

WISCONSIN PEST BULLETIN

Timely crop pest news, forecasts, and growing season conditions for Wisconsin



STATE OF WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION PLANT INDUSTRY BUREAU
2811 Agriculture Dr. Madison, WI 53718 • <http://pestbulletin.wisconsin.gov>

WEATHER & PESTS

Hot, sunny and very windy weather prevailed during the past week. A warm front surged northward across Wisconsin on Monday, bringing humid subtropical air to most of the state. High temperatures ranged from the mid-80s to lower 90s. North of the front, conditions remained showery and cooler, with highs in the 70s. Gusty winds interfered with post-emergence herbicide and fertilizer treatments throughout the week, although the warm, sunny and mostly dry weather allowed for other field-work, with emphasis on planting the last acres of corn and harvesting alfalfa. As expected, development and activity of resident insects accelerated with the warm conditions, while strong winds originating in the southern U.S. brought more migrant black cutworm moths, potato leafhoppers and true armyworm moths into the state.

LOOKING AHEAD

BLACK CUTWORM: Light damage to corn was noted in northern La Crosse County on June 1. According to the DATCP surveyor, 3% of the plants showed signs of feeding and one plant had been cut just below the soil surface. The full-grown larva (1¼ inches) responsible for the damage was found near the base of the cut plant. This development emphasizes the need for close inspection of corn and other vegetable crops. Scouting of corn may be discontinued after the V5 stage.

EUROPEAN CORN BORER: Moths are appearing in low numbers in black light traps. The spring flight is expected to escalate during the next 2-3 weeks and peak by June 10 in the southern areas and from June 17-24 in the central and northern areas. Egg deposition should intensify by mid-June if warm nightly temperatures prevail.

ALFALFA WEEVIL: Larval populations have increased markedly since the last report. Counts in the southern half of the state now range from 0.2-11.0 per sweep and average 3.2. Surveys indicate leaf feeding damage is still below the 40% threshold in most first crop alfalfa, but this may change if the heat continues and intermittent wet weather further delays harvest. Surveillance of alfalfa fields is recommended through first harvest and early regrowth.

SOYBEAN APHID: The first soybean aphids of the 2011 growing season could begin to colonize Wisconsin soybean fields by mid-June. In previous years, the earliest aphid reports were as follows: June 2 in 2010, June 9 in 2009, June 18 in 2008, May 24 in 2007, June 7 in 2006, and June 3 in 2005.

CODLING MOTH: Large flights were registered in pheromone traps from Grant to Marinette County. The biofix was set last week at most monitoring sites. Controls directed against first generation larvae should be applied

around 250 degree days (base 50°F) post-biofix, or from June 10-17 in the majority of Wisconsin orchards.

WESTERN BEAN CUTWORM: The annual trapping survey is scheduled to begin by Wednesday, June 22. Persons interested in participating in the program should email Clarissa Hammond at clarissa.hammond@wi.gov or call 1-866-440-7523 before June 15. Please supply your name, address, telephone number, and specify the number of traps to be placed.



Western bean cutworm pheromone trap

Krista Hamilton DATCP

FORAGES

ALFALFA WEEVIL: Larval populations have shown a very marked increase as a result of recent hot weather. Representative counts in first crop alfalfa range from 0.2-11.0 per sweep, with an average 3.2 per sweep. Lower counts of 0.3-2.1 per sweep can be found in the east-central area. Leaf tip damage is generally less than 30% across the southern and central counties, although a few exceptional fields in Dane and Jefferson counties have economic defoliation levels of 50-80%. As stated last week, failure to harvest the first crop on time could result in serious damage by the larger, more destructive third- and fourth-instar larvae next week. Cutting fields would be more advantageous than chemical treatment.

PEA APHID: Most alfalfa fields contain very low populations. The highest number found in the last reporting period was 5.1 per sweep near Tomah in Monroe County. The average is about 2.0 per sweep.

