

VegNet *The Vegetable and Fruit Crops Teams Newsletter*

<http://vegnet.osu.edu>

Editor: Brad Bergefurd

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North Central Research Station and Northwest Ohio Update

Al Gahler and Matt Hofelich

Tillage work is finally progressing at full speed in most of the area, but conditions are still too wet at the North Central Research Station. One grower has found some spikes emerged in his first sweet corn planting – planted April 5 and emerged April 30! Many growers have planted a second round of sweet corn, with others just getting their first seeds in the ground, and a second planting of cabbage was set in the ground on many farms in the last week, while field corn planting has begun

as well. Soil temperatures are still hovering in the upper 40s, with 50+ in the top two inches on sunny days. With the 70s and 80s in the forecast for the next five days, many growers are anticipating setting the first tomatoes early next week if conditions allow. Fruit growers are "taking advantage" of the freeze injury to peaches and getting a lot of extra pruning done. Strawberries were covered in many northwest counties over the last week with a few nights in the mid- to low- 30s.

2014 Upcoming Events

- ♦ **May 22-** Strawberry Plasticulture Field Night, South Centers in Piketon (see p. 2)
- ♦ **July 15-** Bramble, Blueberry and Wine Grape Field Night, South Centers in Piketon...details to come.

To list your upcoming events in future additions of the VegNet newsletter, please send details to bergeford.1@osu.edu

Wayne County Update

from *Rory Lewandowski, Extension Educator, Agriculture and Natural Resources*

Codling moths were found in traps (see photo) during the week of April 28 – May 2. Across six orchards, trap count averages ranged from 0 to over 4 moths/trap.

No blossoms were reported yet on peach trees.

Tomatoes in high tunnels were at bloom to fruit set stage.

Sweet corn planted under row cover has emerged and some possible slug damage on young plants has been found.



Codling moth trap in apple tree
Photo by Rory Lewandowski

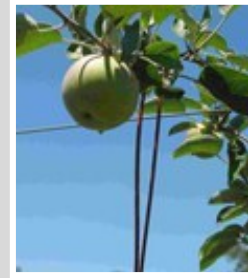


Sweet Corn with sludge damage
Photo by Rory Lewandowski

Weekly Insect Bytes

from Mike Ellis, Department of Plant Pathology, The Ohio State University

Brown marmorated stink bug (BMSB) started emerging from overwintering shelters. In the majority of orchards no stink bug control activities are required at this time. If hand-applied mating disruption materials are planned for the control of codling moth, Oriental fruit moth, dogwood borer, peach tree borer or lesser peach tree borer, now is a time to place dispensers in orchards.



Hops Research Update, Wooster

Chelsea Smith, Research Assistant, OSU Department of Entomology

Spring pruning has been completed at the Wooster hop yard, and a good thing too, because we found basal spikes on the plants, a symptom of downy mildew. Downy mildew is going to be a problem for Ohio hops, and field sanitation is incredibly important. When our hop bines reached about 2 ft. in height, we pruned them back, right down to the soil. All the vegetation was removed from the field to avoid further contamination. We will be spraying for downy mildew after the bines start to grow back. In addition to minimizing mildew in the field, the practice of pruning the first growth should increase yields, so it's a win-win!



After pruning
Photo by Chelsea Smith



Basal Spikes
Photo by Chelsea Smith



Before pruning
Photo by Chelsea Smith

Southern Ohio Vegetable and Fruit Update

from Brad Bergefurd, Ohio State University Extension Educator, Ohio State University Extension Scioto County and OSU South Centers

Field work came to a stand-still the past week with heavy rains through the 4/28 to 4/30 period where some areas received up to 6 inches of rain with most areas receiving 3 to 4 inches. Temperatures were cool with lows in the 40's and soil conditions were wet with some standing water. Some sweet corn planted in bare ground is being replanted with some seed rotting from last week's cool and wet weather.

Soils began to dry on Sunday, May 4 with field work resuming including plowing, working ground, spreading fertilizer, transplanting, bedding, laying plastic and planting.

