



Vegetable Crop Update

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

No. 7 – May 31, 2014

In This Issue

National late blight watch
Blitecast and P-Days for late blight and early blight management
Spotted Wing Drosophila update for fruit
WI Irrigation scheduler program advertisement

Calendar of Events

June 19 – Organic & Sustainable Diversified Veg Farm Field Day, Sunbow Farm, Eau Claire, WI (UWEX St. Croix County)
July 18 – UW Potato Breeding Station Tour, Rhinelander Ag Research Station
July 22 – UW-Hancock Agricultural Research Station Field Day, Hancock, WI
August 12-14 – Farm Technology Days, Stevens Point, WI
August 21 – 1:00PM Antigo Field Day, Antigo, WI

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

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.”

Current P-Day (Early Blight) and Severity Value (Late Blight) Accumulations

P-Day of ≥ 300 indicates threshold for early blight risk and triggers preventative application of fungicide. DSV of ≥ 18 indicates threshold for late blight risk and triggers preventative application of fungicide. Red text in table below indicates threshold has been met. NA indicates that information is not yet available as emergence has yet to occur.

http://www.plantpath.wisc.edu/wivegdis/contents_pages/pday_sevval_2014.html

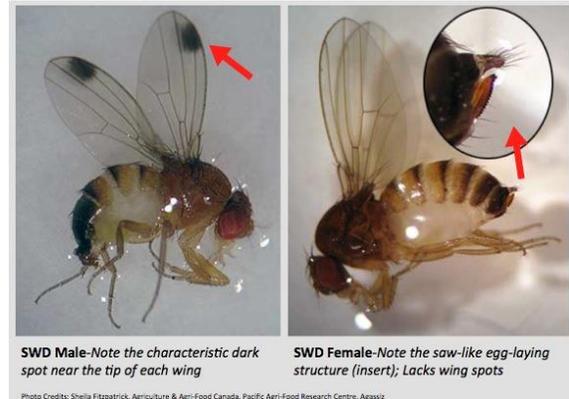
Location	Planting Date	50% Emergence	P-Day Cumulative	Disease Severity Value	Date of DSV Generation
<i>Antigo</i>	Early 5/20	NA	NA	NA	NA
	Mid NA	NA	NA	NA	NA
	Late NA	NA	NA	NA	NA
<i>Grand Marsh</i>	Early 4/20	5/19	81	3	5/31
	Mid 5/4	NA	NA	NA	NA
	Late 6/5	NA	NA	NA	NA
<i>Hancock</i>	Early 4/24	5/20	83	1	5/31
	Mid 5/8	NA	NA	NA	NA
	Late 6/8	NA	NA	NA	NA
<i>Plover</i>	Early 4/21	5/20	84	3	5/31
	Mid 5/5	NA	NA	NA	NA
	Late 6/5	NA	NA	NA	NA

Nationally, in the past week, there were no new late blight diagnoses reported at <http://www.usablight.org/>. So far in 2014, several FL counties have reported late blight caused by genotype US-23 in tomato and potato. The website provides location (by county) of positive reports of late blight in the U.S. and provides further information on disease characteristics and management.

Fruit Entomology Update - Christelle Guédot, Assistant Professor and Extension Entomologist, UW-Madison, Department of Entomology; (608) 262-0899; guedot@wisc.edu

Spotted Wing Drosophila: update on the 2013 growing season and outlook into the 2014 field season

Spotted Wing Drosophila (SWD), *Drosophila suzukii*, is an invasive vinegar fly from Eastern Asia that can cause significant damage to soft-fleshed fruit. SWD was first detected in California in 2008 and is now found in over 38 states. SWD was first detected in Racine County, Wisconsin in 2010 and heavy infestations mainly in raspberry have been reported in 2012 and 2013. Populations were confirmed in 25 counties in 2013 from Rock County to Bayfield, and from Door to Pierce.