POTATO LEAFHOPPER: Migrants are widely distributed over the southern two-thirds of the state. Surveys this

DEGREE DAYS JANUARY 1 - JUNE 1

LOCATION	50°F	2010	NORM	48°F	40°F
Dubuque, IA	494	708	—	482	972
Lone Rock	470	705	—	465	924
Beloit	507	765	—	486	993
Madison	424	675	563	433	861
Sullivan	435	712	551	429	874
Juneau	389	664	—	394	803
Waukesha	340	610	—	343	736
Hartford	329	591	—	331	713
Racine	289	544	—	298	672
Milwaukee	285	532	427	291	656
Appleton	319	604	471	332	682
Green Bay	265	511	449	282	617
Big Flats	362	648	—	360	744
Hancock	355	659	567	354	733
Port Edwards	341	632	524	343	707
La Crosse	434	703	608	435	873
Eau Claire	367	646	534	380	755
Cumberland	327	588	495	326	683
Bayfield	203	423	339	189	509
Wausau	301	582	468	308	635
Medford	306	584	410	315	646
Crivitz	256	518	—	262	579
Crandon	267	532	401	262	593

Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2011.
 NORMALS based on 30-year average daily temps, 1971-2001.

week yielded counts of 1-4 per 10 sweeps in 35 sampled fields. Second crop alfalfa is highly susceptible to potato leafhopper injury and should be checked regularly as populations increase throughout June. The economic threshold for this pest is 1.0 per sweep in 6-11 inch alfalfa and 2.0 per sweep in alfalfa taller than 12 inches.

MEADOW SPITTLEBUG: Nymphs appeared in alfalfa for the first time late last week. Populations are currently below 1 nymph per 100 stems.

CORN

BLACK CUTWORM: Larval infestations in corn have been noted in Dane, Grant and La Crosse counties. A report from the cooperator near Mazomanie states that 4-5% of the plants in a corn refuge had been cut and a rescue treatment was applied last week. Reports of light damage were also received from Grant and La Crosse

counties, where 2-3% of the corn showed small, irregular holes in the leaves and a few plants were cut. The primary damage period is expected to extend throughout the month of June this year. Crop advisors and field scouts must remain vigilant for signs of feeding injury until the V5 stage. A rescue treatment should be considered if 5% of plants are damaged.



Corn plant cut by black cutworm

Krista Hamilton DATCP

EUROPEAN CORN BORER: The spring flight began on May 24 with the capture of a single moth in the Prairie du Chien black light trap. Based on the European corn borer phenology model, the majority of moths should emerge by June 10 at advanced southern sites and about 1-2 weeks later in the central and northern areas. The first egg masses should be detectable next week.

WIREWORM: This soil pest has been found in corn in the southwest and west-central areas of the state, and like the black cutworm, can bore into the base of corn plants and destroy the growing point. It is not uncommon for both pests to occur in the same field at the same time. Accurate identification is imperative since rescue treatment for wireworms is ineffective once damage is observed.

TRUE ARMYWORM: Moths have been flying on warmer evenings for several weeks and continue to appear in black light traps. Counts generally have been low and no reports of larval infestations in small grains or corn have been received to date.

STALK BORER: Larvae could begin migrating from grassy areas into corn in the next two weeks. The recommended scouting procedure is to spot check the marginal 4-6

rows for plants with holes in leaves, wilted whorls and other signs of damage, starting at 1,400 degree days (base 41°F). Control measures may be in order for corn fields with infestation rates in the range of 5-10%. Stalk borer degree day accumulations through June 1 were as follows: Madison 820, La Crosse 865, and Wausau 670.

SOYBEANS

SOYBEAN APHID: The DATCP Pest Survey Program, in partnership with the UW-Madison, is seeking volunteers for the 2011 Soybean Aphid Survey Network. Participants will be asked to provide exact field locations and basic production information, including: 1) Soybean variety and number, 2) Seed treatment chemicals, 3) Planting date, 4) Seeds planted per acre, 5) Row spacing, 6) Fertilizer and herbicide use, 7) Foliar pesticide applications, and 8) Average yield (bu/acre).

In exchange, volunteers will receive current aphid counts as fields are sampled. The program expects to check each soybean field 2-3 times from late June through August. Consultants, agronomists, county agents and growers interested in taking part in the annual survey should email or call Krista Hamilton by June 15 at krista.hamilton@wi.gov or 1-866-440-7523. Persons who have already volunteered are asked to email field locations (GPS coordinates or similar) in the week ahead.



Soybean aphids

Krista Hamilton DATCP

FRUITS

CODLING MOTH: Large numbers of moths are appearing in pheromone traps statewide. Economic counts of 5

or more moths per trap were reported this week from 10 of 27 apple orchards. The high count of 46 moths was registered at Niagara in Marinette County.

