



# Vegetable Crop Update

A newsletter for commercial potato and vegetable growers prepared by the University of Wisconsin-Madison vegetable research and extension specialists

Supplement 4 – August 1, 2012

**Vegetable Disease Update – Amanda J. Gevens, Assistant Professor & Extension Vegetable Plant Pathologist, UW-Madison, Dept. of Plant Pathology, 608-890-3072 (office), Email: [gevens@wisc.edu](mailto:gevens@wisc.edu).**

**Vegetable Pathology Webpage: <http://www.plantpath.wisc.edu/wivegdis/>**

**Late blight update:** We reported the first finds of late blight in Wisconsin potato fields yesterday in Barron and Adams Counties. There is an additional report out of Portage County as of this morning. The genotype (also referred to as strain or clonal lineage) of the Barron County late blight is US-23 based on allozymes analysis. Thanks to Vegetable Pathology graduate students Amilcar Sanchez Perez and Anna Seidl for their steadfast work in getting samples processed. They are continuing to work on samples from Adams County.

To date, most of the late blight identified in the U.S. has been US-23. This lineage is a dynamo at producing sporangia. In a recent study in my lab, it produced more sporangia per area of infected tomato leaf than US-22 or US-24. The table below provides further information on US-23 in comparison to the other lineages that have been present in Wisconsin over the past 3 years.

Clonal lineage	Mating type	Optimum growth temp	Host comments	Years found in WI	Resistance to mefenoxam
US-22	A2	24°C	Tomato and potato, poor pathogen on pepper, eggplant, tomatillo	2009, 2010	sensitive
<b>US-23</b>	<b>A1</b>	<b>18°C</b>	<b>Tomato and potato</b>	<b>2010, 2011, 2012</b>	<b>Intermediately resistant</b>
US-24	A1	20°C	potato	2010, 2011	Resistant (variability among isolates)

### What to look for when scouting for late blight?



**Barron County potato late blight symptoms were primarily on petioles, upper plant stems, and upper leaves. Note white pathogen sporulation on undersides leaf in top left picture.**



**Adams County potato late blight symptoms were primarily on leaves of upper plant canopy. On the day of detection and collection, little sporulation was noted on lesions.**

In order to help better understand the epidemic at hand, please submit samples to my lab or work through your county agent and request that they send to me for genotyping. All we need to know is the county of sample origin, we do not need to have specific field or grower information associated with the sample. Identification of genotype at the county level would be very helpful in improving our understanding of this epidemic and potential future risks. Lab address is: Amanda Gevens, 1630 Linden Dr, Room 689, Plant Pathology Dept., University of Wisconsin, Madison, WI 53706. Please send infected leaves in a slightly inflated ziplock bag with no paper towel. Overnight shipping is best.

Further information on late blight and its management can be found in the Vegetable Crop Updates newsletters archived at the University of Wisconsin Vegetable Pathology Website. Also, fact sheets on late blight are available under the “Late Blight” tab at the website.