PENNSYLVANIA WEEKLY VEGETABLE DISEASE UPDATE

SEPTEMBER 23, 2008

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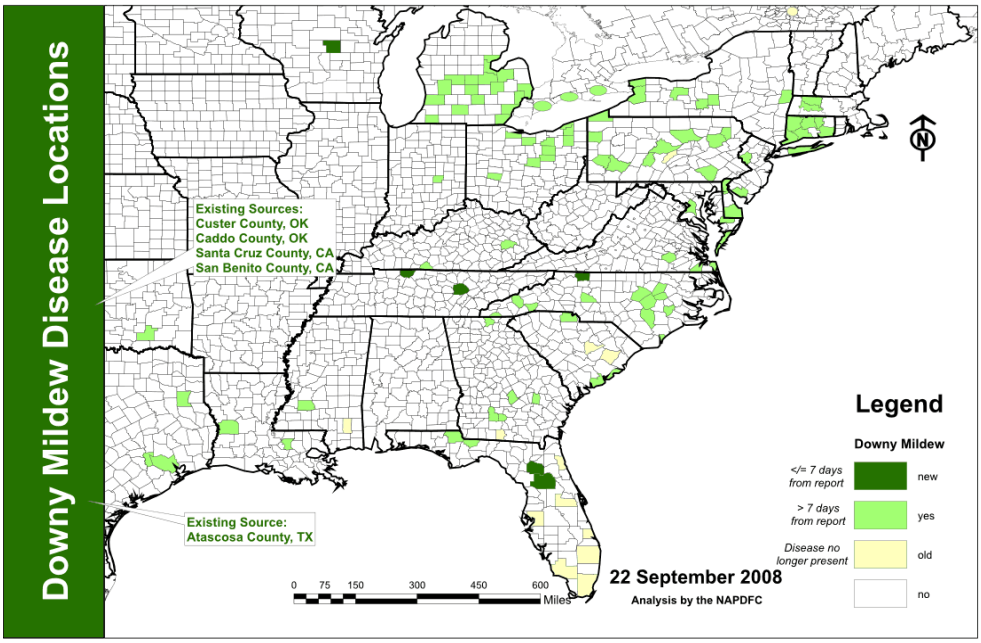
NOTE: This is the thirteenth and final weekly disease updates of the 2008 growing season. Thank you for your support as I started my first season in Pennsylvania and as always please feel free to contact me at 814-865-7328 or bkgugino@psu.edu if you have any questions, concerns or suggestions. Also feel free to include this information in your various newsletters and outreach programming.

WEEKLY UPDATE ON CUCURBIT DOWNY MILDEW

As the season winds to a close, there have been fewer reports of downy mildew in Pennsylvania this past week and the dry, sunny conditions have not been favorable for the transport of spores over the past several days. If you are interested in the continuing to follow the cucurbit downy mildew forecasts please visit the Cucurbit Downy Mildew Forecasting Site at http://www.ces.ncsu.edu/depts/pp/cucurbit/ for the latest list of disease outbreak locations and forecasts. Next season we will continue to monitor downy mildew disease incidence and severity in sentinel plots in PA and along the east coast and provide regular disease updates.



This map is from the NCSU downy mildew forecasting website as of 22 Sep 2008. The counties are shaded based on whether the outbreak is less than 7 days old (dark green), more than 7 days old (light green) or no longer present because the field was harvested or destroyed (yellow).

Keep in mind that although cultural practices such as crop rotation and sanitation have less of an impact on cucurbit downy mildew management since the pathogen does not overwinter here, it is still important to rotate out of cucurbits to manage soilborne pathogens and other diseases such as angular leaf spot and gummy stem blight. In preparation for next year's cucurbit crops, select sites with good air drainage, full sunlight and low humidity to create a less favorable environment for the pathogen.

Please report any suspect cases of downy mildew in cucurbit fields and bring or send a sample (overnight delivery) for confirmation to Beth Gugino, Department of Plant Pathology, 219 Buckhout Lab, University Park, PA 16802. We will examine the sample under a microscope and look for the characteristic downy mildew spores.

TOMATO AND POTATO DISEASE UPDATE

LATE BLIGHT UPDATE

This week there are no new reports of late blight in Pennsylvania or in the surrounding region. Below are the recommended spray schedules for managing LATE BLIGHT as determined on September 23rd using the BLITECAST forecaster for 19 locations across the state of Pennsylvania (thanks to Ellen Hay – Penn State). These suggestions are run using site specific SKYBIT weather data provided by ZedX (Bellefonte, PA) and are based on the assumption that late blight inoculum is nearby. The conditions this past week were less favorable for late blight disease development and as a result the spray intervals have been extended for several locations.