PLUM CURCULIO: The spring migration into orchards continued this week. Most pyramid traps collected no beetles during the last reporting period, except the trap at McFarland, which registered 15 adults. The first oviposition scars were noted in McFarland and Mineral Point by May 25. It is recommended that growers continue scouting early varieties at regular intervals for evidence of feeding and oviposition. At current temperatures, the oviposition period should progress rapidly.



Plum curculio crescent-shaped oviposition scar

umaine.edu

REDBANDED LEAFROLLER: Trap counts have declined to their lowest levels in five weeks. The average count was 24 moths per trap from May 26-June 1, which compares to 48 moths last week, 77 moths from May 12-18, and 57 moths the week before. Egg hatch has greatly increased in response to the hot weather and larvae in southern orchards now range from newly hatched to ¼ inch long.

PEAR THRIPS: Reports of damage to apples, grapes, plums and strawberries have been received from across the state. In Richland County, these insects are not being adequately controlled by standard insecticides (Avaunt®) and economic populations have developed in some orchards and vineyards. Severe infestations can cause abnormal leaf formation, leaf tatter, and flower damage on orchard trees. Economic injury is probable unless effective controls are invoked.

SPOTTED TENTIFORM LEAFMINER: The second of three flights this season is expected to begin next week in the

southern and central counties, once 539-750 degree days (base 50°F) are surpassed. By contrast, counts in Bayfield and Marinette County orchards should decline as populations transition into the larval stages.

VEGETABLES

FLEA BEETLE: Damage to beets, leafy greens, potatoes and other vegetables has intensified in home gardens in many areas of the state. Treatment may be justified when large numbers of beetles are present and plants show severe defoliation.

COLORADO POTATO BEETLE: Adults continue to colonize potato fields and egg laying has begun. The first of two foliar applications of an insect growth regulator or the biological insecticide Bt should be made at egg hatch, and again 10-14 days later.

WEEDS

SOYBEAN WEEDS: Surveyed VE-VC fields in Dane, Grant, Iowa, Jefferson, and Lafayette counties contained a range of common weeds, the most prevalent being 1" common ragweed, ½" giant foxtail, ½" pigweed, 2" velvetleaf, and 3" volunteer corn. Weed control in soybeans should occur 9-19 days post-emergence or before weeds exceed 4-6", depending upon row spacing.



Common ragweed

Clarissa Hammond DATCP

VOLUNTEER CORN IN SOYBEANS: Many Wisconsin soybean growers now use a rotation scheme of glyphosate-tolerant corn hybrids followed by glyphosate-tolerant soybeans, leading to serious problems with glyphosate-

resistant volunteer corn. According to previous surveys, 44-48% of the state's soybean fields are infested with volunteer corn annually, and about 25% are rated as severely infested. Management strategies should account for volunteer corn control since this "weed" can substantially reduce yield and quality, and its widespread occurrence is thought to contribute to development of Bt resistance among corn rootworm populations.

LEAFY SPURGE: This invasive creeping perennial, now flowering statewide, degrades pasture quality, displaces native vegetation, and is extremely difficult to control. Populations may be reduced by sequential herbicide treatment applied in spring when true flowers emerge, or in fall. Biological control agents such as flea beetles and a stem boring beetles now occur at collectable levels in some parts of the state and may be obtained from Wade Oehmichen at the Wisconsin DNR by emailing wade.oehmichen@wi.gov. Any management program will need to be implemented for several consecutive years to achieve sufficient control.

NURSERY & FOREST

GOLDEN CANKER: Nursery inspectors observed this branch canker on pagoda dogwood trees in Wood County. Symptoms include wilting and death of leaves, followed by branch dieback. Diseased branch tissues turn bright, golden-yellow in color and develop numerous small, orange fruiting bodies. Infected branches should be pruned 4-6 inches below the diseased tissue.



Golden canker on pagoda dogwood

Liz Meils DATCP

AZALEA SAWFLY: This insect has been feeding on azaleas for the past week, and if uncontrolled, will defoliate

entire plants, leaving only the leaf midrib. Larvae observed in Dane County varied in color from green to dark brown depending on whether they had fed on the leaves or flowers. Insecticidal soaps or manual removal of the larvae will usually give reasonable control. Severe infestations may require Neem oil or an insecticide spray.

