

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

Mild, occasionally stormy weather contrasted with the hot, dry conditions of the previous week. Most notably, temperatures averaged only 1-5 degrees above normal, a significant difference from 15-20 degrees above average over the holiday weekend. Precipitation was sporadic throughout the state during the week. While parts of the northern and central regions received light, scattered rainfall, some locations in southern Wisconsin received 2 inches or more. The warm weather greatly accelerated crop emergence and favored planting of the final acres of soybeans and corn. Soybean emergence advanced 12 percentage points, leaving progress at 42% complete at the start of the week, 8 points ahead of last year and 7 points ahead of the 5-year average. Predictably, the heat also caused an upsurge in insect numbers and activity, and probably favored certain plant diseases.

LOOKING AHEAD

EUROPEAN CORN BORER: The peak in moth activity evidently has occurred in the southwest, south-central and west-central areas. Black light trap counts have been extremely low at most sites since the spring flight began two weeks ago, with the exception of Marshfield, where 78 moths were registered from May 27-June 3.

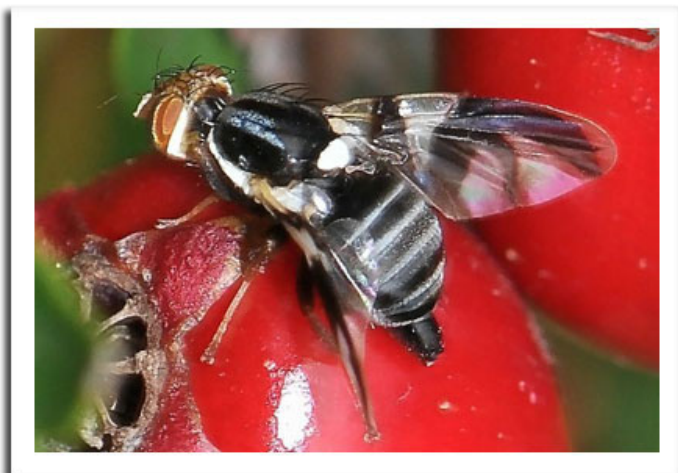
Oviposition on vegetable and weed hosts is well underway and larval hatch has started in the south. Whorl feeding by first instar larvae should be noticeable in the tallest corn fields next week.

SOYBEAN APHID: Alates and nymphs were found for the first time this season on June 2 in Juneau and Monroe counties. Surveys of VE-V3 soybeans detected aphids in only 4 of 26 fields examined during the last reporting period. Densities were very low and ranged from 2-31 aphids per infested plant on no more than 2 per 100 plants examined. Aphids were also noted on June 3 in Rock County.

STALK BORER: Light injury to corn has become apparent in many southern and central Wisconsin corn fields. Damage thus far is limited to 1-5% of plants in the peripheral rows, but is expected to become increasingly severe as more larvae migrate from initial weed hosts this month. Growers of corn should be alert to the possibility of problems in localized fields throughout the state. Spot treatment is justified if 10% of plants are damaged and should be made before the larvae bore into stalks.

APPLE MAGGOT: Adult emergence from the soil could begin by June 7 near Beloit, June 14 near Eau Claire, and June 22 near Racine, which would be 3-4 weeks ahead of last season and several weeks earlier than

normal. This annual event usually takes place around 900 degree days (base 50°F) in years when soil moisture levels are favorable. Traps should be placed next week in perimeter trees adjacent to woodlots with wild hosts or abandoned orchards.



Apple maggot fly Phil Huntley-Franck bugguide.net

WESTERN BEAN CUTWORM: Pheromone trap installation is planned for the next two weeks in the southern and central counties. If warm weather continues, moths could appear as early as June 21. Persons interested in monitoring the annual 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.

FORAGES

ALFALFA WEEVIL: Surveys show larval populations have decreased substantially due to pupation and harvest of the first crop. Representative counts in regrowth vary from 0.2-3.0 per sweep in Chippewa, Clark, Grant, Iowa, Green, La Crosse, Marathon, Monroe and Waushara counties. Leaf tip feeding is generally below 10% in alfalfa 12 inches or shorter. The degree of damage suffered by the first crop appears to have been light in most instances, with only a few fields showing moderate defoliation.

