

Winnebago County Crops Quick Update

Assembled by Nick Schneider, Winnebago County Agriculture Agent

August 18, 2009

Wisconsin Crop Progress: August 17 2009. Source: USDA, NASS, Wisconsin Field Office

Full report at: <http://www.nass.usda.gov/wi/>

Soil Moisture		
	East Central Wisconsin	State Average
Very Short	12	6
Short	36	31
Adequate	50	57
Surplus	2	6

Wisconsin Weekly Weather								
City	Temperature		GDD (50 base)		Last Week	Since June 1	Precipitation June 1 dep. from normal	Year to date
	Avg.	Avg. dep. from normal	March 1 to August 16	Normal				
Green Bay	73	4	1610	1691	0.59	6.59	-1.98	17.03
Madison	74	4	1845	1981	0.18	7.66	-2.28	24.41

Wisconsin Crop Progress						
Crop and percent of acreage	East Central		State Average			
	Central	Central	This Year	Last Year	5-Year	
Corn in dough	11	9	18	22	37	
Soybeans Setting Pods	49	65	66	72	76	
Third cut hay	28	47	40	41	42	

Crop Conditions: Corn: Very Poor=3%, Poor=9%, Fair=27%, Good=43%, Excellent=18%

Soybeans: Very Poor=2%, Poor=9%, Fair=23%, Good=52%, Excellent=14%

Observations of the week: *2009 Winter Wheat Trail Results Posted**:** <http://soybean.uwex.edu/>

A noticeable increase in soybean aphid was detected this week with most plants having between 20 and 50 aphids now; however, this is still short of the treatment threshold of 250 aphids per plant. Potato leafhoppers in alfalfa were also more abundant this week. One of the soybean cyst nematode samples from Winnebago County had a "very high" population as determined by the UW Plant Diagnostics Lab. I have about 10 more sample kits not spoken for so if you would like to do SCN sampling, please let me know. From the ears I have looked at so far, tip fill is pretty respectable, typically with kernels within an inch of the ear tip. Most ears I have checked are around 14-16 kernels around and 30 to 35 kernels longs. I suggest looking for silk clipping by corn rootworm adults in the latest pollinating corn. While I

have observed some silk clipping, it happened after pollination so those ears were fine. Japanese beetles are showing up, which will clip silks and chew holes in soybean leaves

Wisconsin Pest Bulletin: Wisconsin DATCP. Volume 54, Number 16, August 14 2009

Full report at: <http://pestbulletin.wi.gov/>

Forages & Grains

POTATO LEAFHOPPER - Populations in alfalfa are erratic and not uniformly above treatment thresholds. Numbers in Buffalo, La Crosse, Pepin and Trempealeau counties vary from 0.4-6.5 per sweep, with economic levels of 2.0 or more leafhoppers per sweep detected in about 25% of fields checked. In the central and northern areas, including Portage, Shawano, Waupaca and Wood counties, sweep net counts range from 0.1-2.2 and average 0.7. The general condition of alfalfa is also highly variable at this time. Many stands are thin and severely yellowed due to a combination of leafhopper injury, nutrient deficiency and drought stress. Others are dense, vigorous and contain relatively few leafhoppers. Nymphs still comprise approximately 50% of the population in the majority of fields.

PEA APHID - These insects are scarce in field collections, except in a few central and west-central alfalfa fields where they occasionally average 5-7 per sweep. The average is about 2.0 per sweep.

PLANT BUGS - Numbers rarely exceed 3.0 per sweep. The alfalfa plant bug predominates in the areas north of Portage County, while the tarnished plant bug is more abundant to the south. Nymphs of various maturities were noted in all surveyed fields.

FLEA BEETLE - An unidentified flea beetle, presumably the corn flea beetle, was collected from alfalfa in Buffalo, Pepin, Pierce and Trempealeau counties at the rate of 0.2-2.4 per sweep. This species appears to be prevalent only in west-central district. None were found in alfalfa surveyed in southern, central and north-central counties.

--Krista Hamilton, DATCP Entomologist

Corn

CORN ROOTWORM - The annual beetle survey has begun and preliminary results show a decrease from 2008 populations in the southeast and east-central agricultural reporting districts. Surveyed fields in Ozaukee, Washington, Walworth and Waukesha counties contained an average of 0.4 per plant, a substantial decline from last year's average of 1.8 per plant. The average population in Brown, Calumet, Door, Fond du Lac, Kewaunee, Manitowoc, Sheboygan and Winnebago counties was 0.2 beetle per plant, also considerably lower than the 2008 average of 1.0 per plant. Surveys are incomplete in the southwest and west-central districts, but averages by county are as follows: Buffalo 1.3, Iowa 1.0, Lafayette 0.3, and Trempealeau 0.1. An average of 0.75 or more beetle per plant indicates an elevated risk for root injury to continuous corn next season if some form of control is not used. Eleven of the 60 fields examined (18%) from August 4-13 had such a count or higher.

