

# 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, seasonable weather returned after below-normal temperatures slowed crop and insect development during the previous week. Light rain showers occurred in the southern and western portions of the state, while conditions in the eastern areas remained dry. Field crops are generally faring well and growth has been excellent. Most second crop alfalfa in the southern and western counties has been harvested, but those fields that have not been cut are showing yellowing due to high numbers of potato leafhopper nymphs. The yield and quality of alfalfa is reported to be fair to good in several counties. The state average corn height was 36 inches as of July 6, and some early sweet corn has started to tassel. Precipitation is still needed in many areas, especially the east-central and northwest districts.

## LOOKING AHEAD

**SOYBEAN APHID:** The first significant infestations of the year may develop in the week ahead. Surveys indicate that populations have increased to moderate levels in a small percentage of fields since late June. Some fields in Crawford County contain densities of 174 aphids per infested plant (on 90% of the plants), although the typical average is 8 per infested plant. In past years, the first economic populations of 250 or more aphids per plant

have been detected by the third week of July. This insect requires continual observation from now until the late reproductive stages of soybean growth in August.

**EUROPEAN CORN BORER:** The treatment interval for first generation European corn borer larvae has closed near Beloit, Madison, La Crosse, Sullivan and at other locations where accumulations of 1,100 degree days (base 50°F) were surpassed this week. Most feeding is still confined to the whorls, but larvae are beginning to enter the midribs of corn leaves. Treatment remains an option in the central, east-central and northern counties for a few more days. Growers concerned about corn borer control in early market sweet corn should appraise the percent of infested whorls now and not wait any length of time if treatment is justified. The larvae will soon bore into the stalks where they are protected from sprays.

**WESTERN BEAN CUTWORM:** The first moths of the season were registered by June 25 in three pheromone traps established near Eldorado, Ripon and Rosendale in Fond du Lac County. The very low counts of 1-2 moths per trap reported at 12 of 127 sites since then represent the start of the adult flight period in Wisconsin. Participants in the DATCP-UWEX western bean cutworm trapping network should submit datasheets with trap locations to Krista Hamilton at [krista.hamilton@wi.gov](mailto:krista.hamilton@wi.gov) or by fax at (608) 224-4656 by July 10. Scouting is advised as soon as the first moths are captured.

**JAPANESE BEETLE:** Adults have become increasingly noticeable in yards and home gardens in Dane, La Crosse and Milwaukee counties. Numbers are low at this time, but heavy feeding on grapes, lindens, raspberries, roses and many other plants should be expected in the next 6-8 weeks. Because trapping in residential areas may attract more beetles than normally would be present, this practice is not recommended unless areas are isolated from other Japanese beetle breeding sites or if mass trapping is used.



Japanese beetles

Phil Pellitteri entomology.wisc.edu

## FORAGES

**POTATO LEAFHOPPER:** Economic populations of 2.0 or more adults and nymphs per sweep have been detected in localized areas since the last report. Alfalfa surveyed in the southeast, southwest and west-central districts contained an average of 1.0 per sweep, although a few scattered fields in La Crosse, Monroe and Washington counties yielded 2.2-2.8 per sweep. In most instances, the problem could be corrected by harvesting second crop alfalfa immediately. Treatment decisions should be made on a field-by-field basis, only after alfalfa has been systematically sampled to determine if the economic threshold has been exceeded.

**PEA APHID:** Numbers in alfalfa have declined considerably since late June. Surveys conducted in Crawford, Iowa, Grant, La Crosse, Monroe, Racine, Richland and Walworth counties showed 0-4 per sweep, which represents a sharp decrease from the average of 13 per sweep reported as of June 26. Two exceptional fields in Washington County had 7-9 aphids per sweep. Parasitic wasps and predators such as damsel bugs,

