The Ohio State University Extension

VegNet

The Vegetable and Fruit Crops Teams Newsletter

http://vegnet.osu.edu

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In this issue:

SWD Detections Increase Across the State

From Jim Jasinski, IPM Program & Celeste Welty, Extension Entomologist

Spotted wing Drosophila (SWD) has been detected in several counties to date, including Wayne, Clark, Greene, Clinton, and Franklin. Detections have been made in strawberry, raspberry, and blackberry fields with Scentry lure baited traps. Thus far, we have had no reports of SWD being detected in traps baited only with apple cider vinegar, which is a standard bait used from year to year.

Growers should continue to monitor their fields containing ripening or ripe fruit for SWD adults. If you cannot use baited traps to detect the adults or have trouble identifying what you have trapped, you may want to collect a handful of ripe fruit and test if SWD larvae have infested the fruit. This type of detection method is not ideal since it means you have missed the first wave of SWD adults and likely will lose sales of some infested fruit.

For a brief video on how to put out a SWD baited trap or how to use the saltwater test to find SWD larvae, look at these videos on the OSU IPM YouTube website (https://www.youtube.com/playlist?list=PL0HRPaZDLHyFqKGmNic832l0SWqMO8IQ4).

When Does Low Soil Moisture Most Affect Cabbage?

From Matt Kleinhenz, Department of Horticulture and Crop Science, The Ohio State University

It is clear that cabbage yield and quality are greatest when crops are irrigated from start to finish. Consistent, appropriate soil moisture from planting to maturity helps ensure that head weight, shape, density, color, texture, and other characteristics reach target levels on time. That said, sometimes, it is necessary to spread precious irrigation resources around, to determine which plantings should be irrigated, when, for how long, etc. This may be especially true for cabbage. Because they are set over many weeks in the spring and mature much later, over many weeks in the summer and fall, in June-August, individual cabbage plantings may be any stage from recently-established to nearly mature. Knowing the extent to which these individual plantings may be affected by water shortages based on their stage can help growers set irrigation priorities – i.e., to decide the order in which cabbage plantings will be irrigated. **(Continued on next page)**

These heads of cabbage were taken from a study in which plots were irrigated during different periods from after establishment to shortly before harvest. *All plots were irrigated for two weeks after transplanting (i.e., during establishment).* Irrigation treatments began after establishment. Heads in Column 1 (far left; FHS) were taken from plots receiving NO irrigation after establishment. Heads in Column 2 (second from left; HS) were taken from plots irrigated for four weeks after establishment (until heads began to form). Heads in Column 3 (third from left; FS) were taken from plots irrigated during establishment and then again during head development (not during the development of the frame before heads begin to form). Heads in Column 4 (far right; NS) were irrigated throughout the entire season (establishment to just before harvest). These results clearly demonstrate that cabbage plants tend to be more sensitive to water deficits during head development than during frame development.

When Does Low Soil Moisture Most Affect Cabbage? Continued

A team led by former OSU graduate student, Ted Radovich, transplanted cabbage in mid-May in Wooster and irrigated it for two weeks to help it establish. After establishment, different sections of the field were irrigated on one of four programs. Control plots were not irrigated at all after establishment, relying on only rainfall until harvest. A second set of plots was irrigated from planting to maturity; soil moisture in these plots was consistently adequate. Two other sets of plots experienced temporary soil moisture deficits but at different stages of their development. In one set, irrigation was withheld only during frame development (i.e., from establishment to when heads begin to form). In the final set of plots, irrigation was withheld only during head development.

The results were obvious. See Figure 1. Irrigation, especially during head development, resulted in high quality cabbage. Withholding irrigation during frame development lowered yield but less dramatically than withholding water during head development. Irrigation clearly increased yield. Scientific consumer panelists were also able to differentiate cabbage taken from individual plots based on taste. The levels of sugars and glucosinolates were also affected by irrigation program. Contact Matt Kleinhenz (ph. 330.263.3810; kleinhenz.1@osu.edu) for more information.

