

Wisconsin Crop Manager

Volume 18 Number 8 --- University of Wisconsin Crop Manager --- May 5, 2011

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This presentation specifically covers:

- The conditions most favorable for yellow flash
- How glyphosate works when applied to glyphosate resistant varieties
- Management of yellow flash
- The relationship of glyphosate and manganese in soybean growth and yield

Handy Bt Trait Table Updated

Eileen Cullen, Extension Entomologist

Please click on the link below to access the latest version of the Handy Bt Trait Table. Chris DiFonzo (Michigan State University) and I have reformatted it to more clearly show above and below ground insect pests controlled and suppressed by each Bt corn product. Additionally, we have clarified herbicide tolerance traits for the various products with a bit more detail, and added newly EPA-approved Bt corn registrations.

We will continue to update the table when new registrations or changes occur. You can always find the latest version at the link below, as I update the table at the same URL link each time.

[>> Click to Download Handy Bt Trait Table PDF <<](#)

Focus on Soybean Presentation Offers Insights on Yellow Flash

Shawn Conley, Soybean and Wheat Extension Specialist

Please visit

<http://www.plantmanagementnetwork.org/edcenter/seminars/YellowFlash/>

to view an open access webcast on Yellow Flash in Soybean.

Focus on Soybean Presentation Offers Insights on Yellow Flash

The Plant Management Network announces its latest webcast presentation published in its Focus on Soybean resource: Yellow Flash in Soybean by Dr. Mark Bernards at the University of Nebraska-Lincoln. Yellow flash is the temporary chlorosis of newly emerging soybean leaves that sometimes occurs following the application of glyphosate to glyphosate-resistant soybean cultivars.

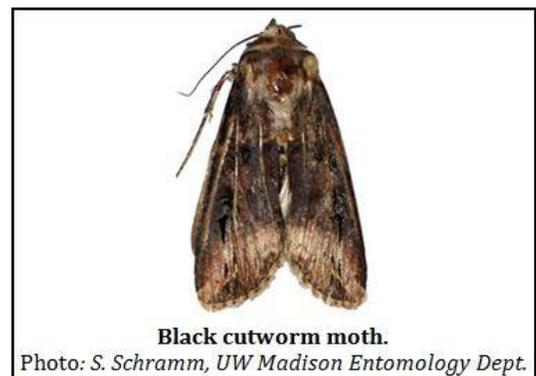
According to Bernards, the most likely cause is a reduction in chlorophyll content caused when environmental conditions are warm and moist, favoring rapid soybean growth, and/or when high rates of glyphosate are applied. These findings will be useful to growers and consultants and provide reason to reconsider foliar applications of manganese as a solution for this issue.

Black Cutworm Damage Potential for Corn

Eileen Cullen, Extension Entomologist

Corn planting and weed control delayed by wet field conditions coupled with a major black cutworm migration make black cutworm damage a likely event later this month.

The WIDATCP [Wisconsin Pest Bulletin](#) noted a significant influx of black cutworm moths from the southern U.S. moved north by storm fronts during the first three weeks of April. Thus far, over 457 moths have been captured in 30 Wisconsin pheromone traps.



Black cutworm moth.

Photo: S. Schramm, UW Madison Entomology Dept.

Based on Wisconsin trap captures and a degree-day biofix date of April 11 this year, **a cutting period starting May 30 is anticipated.**

Concerns over damage are greatest during the first ten days to two weeks after corn emergence. Scout fields for early feeding damage and presence of larvae. Focus attention on corn fields which are most attractive for black cutworm oviposition.

Black cutworm moths prefer to lay eggs on low-growing vegetation such as chickweed, curly dock, mustards or plant residues from the previous year's crop. Female moths are partial to soybean residue over corn and wheat residue for egg-laying sites. Heavy spring weed growth, newly broken sod, previous crop and plant debris all increase risk of black cutworm infestations.

Late-planted corn fields are most heavily damaged during an outbreak of black cutworm because plants are smaller and more vulnerable when larvae are at the "cutting" stage.

Initial damage to corn seedlings by early instar black cutworm larvae shows up as holes or irregular feeding injury to corn leaves. Small larvae are not yet able to cut plants and this injury is not economic. However, it does indicate potential for cutting or tunneling into the base of the plant by larger larvae. By contrast, seedcorn maggot and wireworm feeding may also occur early season, but their feeding is confined to lower leaves (first and second leaf) and below ground.



