Vegetable Crop Update

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

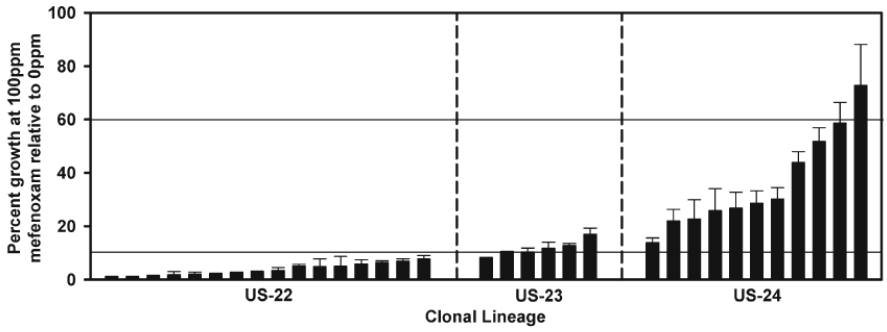
Disease Supplement No. 3 – July 3, 2013

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. Vegetable Path Webpage: http://www.plantpath.wisc.edu/wivegdis/

Late Blight Update: Since the initial late blight detection on commercial potato on June 28th, there have been two additional counties with confirmed late blight: Juneau on commercial potato on June 29th and Sauk on home garden tomato on July 2nd. All late blight has been genotyped as US-23.

At time of diagnosis, potato late blight lesions appeared to be 5 to 7 days old with pathogen sporulation evident on leaf undersides. Lesions were few throughout field and on leaves only – no symptoms on stems. On tomato, late blight lesions appeared to be several weeks old with large oily black lesions on stems and leaves, and sunken sporulating lesions on ripe and unripe fruit. It is challenging to know with certainty where initial inoculum may have come from. However, symptom presentation in potato fields was not suggestive of a seedborne source. No stem lesions were observed and incidence of lesions across field suggested deposition by spore shower. No potato volunteers have been noted so far this season to suggest this potential source. Cull piles are tightly controlled by potato operations and do not appear to be the source.

At this time, it is critical that preventative fungicide applications are made to protect susceptible tomato and potato crops from late blight. A shortened 5-7 day spray interval is recommended. Registered fungicides for potato late blight in WI are listed at the UW Vegetable Pathology website.



US-23 can be managed with mefenoxam fungicides. Figure indicates some variability in sensitivity among US-23 isolates collected from WI in previous years. Line at 10% indicates threshold for sensitivity category. 10-60% indicates intermediate sensitivity to mefenoxam. Greater than 60% indicates resistance to mefenoxam.

Free late blight diagnostics: 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. 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.

For further symptom and management information, please visit the UW-Vegetable Pathology website http://www.plantpath.wisc.edu/wivegdis/ for additional late blight photos and links to other late blight information and identification resources for organic, conventional, and home gardeners.