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Processing Vegetable Field Report

From Jeff Unverferth, Agricultural Manager at Hirzel Canning Company & Farms, Northwood, Ohio

The tomato crop is looking good with irrigation in full swing. The tomato crop seems to be taking the dry conditions better than the corn crop at this time.

Southern Ohio Vegetable and Fruit Update June 23rd — IPM Report

From Zach Charville, OSU Extension IPM Crop Scout Intern

Dry conditions in Southern Ohio have stunted growth in most sweet corn crops. With rain in the forecast over the next few days, however, that is likely to change. As zucchini and squash harvest continues, early control of cucumber beetles has paid off as plant health thrives. Pesticide treatment continues on most crops as the Asian beetles and cucumber beetles continue to be a problem for most fruit and vegetable farmers. Blueberry harvest has been underway for nearly a week in the southern part of the state, as the weather cooperates for blackberry production which will begin to be harvested within the next few weeks. Most watermelon and cantaloupe plants have fully developed their lateral plant structures and fruit is beginning to form on these plants. No signs of the Spotted Wing Drosophila have been evident in the past week, but traps and pesticides are being used in full force to prevent the bug from damaging crops. Potato beetles are attacking potato plants and should be controlled with routine pesticide applications to prevent plant disease or death.

Photos:

A. Potato beetles feeding on a potato plant.

B. Watermelons are thriving in the warm weather in Southern Ohio.

Photos by Zach Charville, IPM Scout Intern

Wayne County IPM Report: June 23rd

From Rory Lewandowski, Extension Educator, Wayne County

The big news in the Wayne County IPM program this week is that spotted wing drosophila (SWD) have been found in trap contents collected June 18, 20, and 21 at three different grower farms. Only 1 to 2 SWD have been found at each location, but remember the treatment threshold is 1. All of the SWD came from traps that were in strawberries. This is about 3 weeks earlier than our first positive SWD last year. Growers have been advised regarding application of preventative insecticides as other susceptible fruit such as raspberries and blueberries begin to ripen. Trapping for SWD will continue in those fruits as well to monitor the increase in SWD pressure.

Growers were being encouraged by scouts to keep up with tying tomato plants during this period of rapid growth. Some tomato growers were also working at pruning off lower tomato leaves/ branches, especially in high tunnel production to increase air movement and provide better growth conditions. Cauliflower leaves are being tied up to insure good head color. Broccoli is approaching harvest in some plantings. Many vegetable fields were dry with scouts noting the need for rain or irrigation to keep plant development progressing. A widespread rain provided some much needed moisture during the nighttime and early morning hours of June 22-23 with amounts generally ranging from 0.75 to 1.25 inches throughout much of the area.

Disease pressure continues to be light in the majority of vegetable fields. Most of the disease noted by scouts this past week was in plantings of zucchini and summer squash where angular leaf spot and anthracnose was noted on some plants. Anthracnose was also found on some melon plants as well.