Town	County	7-day rainfall total (16 Sep to 23 Sep)	Blitecast spray message*	
Fairview	Erie	0.01	Spray if none	Sep 14
Corry	Erie	0.01	since.....	Sep 17
Sweden Valley	Potter	0.01		Sep 15
Butler	Butler	0.01		Sep 14
Finleyville	Washington	0.04		Sep 17
Loretto	Cambria	0.02		Sep 18
Rock Springs	Centre	0.01		Sep 18
Jersey Shore	Lycoming	0.01		Sep 17
Montandon	Northumberland	0.01		Sep 18
Clarks Summit	Lackawanna	0.00		Sep 18
Wyoming Valley	Luzerne	0.01		Sep 16
Germansville	Lehigh	0.02		Sep 18
Kutztown	Berks	0.02		Sep 18
Ringtown	Schuylkill	0.01		Sep 16
Gratz	Dauphin	0.02		Sep 18
Maddensville	Huntingdon	0.01		Sep 18
Waynesboro	Franklin	0.01		Sep 18
Leola	Lancaster	0.02		Sep 18
Mt. Joy	Lancaster	0.01		Sep 18

*As a general rule of thumb, if you have not applied a fungicide in the past 14 days then one needs to be applied to protect the new vegetative growth especially wherever there is a history of late blight.

Below is an excerpt from the article **Potato Late and Early Blight Management for Pennsylvania, 2007** by Barb Christ and Sara May, Penn State Plant Pathology regarding the harvest and storage of potatoes:

> **Harvest** only after the vines are dead and when the soil is dry. Also, those fields with high incidence of late blight that might have resulted in tuber rot should be harvested last. Under situations without late blight when other soft rots are prevalent, harvest those fields last. This will allow rotting potatoes to decay prior to harvest. Do not harvest rotting potatoes. Rogue out blighted tubers at grading. Take every feasible step to keep rotting potatoes out of your storage.
>
> **Manage the storage environment to suppress late blight and soft rots.** Manage storage conditions to promote complete suberization of harvest wounds then lower the temperature to appropriate long-term storage conditions. Do not attempt to store lots that have greater than 2% blighted tubers. Avoid placing wet tubers into

storage. Moisture provides conditions promoting rot. Good air circulation is required to prevent wet pockets. Also, relative humidity should be below 85% to prevent condensation on the tubers.

EARLY BLIGHT UPDATE

The drier conditions this past week have been less favorable for early blight development and as a result a fungicide application was only recommended for Germansville, PA in Lehigh Co.

Although early blight continues to be a common site in the field, as the season draws to a close consider whether or not an additional fungicide application is necessary. If you had trouble with early blight this year, make sure to rotate away from potatoes and tomatoes for at least 2 years and implement practices that reduce leaf wetness and minimize soil splashing.

Keep in mind that this model is run using site specific weather data provided by ZedX. Since environment varies, sometimes within relatively short distances, the spray recommendation information should be considered in combination with your local environmental conditions.

Town	County	FAST spray message*	
Fairview	Erie	Spray if none	Sep 3
Corry	Erie	since.....	Aug 1
Sweden Valley	Potter		Aug 5
Butler	Butler		July 16
Finleyville	Washington		Sep 7
Loretto	Cambria		July 30
Rock Springs	Centre		Sep 8
Jersey Shore	Lycoming		July 27
Montandon	Northumberland		Sep 8
Clarks Summit	Lackawanna		July 22
Wyoming Valley	Luzerne		July 20
Germansville	Lehigh		Sep 15
Kutztown	Berks		July 30
Ringtown	Schuylkill		July 28
Gratz	Dauphin		July 30
Maddensville	Huntingdon		Sep 4
Waynesboro	Franklin		Aug 24
Leola	Lancaster		Aug 2
Mt. Joy	Lancaster		Sep 6

*As a general rule of thumb, if you have not applied a fungicide in the past 14 days then one needs to be applied to protect the new vegetative growth especially where there is a history of early blight.
*For tomatoes, once any fruit start to ripen, regular fungicide applications may be warranted.

Tomato and potato disease updates will also be updated one last time on the 1-800-PENN-IPM hotline.
