Tomato-Loving Gardeners, Beware: Late Blight Is Back

(Reprinted with permission from ORGANIC GARDENING, www.rodale.com. All rights reserved.)

You can help: Plant pathologists are asking gardeners and farmers to report any occurrences of the disease that can wipe out potatoes and tomatoes.

By Leah Zerbe

What can you do:

Scan your tomatoes at least once a day looking for tomato blight; report blight via the USAblight system.

RODALE NEWS, EMMAUS, PA—Meg McGrath would be perfectly content with a super-hot, dry summer. Sure, that means more work for gardeners in the form of watering. But dry, hot conditions will stop a devastating plant disease, late blight, commonly known as tomato blight, in its tracks. In case the weather doesn't cooperate, though, McGrath, PhD, associate professor of plant pathology at Cornell University, is calling on backyard gardeners to help scientists study and contain the disease that targets potatoes and tomatoes. (It's the same pathogen that caused the Irish potato famine.)

A new national tracking project, USABlight, is designed for gardeners to report instances of blight in their gardens, helping researchers better figure out where it's coming from and how to better control its spread in the future. The million-dollar question is, "Is this in someone's home garden and they don't realize it?" McGrath says, noting late blight is a community disease, and left untreated, will spread from garden to garden and farm to farm, making truly organic tomatoes hard to come by. (Fungicides are used as prevention in chemical agriculture.)

THE DETAILS: Earlier this season, two greenhouses in New England reported isolated late blight incidents, which have since been cleaned up. However, McGrath is now reporting a late blight outbreak in New York, along with other confirmed cases in Delaware and Virginia. What sets this disease apart from other tomato problems is not only its ability to destroy entire harvests, but also its ability to affect neighboring farms and backyard gardeners. Late blight spores are wind-borne, and believed to travel and survive long distances in ideal conditions. The funguslike pathogen thrives in cool, wet conditions, or even in prolonged high-humidity conditions.

WHAT IT MEANS: Researchers aren't exactly sure what caused this year's late blight outbreak. It's believed that the only way the pathogen can survive over the winter is in infected tubers that gardeners or farmers leave in the ground or on a compost heap. The disaster scenario, though, is that both male and female versions of the pathogens begin to mate, thus creating spores that can overwinter. McGrath stresses that keeping an eye on your garden, testing suspect plant parts, and removing and double-bagging infected plants is the best way to keep this disease from spreading.

If late blight hasn't struck your neighborhood but is circulating in your state, it raises some tough questions for organic gardeners. Chemical gardeners opt to spray toxic fungicides to the plants regularly to protect against the disease. Certain copper sprays are approved for organic use, but they are not completely safe, either, and can harm beneficial organisms in the garden. "Commercial growers might consider an organic cop-

(Continued on page 2)
Late Blight (Continued from page 1)

per-based fungicide as part of an integrated program to protect tomatoes and potatoes from late blight," explains Doug Hall, senior editor of Organic Gardening magazine. "In a home garden, however, it's hard to justify the potential side effects of using copper sprays.

"Copper accumulates in the soil if crops are sprayed repeatedly," he adds. "Over many years, it can have a destructive effect on the beneficial microbes in the soil."

In the Organic Gardening test garden, Hall and company use cultural practices like sanitation, air circulation, weed management, and keeping the foliage dry to minimize the chance of late blight. If the disease appears despite the team's best efforts, they immediately remove and destroy the diseased plants.

Luckily, plant breeders are developing tomato varieties (hybrids, not genetically engineered) to resist late blight. But to breed the most resistant plants, researchers need gardeners to diligently provide late blight data so they can better understand the organism's patterns.

Here's how to deal with the tomato blight outbreak of 2011:

• Know what it looks like. For the average home gardener, and even inspectors trained to look for plant disease in nurseries, late blight can be a challenge to ID visually, because it sometimes resembles other diseases. If you suspect late blight, don't immediately rip out your plant and send it double-bagged to the landfill. First, check out Tomato Defense Guide: Is That Late Blight, or Something Else? and Slideshow: Tomato Blight Outbreak Threatens Your Tomatoes to see what late blight actually looks like. If you find it on your plant, learn how to responsibly deal with tomato blight.

• Water wisely. McGrath says using a hose and watering at the base of the plant, while keeping the leaves dry, will help lower the risk of many different tomato plant diseases.

• Monitor the late blight forecast model. Check the late blight forecast map to see if your specific location faces a high risk of late blight infection. The map provides forecasts of when conditions have been and likely will be favorable for specific locations, but does not consider presence of late blight spores, which is usually the deciding factor for outbreaks.

• Get it tested. If you suspect late blight on your potato or tomato plants, remove a sample of the afflicted plant and take it to your local extension office. Extension agents can help verify the problem. If it is indeed late blight, ask your extension service to send the sample to researchers.

• Report late blight. Researchers are relying on home gardeners to act as citizen scientists to help determine the source and habits of late blight. Report confirmed cases of late blight to the national USAblight project to help researchers get a handle on this debilitating tomato disease. For more detailed information on dealing with late blight in tomatoes and potatoes, read McGrath's late blight management tips.

