

The University of Maryland Extension Agriculture and Natural Resources Profitability Impact Team proudly presents this bi-weekly publication for the commercial vegetable and fruit industry.

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## Casual Observations from Southern Maryland

By Ben Beale  
Extension Educator & CED, Agriculture  
St. Mary's County

The story this last two weeks has been the weather:

- ✓ In early May much of the southern Maryland area had turned dry, with isolated thunderstorms to the north.
- ✓ Frost visited some farms on the 10<sup>th</sup> and 11<sup>th</sup>, burning the tops of early sweet corn, although, no major widespread damage was reported.
- ✓ A series of thunderstorms with widespread hail rolled through the Waldorf area in Charles county causing damage to area crops and buildings.
- ✓ Vegetable transplants are mostly all in now. Dry and windy weather has made a tough environment for new plants and it shows.
- ✓ Farmers are busy hooking up irrigation systems, transplanting, and scouting.
- ✓ Plant issues seen this week include cucumber beetles, timber rot (high tunnels), herbicide damage, and late blight (isolated only).
- ✓ Early season tomatoes and squash from high tunnels are being harvested now; Strawberry season is in full swing.
- ✓ Finally some gentle spring rains arrived at the beginning of this week.



Image courtesy of B. Beale

## Late Blight Discovered on Southern Maryland Tomatoes

By Ben Beale  
Extension Educator & CED, Agriculture  
St. Mary's County  
&  
Kate Everts  
Extension Vegetable Plant Pathologist & Professor UME

***Edited Correspondence excerpts from Ben Beale and Kate Everts:***

***Ben Beale Wrote 5/7/10:***

Unfortunately, it looks like we are off to a bad start with late blight. This morning I was conducting farm visits and received a complaint from a grower in Loveville who has lost significant greenhouse transplants. The outward visual symptoms match that of late blight. I viewed the plants under a diagnostic scope and then under the compound scope using the directions Karen Rane provided during last year's outbreak. The lemon shaped sporangia are present. I compared this to what I saw last year and it is a match. Pictures are attached. I will get these to Karen for confirmation.



Image courtesy of B. Beale

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## Grower History:

The grower first noticed the problem around April 14-16 as a brownish spot on the upper side of the leaf with a whitish mold on the underside of the spot. He thought it may be leaf mold which is a common problem in our high tunnels. He has been treating with Oxidate.

These were homegrown transplants. Seed was from Rispen Seed and Rupp Seed. The seeds were planted in seedling flats on March 1<sup>st</sup>. The grower did not carry over any tomatoes plants or potato plants or seed potatoes. Note that right beside the infected house is another high tunnel house with tomatoes that were planted out in the Middle of February. The disease is present there, but not very bad. It look like it was just started. Many of the worse infected plants have already been set out in the field. To complicate things further, another grower has obtained plants and planted them out as well last week.



Image courtesy of B. Beale

I am going to the grower and ask him to pull up all plants and transplants and destroy them; I imagine burning would be best. I will try to contact the other grower as well to have her destroy those plants.

*Kate Everts Wrote 5/7/10:*

## Late Blight on Tomato Disease Alert!

We have just learned that there is a greenhouse outbreak of late blight on tomato in St. Mary's County. The grower is working with Ben Beale to destroy the infected plants and minimize the potential for spread. Some plants from the affected greenhouse have been planted in Charles County.

Potato growers in both St. Mary's and Charles counties - and in other nearby counties should apply a protectant fungicide such as chlorothalonil (Bravo), Gavel, or mancozeb. They should also scout aggressively to determine if any symptoms are present. If a grower suspects late blight, they should work with and Extension Educator; or get a sample to the UM Plant Diagnostic laboratory. Infected plants should be destroyed.

Potato growers should also apply a protectant fungicide such as chlorothalonil or mancozeb. In addition, they should scout their plants and if late blight is suspected, confirm the diagnosis with an extension educator or the UM Plant Diagnostic lab.

Because we just learned of the outbreak we are still trying to assess the extent of the problem. We hope it is an isolated incidence but will send more information as it becomes available.

*Kate Everts Wrote 5/17/10:*

## Late Blight on Tomato Disease Update:

### Is the disease still there?

The grower destroyed the tomatoes in his greenhouse and the tomatoes in Charles County were also destroyed.

### Has it spread?

Ben Beale has looked extensively for any additional infected sites and found none. We looked together on Thursday at farms that were close to the original site (in one case a neighboring farm) and did not find any additional late blight. The disease likes cool wet weather, and spring weather is often ideal for spread; so the concern still remains.

### Can it be managed?

While the most common previously occurring *Phytophthora infestans* genotypes were resistant to Ridomil, the genotype that occurred on tomatoes in 2009 (US22) was sensitive to Ridomil.

In addition there are several other fungicides listed in EB236, which can be used for late blight management. We are awaiting results that will tell us what genotype we have in St. Mary's county. In the meantime the grower on the affected farm is using fungicides to manage the outbreak.

### What should growers do?

At this time I still recommend that commercial tomato growers in both St. Mary's and Charles Counties and in other nearby counties apply a protectant fungicide such as chlorothalonil (Bravo), Gavel, or mancozeb. They should also scout aggressively to look for symptoms of late blight. If a grower suspects late blight, they should work with and Extension Educator; or get a sample to the UM Plant Diagnostic laboratory. Infected plants should be destroyed.

### How did it get there?

We don't believe that the pathogen overwintered in St. Mary's County. However, we don't know how it was introduced. The grower did not have any live plants that could have allowed late blight to overwinter. We hope that the genotype information will give us some clues.



**Thanks for partnering with University of Maryland Extension, and supporting our programs.**

### ***Vegetable & Fruit Headline News***

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**Submit Articles to:**

Editor,  
R. David Myers, Extension Educator  
Agriculture and Natural Resources  
7320 Ritchie Highway, Suite 210  
Glen Burnie, MD 21061  
410 222-6759  
[myersrd@umd.edu](mailto:myersrd@umd.edu)

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