

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

Widespread, soaking rains fell across Wisconsin for the second consecutive week, halting fieldwork and generating soil moisture surpluses in many areas. Scattered showers and thunderstorms developed early on, a few of which were severe and produced damaging hail. Surveys in the south-central and west-central counties from June 4-10 found many hail-damaged corn and soybean fields. Periodic rainfall during the week favored summer crop development, but further delayed harvest of the final acres of first growth alfalfa in the northern areas. Strong winds, in combination with the wet weather, also prevented herbicide treatments for fields with already very dense weed growth. Temperatures in the state fluctuated from below-normal at the start of the week to well above normal later on. Unseasonably cool conditions on Tuesday yielded to summer-like temperatures and humidity by Friday. Damp weather persisted throughout the week.

LOOKING AHEAD

STALK BORER: Larvae ranging in size from ½-¾ inch were noted to have caused light leaf injury to 1-6% of edge row plants in corn fields in Columbia, Dane, Dodge and Green counties. Similar levels of infestation were found in Adams, Juneau and Monroe counties. Movement of stalk borers from grass and broadleaf weed

hosts into corn should intensify next week. Spot treatment may be warranted for fields that show 10% of plants with damage.

EUROPEAN CORN BORER: The treatment window for first generation larvae has opened at several advanced locations in southern and west-central Wisconsin, including Beloit, La Crosse, Lone Rock, Madison and Sullivan. Close inspection of corn fields is advised in the next 2-3 weeks to determine the percentage of infested whorls. Conventional or organic treatments should be made before larvae bore into the stalks and midribs.

APPLE MAGGOT: Degree day accumulations are appropriate for fly emergence to begin by June 14 near Madison, June 18 near Eau Claire, and June 30 near Racine. The first apple maggot adult of the season was captured on June 9 at Dodgeville in Iowa County. Heavy rainfall in the last two weeks may contribute to an early and possibly large emergence of this pest. A definite potential exists for damaging populations in many apple orchards this summer.

SQUASH VINE BORER: Adult emergence could begin by June 12 in the south, about the time chicory blooms. Pumpkins, squash, gourds and other vine crops should be examined daily for eggs and evidence of larval boring from 900-1,000 degree days (base 50°F). Insecticidal controls must be applied to stems when the adults are

first observed, especially while the runners are less than 2 feet long. Repeat applications at 5- to 7-day intervals may be required throughout the 3-week oviposition period.



Squash vine borer

tlburton outdoors.webshots.com

FORAGES

ALFALFA WEEVIL: Larval populations have declined to very low levels in the past two weeks, with 0.3 per sweep being the typical count. Some carryover into second crop regrowth has been observed, but their feeding generally has not resulted in significant leaf tip damage. Most larvae were in the late instars by June 10 and should not feed much longer. Pupation is underway in the southern and central portions of the state.

PEA APHID: This insect is still very numerous in alfalfa fields. Counts in regrowth presently range from 2-21 per sweep in Columbia, Dane, Dodge and Green counties, and from 5-32 per sweep in Adams, Juneau and Marquette counties. Winged and parasitized forms comprise a larger percentage of the population than previously.

POTATO LEAFHOPPER: Surveys in alfalfa indicate numbers are low and vary from 0.1-0.9 per sweep in the central and south-central areas. Somewhat cooler, wet weather at the start of the week probably slowed their activity. Economic counts of 1.0 per sweep for alfalfa 8-11 inches and 2.0 per sweep for alfalfa 12 inches or taller have not been detected in any field surveyed thus far. Nymphs were found in approximately 20% of fields.

PLANT BUG: Populations remain fairly low in surveyed fields, with mixed counts averaging 0.5 per sweep.

