INSECT UPDATES IN FIELD CROPS

BRYAN JENSEN, DEPARTMENT OF ENTOMOLOGY AND DIVISION OF EXTENSION

The insect season is starting to wind down a little but there are still a few things to be looking for.

**Soybean Aphids.** Although numbers have been low statewide, the predicted weather forecast indicates a potential for aphid populations to increase. However, every day that passes brings us closer to the end of the “aphid season” when populations crash naturally. These late season management decisions are not easy. However, do keep in mind that with every day that goes by we are banking yield. Also, consider that if aphids do reach the economic threshold of 250/plant (on 80% of the plants and the population is increasing) we are not experiencing immediate yield loss. Don’t feel compelled to make an immediate spray decision. Try to buy some time by watching that field(s) to see if populations increase. Remember it is a combination of aphid numbers and length of feeding that causes yield loss.

**Soybean Gall Midge.** Although not yet discovered in Wisconsin, now is an excellent time to be looking for damaged plants along field edges. For background information on soybean gall midge please see the June 10 article in the WCM. Damage is probably going to be most apparent until maturity.

**Corn Rootworms.** Adult beetles are entering peak egg laying season. Now is a good time to scout those fields which are likely to be in corn next year. Doing so will give you a prediction for damage potential next year. Rootworm populations have been at historic lows in 2017 and 2018 and scouting now can take advantage of this population trend and allow us to make the appropriate decisions based on actual potential for damage.

There are several resources available to help with field scouting and rootworm management:

- **Field Scouting for Corn Rootworms**
- **Corn Rootworm: how to scout for rootworm beetles (YouTube)**
Japanese Beetles. Large. Showy. We love to talk about them. I expect numbers to be slowly decreasing during August. The worst should be behind us.

Brown Marmorated Stink Bug. An invasive stink bug that we have been watching for a few years. They have been an increasing problem in fruit and a pesky nuisance in homes. Be on the lookout for them in soybeans. They are slightly larger than our native stink bugs and the diagnostic features are the white banding on the antennae and (especially) the white triangles along the outside edge of the abdomen which are not always obvious in dried specimens.

Potato Leafhoppers. Populations have been above average this summer. Typically, numbers start to decline by mid-August. However, when conditions are favorable, they can hang on in high numbers well after Labor Day.

ON-FARM RYE FORAGE COMPARISON:
PROGAS HYBRID FORAGE RYE VS. VNS RYE

KEVIN SHELLEY, UWEX NUTRIENT AND PEST MANAGEMENT PROGRAM, 608-575-4746 MEFFERT’S HOMESTEAD DAIRY, WAUNAKEE, WI

Many Wisconsin farmers harvesting corn as silage are following that with a winter cereal grain, such as rye or triticale, for a fall-to-spring cover crop intended to protect against soil erosion and nutrient loss from runoff or leaching. The fall-planted cover crop, with proper management, can also be harvested as a forage crop in mid-to-late May, while still leaving enough time for a full-season crop to follow. The “double cropped” cereal grain forage, if harvested timely at the ‘boot’ to ‘early heading’ stage of growth, can provide a forage option desirable for feeding to dairy heifers and, often, for a portion of the lactating cow ration. One challenge to the economics of this practice, however, is the relatively low forage yield (1-2 tons dry matter (TDM) per-acre) when harvested at this fairly early growth stage. This makes for a relatively high feed cost per-TDM when considering seed and planting, along with harvesting costs, for only one crop (as compared with alfalfa).

Progas rye pictured on left, VNS rye pictured on right Nov 8.
Jeff and Luke Meffert, of Meffert’s Homestead Dairy, Waunakee, WI, like what fall-planted rye helps them accomplish by way of soil conservation and nutrient management. They and their dairy nutritionist, Mike Limmex (Furst-McNess Company), also value it as an additional source of forage for both cows and heifers. Jeff and Luke recognize, however, the yield challenge, especially in years when fall and/or spring conditions lead to lower yields. Interested to find something better, the Mefferts took an interest in a new hybrid forage rye commercially available from KWS Cereals of Einbeck, Germany and Champaign, Illinois. Most winter cereal ryes typically grown as a cover or forage crop are open-pollinated ryes and have been selected for grain production. Working with Kevin Shelley at the UW Nutrient and Pest Management Program, they were able to secure a donation from KWS of Pro-gas hybrid forage rye seed for a five-acre demonstration on their farm. On September 30, 2018, a 20-acre field where corn silage had been harvested was planted with a five-acre section of Progas rye, surrounded by a conventional non-varietal (VNS) brand rye. This trial design allowed for two side-by side comparisons of the hybrid and VNS ryes. Average results and observations are presented below:

Manure application: 8,000 gallons per-acre liquid dairy, 9-10-18

Planting date: 9-23-18, No-till

Seeding rate: The hybrid rye is characterized to have very heavy tillering, and thus, a lower required seeding rate.