By contrast, leaf feeding continues in unharvested alfalfa in the east-central and northern areas. A very high larval population and 70% tip injury were found near Chippewa Falls, but the farmer plans to harvest the field rather than apply an insecticide. Alfalfa growers in the northern

DEGREE DAYS JANUARY 1 - JUNE 2

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	727	515	—	718	1347
Lone Rock	723	507	—	690	1312
Beloit	783	520	—	763	1404
Madison	693	482	590	670	1276
Sullivan	728	505	581	691	1311
Juneau	679	472	—	658	1249
Waukesha	624	475	—	605	1174
Hartford	603	453	—	592	1158
Racine	557	419	—	573	1106
Milwaukee	544	417	450	555	1085
Appleton	614	385	496	604	1170
Green Bay	520	325	473	548	1057
Big Flats	662	455	—	614	1197
Hancock	671	446	595	619	1209
Port Edwards	643	424	550	604	1180
La Crosse	720	500	638	688	1308
Eau Claire	657	471	561	629	1217
Cumberland	598	414	522	551	1119
Bayfield	431	256	361	403	887
Wausau	590	350	493	559	1104
Medford	591	371	433	570	1114
Crivitz	525	302	—	512	1047
Crandon	539	293	423	491	1020

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

counties are advised to check fields immediately to determine their course of action. If 40% or more of alfalfa tips show signs of feeding, some type of control is needed.

POTATO LEAFHOPPER: Nymphs are appearing in alfalfa in the southern and west-central counties. Populations thus far are well below the economic threshold of 2.0 per sweep in alfalfa 10-12 inches. With the potential for populations to proliferate under present warm conditions, second growth alfalfa should be watched closely for yellowing of leaf tips and other indicators of leafhopper injury.

PEA APHID: This aphid continues to be the most abundant insect in Wisconsin alfalfa fields. Counts in the southern half of the state range from 2-90 per sweep, with an average of 15 per sweep. The highest population was encountered this week near West Salem in La Crosse County.

MEADOW SPITTLEBUG: Numbers rarely exceed 1 per 10 stems. Development has progressed rapidly in past weeks and late instar nymphs are common in many southern and central alfalfa fields. A population of 1 or more nymphs per stem may interfere with harvest operations, but these insects are unimportant at current levels. Adults should begin collecting in sweep nets by mid-June.

CORN

EUROPEAN CORN BORER: The emergence of spring adults continued for the third week, but numbers in black light traps are still fairly low. Counts of 1-78 moths per trap were registered from May 27-June 3. The phenology model for this pest suggests that the first flight should have peaked by now in the southern and west-central counties and will peak by June 10 in the northern areas. Since most corn is unsuitable for larval development, egg deposition is presumably occurring on hosts such as peas, peppers, potatoes, snap beans and native weeds.

BLACK CUTWORM: Larvae from earlier flights of moths that oviposited in corn over a month ago are large enough to cut plants. Growers should remain vigilant for signs of feeding injury for another two weeks. Scouting may be discontinued after the V5 stage.

SLUGS: Damage caused by these mollusks can be found in virtually every corn field. In most cases the degree of foliar feeding is light and restricted to the lower leaves. Severe defoliation of young plants in the pre-whorl and early whorl stages may delay development, but corn usually outgrows their injury.



Slug leaf feeding

Krista Hamilton DATCP

CORN EARWORM: Six specimens were captured in the pheromone trap at Janesville and 7 were reported from Sparta during the last monitoring period. Early-season corn earworm activity is infrequent in Wisconsin, although a few migrants appear in June in some years. The main flight normally occurs in August or September.

SOYBEANS

BEAN LEAF BEETLE: Soybean fields in Dane, La Crosse and Monroe counties are showing 5-10% of plants with minor defoliation caused by this insect. While the damage currently is limited to a few holes in the leaves, more extensive feeding injury may appear next week as additional beetles migrate into emerging soybeans.



Bean leaf beetle defoliation

Krista Hamilton DATCP

FRUITS

CODLING MOTH: Large flights of moths continue to be registered in all areas of the state. Economic counts of 5 or more moths per trap were reported this week from 22 of 29 apple orchards. The high count of 87 moths occurred at Niagara in Marinette County. Egg hatch is about 50% complete at advanced southern locations such as Beloit where 713 degree days (base 50°F) were surpassed recently.

SPOTTED TENTIFORM LEAFMINER: Pheromone trap counts are expected to increase sharply in the near future as the second flight of moths begins in the southern and central counties. Numbers were relatively low in the past week, ranging from 1-190 and averaging 35 moths per trap. The economic threshold increases from 0.1 to 1.0

mine per leaf for the second generation of sapfeeder larvae in June.