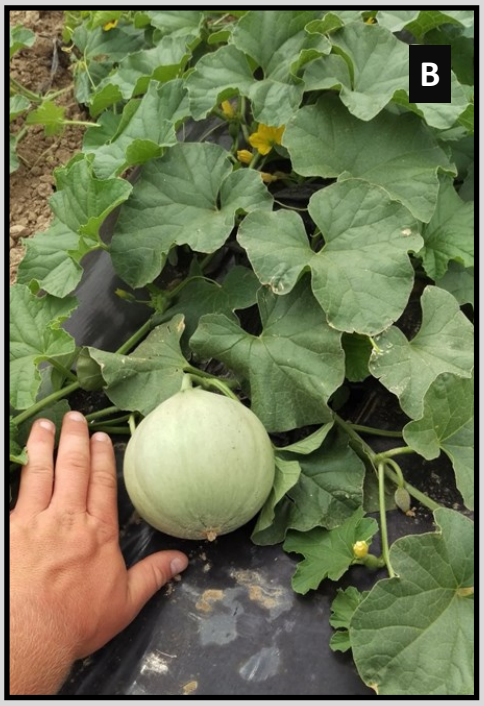
Cucumber beetles continue to be heavy in some plantings, while insecticide treatments recommended by scouts in previous weeks have knocked down populations in other plantings and fields. Cucumber beetles over treatment thresholds were found this past week in pumpkins, zucchini, summer squash and melons. In onions, a number of plantings had thrip numbers over the treatment threshold. White flies were found in a couple of high tunnel tomatoes, along with a few spider mites. Flea beetles were noted on cabbage, cauliflower and broccoli, usually at low levels, except for one planting of cabbage where flea beetles were heavy. Imported cabbage worms were found on cabbage and broccoli plants and zebra caterpillars were found by scouts feeding on some cabbage plants. Colorado potato beetles continue to be very heavy in some potato fields and were also found in some eggplant. Scouts came across some pepper plants that had been damaged by stalk borer, more of a nuisance pest than a serious threat. Japanese beetles showed up on scout notes for the first time this week, being observed in cucumbers and sweet corn.

Sweet corn ranges from emerging to plants at the R1 stage of development. In some fields, European corn borer (ECB) damage was heavy, ranging from 37 to 60% damage. Growers were advised to apply an insecticide in those plantings. Also this week we caught our first corn earworm moth of the season in a pheromone trap.

Blossom end rot was noted by scouts in tomatoes and also in some zucchini and summer squash plantings.

Overall, vegetables and fruit are looking good at this time and if we can continue to get some timely rains, harvest prospects look good. **(Continued on next page)**

Wayne County IPM Report: June 23rd Continued



Pictures:

A. BER on summer squash. Photo by Levi Myers, ACRE intern and IPM scout
B. Melon fruit development. Photo by Levi Myers, ACRE program intern and IPM scout
C. Cabbage worms and damage to cabbage plant. Photo by Levi Myers, ACRE program intern and IPM scout
D. Cauliflower heads developing. Photo by Chris Smedley IPM program scout
E. Zebra caterpillars feeding on cabbage plant. Photo by Levi Myers, ACRE program intern and IPM scout

Wayne County IPM Report: June 23rd Continud

Photos:

A. Heavy infestation of CPB on potato plant. Photo by Chris Smedley, IPM program scout
B. Stalkborer larva in pepper plant. Photo by Chris Smedley, IPM program scout
C. View of Amish field and farm. Photo by Chris Smedley, IPM program scout

OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
OHIO STATE UNIVERSITY EXTENSION

2016 VEGETABLE WORKSHOP SERIES

2nd Thursday, April - October

North Central Agricultural Research Station
1165 County Road 43
Fremont, OH 43420

Topics

April 14: New Fungicide Strategies with Orondis™, Sally Miller, Plant Pathology

May 12: Scouting Cucurbits with Drones, Jim Jasinski, OSU Extension

June 9: Alternative Crop Enterprises – Barley and Hops – Are They an Option for You?, Eric Stockinger, Horticulture and Crop Science

July 14: The OSU Food Safety Program – What It Can Do for You, Beth Scheckelhoff, OSU Extension

August 11: Sweet Corn Evaluation, Field Walk, and Taste It for Yourself, Mike Gastier, OSU Extension

September 8: Pepper Evaluation and Field Walk – Bells, Bananas, Jalapenos, Allen Gahler, OSU Extension

October 13: Soil Health and Water Quality – How Does It Affect Me? A Look at Edge of Field Studies and NCARS Water Samples, Libby Dayton, School of Environmental and Natural Resources

Please join us at the North Central Agricultural Research Station, Fremont, OH, the second Thursday beginning April 14 through October 13 for breakfast, industry updates, in-depth tips, tricks, and information from researchers to help make your 2016 growing season a profitable one! Attend when the topic suits you or take advantage of each month's program

Registration

Free and open to the public

Bring your plant disease and insect samples to the OARDC Lab for identification and same day results, free of charge!

