

# VegNet

*The Vegetable and Fruit Crops Teams Newsletter*

<http://vegnet.osu.edu>

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## Hardin County Report

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

There was some transplanting in the Hardin County fields this past week in an area that wasn't too wet. A few pear trees were diagnosed as Fire Blight. The constant wet spring and cooler temperatures caused this bacterial disease. Symptoms of the first year infection include crooked stems toward the outer ends. Full branches affected are mixed in with non-affected branches. Pruning will be done later in the season or when it goes dormant to avoid spreading.



**Fireblight is being reported on apples**  
Photos by Mark A. Badertscher

# 2014 Upcoming Events

- **July 8-** Cover Crop Cocktail & Soil Health Field Night at OSU South Centers. Contact Charissa McGlothlin at 740.289.2071 ext. 132 or [mcglothlin.4@osu.edu](mailto:mcglothlin.4@osu.edu)
- **July 15-** Bramble, Blueberry and Wine Grape Field Night, South Centers at OSU South Centers. For details contact Charissa McGlothlin at 740.289.2071 ext. 132 or [mcglothlin.4@osu.edu](mailto:mcglothlin.4@osu.edu)
- **July 17-** Hops Field Night at Wooster, Ohio. Contact Charissa McGlothlin at 740.289.2071 ext. 132 or [mcglothlin.4@osu.edu](mailto:mcglothlin.4@osu.edu)
- **August 12-** Hops Workshop in Cleveland, Ohio. More information to come.
- **August 14-** Hops Field Night at OSU South Centers in Piketon, Ohio. Contact Charissa McGlothlin at 740.289.2071 ext. 132 or [mcglothlin.4@osu.edu](mailto:mcglothlin.4@osu.edu)

***To list your upcoming events in future additions of the VegNet newsletter, please send details to [bergeford.1@osu.edu](mailto:bergeford.1@osu.edu)***

## North Central Update

*from Timothy Malinich, Extension Educator, Agriculture and Natural Resources, Erie County*

### *Crop Stage*

Fields are dry in north central Ohio, with some ground cracking showing up. Widely scattered showers haven't brought sufficient moisture for the week. There is not much morning dew on the grass. Later plantings of tomato, squash, watermelon and cole crops going in this week.

Apples are at about 1". Growers are reporting uncharacteristic fruit drop that seems to be variety dependent. Spotted tentiform leafminer numbers are rising. Coddling moths are being found in low numbers in most traps in low numbers. Some coddling moths have been found in fruit. There is also plum curculio damage on some fruit.

Peaches that are not being sprayed (since there is no crop) are showing flagging of shoot tips from oriental fruit moth; this could be a problem in the coming season if OFM numbers are allowed to increase unchecked. Lesser peach tree borers are also being reported.

### *Weed Control*

Annual grasses are up to 6" tall in some operations. Dry weather may be keeping summer annual germination down.

# Southern Ohio Vegetable and Fruit Update

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

Growing and field conditions have been wet this week with frequent rains with some areas receiving isolated heavy rainfall up to 4 inches in 30 minutes. Most areas are reporting 1 to 2 inch rainfall totals for the week and supplemental irrigation has not been needed. Sweet corn is 7 to 10 days away from harvest in Highland and Pike counties. Matted-row strawberry harvest is beginning to wind down. San Andreas and other summer bearing varieties of plasticulture strawberries are complete and continue to be renovated in preparation for a summer harvest, which will begin in 4 to 6 weeks. Asparagus harvest is almost complete and the quality and yield has been excellent since harvest began in April. Harvest of field cucumber, pickle, summer squash, zucchini, sweet onion, garlic scapes, peas, turnips, red beets, tat-soi, mizuna spinach, head and leaf lettuce, chives, basil, spinach, leeks, continues. Blueberry harvest began last Friday, 6/13. Harvest of high tunnel tomato, cucumber, lettuce, spinach and herbs continues. Pythium crown and root rot may have been found in bell and hot pepper fields. For more information on this and other pepper diseases see [http://vegetablemdonline.ppath.cornell.edu/NewsArticles/PepDisease\\_Con.htm](http://vegetablemdonline.ppath.cornell.edu/NewsArticles/PepDisease_Con.htm)