- VNS rye = 100 lbs per-acre (cost = $18/ac.)
- Hybrid rye = 44 lbs per-acre (normal retail cost = $50/ac)

Cutting date: 5-22-19

Growth stage:

- Conventional rye = Late boot to early heading. Height = 23”-26”
- Progas hybrid rye = Pre-boot, heads about 2” below top of stem. Height = 24”-28”

Chopping date: 5-26-19

<table>
<thead>
<tr>
<th>2019 comparison results</th>
<th>Yield (TDM/ac.)</th>
<th>Crude Protein % DM</th>
<th>NDFD (48 hour)</th>
<th>RFQ</th>
<th>Milk/TDM</th>
<th>Milk/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional VNS ryelage</td>
<td>1.2</td>
<td>8.5</td>
<td>61</td>
<td>111</td>
<td>2495</td>
<td>3073</td>
</tr>
<tr>
<td>Progas hybrid ryelage</td>
<td>1.6</td>
<td>7.9</td>
<td>60</td>
<td>112</td>
<td>2550</td>
<td>3948</td>
</tr>
</tbody>
</table>
Observations: At cutting, the hybrid rye appeared slightly darker green in color and slightly taller. Although the VNS rye was at, or slightly passed, the desired boot stage, the Progas hybrid rye was still a few days away. Thus, assumedly, more forage biomass would have accumulated by boot stage with the Progas. However, both the calendar (planting date goal for the subsequent crop) and the weather forecast influenced the decision to cut the rye at this time. There was one 3” rain between cutting and chopping.

Although the hybrid rye did exhibit heavy tillering, most of that appeared to occur in the spring. Over-winter soil cover was much higher for the conventional VNS rye, causing some concern that the hybrid rye would be less effective in achieving the associated soil conservation and water quality protection goals.
INTEGRATED WHEAT MANAGEMENT SELECTED INPUTS INTERACTION TRIAL - 2019

SHAWN P. CONLEY, SOYBEAN AND WHEAT EXTENSION SPECIALIST, DEPARTMENT OF AGRONOMY

This research trial was conducted at the Arlington Agricultural Research Station to assess 10 management levels with varying inputs on the yield, grain quality, and disease incidence on 2 soft red winter wheat varieties.


RESPONSE OF FOUR OAT VARIETIES TO A PLANT GROWTH REGULATOR AND FOLIAR FUNGICIDE COMBINATION - 2019

SHAWN CONLEY, STATE SOYBEAN AND SMALL GRAINS SPECIALIST, JOHN GASKA, SENIOR OUTREACH SPECIALIST, ADAM ROTH, PROGRAM MANAGER, SPYROS MOURTZINIS (AGSTAT)

In an Oat Shock:

- Trivapro® fungicide increased oat yield and test weight in 3 out of the 4 varieties tested
- Palisade PGR applied alone did not reduce lodging or plant height over the NTC
- Only very low levels of crown rust were observed in 2019
- Growers should explore expected ROI and apply BMP’s prior to adding any additional input


TOP 8 RECOMMENDATIONS FOR WINTER WHEAT ESTABLISHMENT IN 2019

SHAWN CONLEY, STATE SOYBEAN AND SMALL GRAINS SPECIALIST, JOHN GASKA, SENIOR OUTREACH SPECIALIST, DAMON SMITH, STATE FIELD CROPS PATHOLOGY SPECIALIST

Top 8 winter wheat establishment recommendations:

1. Variety selection: please see the 2019 WI Winter Wheat Performance Test
2. Plant new seed (DO NOT plant saved seed).
3. A fungicide seed treatment is recommended for winter wheat in WI, espe-
cially for seed damaged by Fusarium head blight (FHB).