## DEGREE DAYS JANUARY 1 - JULY 9

LOCATION	50°F	2008	NORM	48°F	40°F
Dubuque, IA	1155	1182	—	1028	2055
Lone Rock	1112	1069	—	1138	1972
Beloit	1146	1198	—	1166	2048
Madison	1090	1055	1263	1131	1951
Sullivan	1117	1129	1275	1145	1998
Juneau	1081	1074	—	1119	1932
Waukesha	1089	1042	—	1139	1951
Hartford	1054	1017	—	1104	1897
Racine	1003	974	—	1065	1834
Milwaukee	994	955	1089	1043	1821
Appleton	959	984	1136	1001	1791
Green Bay	861	912	1093	908	1617
Big Flats	1004	975	—	1035	1797
Hancock	1011	989	1257	1018	1791
Port Edwards	964	934	1184	1000	1742
La Crosse	1104	1061	1368	1095	1962
Eau Claire	1045	955	1224	1067	1867
Cumberland	933	825	1162	920	1668
Bayfield	659	647	852	655	1257
Wausau	846	842	1108	868	1570
Medford	870	797	994	891	1604
Crivitz	794	834	—	806	1505
Crandon	747	758	916	732	1393

*Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2009. NORMALS based on 30-year average daily temps, 1971-2001.*

lacewing larvae and lady beetles were common in sweep net collections, but did not appear numerous enough to have reduced counts to the low levels observed in the past week.

**PLANT BUGS:** Populations varied from 0-3.4 per sweep in 33 alfalfa fields surveyed this week in the southern and west-central areas, and averaged 0.7 per sweep. High counts of 2.5-3.4 per sweep were found in Adams, La Crosse and Monroe counties.

## SOYBEANS

**SOYBEAN APHID:** Surveys indicate that levels of this insect remain below the economic threshold of 250 aphids per plant on 80% of the plants. Many fields still have no detectable population. Examination of V4-R2 soybeans from July 6-9 found aphids in 31 of 42 (74%) fields sampled in Crawford, Grant, Iowa, La Crosse,

Monroe, Racine, Richland, Walworth, Washington and Waukesha counties. In the 31 infested fields, average densities per 20 plants ranged from 0.5-174 aphids per infested plant on 5-100% of the plants, with an average of 8 aphids per infested plant. The highest single plant count noted this week was 700 aphids in Crawford County. No economic aphid populations were detected in any Wisconsin soybean field surveyed as of July 9.

## CORN

**EUROPEAN CORN BORER:** Larval infestation rates remain about the same as reported in previous weeks, with the typical population affecting fewer than 8% of the plants and occasional fields showing 11-19% whorl feeding. No larvae were detected in 32 of 43 fields (74%) checked during the period of June 6-9. Treatment is justifiable between 800 and 1,100 degree days (base 50°F) when 50% of the plants show leaf feeding. The predominant stages present this week were intermediate 2<sup>nd</sup> and 3<sup>rd</sup> instar larvae.



European corn borer leaf feeding

Krista Hamilton DATCP

**STALK BORER:** Damage to corn has been infrequent, usually with only a few plants in the peripheral rows showing light amounts of feeding injury. Spot treatment is no longer advised now that the degree day accumulation has surpassed 1,400-1,700 (base 41°F) in most areas of the state and the majority of larvae are nearly full grown. Stalk borer feeding is unlikely to kill corn plants beyond the V7 stage.

**CORN ROOTWORM:** Adults were noted for the first time this season on July 7 in La Crosse and Monroe counties. These insects will become gradually more numerous in

the next 3-4 weeks, with the peak of emergence expected by early to mid-August in the southern and western counties. The extent of the larval infestation is unknown and will not be evident until high winds and rains lodge corn plants weakened by root feeding.



Western corn rootworm beetle

Jerry Ting gallery.photo.net

**CORN LEAF APHID:** Colonies consisting of 5-25 aphids per plant are affecting approximately 3-10% of the corn plants in Adams, La Crosse and Monroe counties. Close monitoring is recommended during the late whorl and pollen shed stages to assess populations and the rate of build-up. Colonies of 50 or more aphids per plant on 50% of the plants may interfere with pollination and should be treated promptly.

## FRUITS

**CODLING MOTH:** Larvae are presently in the 2<sup>nd</sup> instar in southwest Wisconsin. According to IPM Specialist John Aue, two orchard locations at which stings and fruit entries were observed were approximately 520 degree days from the initial biofix of May 20. Apple growers, particularly those with a similar biofix date, should inspect fruits at this time to appraise the efficacy of their codling moth management programs.

