



## The Ohio State University Extension Vegetable Crops

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## In this Issue:

- 1. Begin Late Blight Scouting
- 2. Update from Southern Ohio
- 3. Weather Outlook

**Time to Scout for Late Blight on Tomatoes** - Sally Miller, Department of Plant Pathology

Sally can be contacted at miller.769@osu.edu or 330-263-3678

Late blight was detected the last week of May in a hydroponic greenhouse on heirloom tomatoes in Berkeley Springs, WV. With the cool weather and rain we have been experiencing this week, tomato growers should scout greenhouse and high tunnel tomatoes carefully for symptoms of late blight. Look for fuzzy grey growth on the underside of leaves, black lesions on stems and petioles, and coppery-colored lesions on fruit (see photos below). Growers with tomatoes and potatoes in the field should also scout plants as soon as possible.

Fungicides such as chlorothalanil (Bravo, Echo, Equus), EBDCs (Dithane, Penncozeb, Manzate) and copper-based products (Kocide, Champ, etc.) should be used on a protectant basis on a 7-10 day schedule under conditions not favorable for late blight and a 5-7 day schedule under favorable conditions if late blight has not been detected in the area. These fungicides also have activity against early blight. Some strains of the late blight pathogen are sensitive to mefanoxam (Ridomil). A good list of available fungicides compiled by Dr. Amanda Gevens at the University of Wisconsin can be found

at <a href="http://www.plantpath.wisc.edu/wivegdis/pdf/Late%20Blight%20Fungicides%202010.pdf">http://www.plantpath.wisc.edu/wivegdis/pdf/Late%20Blight%20Fungicides%202010.pdf</a>. Please note that many of these fungicides may not be used in greenhouses or high tunnels. Some fungicides with activity against late blight that may be used in greenhouses or high tunnels are Manzate, Kocide, Champ, Cuprofix, and Previcur Flex. See the 2013 Midwest Vegetable Production Guide (<a href="http://www.btny.purdue.edu/pubs/id/id-56/ID-56.pdf">http://www.btny.purdue.edu/pubs/id/id-56/ID-56.pdf</a>; hard copy available for purchase from Purdue Extension - <a href="http://www.btny.purdue.edu/pubs/id/id-56/]</a>.

If late blight is suspected, it can be confirmed by bringing or sending a sample to the

OSU Vegetable Pathology Lab in Wooster (<a href="http://oardc.osu.edu/sallymiller/Extension%200utreach/index.htm">http://oardc.osu.edu/sallymiller/Extension%200utreach/index.htm</a>). We appreciate hearing from you if you expect late blight is suspected so that we can confirm and if necessary alert others.





Late blight lesion on top (left) and underside (right) of tomato leaf. The pathogen is sporulating in a ring around the outside edge of the lesion on the right.





Late blight symptoms on fruit (left) and stems (right).

**Southern Ohio VegNet Report** - Brad Bergefurd, OSU Extension & South Centers at Piketon

High tunnel tomato harvest is in full swing with wholesale auction prices last week exceeding \$5 a pound. Harvest of snap and shell peas is in full swing as is harvest of lettuce, mustard greens, green onions, radishes, spinach, basil, arugula, chives, garlic scapes and other spring greens. Plasticulture strawberry harvest which began the week of May 10 is beginning to lighten up with matted row harvest beginning to peak.

Vegetable planting continues on schedule with rainfall amounts around an inch for the past week. Even with the rains most growers continue to irrigate. Sweet corn planted the end of March under plastic is in full tassel with an estimated harvest date of the 3 or  $4^{\rm th}$  week of June. Pumpkin planting continues. Cultivation and side dressing of Nitrogen continues on sweet corn. Seeding of Cauliflower, cabbage and broccoli plants in the greenhouse continues in preparation for the planting of the fall crop in about 5 weeks.

Production issues have included: irrigation lines are being strung and drip irrigation is being run on a constant basis; post emergent herbicide damage on green beans and sweet corn has occurred with some tank mix combinations; cucumber beetles continue to cause feeding damage to newly transplanted and emerged cucumber, pumpkin and squash transplants; aphids outbreaks and in particular red aphids continue in high tunnel and field crops especially tomatoes and plasticulture strawberries; cutworm damage continues to be reported on sweet corn and bean crops; slug damage is being reported on strawberry crops with slug bait applications being made when possible; many calls are coming into my offices with reports of herbicide drift injury on fruit and vegetable crops from nearby grain farms including systemic and burn down herbicide injury in several instances damage is so severe that growers are removing damaged plants and replanting. This herbicide drift injury seems greater this year than in the past for some reason, hope it is not a beginning of a trend??

## Weather Update - Jim Noel, NOAA

The weather acted as predicted over the last week.

Going forward all indications are fairly normal June weather is on tap into mid June. Rainfall is forecast to occur about every 3-4 days with temperatures averaging close to normal over the next 2 weeks.

Trying to provide more details, it appears rainfall will range from 1-2 inches in northern Ohio and 2-3 inches in southern Ohio into mid June. Therefore, normal to slightly below normal rainfall in the north and normal to slightly above normal rainfall in the south.

Normal highs are 75-80 and normal lows are 55-60. Rainfall averages close to 2 inches.

The latest 2 week rainfall average outlook from the National Weather Service 21 member ensemble weather model can be found at the Ohio River Forecast Center

website: http://www.erh.noaa.gov/ohrfc/HAS/images/NAEFS16day.pdf

## Disclaimer

Information presented above and where trade names are used, they are supplied with the understanding that 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 responsibility of consulting the pesticide label and adhering to those directions.

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Keith L. Smith, Associate Vice President for Agricultural Administration; Associate Dean, College of Food, Agricultural, and Environmental Sciences; Director, Ohio State University Extension and Gist Chair in Extension Education and Leadership.

TDD No. 800-589-8292 (Ohio only) or 614-292-1868.