

# Wisconsin Crop Manager

Volume 20 Number 17 --- University of Wisconsin Crop Manager --- July 4, 2013

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## IPM Toolkit app for Android and Apple smartphones

Roger Schmidt, IPCM computer specialist

A typical use of the IPM Toolkit app would be to find a hot agricultural topic while looking at the latest UW specialist's Twitter posts in the app. Then view a video, read a news article or publication, or search for pictures related to that topic. You can create an email that contains pictures or links and share with other growers what you have learned. You can do it all inside this one app using your smartphone and the Internet when ever or wherever you might be.

The IPM Toolkit app is available to users for free for Android and Apple smartphones and tablets. This app is produced by the University of Wisconsin's Integrated Pest Management (IPM) program.

Check out this application for iPhone and iPad:

<http://itunes.apple.com/us/app/ipm-toolkit/id504685615?mt=8>

Check out this application for Android:

<https://play.google.com/store/apps/details?id=ipcm.tool.kit>

Mobile device and Internet use is changing how global and local agriculture operate and expand their businesses. Growers in Wisconsin, like the rest of the world, are increasing their use of smartphones and other handheld devices for communication and information management on their farms. A key to agriculture's continued success is incorporating information from an unbiased science and research-based source such as the University of Wisconsin.

This app allows a user to read timely IPM related news articles, view videos, download publications, and search for pictures to aid in using IPM practices on their agricultural operations.

### Features:

- news reader for the Wisconsin Crop Manager blog and a browser with UWEX specialist Twitter posts
- video browser with access to the UW IPM YouTube channel containing dozens of short educational clips made by UWEX specialists
- publication library of IPM materials that have been developed by the UWEX IPM program. The list contains PDF documents and ePub books. All of the files can be saved in iBooks or other compatible apps for offline use.
- picture search designed to aid in IPM field observations and scouting. The picture database it searches has over 175,000 images available and is hosted by [IPMimages.org](http://IPMimages.org)



The app comes with a “featured collection” of pictures already saved in the “favorites” area where you can save your own favorite searches. When you tap in the search input box, you type in the common or scientific name for a pest of interest to you. You may search using a partial name by typing in at least three letters and tapping “Search” on the keyboard. The app will return a list of suggestions based on your search letters. Tap one of the suggestions to see a list of thumbnail images based on that subject. Tap a thumbnail to see a full screen image. An “HD” button will be active for a higher resolution version of the image. You can copy, save or email images. Tap “Save” to add this collection to your list of saved

searches. To view your list of saved searches, tap “cancel” next to the search input to indicate you are finished typing in search words. The featured collection and any searches you saved are now in the list, which you can edit or email.

There are two other free apps for agriculture from UW-Madison here >> <http://ipcm.wisc.edu/apps>

For additional information or answers to questions, contact Roger Schmidt or Bryan Jensen at <http://ipcm.wisc.edu/contacts>

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## Biggest Weed Contest at Farm Technology Days in Barron County

Mark Renz, UW-Madison Extension Weed Scientist

With cooler weather and rain the Weed Doctors are expecting a bumper crop of large weeds. Have a weed in your field that you think is a prize winner? Then cut it down and bring it to Farm Technology days and enter it in the contest. All you need to do is bring it in to the Weed Doctors booth in the Progress Pavilion and we will enter you in the competition. We will have daily and an overall winner, and will report the winners at the conclusion of the event. Last year’s winner (giant ragweed) was 113 inches tall and 52 inches wide. While it was slender its height made up for the lack of width as it beat common mullein, horseweed, and Japanese knotweed. So start scouting those fields now for the winning entry. The only rules of the contest are that

- weeds can’t be woody plants (e.g. trees)
- weeds can’t be poisonous plants
- weeds must be “donated” for display at the booth.

Winners will receive a weed identification book and of course the honor of being able to grow the biggest weed in Wisconsin in 2013.

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## Soybean Aphids Make an Early Appearance

Eileen Cullen, University of Wisconsin Extension Entomologist

It is time to start soybean aphid scouting and be aware of current population densities in your fields to determine if they are increasing. Soybean aphids made an early appearance in WI soybean fields this year. Infestations are fairly widespread, although still low to moderate in density on a field average basis. However, individual plants with high numbers (up to 168 aphids per plant) have been reported by WI DATCP, UW researchers and crop consultant calls.

