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Vegetable Crop Update 5/7/14
The 4th issue of the Vegetable Crop Update is now available. This issue contains information on Dual Magnum 24(c) Special Local Needs label in WI, Edema & Ethylene Toxicity in Greenhouse Plants, and Risk for Potato Volunteers in WI 2014. To view this update click here.

Hitting the Bull’s Eye when Switching Corn Hybrid Maturity
Joe Lauer, University of Wisconsin–Madison
This article first appeared May 2013

The 2013 corn growing season is off to its slowest start in a long time. On May 12 USDA-NASS reported 14% of the corn planted. The slowest start ever recorded was in 1984 when by week 19, only 14% of the corn was planted. Other slow starting years (by Week 19) were 1979 (15%), 1981 (20%) and 1993 (21%). Due to the slow start, especially for farmers in northern Wisconsin, many are considering whether they need to switch corn hybrid maturities. In the north, we really only have one opportunity to switch maturity and still have the potential for grain yield. In southern Wisconsin, we may have two opportunities to switch hybrid maturity. Although the penalty for late planting is important, growers also need to be careful to avoid tillage when soil is too wet. Yields may be reduced somewhat this year, but effects of soil compaction can reduce yields for several years to come. Your decision to switch hybrid maturity depends upon:

- **Desire to accept risk**: Longer season hybrids offer the highest yield potentials, but may also increase drying costs and/or delay harvest.
- **Potential use**: For dry grain, relative maturities should be shorter-season within the maturity range for the latest acceptable planting date. For ear corn, high moisture corn, and silage, relative maturities should be longer-season within the maturity range for the latest acceptable planting date.
- **Field conditions**: Shorter-season hybrids within the maturity range for the latest acceptable planting date should be selected when field conditions include heavy crop residue, reduced tillage, and heavy soil textures.
- **Hybrid dry down and grain quality characteristics**: Longer-season hybrids within the latest acceptable planting dates should have fast grain dry-down and high test weight characteristics.
- **Ease of trading** original hybrids for superior shorter-season alternatives.

Please read the full article for the complete UWEX guidelines at [http://wisccorn.blogspot.com/2013/05/B036.html](http://wisccorn.blogspot.com/2013/05/B036.html)
New Video: Soybean Emergence and Germination Common Issues
Shawn Conley, Soybean and Wheat Extension Specialist

Common issues growers may have concerning soybean emergence and germination are discussed by Wisconsin State Soybean and Wheat Extension Specialist Dr. Shawn Conley. In a spring field, Shawn gives tips on seeding depth, soil compaction issues, loss of cotyledon at emergence, frost damage, and general stand assessment.

To watch the video, click on the image below.

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How to use UWEX Pest Management Mobile web app
Mark Renz, Extension Weed Specialist; University of Wisconsin-Extension

University of Wisconsin-Extension is pleased to announce Pest Management Mobile, which offers quick mobile access to key pest management information found in publication A3646 (Pest Management in Wisconsin Field Crops) through http://pmm.uwex.edu. This website has been tailored for use on a mobile device such as a smart phone or tablet, but can also be viewed through any web browser on any computer.

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Pest Management Mobile currently provides information on
1. herbicides for establishing and established alfalfa,
2. insecticides for corn, soybeans and alfalfa, and
3. fungicides for corn. Herbicides in corn and soybean and fungicides in soybeans and alfalfa will be added later in 2014.

Here is an example of how to use this web app. While herbicides are given as an example, users can also access information with respect to insecticides and select fungicides (corn). These other options will be highlighted in future articles.

**Quick reference to key information about a product:** To check on an attribute of a product, use the “product details” search feature. Simply start to type in the product name and, as the product name becomes available from the list, select it (Figure 1A). The resulting page will display key attributes of the product, such as restricted entry interval, mode of action, manufacturer, or rainfastness of the resulting pesticide (Figure 1B). To access information about using the product in registered crops, scroll down and click on the tab key (Figure 1C).

Interactive search for pest management options: An interactive search of pesticide products registered for user-identified pests can also be conducted from this website. For example, to identify a herbicide that is effective in managing foxtails, common lambquarters, and common ragweeds in a new alfalfa seeding, select “establishing alfalfa weeds” (Figure 2A), then select the weed species of interest (Figure 2B), and a list of herbicides sorted by effectiveness on the species selected will be displayed. Pesticides can be filtered by stage, application method, or minimum efficacy rating to reduce the number of products (Figure 2C). Results are presented in a table that allow for quick viewing of key information (Figure 2D). While the table is initially sorted by efficacy, it can be resorted by any of the other attributes—just select the column heading.
Once a product is selected (figure 3A), touch/click the name to view specific information related to application in the crop of choice (Figures 3B-D), pests selected, and general product information (Figure 1c).

