it must be rotated with a spray of a wide spectrum fungicide with a different chemistry, in Ohio usually either chlorothalonil (eg. Bravo or Terranil 6L) or one of the mancozebs. Chlorothalonil or mancozebs do not adequately control Powdery Mildew, however, so in the alternating sprays using these materials, Nova should be added for Powdery Mildew control.

I found well developed Powdery Mildew on Gourds in Wood County on 7.21.99. Pumpkin growers should be checking their fields for this disease now. (see Wayne county report)

Bacterial Spot and Bacterial Canker is easy to find in tomatoes in Northern Ohio. Growers should scout for these diseases now.
Septoria Leaf Spot is developing on Tomatoes in Northern Ohio now where rainfall has been common in early July. This disease will be spotty in development because of wide spread dry conditions in the state. If tomatoes are on a chlorothalonil program, benomyl should be added to the tank to control Septoria. Quadris is excellent for control of this disease.

Insect News
C. Welty

The second generation flight of European corn borer population is continuing; 65 borer moths were caught in our blacklight trap at Fremont in the past week, which is up from 47 moths the previous week. Peppers and silking corn should be treated with insecticide during the time that corn borer moths are active. Corn earworm is being caught in low numbers in pheromone traps at some locations but not at others. See last week’s VegNet for details about control of corn borer and corn earworm on sweet corn.

Blistер beetles are in Ohio vegetables this year, especially potatoes and tomatoes, but in other crops like swiss chard as well. They are a common problem in the southern USA but not seen here most summers. We have several species; most are about 3/4 to 1 inch long, slender, and black or gray, either solid or with stripes. Their wing covers are fairly soft and do not always cover the tip of the abdomen. Adults feed on leaves and sometimes flowers. Larvae live in the soil and feed on grasshopper eggs. When handled, these beetles can cause blisters on skin due to release of cantharidin.

Bean leaf beetles are abundant not only on beans but on many other crops. The adult bean leaf beetle chews irregular holes through leaves and pods. They should not be confused with Mexican bean beetle, which feed only on leaves as both larvae and adults, and which skeletonizes leaves rather than chewing irregular holes.

Problem and Pest News
R. Precheur

Spider Mites Revisited.
Pay close attention to spider mite buildup as it is rapidly becoming a major problem in many vegetable fields, (See: R. Becker’s Wayne county report). While mites have been in one of my pumpkin fields for the past three weeks, in just 5 days they have started to cause significant yellowing of the foliage. In other parts of central OH, a watermelon grower has noticed rapid yellowing and death of his vines due to mites. Mite infestations usually occur first at the edge of the field. [For early leaf symptoms, see: Problem of the Week at the VegNet website]. As populations increase, infested leaves will usually turn yellow and be visible from a distance. This yellowing usually begins at the crown of the plant. Close inspection of the leaf shows an interveinal yellowing, or a typical mottled appearance. Turn the leaves over to see the spider mites and you will probably need a hand lens. Sometimes a small amount of
webbing is also visible. Follow control recommendations in the OH Vegetable Production Guide.

Crop Reports
R. Becker, W. Evans, H. Kneen

North Central:
Celeryville had a driving rain with pea-sized hail in spots on Friday, July 23. Some leaf shredding was reported but the rain was welcome. Crop quality is good to excellent throughout the area. Green onions continue to look good. Corn quality is high, as is tomato quality. Pepper harvest has or will begin shortly on most area fields.

Weed pressure is strong on the muck as warm temperatures combine with frequent irrigations to provide great weed growing conditions. Pigweeds and purslane are the main problems. Leaf hopper numbers are high but most other insects are causing few problems. Stink bugs have been seen as have cucumber beetles. Some adult carrot weevils have been seen this week also. Some powdery mildew on cucurbits and bacterial spot has been found on tomatoes. Some aster yellows is being found on lettuces. Corn smut is also being seen a bit.

Please join us for our field day Thursday, July 29 from 10-12 at the Muck Crops Branch, 1.5 miles south of Willard on St.Rt. 103.

The dry weather continues in the Celeryville area. We have used significant volumes of irrigation water this season and will need several good rains during August to assure adequate resources through the fall. The supervisor of the Celeryville reservoir reports that the reservoir is down to about 7 feet. He is doing his best to conserve and stretch the remaining water.

