

# Wisconsin Crop Manager

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## Accounting for Every Drop of Irrigation Water Podcast

### Transcript

**Sevie Kenyon:** Irrigators are keeping track of every drop now. Can you give us an idea why this is so important?

**John Panuska:** With the climate conditions we've had recently it seems that we've had floods or we've had droughts, and so water management is obviously a very critical issue for farmers trying to get a good crop or remain profitable. Obviously any type of tools or assistance that are available to aid in that process is a value. Having adequate water in the crop/root zone is critical to good yields and high quality crops.

**Sevie Kenyon:** Can you give us an idea what they're doing?

**John Panuska:** One of the tools that we currently have available to assist producers in tracking every drop of water is an irrigation water management tool called WISP2012, which stands for the Wisconsin Irrigation Scheduling Program 2012.

**Sevie Kenyon:** John, do you want to tell us what the pieces are of the WISP2012?

**John Panuska:** Well WISP2012 uses soils information, crop information, and climate information to track the amount of water that's available in the root zone of a crop on a daily basis.

**Sevie Kenyon:** And John, what kinds of technologies are being used to track these things?

**John Panuska:** The WISP program includes a number of different technologies. It's a web based tool, and it's using what we call the evapotranspiration which is the amount of water that a plant loses through its leaves and from surface soil evaporation, and that number is estimated on a statewide basis using satellite imagery and ground temperatures.

**Sevie Kenyon:** What does the producer do to access this information?

**John Panuska:** You can find it on the web simply by doing a search under WISP; *W-I-S-P, 2012*, and it will come up as the Wisconsin Irrigation Scheduling Program.

**Sevie Kenyon:** What do you have to say to someone who doesn't have to irrigate every day?

**John Panuska:** Often times, when you're driving down the road, and you see irrigation systems running a lot, you think they're wasting water. But, pumping water costs money, and they're not going to want to waste that water. We're working with producers to get the most crop for every drop of water they put on.

**Sevie Kenyon:** John, could you perhaps describe the research behind this program?

**John Panuska:** Research that's recently been completed down at the University of Nebraska suggests that you can defer irrigation water application on soybeans. We're currently looking at that here for vegetable crops; perhaps the snap beans or peas, and then we can do that here in Wisconsin and save water overall.

**Sevie Kenyon:** We've been visiting with John Panuska, Department of Biological Systems Engineering, University of Wisconsin Extension, and the College of Agricultural and Life Sciences, Madison, Wisconsin and I'm Sevie Kenyon.

To listen to the podcast follow the link below:

<http://fyi.uwex.edu/news/2013/07/19/crops-for-every-drop/>

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## Vegetable Crop Update 7/22/13

The 13<sup>th</sup> issue of the Vegetable Crop Update is now available. This issue contains information on Disease Severity Values, PDays for Early Blight Management, and Cucurbit downy mildew. Click [here](#) to view this update.

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## Late Season Weed Survey

Vince M. Davis, Cropping Systems Weed Scientist and Extension Specialist

A glyphosate-resistant horseweed population in Wisconsin has been identified by University of Wisconsin-Madison/Extension researchers from a 2012 sample taken in Jefferson County.

“Although the weed usually follows a winter annual life cycle, it has the ability to germinate later in the year, choking out spring and summer crops,” said Vince Davis, UW-Extension cropping systems weed specialist at UW-Madison. “Horseweed has tiny seeds that can easily be carried great distances by wind, therefore, the threat of this weed spreading herbicide-resistant biotypes to new locations through naturally occurring seed movement is high.”

He noted that the adoption of no-till cropping systems in past decades has allowed horseweed to become a major problem in agricultural fields.

“Farmers use a zero tillage agricultural technique to decrease costs, decrease soil erosion, and improve soil health. However, the weed seeds left from the season before also remains near the surface and creates a higher chance of growing again in the next crop,” said Davis. “Increasing the number of weeds in the crop often means increasing the chances for selecting herbicide-resistant weeds.”