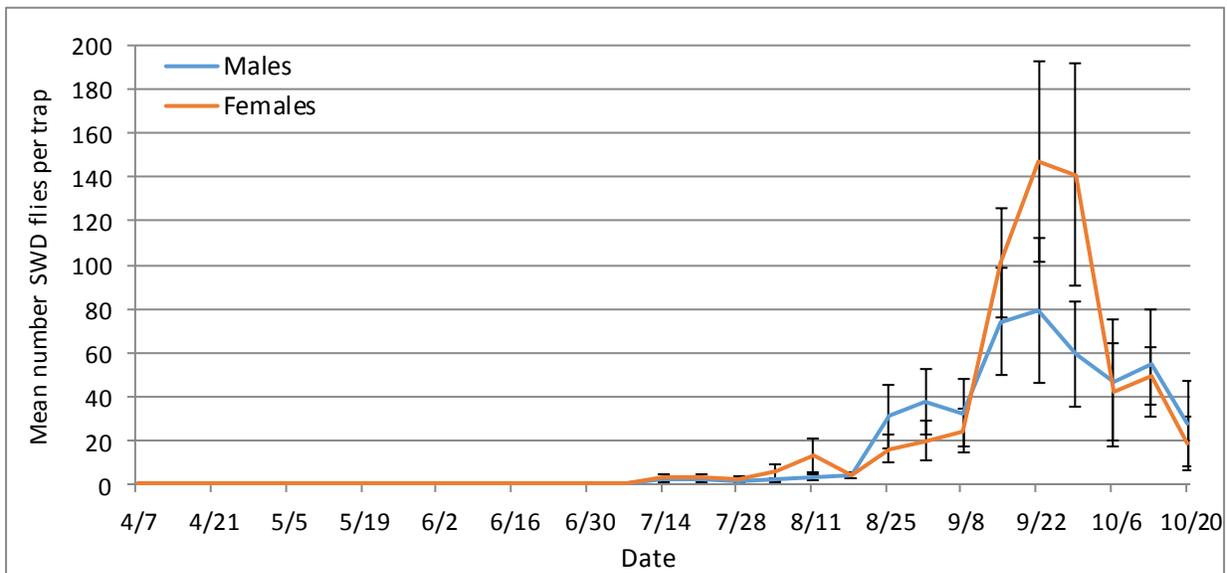


Unlike other *Drosophila* flies that only infest rotting or damaged fruit, SWD females have a serrated ovipositor that enables them to lay eggs inside ripe and ripening fruit, in addition to damaged or rotting fruit. In Wisconsin, the majority of confirmed cases up to date have been in raspberries. Although SWD is known to attack strawberry, infestations have seldom been reported here, probably due to lack of overlap between strawberry ripening and the appearance of fly populations.

In 2013, a state wide monitoring project was conducted with the collaboration of many UW-Extension agents and faculty, DATCP, and fruit growers. From this monitoring and other experiments we conducted, we were able to provide updates on the occurrence of SWD in Wisconsin, through our SWD website <http://labs.russell.wisc.edu/swd/> and newsletters. We also were able to track populations throughout the season (see graph below).

What we found in 2013

- SWD was first detected in 2013 on June 24th in Vernon County. The first detection in the 2013 monitoring project with an apple cider vinegar bait was on July 7th in strawberry in Iowa County, towards the end of strawberry harvest.
- SWD larvae were found in fruit before adults were caught in traps, suggesting that apple cider vinegar is not a good bait for detecting first occurrence of SWD populations.



- SWD populations are not evenly distributed. Some traps caught no fly during the entire season while the maximum reached was 650 males and 500 females in a single trap in a single week!
- Crops vary in their susceptibility to SWD with caneberries being probably at the top of the list.
- Overall, we seemed to catch more females than males but this pattern might not hold true in every crop.
- Flies were still caught in late October (and even into November in another experiment)
- Take home message: for monitoring first occurrence, it is advised to use a yeast and sugar bait (1 tbsp. active dry yeast + 4 tbsp. sugar + 12 oz. water) instead of apple cider vinegar

What is next

A new statewide monitoring project is underway this season to look at first occurrence of SWD. We have 16 collaborators throughout the state trapping in raspberry, blueberry, grape, and strawberry with the yeast and sugar bait. We hope to pinpoint the first occurrence of SWD this season throughout the state and inform growers through the SWD website and newsletters of the distribution of populations throughout the state.