From Wayne County:
Spider mite is continuing to be the main problem in several crops. Nearly all watermelon plantings have gone over threshold. A single application of an insecticide is doing little more than buying a few days time till the next eggs hatch. Growers are now attempting to break the cycle by spraying a second time five days after the first application, hoping to kill mites that have hatched before they are able to lay more eggs. Spider mites are also now going over threshold in muskmelons, cucumbers, green beans and eggplant. They have been noted on several tomato plants but continue to be low in numbers. Both corn borer and earworm are in flight and silking sweet corn fields are being sprayed on a 5-7 day schedule. A few corn borer larvae were found in ears Tuesday afternoon.

Aphid populations are increasing on tassels, though well below threshold levels. Cucumber beetle numbers are building up again, going over threshold in late planted cucumber and summer squash plantings. They are also active in pumpkin and winter squash, though at less than one per plant.

Powdery mildew is most prominent in zucchini, but is also starting to show in pumpkins and melons. Many growers are now starting a spray schedule for control.
Early blight continues to be light. Tomato harvest is just beginning, peppers have been very slow to set fruit.

Trap Report: Trap count numbers are as follows: European Corn borer - Wooster - 4; Moreland-1; Copley-12; Earworm - Wooster-3

Southeast
Meigs County received scatters thunderstorms the past seven days. Weather is hot and humid. Some growing regions received 1/2 inch of rain while others received 3 inches of rain and tornado like winds. Heavy rains have caused tomatoes to split after several weeks of dry weather even in irrigated fields. Many growers are discontinuing sales this week. Early blight is showing up on the tomato leaves, as hot humid weather continues our DSV (Disease severity units) are increasing rapidly on a daily basis. Sweet corn fields that are tasseling are benefiting from the rainfall. Corn earworm (12) and european corn borer (19) moths are flying in low numbers this pass week through July 28th. Watermelon and cantaloups are being picked especially off of irrigated fields.

TOMCAST Report
J. Jasinski
DSV Hotline -1-800-228-2905

TOMCAST is a tomato disease forecasting network which many growers find aids in their timing of fungicide applications. As of July 28, the total TOMCAST DSV, are given for each station below:

The current stations and DSV counts as of July 28, 1999:

If you have further questions, please contact: J. Jasinski at 937-454-5002 or jasinski.4@osu.edu

The 7-10 Day Outlook*
Temperature:
From 28 Jul to 2 Aug, the mean surface temperature will be 70 to 80 degrees for all of OH, except for extreme southwest counties will have a mean surface temperature of 80 to 90 degrees.
From 02 Aug to 07 Aug, the mean surface temperature will be 70 to 80 degrees for all of OH.

Precipitation:
From 28 Jul to 02 Aug, expect about 0.5 to 1 inches for most of OH, except the extreme northeastern counties where you can expect about 0.5 inches.
From 02 Aug to 07 Aug, expect about 0.5 inches for most of the northern half of OH. For the southern half of OH, expect 0.5 to 1.0 inches.
During these periods, most of the precipitation will come from thunderstorms and rainfall levels can vary widely in the affected areas.
Editors Note: Long term precipitation forecasts (5 days or more) are much less accurate than short term (the next 4 to 5 days).

What’s New At The VegNet Web Site
Visit “Problem Of The Week”, See: Spider Mites On Pumpkin Leaves
The Washington/Meigs Vegetable Tour

If you didn’t make the tour, take the virtual tour. The Washington-Meigs Annual Twilight Vegetable Tour was held June 23. at Witten Farms, Take the virtual tour and see sweet corn, tomatoes, melons and more.
"Problem Of The Week from July 1"

See:
Command Carryover Damage on Tomatoes
Bacterial Wilt in Melons
Drought Conditions
A New Section to VegNet

This week see our newest section: Vegetable Pest Trap Summary
Here you can review the trap counts of various pests from around the state.
You can get to it from the main homepage.
Impatiens Necrotic Spot on Pepper Transplants

Return to Vegetable Crops Homepage Ohio State University Extension
We appreciate very much the financial support for this series of vegetable reports which we have received from the board of growers responsible for the Ohio Vegetable and Small Fruit research and Development Program. This is an example of use of Funds from the "Assessment Program".

Where trade names are used, no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Keith L. Smith, Director, Ohio State University Extension.

All educational programs and activities conducted by Ohio State University Extension are available to all potential clientele on a nondiscriminatory basis.
without regard to race, color, creed, religion, sexual orientation, national origin, sex, age, handicap or Vietnam-era veteran status.