

# VegNet



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## In This Issue

1. Late Blight Update ♦ Tomatoes and Potatoes

### Late Blight ♦ Tomatoes and Potatoes

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Late blight was confirmed in a non-commercial tomato sample in Ohio on June 25. As reported last week in VegNet #12-09, late blight has also been found on tomatoes from home gardens in Pennsylvania and New York, and from commercial farms in Pennsylvania and Virginia. It has also been confirmed on potatoes from Pennsylvania. Infected plants were found at a Lowes in New York, and since Lowes retails plants from a limited number of suppliers, it is possible that infected plants may be now widely distributed across the country. It is also possible that diseased plants may have been/are being distributed by other retailers. Weather conditions (cool-warm with high moisture ♦ rain or heavy dew) in Ohio have been very favorable for late blight.



Late blight on open field (l) and greenhouse (r) tomatoes.

If you are not sure that the disease symptoms you see on tomatoes or potatoes are caused by late blight, you may send a sample to Sally Miller or Fulya Baysal-Gurel, Department of Plant Pathology, The Ohio State University, OARDC, 1680 Madison Ave., Wooster, OH ♦ 44691, ph. 330-263-3838, or to the C. Wayne Ellett Plant and Pest Diagnostic Clinic, OSU, Kottman Hall, 2021 Coffey Road, Columbus, OH 43210, ph. 614-292-5006 (c/o Nancy Taylor) for diagnosis. ♦ Please go to our website (<http://oardc.osu.edu/sallymiller/Extension/index.htm>) to download the sample submission form. ♦ Those in the Fremont area may take their samples to the OSU-OARDC North Central Agricultural Experiment Station, which is now equipped with microscopes connected to the OSU Wooster and Columbus labs via the internet. ♦ A similarly equipped lab is also available at the Muck Crops Agricultural Research Station in Celeryville.

**What to Do:** ♦ Potato and tomato growers should protect plants with appropriate fungicides as long as favorable environmental conditions persist. ♦ Heirloom and conventional tomato varieties alike are susceptible to late blight. ♦

**Home gardeners:** Destroy plants already infected ♦ pull out the entire plant(s), immediately bag it (them) in a plastic bag, and dispose of the closed (tied or knotted) bag in the garbage. ♦ Do not put the plants on a compost pile or in a composter, or leave them lying about. ♦ Live plant tissues serve as a source of inoculum, and uprooted plants may support active spores of the pathogen for some time. ♦ Healthy-looking plants should be protected with a fungicide containing chlorothalnil or copper; several brands are available in garden centers and other retail outlets. ♦ Chlorothalnil is more effective than copper in controlling late blight.

**Conventional farmers ♦ open field:** Protect plants with chlorothalnil or mancozeb (♦ protectants ♦) before the disease appears. ♦ Scout fields intensively for late blight and destroy any infected plants. ♦ Growers with fields in which late blight has been found should also consider applying Curzate, which has curative activity, plus a protectant fungicide. ♦ Other fungicides that can be used in a program that alternates products with different modes of action include Gavel, Previcur Flex, Ranman, Tanos and Revus Top. ♦ Previcur Flex, Ranman and Tanos must be tank-mixed with a protectant fungicide. ♦ If late blight has been a problem in a potato field, vines should be killed 2-3 weeks prior to harvest to minimize infection of tubers. ♦ Destroy unmarketable potatoes ♦ cull piles serve as a source of inoculum for next season.

**High tunnel and greenhouse tomato farmers (conventional):** ♦ High relative humidity and condensation (with water dripping onto plants) inside high tunnels and greenhouses can be very favorable for late blight. ♦ Prune plants, raise side walls and /or use fans appropriately to improve airflow through the canopy and minimize condensation. ♦ Remove and destroy diseased plants. ♦ Ranman, Tanos, Previcur Flex, Revus Top and Gavel may be used in

greenhouses and high tunnels, but chlorothalanil formulations and Ranman may not due to label restrictions.

Organic growers: ♦ Follow management approaches described above for conventional or home garden potatoes or tomatoes, except that only copper-based fungicides may be used. ♦ Several OMRI-approved copper-based fungicides and formulations are available.

For more information, including more color photos, see our late blight fact sheet on Ohioline: <http://ohioline.osu.edu/hyg-fact/3000/3102.html>