What to expect

We strongly suspect that SWD is overwintering in Wisconsin. The first detection in 2013 was on June 24th and it is possible that SWD adults will show up earlier this season as they become established in the state. We also expect to get more reports of infestations and in more locations.

News

Commercial synthetic lures by Trécé, Inc. are now available for monitoring SWD from Great Lakes IPM (<http://www.greatlakesipm.com/>) for \$3.45/lure and \$29.50 for a pack of 10. Lures are good for 4 weeks.

Resources

Please, visit our SWD website <http://labs.russell.wisc.edu/swd/>, where you will find all sorts of information on SWD, from how to identify SWD to management practices for specific crops. We will also provide updates on occurrence and distribution as the season progresses. Stay tuned! Remember, it is very important to monitor for SWD, especially in soft-skinned berries, so check how to make cheap and easy to construct traps on the website <http://labs.russell.wisc.edu/swd/>



Monitoring trap

Entry hole

~1" of yeast and sugar mix

+ 1 drop of unscented soap

If you have any question, please contact Christelle at guedot@wisc.edu or at 608-262-0899. [Happy growing season!](#)

How to submit a sample to the UW Insect Diagnostic Lab:

If you need confirmation of SWD, send your specimens to the UW-Madison Insect Diagnostic Lab.

Crushed, damaged specimens are very difficult to identify. Use mailing tubes, padded envelopes or sturdy boxes to prevent damage when shipping. **DO NOT PUT SPECIMENS ON TAPE.** Use cotton, or tissue paper for cushioning. Tape vial or film canister tops before shipping. Many specimens are damaged in transit if not cared for.

Adult SWD are needed for identification, larvae in infested fruit must be reared to adults in order to confirm identity.

Ship the specimens along with your contact information, date and the type of fruit the specimens were found in to:

Insect Diagnostic Lab
240 Russell Labs
1630 Linden Drive
Madison, WI 53706

Wisconsin Irrigation Scheduler Program (WISP)

Grower Training Workshops

Dates: June 19, 24 & July 7

9:00 AM to 12 PM

**Advanced Registration is required
(limited enrollment)**

**Location: Hancock Ag Research Station
N3909 County Rd V Hancock, WI**



**Who should attend: Growers, Irrigation Managers, Crop
Consultants who manage irrigation systems**

A new web-based irrigation scheduling program has been developed to automate some of the operations for Irrigation Scheduling such as recording daily ET, calculation of adjusted ET and setting allowable depletion set points for various fields on your farm.

This 3-hour workshop will walk you through setting up your account, setting up farms, entering center pivot information, setting up fields for each pivot and entering crop information. We will review how to determine and enter other required data - % cover, rainfall, irrigation amounts, soil moisture and field-side measured ET. Several different type/brands of soil moisture sensors will be demonstrated; installation techniques, data collection & maintenance. This is a hands-on workshop with limited enrollment so everyone gets one-on-one assistance as needed.

Workshop Objectives

- Do initial set-up on WISP for some of your farms pivots and fields
- Learn how to set-up additional farms, pivots, fields
- What data is required and where to find it.
- How to interpret the field status page for irrigation scheduling
- Learn about types of soil moisture sensors and pros / cons of each

WISP 2014 Workshop Registration

Name: _____

Farm/Business: _____

Address: _____

City/state _____

Zip Code: _____ Phone Number: _____

Date: (circle one) June 19 registration by June 13
 June 24 registration by June 17
 July 7 registration by June 30

Cost: No Charge
Limited to first 6 registered for each workshop

We will supply laptop computers but you may also bring your own if you desire. Needs to have a Wireless modem and a browser (Internet Explorer, Firefox, Google Chrome, Safari).

Will you be bringing your own Laptop? Yes No

Bring to the workshop - field maps, pivot locations, crops planted, emergence dates.

Send form to Attention: Scott Sanford by Fax 608-262-1228;
Email - sasanford@wisc.edu;
Mail: 460 Henry Mall, Madison, WI 53706