Any information can be shared by emailing, texting, or posting the URL from the mobile website. This will allow users to communicate results to interested parties. For example, these are the links used in this example:

- **Figure 1C**: [http://pmm.uwex.edu/Product.aspx?p=Raptor](http://pmm.uwex.edu/Product.aspx?p=Raptor)

- **Figure 2C**: [http://pmm.uwex.edu/grid.aspx?crop=2&type=weeds&ids=5,6,2](http://pmm.uwex.edu/grid.aspx?crop=2&type=weeds&ids=5,6,2) scroll down to see Figure 2D

- **Figure 3A**: [http://pmm.uwex.edu/product.aspx?product_id=26&pest_id=5,6,2&crop_id=2](http://pmm.uwex.edu/product.aspx?product_id=26&pest_id=5,6,2&crop_id=2) click/touch usage in establishing alfalfa to view Figure 3B, scroll down to see Figures 3C-D.

All this information is also found within Pest Management in Wisconsin Field Crops (A3646). For a print copy or PDF of this information, please search for A3646 at the UW-Extension Publishing website learningstore.uwex.edu or use the following link: [http://learningstore.uwex.edu/Pest-Management-in-Wisconsin-Field-Crops2014-P155.aspx](http://learningstore.uwex.edu/Pest-Management-in-Wisconsin-Field-Crops2014-P155.aspx).

### Wisconsin Pest Bulletin

5/8/14

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. 2 of the Wisconsin Pest Bulletin is now available at:

- [http://datcpservices.wisconsin.gov/pb/index.jsp](http://datcpservices.wisconsin.gov/pb/index.jsp)

### Hop production workshops for sprayer calibration and more

UW-Madison Integrated Pest Management specialist Dan Hieder will be speaking at two hop production workshops held in Waterloo and Arkansaw, WI. Both workshops are the same and are titled “Hop Production in Wisconsin: Sprayer Calibration and Proper Pesticide Application.”

Both workshops start at 3:00 pm and are limited to the first 25 registrants at each location. The workshops are part of a larger group of education sessions on Hop and Malting Barley production. The sessions are organized by UW-Extension with funding in 2014 through a SARE, Education and Research Grant.

**Speaker:** Dan Heider, UW-Madison IPM Outreach Specialist

- Nozzles Types and Spray Rates
- Nozzle selection for the pesticide used
- Calibration of hand sprayers
- Calibration of air blast sprayers
- Herbicides and sucker control
- New Hop pesticide registration process

May 23 - NuSolutions Agronomy
Dave Buss, N1926 County Road II, Waterloo, WI  https://goo.gl/maps/eYX0U

May 30 – AgDynamics LLC
Luke Albers, N5988 County Road N, Arkansaw, WI  https://goo.gl/maps/W55Ml

To register, email Carl.duley@ces.uwex.edu or call 608-685-6256

For more info about more barley and hops workshops, visit http://buffalo.uwex.edu/agriculture/barley-and-hops/

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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 May 3, 2014 through May 9, 2014.

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

**VEGETABLES,**

Broccoli, Sunburn/Water Stress, None, Dane

Tomato, Bacterial Canker, *Clavibacter michiganensis* subsp. *Michiganensis*, Douglas

Tomato, Ethylene Injury, None, Dane

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 has a 2014 CCA of the Year**

Bryan Jensen, IPM Program

Please join the WI CCA Board in congratulating Jeff Polenske as our 2014 WI CCA of the Year!

Jeff has over 26 years of Wisconsin crop advising experience and currently works with 56 clients and over 50,000 acres of corn, soybean, alfalfa and wheat in Northeast Wisconsin. His company, Tilth Agronomy (formerly Polenske Agronomic Consulting), employs 8 permanent staff (5 of which are CCA’s), 2 part time staff and several summer interns. Jeff was raised in Wisconsin and Nebraska but moved permanently to Wisconsin to attend UW-Madison where he completed his degree in Agronomy. Jeff and his wife live in the Appleton area and have raised three daughters.