Free breakfast begins at 7 A.M. followed by the featured speaker, field walk and networking

For more information

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OHIO AGRICUTURAL RESEARCH AND DEVELOPMENT CENTER
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Ohio Superberry Field Night

at Ohio State University South Centers

Thursday,

July 7, 2016

6:00 p.m. — 9:00 p.m.

Hosted by Dr. Gary Gao, Dave Scurlock, & Ryan Slaughter

Location: OSU South Centers
1864 Shyville Rd., Piketon, OH
Large Auditorium, Research Building

Cost: $15.00*
**includes a light dinner*

To Register:
Contact Charissa Gardner
gardner.1148@osu.edu or at
740.289.2071 ext. 132

DEADLINE to Register:
Tuesday, July 5, 2016

Learn the basics on these topics:

- Blueberry Cultivars and Production Techniques
- Summer Vineyard Management Practices
- Blackberry Production Systems
- Introduction to Elderberry, Aronia, and Goji Berry Production
- Container Fruit Production
- Chemigation for Pest Management
- Field tour
- And more!

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Ohio State University Direct Marketing

Food & Agriculture

2016 Webinar Series

One-hour webinars will be offered to bring exceptional speakers to your home, office or local Extension center. If you're interested in finding out more about marketing issues, visit the website for details.

2016 Direct Marketing Webinar Series
All webinars begin at 12 noon

Date	Topic	Lead Presenter	Connection
Feb. 18	Marketing Trends Learned from the Super Bowl	Eric Barrett & Rob Leeds	http://carmenconnect.osu.edu/marketingtrends2016/
Mar. 2	Using All Your Senses in Branding Your Business	Eric Barrett & Rob Leeds	http://carmenconnect.osu.edu/brandingyourbusiness/
Apr. 21	Enhancing Your Web Presence	Melissa Carter	http://carmenconnect.osu.edu/enhancingwebpresence/
May 26	Product Recall & Traceability	Eric Pawlowski	http://carmenconnect.osu.edu/productrecallandtracibility/
June 16	Product Labeling	Emily Adams	http://carmenconnect.osu.edu/productlabeling/
July 21	Celebrate Ohio Local Foods Week	Heather Neikirk & Patricia Barker	http://carmenconnect.osu.edu/localfoodsweek/
Aug. 18	Produce Auctions	Brad Bergefurd	http://carmenconnect.osu.edu/auctionsforproduce/
Sept. 15	Pricing Your Products	Megan Leffew	http://carmenconnect.osu.edu/pricingproducts/
Oct. 20	Cooperatively Marketing Your Products	Hannah Scott	http://carmenconnect.osu.edu/marketingyourproducts/
Nov. 17	Using Facebook for Your Business	Duane Rigsby	http://carmenconnect.osu.edu/facebookforyourbusiness/
Dec. 15	Survey Results for Ohio Produce Marketers	Direct Marketing Team	http://carmenconnect.osu.edu/surveyresultsformarketers/

For recordings of all webinars go to go.osu.edu/DirectMarketingWebinars

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Submit Articles:

To submit an article to the VegNet newsletter please send the article and any photos to **Brad Bergefurd** at bergefurd.1@osu.edu or for questions regarding the newsletter call 740.289.2071 ext.132

About the editor

Brad Bergefurd

Bergefurd is an Extension Educator, Agriculture and Horticulture Specialist with Ohio State University Extension, with statewide responsibilities for outreach and research to the agriculture and commercial fruit and vegetable industries Brad has offices at the OSU Piketon Research & Extension Center in Piketon and at OSU Extension Scioto County in Portsmouth.

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