Horseweed is a broadleaf species of weed problematic to agricultural fields in Northern America. The Weed Science Society of America says the best way to stop the spread is to manage it first. For more information on how to best manage weeds and reduce the risk of herbicide resistance go to <http://www.wssajournals.org/doi/pdf/10.1614/WS-D-11-00155.1>.

The Wisconsin glyphosate-resistant horseweed population was identified through the *Late-Season Weed Escape Survey in Wisconsin Corn and Soybean Fields*, which is primarily funded by the Wisconsin Corn Promotion Board. The survey will be conducted again in 2013. If you are interested in participating in this survey, please see the survey announcement here: <http://ipcm.wisc.edu/blog/2013/06/corn-and-soybean-herbicide-use-survey-participation/>.

Moreover, if you have horseweed, or other weeds that survive post emergence applications and you have concern about glyphosate resistance, contact [your local county Ag Extension Agent](#) who can help you further evaluate the situation.

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## Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Ann Joy, Erin DeWinter and Joyce Wu, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from July 13, 2013 through July 19, 2013.

## Plant/Sample Type, Disease/Disorder, Pathogen, County

### FIELD CROPS,

Corn, Mosaic, Unidentified Virus, Sauk

Corn, Northern Corn Leaf Spot, *Bipolaris zeicola*, Dane

Corn, Root Rot, *Rhizoctonia solani*, *Pythium* sp., Sauk

Corn, Yellow Leaf Blight, *Phyllosticta maydis*, Dane

Soybean, Fusarium Root Rot, *Fusarium* spp., Dubuque (IA)

Soybean, Herbicide Damage, None, Marinette

Soybean, Charcoal Rot, *Macrophomina phaseolina*, Dubuque (IA)

### FORAGE CROPS,

Alfalfa, Aphanomyces Root Rot, *Aphanomyces euteiches*, Vernon, Winnebago

Alfalfa, Crown Rot, *Fusarium* spp., *Phoma medicaginis*, Green Lake, Vernon, Winnebago

Alfalfa, Phytophthora Root Rot, *Phytophthora megasperma* f. sp. *medicaginis*, Green Lake, Winnebago

Alfalfa, Pythium Root Rot, *Pythium* sp., Green Lake

Alfalfa Rhizoctonia Root Rot, *Rhizoctonia solani*, Vernon, Winnebago

### FRUIT CROPS,

Apple, Frogeye Leaf Spot, *Botryosphaeria obtusa*, Lafayette

Blueberry, Anthracnose, *Gloeosporium* sp., Waukesha

Grape, Anthracnose, *Sphaceloma ampelinum*, Dane, Jefferson

Grape, [Downy Mildew](#), *Plasmopara viticola*, Jefferson

Grape, Poor Pollination, None, None

Grape, Rupestris Speckle, None, Dane

Pear, [Anthracnose](#), *Gloeosporium* sp., Waukesha

Strawberry, [Root Rot](#), *Pythium* sp., *Fusarium* sp., Marathon

### VEGETABLES,

Cabbage, [Black Rot](#), *Xanthomonas campestris* pv. *campestris*, Outagamie

Garlic, Twister/Anthracnose, *Colletotrichum gloeosporioides*, Washburn

Horseradish, Fusarium Root Rot, *Fusarium* spp., Dunn

Pepper, Bacterial Spot, *Xanthomonas campestris* pv. *vesicatoria*, Columbia

For additional information on plant diseases and their control, visit the PDDC website at [pddc.wisc.edu](http://pddc.wisc.edu).

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## Wisconsin Pest Bulletin 7/25/13

A new issue of the Wisconsin Pest Bulletin from the Wisconsin Department of Agriculture, Trade and Consumer Protection is now available. The Wisconsin Pest Bulletin provides up-to-date pest population estimates, pest distribution and development data, pest survey and inspection results, alerts to new pest finds in the state, and forecasts for Wisconsin's most damaging plant pests.

Issue No. 12 of the Wisconsin Pest Bulletin is now available at:

<http://datcpservices.wisconsin.gov/pb/index.jsp>

<http://datcpservices.wisconsin.gov/pb/pdf/07-25-13.pdf>

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