Plastic has been split on March planted sweet corn which is 6 inches tall, but, due to cool weather, does not have the best color. We hope this color improves with warmer soil temperatures and with sidedress applications of Nitrogen.



Plastic has been split on March planted sweet corn

Photos by Brad Bergefurd

Field tomatoes and melons continue to be transplanted to fields. High tunnel tomatoes continue to be planted in high tunnels. Fertilizer, lime and anhydrous continued to

be applied. Pre-emergent and contact herbicides continue to be applied. Pruning of blackberry, blueberry, apple and grape continues.

Plasticulture and matted row strawberries are in bloom. Planting of cover crops continues. Harvest of asparagus continues in full swing with some distortion and cracking of spears being expressed following last weeks heavy rains in areas where farms were approaching very dry drought-like conditions prior to the rainfall event. Overall asparagus quality, yields and demand are high.



Strawberry harvest will begin in about 20 days in Lowell Ohio

Photo by Witten Farms

Tomatoes are the sizing up nicely in January and February planted high tunnel tomatoes, with first harvest projected to be in 10 to 14 days. High tunnel strawberry harvest has begun, with the Chandler variety. Fertilization of nitrogen continues on plasticulture and matted row strawberry. Seeding of all vegetable and melon crops continues in greenhouses. **Photos continues on next page.**

Southern Ohio Vegetable and Fruit Update continues...



Some farms are reporting distorted and cracked asparagus spears after last week's heavy rains
Photo by Brad Bergefurd



Hops bines are being trained at Piketon on 5/6
Photo by Brad Bergefurd



Planting of sweet corn and field corn continues
Photo by Brad Bergefurd



The last of the plowing is being done this week.
Photo by Brad Bergefurd

OPGMA
Ohio Produce Growers
& Marketers Association

SUMMER TOUR

& Field Day

JUNE 25, 2014

White House Fruit Farm - Canfield, Ohio
Agri-tourism at its best

McMaster Farms - Columbiana, Ohio
Third-generation wholesale and retail farm



Registration Opens TODAY

Don't miss this opportunity to refresh your perspective of the Ohio produce industry. See the latest equipment, packaging, seeds, chemicals, and services designed to grow your business, and network with more than 250 growers and marketers across Ohio.

Don't wait to register. Visit <http://opgma.org/tour>

Label Change for Presidio

Sally Miller and Fulya Baysal-Gurel, Department of Plant Pathology, The Ohio State University

The fungicide Presidio (Valent, USA) now has a revised rotational crop interval on its label. Whereas in the past, all crops not on the label required an 18-month rotational interval, the interval for corn and wheat is now 30 days. All other crops not on the label retain the 18-month rotational interval requirement. Presidio is widely used in Ohio for management of downy mildews, Phytophthora blight, late blight, Pythium damping-off and other diseases of vegetables caused by oomycete pathogens (water molds). Growers applying Presidio need to be in possession of the supplemental label, which is posted on the CDMS website (<http://www.cdms.net/LDat/ld8J5001.pdf>).

Muck Crops Research Station Update

from Robert (Bob) Filbrun, Assistant Manager, OARDC Muck Crops Research Station, Willard, Ohio

Here at the Muck Station, we've completed the first planting of the Russian Dandelion - Direct Seed Trial. Agriculture Engineers, at the Muck Station using an air seeder to complete the first seeding.

Leek transplanting is in high gear and the sprayers are definitely rolling. Growers testing out Kubota's M8540 Power Krawler Narrow Cab.



Sprayers at the station are in high gear
Photo by Robert Filbrun



Testing out Kubota's M8540 Power Krawler Narrow Cab
Photo by Robert Filbrun

Muck Crop Update

from Robert Holthouse of D.R. Walcher Farms



Beds made and ready for planting in North Fairfield, Ohio area

Photo by Robert Holthouse



Field work continues in the Willard area.