The economic threshold is 250 aphids per plant and is based on 20 to 30 plants sampled from throughout the field. Finding one or two plants with high numbers does not necessarily mean a field is at threshold. Additionally, if you find many plants (widespread infestation) throughout a field with low numbers, watch the field for population increase. Natural enemy abundance (predators and parasitoids) and temperature (soybean aphids develop more slowly at sustained high

temperatures in the 90°F + range) will, in part, determine whether and when economic populations develop.

Soybean fields without insecticidal seed treatment are likely to be infested first. For fields with insecticidal seed treatment, much of the insecticidal activity will diminish after approximately 46 to 55 days. Therefore, depending on planting date, be sure to include seed-treated soybean fields in your soybean aphid scouting plan after mid-July.

Summary of 2013 Soybean Aphid Management Recommendations:

Scout weekly beginning in late June or early July, and no later than R1 beginning bloom soybean growth stage.

Check 20 to 30 plants per field, covering 80% of the field in your sampled area.

Use an economic threshold (action threshold) of 250 aphids per plant if populations are actively increasing. Regular field visits are required to determine if soybean aphid populations are increasing.

For more information, visit the North Central Soybean Research Program Plant Health Initiative soybean aphid website: [http://www.planthealth.info/aphids\\_basics.htm](http://www.planthealth.info/aphids_basics.htm)

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## Armyworms in Corn and Wheat

Eileen Cullen, Extension Entomologist

Spring flights of true armyworm moths into Wisconsin resulted in first generation larvae that feed on corn and wheat. The UW Integrated Pest and Crop Management video below discusses field diagnosis of true armyworm feeding on the two crops, larval ID, and economic thresholds. First generation infestations (late June through mid-July) appear to be scattered and not a widespread problem. The video shows you what to look for and how to scout and manage true armyworm in an IPM program.

Pay special attention to cornfields following a rye cover crop or cornfields where grass weed control measures were delayed. Moths may have laid eggs on the rye or grass weeds and can then move to corn.

The economic threshold for true armyworm in corn is 25% of plants with 2 or more larvae or 75% of plants with 1 larvae. In wheat, the threshold is 3 armyworms per square foot. Treatment thresholds generally apply to larval size of ¾ inch or smaller. When larvae reach 1 inch in length they are nearing pupation and feeding is nearly done.

### Armyworm in Corn and Wheat



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## Position opening at Lancaster Agricultural Research Station

The University of Wisconsin-Madison Ag Research Stations is currently recruiting for an assistant superintendent position at the Lancaster Agricultural Research Station. Lancaster is located in Grant County in the driftless area of Southwest Wisconsin.

This position has primary responsibility for coordinating crop research activities, and crop production including pasture management in support of the beef herd housed at

the station. In addition this position supports the Superintendent in budgeting, personnel and overall station management.

If interested in viewing the PVL for this position, please go to the following link:

[http://www.ohr.wisc.edu/pvl/pv\\_076698.html](http://www.ohr.wisc.edu/pvl/pv_076698.html)

To ensure consideration, applications must be received by July 31, 2013. To apply for this position, please send resume and cover letter referring to Position Vacancy Listing #76698 to:

Dwight Mueller  
UW-Ag Research Station  
N695 Hopkins Rd  
Arlington, WI 53911

Email: [dhmuelle@wisc.edu](mailto:dhmuelle@wisc.edu)

Phone: 608-846-3751

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## Bloomin Beans, Glyphosate, and Wheel Track Damage

Shawn Conley, WI Soybean and Wheat Extension Specialist

The WI soybean crop ranges anywhere from just planted (JP) to beginning flower (R1). As we enter the soybean reproductive growth phase there are a few things to keep in mind. The first is that soybean will produce flowers for ~3 to five weeks, depending upon planting date and environment. During that time soybean will abort anywhere from 20 to 80% of the flowers that they produce. Generally it is the first and last flush of flowers produced that are most likely to be aborted.