DEGREE DAYS JANUARY 1 - JUNE 10

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	858	602	—	865	1559
Lone Rock	843	574	—	825	1511
Beloit	915	608	—	911	1616
Madison	810	550	699	804	1474
Sullivan	848	586	692	827	1511
Juneau	793	541	—	788	1442
Waukesha	730	548	—	728	1360
Hartford	707	518	—	712	1341
Racine	663	478	—	696	1293
Milwaukee	645	473	548	673	1266
Appleton	708	430	596	714	1344
Green Bay	606	368	572	649	1223
Big Flats	760	503	—	728	1375
Hancock	774	495	705	738	1392
Port Edwards	734	466	653	710	1350
La Crosse	842	556	758	825	1509
Eau Claire	760	516	669	748	1400
Cumberland	687	454	629	649	1280
Bayfield	489	288	439	463	1006
Wausau	668	384	591	650	1260
Medford	670	408	523	660	1267
Crivitz	597	339	—	593	1190
Crandon	602	325	504	559	1149

Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2010.
 NORMALS based on 30-year average daily temps, 1971-2001.

Nymphs of both the alfalfa and tarnished plant bug species are common in sweep net collections, and the immature stages outnumber the adults in many fields.

SMALL GRAINS

WHEAT DISEASES: Examination of 37 wheat fields from Rock to Oconto County found the crop in generally good condition, with flowering complete. The most common diseases encountered were leaf spots (Septoria and/or tan spot) in 17 fields and powdery mildew in 15 fields. Severities were relatively low, and flag leaves, the main contributor to yield, were mostly clean. Symptoms of bacterial blight were found in 1 field in Calumet County, and loose smut was observed at very low levels in 3 fields. To date, no rust has been detected in Wisconsin wheat by DATCP surveyors.

CEREAL LEAF BEETLE: Two fields surveyed, one in Fond du Lac County and one in Sheboygan County, showed

severe infestation by the cereal leaf beetle. In these fields, flag leaves were heavily skeletonized. The wheat in Sheboygan County had damage on almost every plant, while the Fond du Lac field showed at least 50% of plants with damage. Some of the larvae had pupated.



Leaf feeding injury by cereal leaf beetle larvae

Adrian Barta DATCP

CORN

WESTERN BEAN CUTWORM: The annual trapping survey began this week. State entomologists, county agents, crop consultants and many growers are cooperating in the pheromone trapping program, which is expected to continue through early August. Results should identify areas of high adult concentration and with potential for severe larval infestation. Based on past experience, indications are that populations are highest in the central counties of Adams, Green Lake and Marquette.

Persons interested in monitoring the flight of western bean cutworm moths should email Krista Hamilton at krista.hamilton@wi.gov or call 1-866-440-7523. Please provide your name, address, telephone number, and specify the number of traps to be placed.

EUROPEAN CORN BORER: Moth flight continued over the central and northern parts of the state, and oviposition is expected to be well underway. Whorl feeding was noted this week on 5% of corn plants in a Sauk County field, but most corn is still unattractive for egg laying. Non-Bt corn and Bt refuge acreage 18 inches or taller is now susceptible to infestation by first generation larvae.

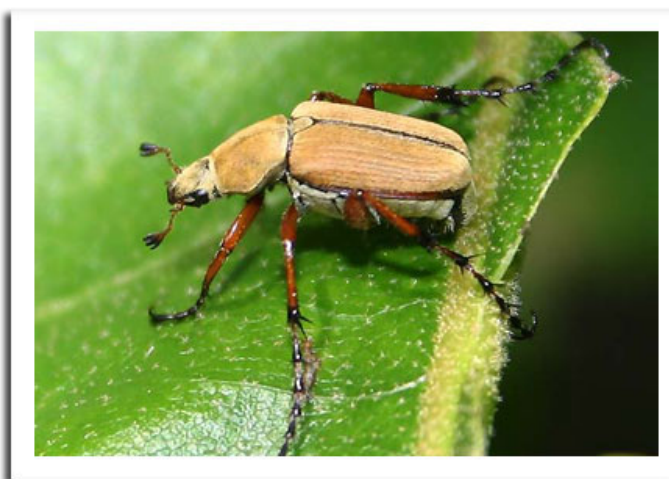
TRUE ARMYWORM: Half-grown larvae were observed feeding in the whorls of corn at a few Grant and Green

County sites. Damage was light and confined to 1-11% of plants in the margins of fields. Although serious damage by the first brood is infrequent, continued scouting for localized outbreaks is recommended. Several black light traps have registered low-moderate numbers of moths consistently since early May.