Bacterial disease is being suspected in turnip greens in the Cincinnati area where they have been getting frequent rainfall. Aphid outbreaks and sooty mold are occurring in high tunnel cucumbers. Watermelon and cantaloupe have fruit the size of tennis balls and are in full bloom with total vine coverage between rows. Weed pressure continues in all vegetable and fruit fields and cultivation with basket weeder cultivators (<http://www.sare.org/Learning-Center/Books/Steel-in-the-Field/Text-Version/Horticultural-Crop-Tools/Basket-weeder>), hand hoeing and post emergent herbicide applications are being performed. Direct seeding and transplanting of all vegetable crops continues with the last of the jack o lantern pumpkins seeded or transplanted this week. Seeding of cauliflower, broccoli and cabbage for a fall planting continues. Staking and stringing of tomatoes, cucumbers and peppers continues. Ground continues to be worked, fertilizer spread, beds formed, and plastic and drip lines installed for late spring plantings.



**Bacterial disease is suspected in turnip green**  
Photo by Brad Bergefurd

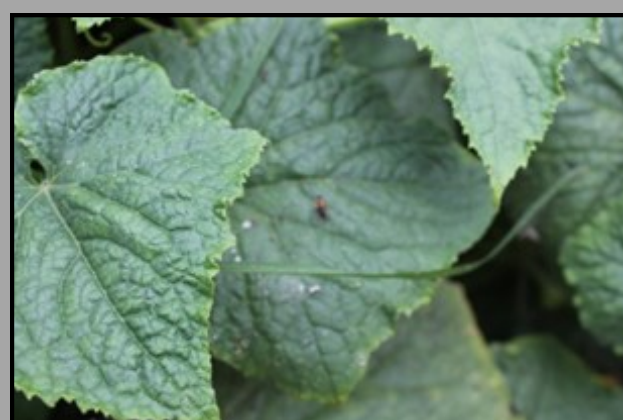


# Southern Ohio Vegetable and Fruit Update



**Basket weeder cultivator being used on small seeded crops for weed control**

Photos by Brad Bergefurd



**Aphids and sooty mold on high tunnel cucumbers**

Photos by Brad Bergefurd



**Aphids and sooty mold on high tunnel cucumbers**

Photo by Brad Bergefurd



**Pythium root rot has been suspected on pepper plantings**

Photo by Brad Bergefurd

# Cucumber/Melon Downy Mildew Update

*From Sally Miller, Department of Plant Pathology, OSU, OARDC*

There have been no reports of cucurbit downy mildew north of North Carolina to date. However, we normally see the first symptoms of the disease on cucumber the first week of July – sometimes the end of June. Disease symptoms on melons (muskmelon, honeydew, cantaloupe etc., not watermelon) start appearing soon after that. Therefore, cucumber and melon growers in the northern third of Ohio and especially in the lake counties should be doing the following:

1. SCOUT cucumber and melon fields for symptoms. Early symptoms on cucumbers are yellowish angular lesions on the tops of the leaves. Lesions on melon leaves are less angular than on cucumbers. A downy mold growth with tiny dark purple/black specks may be seen on the underside of the leaves.



**Cucumber downy mildew**

Photos by Sally Miller



**Cantaloupe downy mildew**

2. downy mildew-suspected samples to the OSU Vegetable Pathology Lab ([http://www.oardc.ohio-state.edu/sallymiller/t08\\_pageview3/Diagnostics\\_Services.htm](http://www.oardc.ohio-state.edu/sallymiller/t08_pageview3/Diagnostics_Services.htm); [miller.769@osu.edu](mailto:miller.769@osu.edu) or [gruel.2@osu.edu](mailto:gruel.2@osu.edu), or 330-263-3678) for confirmation. There is no charge for diagnosis of vegetable diseases from Ohio growers.