PLUM CURCULIO: This beetle is appearing quite commonly in the southern part of the state. Counts in pyramid traps near orchard perimeters ranged from 1-30 per trap during the period of May 28-June 3. Since weather conditions have been very conducive for rapid degree day accumulations, the oviposition period should occur fairly quickly if temperatures stay as warm as they are now.

CRANBERRY REPORT: Abnormally warm weather has accelerated cranberry development well ahead of normal for this time of year. Several varieties are already in bloom, according to reports from growers. Reflective of the high temperatures, numbers of false armyworm and spanworm have exceeded economic thresholds in some beds and blackheaded fireworm, fruitworms and loopers are appearing. Many growers have opted for flooding to reduce insect pressure, while others are making their first pesticide applications.

VEGETABLES

IMPORTED CABBAGEWORM: Larvae measuring $\frac{1}{2}$ - $\frac{3}{4}$ inch in length were the cause of moderate defoliation of lettuce, radishes and broccoli in a La Crosse County vegetable garden. Manual removal of the caterpillars will generally give reasonable control, but a Bt insecticide may be required for larger commercial plantings.



Imported cabbageworm larva Christian Bauer upload.wikimedia.org

ASPARAGUS BEETLE: Extension personnel in Monroe County have received a greater than usual number of inquiries concerning these beetles in the past two weeks.

Activity by both the common and spotted species has been observed in the west-central area since late May. Distinguishing between the two is important because the common asparagus beetle is more prevalent and damaging.



Spotted asparagus beetles

Eric Steckx

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.

POTATOES

LATE BLIGHT: Reports of this disease on tomatoes or potatoes in Wisconsin have not been received as of June 4, but several new cases have been verified from Florida, Kentucky, Louisiana, Massachusetts and Pennsylvania. The latest confirmation in Kentucky is cause for concern since the tomato transplants originated from a supplier in the Kalamazoo area of southwestern Michigan. Further investigation is underway to determine if late blight is present in Michigan.

NURSERY & LANDSCAPE

NON-VIABLE STOCK: Nursery plants that have not leafed out by now are considered non-viable and cannot be offered for sale. Such stock may be set aside and observed for late growth, but otherwise should be destroyed or returned to the supplier.

BEECH BLIGHT APHID: A very light infestation of these small, woolly insects was found on tricolor beech in a

Sauk County nursery. Similar to other aphids, the primary concern with this species is the black sooty mold fungus that grows on its honeydew and accumulates on leaves and branches. Under most circumstances, beech blight aphids are an aesthetic problem and colonies rarely become large enough to cause significant damage.

HOLLYHOCK RUST: Nursery inspectors observed this serious rust disease on hollyhock 'Zebrina' in Dane County. Diagnostic characteristics are the numerous light yellow spots that appear on the upper leaf surfaces and orange-brown rust pustules on the leaf undersides. Hollyhock rust typically increases in severity as the summer progresses, killing most of the foliage on infected plants by early fall. This disease cycle can be broken by cutting stalks back to ground level in the fall and destroying all infected plant material. Removal of mallow weeds, which serve as a source of infection for hollyhock, is also recommended.



Hollyhock rust

bumblebeeblog.com

FOREST

GYPSY MOTH: The DATCP Slow the Spread Program completed its Btk and Gypcheck spray season on May 28, treating approximately 77,000 acres in Ashland, Barron, Bayfield, Chippewa, Clark, Crawford, Douglas, Dunn, Eau Claire, Green, Iowa, Jackson, La Crosse, Monroe, Richland, Taylor, Trempealeau and Vernon counties. Additional treatments with mating disruptant are scheduled for later this month and in July at 23 sites in western Wisconsin.

The DNR Suppression Program treated 5,700 acres in Brown, Dane, Menomonee, Milwaukee, Oconto,

Outagamie, Racine, Rock, Sauk, Washington and Waukesha counties, completing its spray season on May 23. Residents in central and eastern Wisconsin who would like their property to be considered for treatment by the DNR in 2011 should contact their county or municipal suppression program coordinator promptly.

TRAPPING NETWORKS

BLACK LIGHT TRAPS: High temperatures favored activity of European corn borers in the past week, and a few locations reported moderate counts of 14-78 moths. The hot weather also caused numbers of spotted cutworms to increase at East Troy, Lancaster, Marshfield and Sparta.