BLACK CUTWORM: Surveys conducted in the southern two-thirds of the state during the past three weeks lead to the conclusion that black cutworm has not been a major problem this season. The threat from this early-season pest has largely subsided, but isolated problems could develop in later planted corn fields. Scouting is advised through the 5-leaf stage.

SOYBEANS

ROSE CHAFER: Light defoliation caused by these insects was observed this week in soybeans in Adams, Juneau and Monroe counties. Currently the infestations involve fewer than 3% of plants. Beetles were also noted on a variety of ornamental and garden plants in La Crosse and Sauk counties. Activity and leaf skeletonization should increase over the next 3-4 weeks, especially in the sandier areas of the state.



Rose chafer

Tony DiTerlizzi bugguide.net

SOYBEAN APHID: Examination of V1-V3 soybeans from June 4-10 found very low densities of 10-77 aphids per infested plant in 10% of fields checked in the south-central, central and east-central counties. Near Mauston in Juneau County, approximately 20% of the plants were infested with 51-77 adults and nymphs per expanding trifoliolate. Small colonies have been detected thus far in Green, Juneau, Monroe, Rock, Walworth and Washing-

ton counties. Soybean growers should begin monitoring fields next week for developing problems.



Soybean aphids

John Obermeyer Purdue Extension

FRUITS

CODLING MOTH: Moth flight has subsided in most orchards after three weeks of very intense activity. Larvicides applied before the recent wet weather may not provide adequate protection against first brood larvae entering fruit, particularly in areas that received two or more inches of rain. Options for apple growers include scouting fruits for tiny, circular entry wounds (targeting trees which have not been over-thinned) or reapplying an insecticide to key varieties or orchard blocks with the highest counts. Orchards that registered few or no moths this week can probably forgo a second application.

OBLIQUEBANDED LEAFROLLER: Numbers of this fruit moth have also moderated in the last week, but it is unclear if this trend is due to heavy rains or is part of their development cycle. Counts during the last reporting period averaged 6 per trap, which represents a slight decline from an average of 9 moths per trap the week before.

SPOTTED TENTIFORM LEAFMINER: The second of three flights this season has started in southern Wisconsin, where pheromone trap counts varied from 3-930 moths per trap from June 4-10. The peak in flight activity is not expected to occur until the first week of July in the southern and central counties and a week or more later in the east central and northern counties. The economic threshold increases from 0.1 to 1.0 mine per leaf for the second generation of sapfeeder larvae.

PLUM CURCULIO: Adult migration into orchards has ended at most localities. The oviposition interval, which ordinarily extends for six weeks or longer, was hastened this season by abnormally high temperatures in late April and again two weeks ago. Pyramid traps can be removed by late June.

CRANBERRY REPORT: Favorable temperatures and timely rains have greatly benefited the 2010 cranberry crop. Heat unit accumulations remain 15% or more above the 30-year average and 30% ahead of last year. Drought and heat stress due to extreme temperature variations became apparent at a few sites in the past week. Damage caused by spanworms and false armyworms has been reported, and insect populations remain at economic levels in some beds. Other activities on the marshes include irrigation, fertilization and weed control.

VEGETABLES

STRIPED CUCUMBER BEETLE: Cucumbers and summer squash were seriously damaged by this insect near East Troy in Walworth County. According to the reporter, the infested cucurbits are now being used as a trap crop and all successive plantings were immediately row-covered. This beetle is the vector of bacterial wilt of cucurbits such as cucumbers, melons and squash.