SEND

3. TREAT cucumbers and melons preventatively with fungicides according to the recommendations below. See the Midwest Vegetable Production Guide for more details.

## **Fungicide application:**

Protection before disease appears: Apply one of the following fungicides on a 7-10 day schedule, tank mixed with Bravo, Manzate or Dithane: Presidio, Ranman, Previcur Flex, Tanos, Curzate, Gavel (Gavel already contains mancozeb), Zampro or Omega (melons only). Alternate products. The application interval can be lengthened under dry conditions. Use the shorter interval under cool, moist conditions.

Management after disease appears: Apply one of the following fungicides on a 5-7 day schedule, tank mixed with Bravo or Dithane: Presidio, Ranman, Previcur Flex, Zampro or Tanos. Alternate products. The application interval can be lengthened under dry conditions. Use the shorter interval under cool, moist conditions. See product labels for fungicide rates.

Always tank mix targeted fungicides with a protectant fungicide and alternate targeted fungicides with different modes of action (see FRAC Codes below). Note that the fungicides recommended above have different pre-harvest intervals (PHI). Keep this in mind when fungicides are applied after harvesting begins. Note also that some fungicides have plant-back restrictions that may affect decisions regarding crop rotations. (see table on the next page)



# Cucumber/Melon Downy Mildew Update Continued...

From Sally Miller, Department of Plant Pathology, OSU, OARDC

Product	PHI (days)	FRAC Code	Comments
Chlorothalanil e.g. Bravo Weather Stik	0	M5	Protectant; tank mix with targeted fungicides below
Mancozeb e.g. Dithane or Manzate	5	M3	Protectant; tank mix with targeted fungicides below
Ranman	0	21	
Previcur Flex	2	28	Reduced activity suspected in some Ohio counties
Tanos	3	11 + 27	Up to 2 days curative activity but low residual (3-5 days)
Gavel	5	22	Contains mancozeb; see label for worker safety requirements
Presidio	2	43	Possible resistance in some CDM populations
Curzate	3	27	Up to 2 days curative activity but low residual (3-5 days)
Zampro	0	40 + 45	
Omega 500F	30	29	Use only for cucurbit vegetables Subgroup 9A – includes muskmelons/cantaloupes/honeydew; use early for protection: <b>note 30 day PHI</b>

## Hirzel Canning Company

*Jeff Unverferth, Agricultural Manager at Hirzel Canning Co.*

The Northwest Ohio tomato processing crop is off to a great start. There are some dual/sencor stunting on early May plantings but the crop is now growing thru it. There are currently no disease or insect pressure to report.



**Processing tomato plantings off to a good start**  
Photo by Jeff Unverferth



# OSU South Centers Update at Piketon

*from Thom Harker & Ryan Slaughter, Research Assistant OSU South Centers*

Blackberries in the winter hardiness trial are continuing to flower and fruit -set looks good. Some growers from around the area are reporting cane collapse after fruit set, possibly due to the extreme cold temperatures we had this winter, but so far this has not been observed here at the research farm. Tomato stakes were installed this week and training of young plants between twine was started. An OMRI certified herbicide was applied to organic no-till corn plots. The spray appeared to be very effective. Drip irrigation was installed this week in the pumpkin trial plot just in time for a very warm week.