(Mike Bertram a WSA board member reminded me to add the category almost planted (AP). That's the treated seed that's in the drill that will hopefully gets planted if the field dries out this week. It might end up as forage.)



R1 soybean growth stage



Spraying soybean at the R1 crop growth stage

plants could not compensate for wheel tracks made at R3 (early pod development) or R5 (early seed development). The average yield loss per acre is based on sprayer boom width (distance between wheel track passes). In our trials yield losses averaged 2.5, 1.9, and 1.3% when sprayer boom widths measured 60, 90, and 120 foot, respectively. Multiple trips along the same wheel tracks did not increase yield loss over the first trip.

Hanna, S., Conley, S. P., Shaner, G., and Santini, J. 2008. Fungicide application timing and row spacing effect on soybean canopy penetration and grain yield. *Agronomy Journal*: 100:1488-1492.



Wheel track damage to drilled soybean at R1

## Removal of Roundup Ready Alfalfa: What can we learn from 2012

Mark Renz, University of Wisconsin Extension Weed Scientist

Alfalfa stand termination has been difficult in 2013. This is likely due to several factors, including poor regrowth in the fall of 2012, late emergence this spring, and stressed crops due to insect damage from 2012. While tillage is an effective removal strategy by itself or when combined with herbicides, many acres are in no-till production. To further complicate matters the use of Roundup Ready alfalfa makes removal more challenging as glyphosate cannot be used to remove the alfalfa.

We have initiated a study at Arlington Research Station to study Roundup Ready alfalfa removal during this challenging time. We evaluated fall or spring applications of 2,4-D alone or combined with dicamba with additional treatments in corn planted this spring targeting alfalfa. This experiment was viewed by many at the recent Pest Management Field-day. For those that couldn't attend below is a link with a summary of the project and initial results.

[http://fyi.uwex.edu/weedsci/?attachment\\_id=3178](http://fyi.uwex.edu/weedsci/?attachment_id=3178)

Next, the timing window for glyphosate applications in our early planted soybean is quickly closing. Glyphosate labels indicate that applications can be made through R2 or full flower. The R3 growth stage begins when one of the four top nodes with a fully developed leaf has a 3/16 inch long pod. Applications made after the R3 stage begins are off-label applications. On average it takes ~ 4 days to move from R1 (beginning flower) to R2 (full flower) and ~10 days from R2 to the start of R3 (beginning pod).

Last but not least, wheel track damage made from ground applications may start to reduce yield. Sprayer wheel traffic from first flower (R1) through harvest can damage soybean plants and reduce yield (Hanna et al. 2008). Our research suggests that an adequate soybean stand (more than 100,000 plants per acre) planted in late April through mid-May can compensate for wheel tracks made when a field is sprayed at R1. Yield loss can occur, however, when wheel tracks are made at R1 or later in thin soybean stands (less than 100,000 plants per acre) or late planted soybeans. Regardless of stand,

## Vegetable Crop Update 10 available

Amanda J. Gevens, Assistant Professor & Extension Vegetable Plant Pathologist, UW-Madison

The latest issue, #10 for July 1, 2013, of the Wisconsin Vegetable Crop Update newsletter is now available for download.

Also attached is *Disease Supplemental #2 and #3, Potato Late Blight Fungicides Registered for WI, 2013*, and *Managing Late Blight in Organic Tomato & Potato Crops*.

<http://ipcm.wisc.edu/download/vgu/VegetableCropUpdate-10-with-Supplemental2-3.pdf>

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## **UW-Extension/Madison 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 **June 8, 2013 through June 14, 2013**.

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

#### **FRUIT CROPS**

Apple, Cedar-Apple Rust, *Gymnosporangium juniper-virginianae*, Lafayette

Pear, Pear Scab, *Venturia pirina*, Dane

Plum, Plum Pockets, *Taphrina communis*, Dane

#### **VEGETABLES**

Onion, Root Lesion, *Pratylenchus* sp., Columbia, Green Lake, Marquette

Tomato, Unidentified Viral Disease, Unknown, Dane

#### **MISCELLANEOUS**

Hops, Fusarium Stem Canker, *Fusarium* sp., Dodge

#### **SOIL**

Soil, Soybean Cyst, *Heterodera glycines*, Sauk

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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