

Winnebago County Crops Quick Update

Assembled by Nick Schneider, Winnebago County Agriculture Agent

July 20, 2009

Wisconsin Crop Progress: July 20 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	53	34
Short	38	36
Adequate	9	30
Surplus	0	0

Wisconsin Weekly Weather								
City	Temperature		GDD (50 base)		Last Week	Precipitation		
	Avg.	Avg. dep. from normal	March 1 to July 19	Normal		Since June 1	June 1 dep. from normal	Year to date
Green Bay	64	-6	1112	1169	0.02	3.10	-2.33	13.53
Madison	65	-7	1312	1404	0.41	6.06	-0.25	22.81

Wisconsin Crop Progress					
Crop and percent of acreage			State Average		
	Central	East Central	This Year	Last Year	5-Year
Average Corn Height	45	47	60	58	63
Soybeans Blooming	28	35	24	30	45
Second Cutting Height	60	63	68	50	59

Observations of the week: Soybean aphid update: When I first found soybean aphids a month ago already, I was very concerned producers will need to treat a large portion of the soybean acres. Late June was the earliest soybean aphid detect I ever ran across. Here and throughout the state, populations really haven't increased. The Winnebago County field I check routinely continues to have fewer than 10 aphids per plant with no aphids on many plants. I am gathering soybean cyst nematode samples. Please let me know if interested.

Potato leafhopper populations have increased but were not at treatment thresholds. In 10 sweeps we found 19, 14, 11, 5, and 7 potato leafhoppers in 22" budding 3rd crop.

A number of Ag Agents throughout the state will be collecting corn roots from corn-on-corn planted to corn rootworm resistant hybrids. I plan to collect samples from a few fields at the end of the month. Please let me know if you have CRW hybrids planted in corn-on-corn fields that I can sample.

Some of you are aware of the red clover frost seeding into winter wheat experiment I have in three locations across the county. Pre-harvest red clover heights average around 6 inches with a few plants as tall as 8 inches where the wheat stand is thin.

Joe Lauer, UW-Extension Corn Agronomist reminded Agents to take note of when pollination takes place. Corn commonly is ready for silage harvest 45 days after silking.

Wisconsin Pest Bulletin: Wisconsin DATCP. Volume 54, Number 12, July 17 2009

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

Forages & Grains

POTATO LEAFHOPPER - Numbers in alfalfa are low in most areas. Sweep net counts rarely exceed 1.5 per sweep, except in Buffalo, La Crosse and Trempealeau counties where surveys yielded 3.2-3.5 per sweep in 10% of fields checked. Distinct yellowing was observed throughout the west-central area, but in most instances the chlorosis could not be attributed to leafhoppers. Yellowing due to this insect can be confused with nutrient deficiencies, both of which are magnified by dry weather. The extended forecast indicates continued dry conditions, and this may cause leafhopper populations to escalate into a more serious problem than currently exists.

PEA APHID - A marked population decrease has occurred in alfalfa in the last 2-3 weeks. Surveyed fields in the south-central and west-central counties contain fewer than 3.0 per sweep, although there are localized exceptions. In the east-central counties of Fond du Lac and Sheboygan, significantly higher numbers ranging from 18-25 per sweep were detected in scattered fields from July 13-16.

PLANT BUGS - Populations remain about the same as reported in previous weeks. Mixed counts of the alfalfa and tarnished plant bug species are less than 2.6 per sweep, and nymphs are present in very low numbers. The tarnished plant bug continues to predominate in all areas.

--Krista Hamilton, DATCP Entomologist

Corn

EUROPEAN CORN BORER - Surveys of V10-VT corn found infestation rates of 0-14% in the south-central and west-central districts, with the highest populations noted in La Crosse County. No larvae were detected in 21 of 24 fields (88%) examined. Now that boring into stalks has begun, control treatments will become progressively less effective until the second generation of larvae appear in early August. Second and third instar larvae were the predominant development stages as of July 17.

WESTERN BEAN CUTWORM - Traps have been installed at 131 sites distributed across 25 Wisconsin counties. High counts for the period of July 12-16 were 17 moths in the pheromone trap near Montello in Marquette County and 35 moths in the black light trap near Grand Marsh in Adams County. Close inspection of corn should begin in the week ahead to determine the percentage of plants infested with egg masses and small larvae. Eggs are deposited primarily on the upper surface of the flag leaf, while the larvae can be found in the developing tassel.

Treatment is justified when 8% of plants are infested (4% for processing sweet corn), and should be applied at 90-95% tassel emergence.

CORN ROOTWORM - Adults of the northern and western species are becoming increasingly prevalent. Surveys conducted in Columbia, Dodge, Iowa, Jefferson, Buffalo, La Crosse and Trempealeau counties yielded 1-3 beetles per 50 plants in the past week. Peak adult emergence is anticipated by mid-August in the southern and western areas of the state. Much of the earlier planted corn will be pollinated by then, but late-planted fields may suffer from silk pruning and reduced pollination.