4. Wheat should be planted 1 to 1.5 inches deep regardless of planting date.

5. Plant between September 20 and October 10.

6. The target seeding rate for wheat planted from September 20th to October 1st is 1,750,000 seeds per acre.

7. The optimal seeding rate for wheat planted after October 1st should be incrementally increased as planting date is delayed to compensate for reduced fall tillering.

8. Crop rotation matters.


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**COVER CROPS WORKSHOP SEPTEMBER 4, 2019**

**DANIEL H. SMITH, JOSH KAMPS, GENE SCHRIEFER, RODRIGO WERLE**

We like to invite educators, conservation professionals, farmers, agronomists, and industry representatives, attend the 2019 “Cover Crop Workshop” on **Wednesday, September 4, 2019** at the Lancaster Agricultural Research Station (7396 State Rd 35 & 81, Lancaster, WI 53813). See flyer at end of newsletter

We will provide educational outreach on:

- Cover cropping in the Driftless region
- The value of no-till and cover crops for waterhemp suppression
- Planting green
- Waterhemp management in corn and soybean through the use of residual herbicide, no-till, and cover crops

Plot tour of research plots planted green and comparing cover crops with no-till and conventional till systems for waterhemp suppression

Registration starts at 9:00 AM and the field day concludes by noon.

Please **RSVP by September 3, 2019** with Dan Smith (NPM Southwest Regional Specialist) via email: dhsmith@wisc.edu or 608-219-5170
VEGETABLE CROP UPDATES NEWSLETTER
#18

AMANDA GEVENS, ASSOCIATE PROFESSOR & EXTENSION SPECIALIST, POTATO & VEGETABLE PATHOLOGY, PLANT PATHOLOGY DEPARTMENT

Update 18 – August 11, 2019

• Potato crop production updates
• Cucurbit downy mildew updates (no reports from Wis. at this time)
• Phytophthora crown and fruit rot (P. capsici) in cucurbits, peppers, and tomatoes
• Late blight updates in tomato/potato crops
• P-Days and DSVs


WISCONSIN FRUIT NEWS, VOL. 4 ISSUE 10

CHRISTELLE GUEDOT, FRUIT CROP ENTOMOLOGY AND EXTENSION SPECIALIST, WISCONSIN-MADISON FRUIT PROGRAM

Welcome to the latest issue of Wisconsin Fruit News. This week you will find articles on:

Tissue analysis to determine nutrient status of cold-hardy wine grapes
Grape scouting report: Japanese beetle and grape phylloxera continue to be present
Rainfastness characteristics of insecticides
Leaf tissue analysis for berry crops- Now is the time
New tool for predicting bitter pit in Honeycrisp apples
Door County Report
UW-Madison/Extension Insect Diagnostic Lab Update
UW-Madison/Extension Plant Disease Diagnostic Clinic Update
WISCONSIN PEST BULLETIN AUGUST 8 & 15, 2019

KRISTA HAMILTON, ENTOMOLOGIST, WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

Volume 64 Issue No. 17 of the Wisconsin Pest Bulletin available here

LOOKING AHEAD: Western bean cutworm flight ending across the state

FORAGES & GRAINS: Potato leafhopper and pea aphid counts for the week

CORN: Corn rootworm beetle survey results as of August 21

SOYBEAN: Japanese beetles still common in soybean fields

FRUITS: Large codling moth flights continue

VEGETABLES: Late blight cases confirmed in Adams and Vernon counties

NURSERY & FOREST: Assorted observations from recent inspections

DEGREE DAYS: Growing degree day accumulations as of August 21, 2019

Volume 64 Issue No. 16 of the Wisconsin Pest Bulletin available here

Volume 64 Issue No. 15 of the Wisconsin Pest Bulletin available here
Cover Crops Workshop
Wednesday, September 4th, 2019
Lancaster Agricultural Research Station
7396 State Rd 35 & 81, Lancaster WI, 53813

9:00  Registration and introductions

9:30  General cover crop establishment for the Driftless region

10:30  Travel to cover crop plots

10:45  Considerations for planting green

11:00  Using cover crops for weed control

Field day wraps up by noon!

RSVP and Questions: Dan Smith, NPM Program (dhsmith@wisc.edu) 608.219.5170

Free event!