FIRE BLIGHT: Hot, humid weather this week favored growth of the fire blight bacterium in nurseries and orchards. The pathogenic bacteria multiply on the edge of cankers formed the previous year and are disseminated by insects, wind, and rain splash. During this week's inspections, fire blight was found on the pear cultivar 'Cleveland Select' in a Washington County nursery. Symptoms are cankered twigs and branches with blackened, drooping foliage that appear to have been scorched. Prompt removal of cankered branches or "strikes" 10-12 inches beyond the diseased area can reduce the problem. Sterilizing tools between cuts is required.



Branch or 'strike' infected with fire blight

M. Allen treexperts.mb.ca

GYPSY MOTH: Btk treatment was conducted in Brown, Chippewa, Clark, Grant, Eau Claire, Iowa, Jackson, La Crosse, Lafayette, Marinette, Menominee, Milwaukee, Monroe, Polk, Price, Richland, Rusk, Sauk, Shawano, Trempealeau, Vernon and Washburn counties from May 27-June 2. Some of these counties will receive a second application of Btk for control of late-emerging larvae. Bayfield and Ashland counties are scheduled for initial treatment next week if tree phenology is suitable.

EASTERN TENT CATERPILLAR: Larvae are dispersing from tents in advance of pupation. Hundreds of "wandering" caterpillars were noted crossing roadways in Grant County on May 31.

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 26 - JUNE 1

COUNTY	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	PC ⁶	AM RED ⁷	GDD 50°F
Bayfield	Keystone	13	22	0	0				
Bayfield	Orienta	4	0	0	0				
Brown	Oneida	405	33	4	0				
Chippewa	Chippewa Falls	80	49	3	0	0			381
Dane	Deerfield	8	0	9	0				
Dane	Mt. Horeb	0	10	3	9				
Dane	Stoughton	21	26	11	0	0			336
Dane	McFarland	5	0	0	0		15		
Dane	West Madison	32	26	6	0				
Dodge	Brownsville	—	—	—	—				
Fond du Lac	Campbellsport	23	30	3	0				
Fond du Lac	Malone	20	7	37	0				
Fond du Lac	Rosendale	88	36	1	0				
Grant	Sinsinawa	0	4	10	2				
Green	Brodhead	0	4	1	2	2			
Iowa	Dodgeville	—	—	—	—				
Iowa	Mineral Point	0	14	7	0		0		312
Jackson	Hixton	30	6	0	3	3			
Kenosha	Burlington	7	3	3	0				275
Marinette	Niagara	800	3	46	0				214
Marquette	Montello	13	52	2	0				245
Ozaukee	Mequon	10	28	4	0				266
Pierce	Beldenville	142	95	2	0	2			
Pierce	Spring Valley	7	56	0	0	0	0		
Polk	Turtle Lake	—	—	—	—				
Racine	Raymond	35	10	7	0				
Racine	Rochester	0	28	12	0		0		313
Richland	Hillpoint	13	19	0	0				
Sheboygan	Plymouth	37	80	3	80				270
Walworth	East Troy	—	—	—	—				
Walworth	Elkhorn	—	—	—	—				
Waukesha	New Berlin	20	12	6	0				

¹Spotted tentiform leafminer; ²Redbanded leafroller; ³Codling moth; ⁴Obliquebanded leafroller EASTERN; ⁵Obliquebanded leafroller WESTERN; ⁶Plum Curculio; ⁷Apple maggot red sphere.

COUNTY	SITE	ECB ¹	TA ²	BCW ³	SCW ⁴	DCW ⁵	CE ⁶	CEL ⁷	WBC ⁸	FORL ⁹	VCW ¹⁰
Columbia	Arlington	0	86	0	0	0	0	1	0	0	0
Dane	Mazomanie	1	2	1	0	0	1	0	0	2	0
Grant	Prairie du Chien	0	4	0	0	0	0	0	0	1	0
Manitowoc	Manitowoc	0	13	0	0	0	0	0	0	0	0
Marathon	Wausau	0	13	0	0	0	0	4	0	0	0
Monroe	Sparta	0	7	0	0	0	0	0	0	0	2
Rock	Janesville	0	11	0	0	0	0	0	0	0	0
Walworth	East Troy	0	0	0	0	0	0	1	0	0	0
Wood	Marshfield	0	53	0	0	0	0	4	0	1	0
Vernon	Coon Valley	—	—	—	—	—	—	—	—	—	—

¹European corn borer; ²True armyworm; ³Black cutworm; ⁴Spotted cutworm; ⁵Dingy cutworm; ⁶Corn earworm; ⁷Celery looper; ⁸Western bean cutworm; ⁹Forage looper; ¹⁰Variegated cutworm.