STALK BORER - Larvae ranging in size from 1-1¼ inches were noted to have caused severe leaf injury to 29% of edge row plants in a field near Rubicon in Dodge County. Spot treatment is no longer effective or necessary now that the majority of larvae have bored into stalks where they are protected from sprays and most corn is beyond the V7 growth stage.

--Krista Hamilton, DATCP Entomologist

Soybeans

SOYBEAN APHID - Economic populations of 250 or more aphids per plant have not been detected in any Wisconsin soybean field since the last report. Examination of 59 fields in Buffalo, Columbia, Dane, Dodge, Fond du Lac, Green, Iowa, Jefferson, La Crosse, Manitowoc, Pepin, Sheboygan and Trempealeau counties during the period of July 13-16 revealed generally very low densities, with moderate populations of 106-140 aphids per plant encountered in only 2 fields in the Gilmanton and Mondovi areas of Buffalo County. Average densities per 20 plants sampled ranged from 0-10 aphids per plant in 51 (86%) fields, 11-50 aphids per plant in 5 (8%) fields, and 51-141 aphids per plant in 3 (5%) fields. Approximately 10% of the surveyed sites, including fields in Buffalo, Green and Trempealeau counties were 100% infested with moderate aphid densities, and some of these may develop economic populations in the next 1-2 weeks.

TWO-SPOTTED SPIDER MITE - This mite regularly begins to cause noticeable yellowing of leaves in the margin rows of soybeans by late July or early August, particularly during periods of prolonged dryness. Symptoms were observed in a few fields in the west-central area this week, indicating that growers should begin monitoring soybeans at 4- to 5-day intervals for stippling associated with early mite infestation.

GRASSHOPPERS - These insects have become noticeably more abundant in the last two weeks. Light defoliation is evident in soybeans and corn, principally near the margins of fields. Severe injury has not been observed yet, but their feeding is expected to become more pronounced if the current dry conditions persist.

--Krista Hamilton, DATCP Entomologist

Considerations for Spraying Foliar Fungicides in Soybean

Paul Esker, Field Crops Extension Plant Pathologist

Shawn P. Conley, State Soybean and Wheat Extension Specialist

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As the soybean crop moves into the R3, or early pod development, growth stage, we have received numerous calls regarding the use of foliar fungicides and insecticide tank-mix partners (a.k.a. plant health programs). Outside of a few areas where we have received reports of Septoria leaf spot, incidence of early season foliar diseases of soybean has been low. Furthermore weather conditions have not been conducive in most areas of Wisconsin for disease development to occur. Therefore, the use of foliar fungicides would not be advised for soybean at this time.

To support our non-recommendation we first site the July 14 U.S. Drought Monitor map that indicates that the northern 2/3 of the state has moved into the abnormally dry to severe drought stage. This was very evident to us in our travels to both the northwest and northeastern portions of the state where we saw many soybean (and corn) fields rolling early in the day in spite of the lack of hot weather.

U.S. drought monitor conditions through July 14, 2009: Drought conditions increased by 15% of the state area from July 7. (Source: <http://drought.unl.edu/dm>)

Next we examined our set of weather stations at Arlington, Chilton, Janesville, and Lancaster. At these locations we have seen stark differences in the amount of rainfall in the past month (June 19 to July 19), ranging from 0.5 inches at Chilton to approximately 2.3 inches at Lancaster. This is important when we consider that most pathogens of soybean that cause foliar disease require leaf wetness in order to cause the initial infection. For all of our weather stations, we have mounted two leaf wetness sensors, one at 30" and the other at 48" to mimic different crop canopy heights. An increased risk of infection occurs as the number of hours of leaf wetness during the overnight period increases. To compare and contrast conditions around the state, Figure 3 (not shown) states the percentage leaf wetness from Chilton and Lancaster, respectively for June 19 to July 19. Conditions at Chilton have been much less favorable for infection, as evident by increased periods of drying especially during the overnight period. Even at Lancaster where there has been a greater frequency of rain, we see intermittent periods of leaf drying overnight. While the overall rainfall total has been good, the frequency of rains has been patchy.

The last point to address is the blind (no scouting) addition of insecticides to the fungicide application. We want to emphasize this is not a prudent decision, since natural enemies of soybean aphid, including beneficial fungi are keeping soybean aphid populations in check at the moment and the blind application of a fungicide/insecticide tank-mix would remove both the beneficial insects and fungi. This could require an additional application of insecticides later in the growing season. If soybean aphid population have reached threshold (250 aphids per plant) and numbers are rising then an insecticide application is warranted. In conclusion, conditions in Wisconsin do not warrant the application of a foliar fungicide for soybean. Active scouting and identification of foliar diseases of soybean are important before considering if a foliar fungicide is necessary. A new [Visual Quick Guide – Common soybean diseases in Wisconsin](#) is now available through UW-Extension publications and can be used to help in diagnosing foliar diseases in soybean fields as the season progresses.