Photo by Robert Holthouse



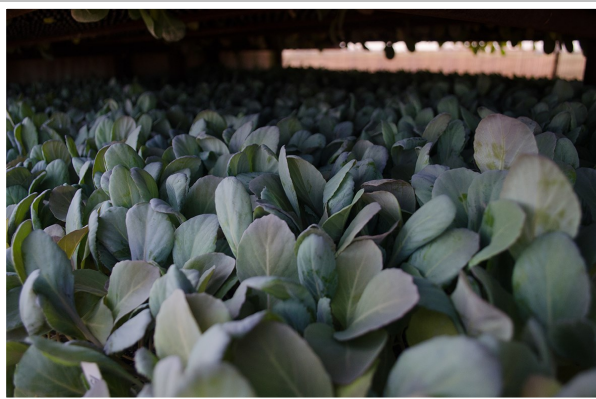
Cabbage has been transplanted in the Willard area

Photo by Robert Holthouse



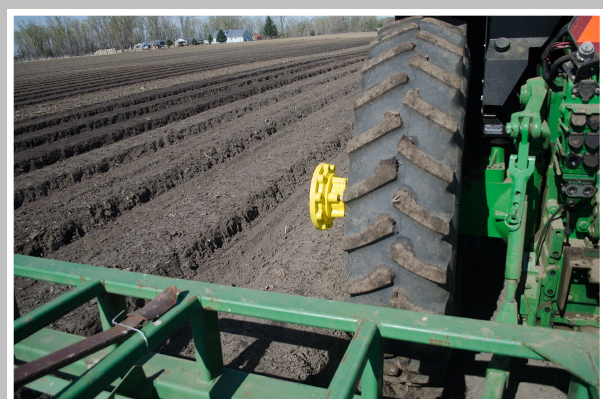
Beds have been made in the muck crops area

Photo by Robert Holthouse



Cabbage transplants loaded on the transplanter in the North Fairfield, Ohio area.

Photo by Robert Holthouse



Beds being pulled up with sled bedder

Photo by Robert Holthouse

Muck Crop Update continued on next page

Muck Crop Update continued...

from Robert Holthouse, Food Safety Manager, of Doug Walcher Farms



Cabbage was transplanted the past week in the North Fairfiled, Ohio area. Photos by Robert Holthouse



Steve (left) and Ken Holthouye (right) examining the health of bell pepper transplants in the greenhouse
Photos by Robert Holthouse

Wayne County IPM Scouting Program Update

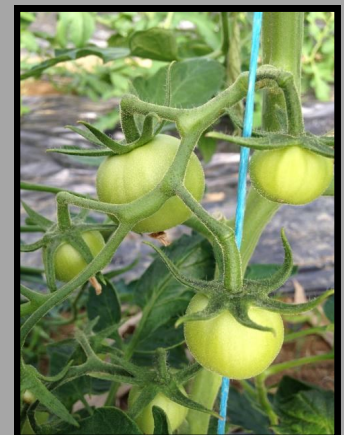
from Rory Lewandowski, Extension Educator, Agriculture and Natural Resources

After a surprising number of codling moths found in traps last week, trap catches early the week of May 5 have been low, averaging less than 1 per trap.

High tunnel tomatoes are progressing. Although there is some evidence of cold stress in some high tunnel tomatoes, fruit set is underway. Photos show tomato growth, fruit set and some zippering as a result of poor pollination. Photos are by Wayne County IPM scout Christine Smedley.



Tomato zippering
Photo by Christine Smedley



Tomato fruit set
Photo by Christine Smedley

Hops Downy Mildew Management in Ohio

from Sally Miller and Fulya Baysal-Gurel, Department of Plant Pathology, The Ohio State University

Symptoms and signs of the hops downy mildew typically observed in spring include shortened internodes on spikes and black sporulation on the lower surface of the leaves (see photos).

Early spring pruning is essential to reduce primary inoculum of the downy mildew pathogen, and pruned leaves and shoots must be destroyed to prevent survival and movement of spores. Later on, lower leaves should be removed to promote airflow. Several fungicides are effective against downy mildew. Be sure to note label restrictions on application intervals, maximum number of applications per season, and pre-harvest intervals, which may range from 7-45 days after application (see table on the next page).