WESTERN BEAN CUTWORM - Larvae from the late July flight of moths are primarily in the early to intermediate instars and should be detectable in corn ears. Examination of corn in Buffalo, La Crosse, Monroe and Pierce counties found egg masses and larvae in approximately 4% of fields. No economic infestations were observed during the past week.

--Krista Hamilton, DATCP Entomologist

Soybeans

SOYBEAN APHID - Results of the 2009 survey of soybean aphid populations are still being organized for publication in the August 21 issue of this bulletin. Preliminary review of the data indicates that 94% of the 247 surveyed fields did not develop economic infestations of 250 or more aphids per plant by the R2-R4 stages of growth. By contrast, 6% of fields distributed in Columbia, Dunn, Eau Claire, Marquette, Pepin, Pierce, Taylor, St. Croix and Wood counties did have economic populations.

None of the fields examined at the R2 (full bloom) stage early in the survey contained economic densities of aphids. It was not until the final week of July and first two weeks of August, once soybeans reached R3-R4 (beginning pod to full pod), that significant infestations were observed. A similar trend has been noted in the last 2-3 years. These findings suggest the annual survey should be initiated later in the season in order to more accurately assess peak aphid populations. However, surveys conducted in August are often complicated by spray operations and in some years outbreaks have developed as early as mid-July. Final results will be included in the next report.

--Krista Hamilton, DATCP Entomologist

PHYTOPHTHORA ROOT ROT - Fifty randomly selected soybean fields in the early vegetative stages of growth were sampled by Plant Industry Laboratory personnel from late June to early July. Preliminary analysis based on molecular testing of root DNA showed 9 of 50 symptomatic samples (18%) were infected with the root rot pathogen *Phytophthora sojae*. This figure is analogous to 2008 test results, when the pathogen was detected in 10 of 50 samples (20%). Results based on cultures and morphology are pending. A summary report will be published later this season.

-- Kristyn Meyers, Plant Industry Laboratory

The Soy Report, Shawn Conley UW Soybean and Small Grain Specialist and Paul Esker, UW Plant Pathologist.

Monday, August 17, 2009

Soybean Disease Update

Sclerotinia Stem Rot: Over the past week, we have continued to receive numerous questions regarding Sclerotinia stem rot (aka, white mold) and the control of this disease using foliar fungicides. In most soybean fields, we are at the R4 growth stage, or full pod. **Fungicides are not recommended at this time for managing white mold.** The key point to always remember is that infection by the pathogen that causes Sclerotinia stem rot occurred during the flowering period. Sclerotinia stem rot is a monocyclic disease. This means there is only a primary cycle for infection. There is no secondary spread of the disease; although plants that are adjacent or touching an infected plant may become diseased.

Sudden Death Syndrome: Also in the past week, we have also received reports and have seen symptoms associated with Sudden death syndrome (SDS), caused by *Fusarium virguliforme*. As a reminder, this is a relatively new disease in Wisconsin and the foliar symptoms of SDS can easily be confused with Brown stem rot (BSR) (Figure 1). Symptoms of SDS include a yellow to brown discoloration of the leaves around veins. These often begin as small, circular spots. A differentiating characteristic to BSR is that roots may be black and rotted with a slightly blue hue (growth of the fungus). Conditions in Wisconsin during the 2009 growing season have been favorable since

there was ample soil moisture during early vegetative growth in many parts of the state as well as the cool temperatures around flowering.

Wednesday, August 12, 2009

Downy Mildew of Soybean

We have been receiving lots of reports of downy mildew of soybean throughout the state. Downy mildew is common disease of soybean that rarely affects soybean yield in the state. Based on our own observations and comments from growers and consultants, the increased incidence of downy mildew appears to be somewhat variety dependent. Downy mildew is caused by the fungus *Peronospora manschurica*. Symptoms of downy mildew are typically found on the upper surface of young soybean leaves. Spots of downy mildew are green to light yellow that can enlarge into bright yellow spots. Also, during periods of high humidity, the spots will look slightly gray and fuzzy when looking at them from below. As the lesions age, they may become brown with a yellow border. Depending on soybean variety, there may be a leaf distortion that may look like virus symptoms.

Fungicides are not recommended for control of downy mildew given that it rarely reduces yield. Many of the questions we have received have focused on the use of an insecticide-fungicide tank mix and we would like to remind growers that it is important to base decisions for use of insecticides for soybean aphid on the established threshold 250 aphids per plant and that decisions for use of fungicides should be based on active scouting, identification and recognition of diseases that may reduce the soybean yield.