In This Issue

Late blight national updates Cucurbit downy mildew national updates Late blight and early blight disease forecasting Comments on new late blight fungicide Orondis (Syngenta)

Calendar of Events

July 14, 2016 – UW-Rhinelander Agricultural Research Station Field Day July 21, 2016 – UWEX Langlade County –Antigo Research Station Field Day July 28, 2016 – UW-Hancock Agricultural Research Station Field Day February 7-9, 2017 – UWEX/WPVGA Grower Ed. Conf., Stevens Point, WI

Amanda J. Gevens, Associate Professor & Extension Vegetable Plant Pathologist, UW-Madison, Dept. of Plant Pathology, 608-890-3072 (office), Email: gevens@wisc.edu. Veg Pathology Webpage: http://www.plantpath.wisc.edu/wivegdis/.

National Late Blight Updates (<u>www.usablight.org</u>). There were no new late blight confirmation in this past week. The Jun 1st, Washington (Walla Walla Co.) report of late blight on potato was confirmed to be of the <u>US-8</u> strain/genotype. On Jun 2nd, Virginia reported late blight on potato which was <u>US-23</u>. Earlier reports have come from MD (tomato US-23), CA (potato, types US-8 and US-11), and FL (potato and tomato US-23). **US-11** can infect both tomato and potato, is of the A1 mating type, and is resistant to Ridomil. **US-8** can infect both potato and tomato, but favors potato, is of the A2 mating type and is also resistant to Ridomil. **US-23** is a genotype that can be controlled with mefenoxam/metalaxyl fungicides (ie: Ridomil Gold SL) and can infect both tomato and potato. It should be noted, however, that some US-23 isolates can be intermediately or fully resistant to mefenoxam. As such, ongoing tests/screens should be conducted to best prescribe appropriate treatment responses.

Cucurbit Downy Mildew Updates (http://cdm.ipmpipe.org/). In the past week there were two states reporting new confirmations of cucurbit downy mildew: FL and GA. Previous confirmations were made in FL, GA, NC, and TX.

Current P-Day (Early Blight) and Severity Value (Late Blight) Accumulations (R.V. James, UW-Plant Pathology/R.V. James Designs): A P-Day value of ≥ 300 indicates the threshold for early blight risk and triggers preventative fungicide application. A DSV of ≥ 18 indicates the threshold for late blight risk and triggers preventative fungicide application. Red text in table below indicates threshold has been met/surpassed. "-" indicates that information is not available. Blitecast and P-Day values for actual potato field weather from Grand Marsh, Hancock, Plover, and Antigo are now posted at the UW Veg Path website at the tab "P-Days and Severity Values." http://www.plantpath.wisc.edu/wivegdis/contents_pages/pday_sevval_2016.html

Location	Planting	50%	P-Day	Disease	Date of	Increase
	Date	Emergence	Cumulative	Severity	DSV	in DSV
				Value	Generation	from 6/3
Antigo	Early 5/1	6/2	57	10	6/10	10
	Mid 5/18	6/7	23	0	6/10	-
	Late 6/3	-	-	-	_	-
Grand	Early 4/15	5/22	158*	23*	6/10*	-
Marsh	Mid 5/1	5/27	121*	17*	6/10*	-
	Late 5/15	6/3	63	6	6/10*	-
Hancock	Early 4/18	5/24	145	23	6/10	6
	Mid 5/3	5/29	105	10	6/10	6
	Late 5/20	6/5	48	1	6/10	-
Plover	Early 4/20	5/25	136	25	6/10	7
	Mid 5/5	5/30	93	10	6/10	7
	Late 5/20	6/6	37	1	6/10	-

Summary: Disease Severity Values (DSVs) and Late Blight Blitecast: We now have most potatoes in WI at 50% emergence or greater and are generating forecast values for all but late planted potatoes in Antigo. Conditions were rather poor for promotion of late blight in this past week with 7 day accumulations of just 6-7 Disease Severity Values in the Hancock and Plover locations. Recall the maximum number of DSVs that one day can accumulate is 4. However, the threshold of 18 has been met for early planted potatoes in Grand Marsh, Hancock, and Plover indicating that overall accumulated risk, since emergence, could have promoted late blight. *We continue to work on our Grand Marsh station and despite installation of a new modem and battery, we are still unable to regularly generate hourly data. As such, we have used some of the Hancock data to provide estimates for Grand Marsh based on the Grand Marsh emergence dates. Wisconsin commercial conventional fungicides for late blight control can be find at: http://www.plantpath.wisc.edu/wivegdis/pdf/2016/Potato% 20Late% 20Blight% 20Fungicides% 202016.pdf



P-Day Values for Early Blight Prediction: P-Day values are still under threshold, are accumulating with warm days. A few of the earliest early blight lesions have been noted in some southern and central WI early emerged commercial potato fields. First lesions are typically seen on the lowest/oldest foliage. Lesions are circular, brown, and typically have concentric rings or a 'bull's eye'/target appearance as noted in the leaf close up in photo on left.

Orondis (Syngenta) Fungicide Comments: After sending out last week's newsletter with fungicide information for potato late blight control, I learned of a few updates that may be of use in your fungicide considerations. Orondis Ultra may be running tight in some parts of the U.S., but Orondis Opti seems to have more availability.

Orondis Opti: Orondis A and B are the two components of an eventual single product. Orondis B is *chlorothalonil* and Orondis A is *oxathiapiprolin*. The two products come in the same case. In 2017, Syngenta anticipates that this product will be a pre-mix sold as Orondis Opti.

Orondis Ultra: is also available, but this has a more limited use on potatoes at this time. In this co-pack, Orondis Ultra A is *oxathiapiprolin* and Orondis Ultra B is *mandipropamid*. The two products come in the same case. In 2017, Syngenta anticipates that this product will be a premix sold as Orondis Ultra. Both of these active ingredients are very strong in prevention of late blight, most specifically. Mandipropamid is also currently available in Revus Top which also contains difenoconazole – providing a strong pre-mix for early and late blight control.

For further information on common diseases, insect and weed pest information, please consider the 2016 A3422 Commercial Vegetable Production in Wisconsin guide is available for purchase (\$10) through the University of Wisconsin Extension Learning Store website: http://learningstore.uwex.edu/Commercial-Vegetable-Production-in-Wisconsin2016-P540.aspx

A pdf of the document can be downloaded for free at the following direct link: http://learningstore.uwex.edu/Assets/pdfs/A3422.pdf