Growers interested in confirming hops downy mildew can submit a sample to the Vegetable Pathology Lab at The Ohio State University (http://www.oardc.ohio-state.edu/sallymiller/t08_pageview3/Diagnostics_Services.htm).



Symptoms and signs of hops downy mildew. Upper left and right, shortened internodes of primary spikes; lower left and right, black sporulation on underside of leaves

Photo by Sally Miller

Fungicide Application Intervals

from Sally Miller and Fulya Baysal-Gurel, Department of Plant Pathology, The Ohio State University

| Product group | FRAC Code | Pre-harvest Interval | Notes |
|--|-----------|----------------------|--|
| Copper octanoate, copper sulfate, copper hydroxide and cuprous oxide | M1 | 0 days | Over-application may result in copper accumulation in the soil, contamination of runoff water, and toxicity to non-target organisms. |
| Folpet | M4 | 14 days | Maximum four applications per season at 28-day intervals |
| Metalaxyl | 4 | 45 days | Apply as a drench to the crowns after pruning but before training (when shoots are ≤ 6 inches). Foliar applications should be in combination with a copper fungicide registered for hops. |
| Phosphorus acid mono- and di-potassium salts | 33 | 0 days | Apply on 2-3 week intervals. |
| Cymoxanil | 27 | 7 days | Maximum four applications per season. |
| Dimethomorph | 40 | | Maximum three applications per season; 10 day-intervals. |
| Mandipropamid | 40 | 7 days | Addition of a spreading/ penetrating adjuvant such as a non-ionic surfactant or blend is recommended. Do not apply more than 24 fl oz. of product/A/ season. |
| Ametoctradin plus Dimethomorph (Zampro) | 45+40 | 7 days | Addition of a spreading/penetrating adjuvant is recommended. Maximum three applications per season; not more than two sequential applications before alternating with a labeled fungicide with a different mode of action. |
| Pyraclostrobin + boscalid (Pristine) | 11+7 | 14 days | Suppression of downy mildew. Apply on 10-21 day intervals. Maximum three applications per season; not more than two sequential applications before alternating with a labeled fungicide with a different mode of action. |
| Biorational products: Actinovate, Sonata, Regalia, Armicarb | - | 0 days | OMRI approval status is available at http://attra.ncat.org/attra-pub/biorationals/ . |

Hardin County Report

from Mark A. Badertscher, Agriculture and Natural Resources Educator, OSU Extension Hardin County

Soils in Hardin County are finally starting to dry with warmer temperatures and brisk wind over the weekend. Tillage and planting is just starting to take place this week. So far, we have previously seen drainage work, manure and fertilizer application, herbicide burndown applications, and some spotty tillage.



Plastic being put down on the Amish fields east of Kenton

Photos by Mark Badertscher



Field starting to dry out
Photo by Mark Badertscher

Dayton Area Blackberry Update

- ◆ Due to heavy snow cover, at least 20% damage from rabbits.
- ◆ All normal buds are dead, yet a few canes are pushing out leaves through secondary buds. Right now that looks like 5 -10%.
- ◆ I have been checking canes for life by scratching a little bit of the skin off, typically at the end of the cane. Many continue to show green.
- ◆ Primo-cane growth looks pretty good
- ◆ Regardless, it will not be a good Blackberry year, but so far the raspberries and blueberries are looking good.
- ◆ Waiting to see if anymore canes leaf out, before starting my spring blackberry pruning
- ◆ If It looks like only 5-10% leaf out , I may cut everything out so I don't have to deal with SWD on sporadic crop. Giving the berries a couple more weeks before making the call.

I want to prune before the primo-caness get too large. Normally we finish pruning by late March to early April. The blueberries will be done this week. It is a little late growth wise, as they have already started to flower.



Reduced leaf-out on Triple Crown blackberries in Scioto County

Photo by Brad Bergefurd



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

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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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