**Fruit-set and flowering continue in Winter Hardiness Blackberry Trial**

Photo by Ryan Slaughter



**Shielded application of organic herbicide in corn**

Photo by Thom Harker



**Staking and training in Tomatoes**

Photo by Ryan Slaughter



**Results of a citrus oil based herbicide applied in organic, no-till corn plot**

Photo by Ryan Slaughter



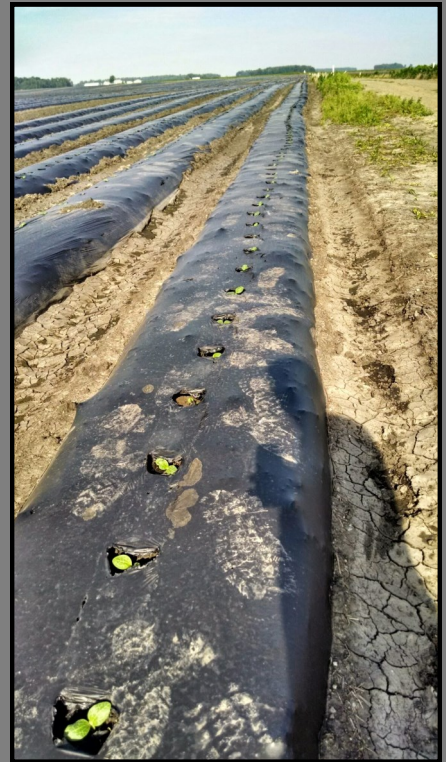
# Muck Crop Update

*from Robert Holthouse of D.R. Walcher Farms and Holthouse Farms*



**Cucumber is at vine tip**

Photo by Robert Holthouse



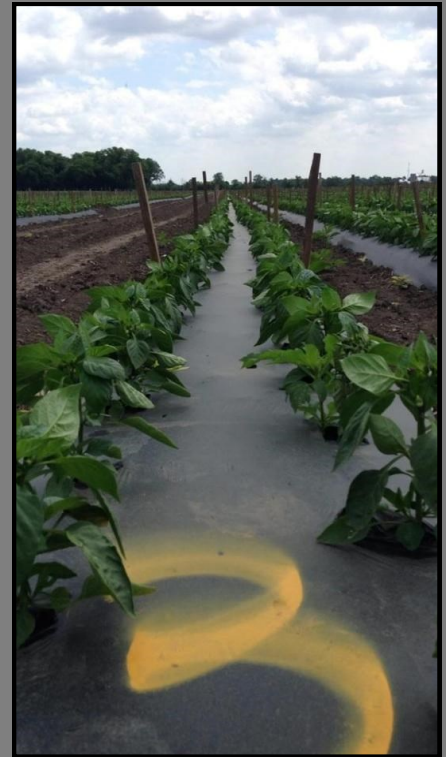
**Summer squash emergence**

Photo by Robert Holthouse



**Cabbage beginning to head up**

Photo by Robert Holthouse



**Bell peppers showing bloom**

Photo by Robert Holthouse



# Soil, Water, and Bioenergy Field Night

## OSU South Centers

Hosted by Dr. Rafiq Islam

Tuesday,  
**July 8, 2014**  
5:30—9:00 P.M.

**Location:** OSU South Centers  
1864 Shyville Rd., Piketon, OH  
Endeavor Center, Room 160

**Cost:** **NO CHARGE**

**To Register:**

Contact Charissa McGlothlin at  
mcglothlin.4@osu.edu or at  
740.289.2071 ext. 132

**For more information:**

Mary Sibole  
mary.sibole@oh.nacdn.net  
740- 947-5353

**DEADLINE to Register:**  
July 3, 2014

**Sponsors:** Ohio State University,  
Pike County SWCD, Battelle



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5:45 pm: Welcome and Comments

5:50 pm: Phosphorus adsorption research, *Battelle*

6:20 pm: Mixed cover crops and soil health, *David Brandt*

7:05 pm: Dinner provided

*Wagon tour: field research discussion*

7:35 pm: Multiple cover crop demonstration plots

8:45 pm: Questions and Evaluations



**Displays to include:**

Soil & Water Resources

Direct Marketing-Specialty Crops

NRCS Energy

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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](mailto: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.



**Brad Bergefurd, MS**

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Specialist with Ohio State University Extension