Jeff is a registered Technical Service Provider for NRCS and is certified to write both CNMP’s and Conservation Plans for Wisconsin. Jeff visits clients on a weekly basis during the growing season and his services include field scouting with emphasis on IPM techniques and recommendations. Jeff and his staff are active supporters of on-farm research including several WAPAC Grain and UWEX Research trials. Currently they are working on a Maximum Return to Nitrogen (MRTN) plot to refine nitrogen rates on corn.

Jeff’s professional contributions include:

- Active membership in the Wisconsin Association of Professional Agricultural Consultants and has served as president.

- Active member of the National Alliance of Independent Crop Consultants. Jeff currently serves on the Educational Outreach Committee and is the committee co-chair for the Precision Agriculture Committee.

- Additionally, Jeff is the co-chair for the University of Wisconsin Integrated Crop and Pest Management Programs (NPM, PAT and IPM).

Jeff, we’re not sure if there can be any higher praise than having your colleagues and clients nominate you for this award. Congratulations Jeff!

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**Add Ed Liegel to the list of CPAg’s with 20 plus years of certification**

Bryan Jensen, IPM Program

Our sincere apologies go out to Ed Liegel for unintentionally leaving him off the list of CPAg’s with 20 or more years of experience. Ed, we salute you and your colleagues for your dedication to Wisconsin Agriculture!
Considerations for Switching Soybean Maturity Groups for Delayed Plantings

Shawn P. Conley, State Soybean and Wheat Extension Specialist
John Gaska, Outreach Specialist
University of Wisconsin, Madison

Delayed corn planting coupled with frequent rainfall events and poor planting conditions have postponed soybean planting across many parts of WI. Since we are rapidly approaching the hybrid maturity switch date for corn in southern WI (May 20\textsuperscript{th}, given 2014 costs and prices) three common questions have arisen regarding soybean plantings. These are:

1. **When during the planting season should a producer switch to an earlier maturing soybean variety?**
   In southern Wisconsin, full season soybean varieties (>1.8RM) out yielded earlier maturing varieties (<1.8RM) by 15 bu per acre at early May planting dates compared to only 2 to 5 bu per acre at late May planting dates. In northern Wisconsin, late maturing varieties (1.7 to 1.9RM) also out yielded early maturing varieties (<1.7RM), however the difference was not as great. **Switching to an earlier maturing variety when planting after the first week of June will reduce the chance of damage from an early fall frost** (Fig. 1.). Unfortunately growers will realize a yield penalty if they choose to move to an earlier maturity groups and lowered seeding rates (Table 1.). It is also important to note that if you do choose to switch to an earlier maturity group soybean, do not use a variety that is more than 0.5 RM earlier than you normally would plant.

2. **When is the latest soybeans can be planted in Wisconsin and still expect a grain yield?**
   Research from the 1990’s in southern Wisconsin indicates that in two out of three years, grain can be harvested from soybeans planted as late as June 26, although the yields are usually minimal and not generally economically feasible. The frequency of harvesting grain from soybeans planted this late can be increased by using early maturing varieties (<1.8RM) in southern Wisconsin, and <1.0RM in northern production areas. A planting date of June 20 in southern Wisconsin and June 15 in northern Wisconsin, using early maturing varieties, was considered to be the latest practical date. However today’s grain prices coupled with opportunities for late-season discounted treated soybean seed may entice growers to push the planting date window in 2014.

Figure 1. Median frost date for WI.
3. **What should my target plant population be in my late planted soybeans?**

To maximize yield potential in late planted soybean, growers should target a stand of 180,000 plants per acre in row spacing’s ≤ 20 inches. Wider row spacings and reduced plant stands will lead to reduced yield potential due to decreased canopy development. Planting too few seeds can also lead to a lower physical pod set and harvest issues. To achieve 180,000 plants per acre a grower may have to plant up to 200,000 seeds per acre (assuming 90% germ).

<table>
<thead>
<tr>
<th>Early plant population (May 1-20)</th>
<th>Initial planting</th>
<th>Replanting date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ppa x 1,000</td>
<td>June 1</td>
<td>June 10</td>
</tr>
<tr>
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<td>100</td>
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<td>180</td>
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<td>83</td>
<td>77</td>
</tr>
</tbody>
</table>

* Figures in bold italics are for shorter season maturities.