Striped cucumber beetle

Ralph C. Baslow bugguide.net

FLEA BEETLE: Unusually high numbers of flea beetles have been reported in Grant and Sauk counties. A local horticulture educator states emphatically that this is the first time in her gardening career she has actually seen "thousands of flea beetles" on her potatoes and tomatoes. Similar observations made by a DATCP pest survey

specialist in the southwest counties corroborate this report.

LATE BLIGHT: Although no cases have been reported or observed in Wisconsin, this disease could be especially severe under climatic conditions experienced this month. Home garden tomatoes are frequently grown without the use of fungicides to protect them from this blight that can cause extreme defoliation and a very destructive fruit rot.

NURSERY & LANDSCAPE

BLACK KNOT: Canadian red cherry trees in a Brown County nursery were showing light amounts of this common fungal disease. Black knot is characterized by irregular, black swollen galls or 'knots' which form on branches and vary in size from ½ inch to 1 foot long. Shoots and branches bearing knots should be pruned during the winter or early spring, before the fungal spores are released.

FLETCHER SCALE: Nursery inspectors observed eggs and mobile crawlers in Brown, Dane, Marquette and St. Croix counties this week. This scale pest of arborvitae, juniper and yew can cause premature needle drop and branch dieback. For severe infestations, horticultural oils, insect growth regulators, or conventional insecticides may be applied as soon as the crawlers are noticed.



Fletcher scale on yew

Konnée Jerabek DATCP

GYPSY MOTH: Third and fourth instar larvae of this insect were found on oak, crabapple, hawthorn and maple trees in Brown County, an area currently affected by the gypsy moth quarantine. Nursery stock and Christmas tree growers in the quarantined eastern and

central counties of the state are required to treat all stock before shipping to a non-quarantined area.

MEADOW SPITTLEBUG: Spittle masses are relatively common on ornamentals and conifers in Brown and Dane counties. The nymphs are nearly full grown and should reach maturity next week. Control is not needed, as spittlebugs rarely occur in damaging numbers on nursery plants.

APHIDS: Heavy infestations of an unidentified aphid were noted on several honey locust trees at an Appleton garden center. The smaller trees were treated with a systemic insect control product, while an arborist was consulted to assist with aphid control on the larger trees.

JUNE BEETLE: A report from the UW-Madison Insect Diagnostic Lab indicates that these insects are causing defoliation of oaks in Barron and St. Croix counties. Beetles are also appearing in moderate-high numbers in some black light traps around the state.

FOREST

EMERALD ASH BORER: The first appearance of beetles this year has been reported from Newburg and Victory, areas with known infestations of the tree-killing pest. Larvae and adults were also detected last week in a park near West Bend in Washington County. A comprehensive detection survey is now underway in 71 Wisconsin counties. Residents concerned about their ash trees should consult with an arborist or tree care professional. A variety of treatments are available, though none are guaranteed to prevent or reverse an infestation.

TRAPPING NETWORKS

BLACK LIGHT TRAPS: Low numbers of European corn borer moths were registered in the past week. Counts ranged from 0-12 per trap, with a total of only 26 moths captured at 6 sites. The spring flight has peaked in the southern and central areas and is now declining. Moths should continue to appear in trap collections for another two weeks. The spotted cutworm count increased noticeably from 24 to 42 per trap at Marshfield and from 12 to 55 at Wausau. Low-moderate numbers of this species have been reported from most locations since late May.