WINTER CUTWORM: Reports of activity were received from Dane and La Crosse counties from May 22-28, signaling that oviposition is occurring on agricultural and ornamental crops. Black light trap collections should be watched over the next several weeks for these large, light brown moths with orange-yellow hindwings. Large flights may develop in some areas of the state.

Winter cutworm moth, *Noctua pronuba*

Willem 54 11-29-08

CORN EARWORM: Network cooperators should place traps by June 7 to monitor the early migration of moths into Wisconsin. In most years significant flights are not observed until August, but on rare occasions problems have resulted from moths arriving in June. The Hercon "Zea Lure-Tape" brand lures should be changed every two weeks from June 7-July 15 and every week from July 15-August 30.

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 28 - JUNE 3

COUNTY	DATE	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	AM RED ⁶	AM YELLOW ⁷
Bayfield	5/28-6/02	Keystone	0	35	8	0	—		
Bayfield	5/28-6/03	Bayfield	—	—	—	—	—		
Bayfield	5/24-5/31	Orienta	37	0	0	0	—		
Brown	5/28-6/03	Oneida	10	0	12	0	—		
Chippewa	5/28-6/02	Chippewa Falls 1	0	11	17	5	1		
Chippewa	5/28-6/03	Chippewa Falls 2	—	—	—	—	—		
Dane	5/26-6/03	Deerfield	184	0	27	15	—		
Dane	5/28-6/03	McFarland	0	0	80	0	—		
Dane	5/28-6/02	Stoughton	36	3	18	19	—		
Dane	5/20-6/01	West Madison	15	0	25	13	—		
Dodge	5/28-6/02	Brownsville	5	2	5	5	—		
Fond du Lac	5/28-6/02	Campbellsport	1	2	0	5	—		
Fond du Lac	5/28-6/03	Malone	1	1	18	12	—		
Fond du Lac	5/28-6/03	Rosendale	26	17	3	0	—		
Grant	5/28-6/03	Sinsinawa	61	0	0	10	0		
Green	5/28-6/03	Brodhead	0	0	2	11	1		
Iowa	5/28-6/03	Dodgeville	47	0	56	15	17		
Iowa	5/28-6/03	Mineral Point	0	0	4	10	0		
Jackson	5/28-6/03	Hixton	22	6	16	2	0		
Kenosha	5/21-6/03	Burlington	30	0	5	22	—		
Marinette	5/28-6/03	Niagara	77	0	87	1	—		
Marquette	5/25-6/01	Montello	12	3	5	0	—		
Ozaukee	5/27-6/02	Mequon	0	0	17	8	—		
Pierce	5/28-6/03	Beldenville	190	13	1	0	0		
Pierce	5/27-6/03	Spring Valley	34	0	6	0	0		
Racine	5/28-6/03	Raymond	8	0	22	4	—		
Racine	5/28-6/03	Rochester	0	0	25	23	—		
Richland	5/25-6/01	Hillpoint	19	1	10	22	1		
Sheboygan	5/28-6/02	Plymouth	50	0	29	0	—		
Walworth	5/28-6/03	East Troy	—	—	—	—	—		
Walworth	5/28-6/03	Elkhorn	—	—	—	—	—		
Waukesha	5/28-6/03	New Berlin	101	0	5	10	—		

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	5/28-6/03	Chipp Falls	1	0	0	0	7	0	2	0	0	0
Columbia	5/28-6/03	Arlington	—	—	—	—	—	—	—	—	—	—
Dane	5/28-6/03	Mazomanie	—	—	—	—	—	—	—	—	—	—
Grant	5/28-6/03	Lancaster	2	0	0	21	0	0	1	0	0	0
Manitowoc	5/28-6/03	Manitowoc	—	—	—	—	—	—	—	—	—	—
Marathon	5/28-6/03	Wausau	0	1	0	12	0	0	1	0	0	0
Monroe	5/28-6/03	Sparta	31	11	0	27	12	7	0	0	0	0
Rock	5/28-6/03	Janesville	0	14	0	1	0	0	1	0	0	0
Walworth	5/28-6/03	East Troy	14	0	10	24	0	0	1	0	0	0
Wood	5/27-6/03	Marshfield	78	31	1	24	0	0	9	0	8	5

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