Black cutworm feeding damage by small larvae on young corn plant.

Photo: UW-Madison Entomology Department

Black cutworm treatment is suggested if 5% of corn plants have cutting damage and cutworm larvae are 6th instar or smaller.



Black cutworm larvae reach the "cutting" stage at ½ -inch length. When corn reaches V3-V4 stages larvae may not be able to cut the plant, but they can burrow into the corn plant below ground level.

More information on black cutworm as well as foliar insecticide treatment options are available on Pg. 63 of UW Extension [Publication A3646 Pest Management in Wisconsin Field Crops](#) .

What can you expect from Bt Corn and Insecticidal Seed Treatments for black cutworm control?

Dr. Michael Gray, Entomologist at the University of Illinois Department of Crop Science posted an informative article in last week's Bulletin newsletter titled '[Black Cutworms, Bt Corn, and Insecticidal Seed Treatments: Recent Research Developments](#)', Issue No. 4.

The article summarizes a research publication in the April 2011 issue of the *Journal of Economic Entomology* (Vol. 2, No. 104, pp. 484-493, DOI: 10.1603/EC10360) that sheds some light on interactions of black cutworm larvae with Bt corn and one insecticidal seed treatment. The work was done by entomologists at University of Guelph, Ridgetown Campus in Ontario, Canada.

I encourage you to read Dr. Gray's short summary of this research by clicking the article title above for more information. (Keep in mind that not all Bt corn hybrids include black cutworm in the spectrum of control. See the [Handy Bt Trait Table](#), this issue, for more information.)

Pay attention to herbicide application timing restrictions

Vince M. Davis, Extension Weed Scientist

Over the last few days burndown herbicide applications, tillage, and corn planting have started to reach full speed. I know this time of year there is always temptation to plant more than what the weed control operations can keep pace with, particularly if there is threat it will turn off wet again. To prevent yield loss from early-season weed competition, it is important to start with a clean field whether in no-till or conventional till systems. To prevent any yield loss due to injured crop seedlings, it is important to abide herbicide labels and restrictions on the timing of application in relation to crop planting date and herbicide rate. In no-till systems, this puts particular strain on timing the burndown herbicide before, or at, planting. Here are some things to keep in mind:

For no-till systems

- Make sure your burndown herbicide product/s and rate/s will control the weeds present in the field. Pay particular attention to perennial weeds that may be difficult to control, as well as the growth stage of winter annual or biennial weeds. This will be more important as the spring progresses because as weeds begin to flower, they become more difficult to control with herbicides in general. In addition, if you need to remove a herbicide from your burndown tank-mix combination, you may need to increase the rate of the other herbicide. For instance, if you planned to use 22 fl. oz/ac glyphosate + 1 pt 2,4-D, but leave the 2,4-D out (see next point), you may need to increase to 32 or 43 fl. oz/ac glyphosate based on weed size.
- Make sure the burndown herbicide application allows planting in your desired window. For instance, there should be 7 days between application of one pint/a 2,4-D and planting of corn or soybean. Application of two pints/a 2,4-D requires 14 days before planting corn, and 30 days before planting soybean. Refer to specific product labels for other combinations

For conventional tillage systems

- Pay attention to interval restrictions between the preemergence herbicide application in relationship to crop emergence. For example, some products in corn such as Sharpen or Integrity can be applied preemergence (after corn is planted), but *must* be applied *before* corn starts to emerge to avoid seedling injury. Moreover, some products in soybean such as Enlite and Envive (southern WI) can be applied after soybeans are planted but *must* be applied within three days following the planting date to avoid soybean seedling injury.

These scenarios were just used as examples and for your given situation please read and follow label directions.

UW-Extension/Madison Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Ann Joy, Amanda Zimmerman and Adam Greene, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant samples from around the state. The following diseases/disorders have been identified at the PDDC between April 27, 2011 through May 3, 2011:

PLANT/ SAMPLE TYPE	DISEASE/ DISORDER	PATHOGEN	COUNTY
FIELD CROPS			
Soybean	Root Rot	<i>Pythium</i> sp.	Dane
FRUITS			
Apple	Cytospora Canker	<i>Cytospora</i> sp.	Oneida
	Sooty Mold	<i>Fumago vagans</i>	Oneida
VEGETABLES			
Pepper	Root Rot	<i>Pythium</i> sp.	Fond du Lac
Tomato	Bacterial Canker	<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>	Douglas

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.