Note: The underlined phrases in the article are links to the Internet and work with the electronic version of the newsletter. For those receiving a paper copy of this newsletter but with access to the Internet, the newsletters are posted on the website www.communitygroundworks.org.
Savor the Summer Food-a-palooza

Saturday, August 6, was hot like most of the summer days leading up to it, but that did not stop us from enjoying several wonderful dishes prepared by the Hmong women gardeners. They went into their plots and picked fresh vegetables to use in the dishes and generously donated other non-garden items such as ground beef, pork, curry, and rice prepared at home.

We learned the vines, leaves and squash blossoms can all be used as part of a dish along with pork and lemon grass. Delicious! What some of us consider weeds are used in a broth-like dish which is popular among the older Hmong generation. If you want to impress your future mother- and father-in-law, this is the dish you make for them. Long beans were a real hit (see picture below). The Hmong and Lao gardeners grow them up structures, and they produce beautiful long beans that have a sweeter taste than conventional green beans. But, best of all, no bean beetles on them, and when you pick one of these beans, it’s like picking five or six regular green beans! They come in green, white and purple varieties.

We also enjoyed a wonderful cold salad made with cherry tomatoes and a cucumber-like vegetable that is very similar to the cucumbers most of us know. However, they are wider and with fewer seeds (see below). Peppers were featured in several mild to very hot condiments which went well with the meat and vegetable dishes.

Everything was superb, and we thank all the people who helped cook the Hmong dishes. And, believe it or not, that was just some of the food available at Savor the Summer. Gardener-donated vegetables were collected and vegetarian chili and gazpacho were prepared by volunteers and served in conjunction with the Hmong dishes. Free ice cream was available to cool us down from the heat (both food- and weather-induced). Thanks to all the gardener volunteers listed below for helping make 2011 Savor the Summer a grand food-a-palooza.

Mai Vue Vang
Chao Yang
Khou Vang
Yer Lee
Bee Xiong
Paosoua Xiong (interpreter)
Pahoua Thao (interpreter/planner)
Friends/family of Hmong gardeners
Heather Harris-Fatty

Basics of Composting
8/20/11, 10:30 am, Troy Community Gardens

Joanne Tooley, a Troy Community Gardener and Master Composter, along with Joe Muellenberg, a Youth Nutrition Educator at UW Extension and Master Composter, will be leading this workshop about basic composting techniques. The workshop is free and Troy Gardeners will earn volunteer time for attending. Hmong interpretation will be provided.

Food Preservation Workshops

Water-bath Canning - High Acid Foods - $25
Sunday, August 21, 4-7pm, Lakeview Lutheran Church

Pressure Canning - Low Acid Foods - $25
Sunday, August 28, 4-8pm, Lakeview Lutheran Church

To register for the classes, email Gini at gini@macsac.org or call the Madison Area CSA Coalition (MACSAC) office at 608-226-0300.
CAC Impacted by Budget Cuts

Below is an email message sent to the Madison Area Community Gardeners Google Group from Greta Hansen and Chris Brockel of Community Action Coalition

Dear Friends of Gardens,

With all the budget excitement in Washington DC these days, it’s hard to predict where programs that help people will actually end up. However, one thing we know at CAC is that funding cuts hurt people and programs that improve the quality of life in our community, including community gardens.

Earlier this year we asked you to contact your elected officials and many of you did. Your calls have made a difference in reducing cuts for 2011.

We are now facing even more severe cuts – ones that could jeopardize the quality of your community gardens program altogether. We are facing inevitable staff reductions as we close out 2011, and we’re working hard to ensure that we’ll have enough resources and personnel to continue providing essential support for community gardens in 2012.

What can you do to help?

First, please consider a donation to CAC’s Community Gardens program. 100% of your donation will help sustain community and food pantry gardens in Madison and Dane County. Your gift of green will help keep gardens growing. If even half of the roughly 2,000 households gardening in CAC-supported community gardens give $10-20, we’ll be a long way towards closing our funding gap for the 2012 growing season.

Second, please take a few minutes to share your personal story about community gardening. You may either use the attached form or simply reply to this email with your story. CAC plans to share these stories with our elected officials to show them the real difference that community gardens make in people’s lives.

You may receive a letter from us in the mail asking for a donation as well. That appeal refers to the general programs at CAC, all of which are being affected by the current budget cuts. We know times are uncertain for most. Let’s work together to ensure that gardens keep building communities and feeding people.

Thank you very much,
Greta C. Hansen, Executive Director
Chris Brockel, Manager of Food and Gardens

P.S. You can send a check to CAC (CAC for South Central Wisconsin Inc. 1717 North Stoughton Road Madison, WI 53704-2605) or give via our website at www.caascw.org/donate.php.

Questions? Call Greta at 246-4730 Ext 217, or Chris at 246-4730 Ext 206.