APPLE INSECT & BLACK LIGHT TRAP COUNTS JUNE 4 - 10

COUNTY	DATE	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	AM RED ⁶	AM YELLOW ⁷
Bayfield	6/04-6/10	Keystone	0	0	0	0	—		
Bayfield	6/04-6/10	Bayfield	—	—	—	—	—		
Bayfield	5/31-6/07	Orienta	13	0	0	0	—		
Brown	6/04-6/10	Oneida	12	0	2	0	—		
Chippewa	6/04-6/10	Chippewa Falls 1	0	9	2	2	0		
Chippewa	6/04-6/10	Chippewa Falls 2	—	—	—	—	—		
Dane	6/04-6/10	Deerfield	655	1	3	1	—		
Dane	6/04-6/10	McFarland	0	0	10	0	—	0	0
Dane	6/04-6/10	Stoughton	63	9	3	15	—		
Dane	6/01-6/08	West Madison	105	0	3	5	—		
Dodge	6/04-6/10	Brownsville	0	0	1.5	3	—	0	0
Fond du Lac	6/04-6/10	Campbellsport	7	0	0	5	—		
Fond du Lac	6/04-6/10	Malone	100	1	4	13	—	0	0
Fond du Lac	6/03-6/10	Rosendale	3	1	2	0	—	0	0
Grant	6/04-6/10	Sinsinawa	84	0	3	11	—		
Green	6/04-6/10	Brodhead	21	0	7	0	0	0	0
Iowa	6/04-6/10	Dodgeville	810	0	29	17	4	1	0
Iowa	6/04-6/10	Mineral Point	—	—	—	—	—		
Jackson	6/04-6/10	Hixton	—	—	—	—	—		
Kenosha	6/03-6/10	Burlington	275	0	3	2	—		
Marinette	6/04-6/09	Niagara	0	1	26	4	—		
Marquette	5/31-6/06	Montello	41	1	0	0	—		
Ozaukee	6/04-6/10	Mequon	—	—	—	—	—		
Pierce	6/04-6/10	Beldenville	21	0	19	5	0		
Pierce	6/03-6/10	Spring Valley	7	0	5	17	1		
Racine	6/04-6/10	Raymond	930	0	0	16	0		
Racine	6/04-6/10	Rochester	90	0	3	11	—		
Richland	6/02-6/07	Hillpoint	240	0	0.5	8	1		
Sheboygan	6/04-6/10	Plymouth	0	0	4	4	—		
Walworth	6/04-6/10	East Troy	0	3	1	0	0		
Walworth	6/04-6/10	Elkhorn	10	10	2	0	0		
Waukesha	6/04-6/10	New Berlin	810	0	8	39	0		

¹Spotted tentiform leafminer; ²Redbanded leafroller; ³Codling moth; ⁴Obliquebanded leafroller EASTERN; ⁵Oblique-banded leafroller WESTERN; ⁶Apple maggot red ball; ^{*}Unbaited red ball; ^{**}Baited red ball; ⁷Apple maggot yellow board.

COUNTY	DATE	SITE	ECB ¹	TA ²	BCW ³	SCW ⁴	DCW ⁵	CE ⁶	CEL ⁷	WBC ⁸	FORL ⁹	VCW ¹⁰
Chippewa	6/04-6/10	Chipp Falls	3	0	0	0	2	0	0	0	0	0
Columbia	6/04-6/10	Arlington	—	—	—	—	—	—	—	—	—	—
Dane	6/04-6/10	Mazomanie	—	—	—	—	—	—	—	—	—	—
Grant	6/04-6/10	Lancaster	3	4	0	13	0	0	0	0	0	0
Manitowoc	6/04-6/10	Manitowoc	—	—	—	—	—	—	—	—	—	—
Marathon	6/04-6/10	Wausau	2	5	0	55	0	0	0	0	0	0
Monroe	6/04-6/10	Sparta	4	—	—	18	—	—	—	—	—	—
Rock	6/04-6/11	Janesville	0	3	0	2	0	0	3	0	0	0
Walworth	6/04-6/10	East Troy	6	0	0	16	0	0	0	0	0	0
Wood	6/04-6/10	Marshfield	12	23	0	42	0	2	2	0	0	7

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