**POTATO LEAFHOPPER:** Alfalfa harvest operations have forced the migration of large numbers of leafhoppers into some apple orchards. Populations of just 1-2 nymphs per leaf can cause leaves to curl and shrivel. The nymphs are most damaging to non-bearing trees, and this is where growers should scout for evidence of this pest. Treatment is warranted at levels of 1 or more nymph per leaf when symptoms are obvious.



**APPLE MAGGOT:** Early activity has been reported from Crawford, Marquette, Pierce and Racine counties after the rains of the past week. The University of Wisconsin recommends 1 fly per **UNBAITED** trap (per week) or 5 flies per **BAITED** trap as a criterion for determining the need for control measures.



Apple maggot fly

Tom Murray [www.pbase.com](http://www.pbase.com)

**WOOLLY APPLE APHID:** Populations have increased rapidly since the final week of June. These insects are beginning to colonize the terminal shoots as well as pruning cuts and cankers. Orchardists should check for parasitism by removing the white fluff to determine if natural enemies are effectively controlling colonies. The green apple aphid has likewise multiplied quickly on terminals in the previous two weeks.

**UNKNOWN DISORDER:** John Aue reports that a mysterious disorder is causing "alarming" bruises on Paula Reds in southwest Wisconsin. Affected fruits initially develop small, circular, sunken areas similar to hail damage, which later enlarge to form dents 24-32 mm in diameter. It is unclear if the symptoms are due to pathogenic or abiotic causal factors (e.g. rain, temperature). Apple growers are strongly advised to inspect Paula Reds for the symptoms described.

**CRANBERRY REPORT:** Weather conditions during the first two weeks of July have had a pronounced effect on the cranberry crop, shifting development to a more normal rate for this time of year. Most beds are now at mid- to full bloom and plant growth generally has been excellent. Activity of honeybees and bumblebees has resumed after alternating periods of excessive heat and below-normal temperatures temporarily slowed pollination. Predictably, reports from crop scouts indicate a similar

increase in activity of several key pest insects with the more rapid accumulation of degree days.

## VEGETABLES

**CORN EARWORM:** The Tomah and Warrens pheromone traps registered very low numbers of moths in the last reporting period, and 0-19 moths per trap during the previous week. No moths were captured at 6 of 8 trap locations from July 3-9. Participants in the corn earworm monitoring network should install traps by July 16 and replace pheromone lures on a weekly basis. Please report counts to Clarissa Hammond at [clarissa.hammond@wi.gov](mailto:clarissa.hammond@wi.gov) each Thursday by 4:00 pm.

**STRIPED CUCUMBER BEETLE:** Few beetles have been trapped on yellow sticky boards this season, but cooperators and County Extension personnel are reporting injury to cucurbits, especially in the southeast and central areas of the state. Counts this week were as follows: Bourbonnais, Illinois 0, Chippewa Falls 0, East Troy 0, and Malone 1.

## WEEDS

**THISTLES:** The development of seeds on Canada and musk thistle plants throughout southern Wisconsin signals that control measures such as clipping and disposing of seed heads should be implemented at this time. Thistle seeds reach maturity just 1-3 weeks after bloom. Recurrent, year-to-year management is needed to reduce populations over time. Mowing plants is not recommended after plants begin to flower.



Immature Canada thistle seeds

Clarissa Hammond DATCP

**VENICE MALLOW:** Flowering plants were noted in several corn and soybean fields surveyed in the past week. Venice mallow commonly escapes management due to its later emergence period. This weed is unlikely to cause further yield losses since the vast majority of fields are beyond the critical period of weed control.

**SOYBEAN WEED SURVEY:** Soybean growers who have not treated their fields with a post-emergence herbicide by now can expect some degree of yield loss at harvest. Common lambsquarters has reached an average height of 12.5 inches, while some giant ragweed plants are nearly 5 feet tall in surveyed fields. Most herbicides are ineffective against weeds of this size. Final results of the annual corn and soybean weed surveys will be published in a later issue of the Wisconsin Pest Bulletin.

## NURSERY & LANDSCAPE

**GUIGNARDIA LEAF BLOTCH:** Reports from Ozaukee and Washington counties indicate this disease is beginning to develop on horsechestnut and buckeye trees. Symptoms include irregular, reddish-brown leaf blotches with yellow margins that twist and distort affected leaves as they increase in size and severity. Disease development can be suppressed by disposing of fallen leaves in autumn to reduce future inoculum levels.

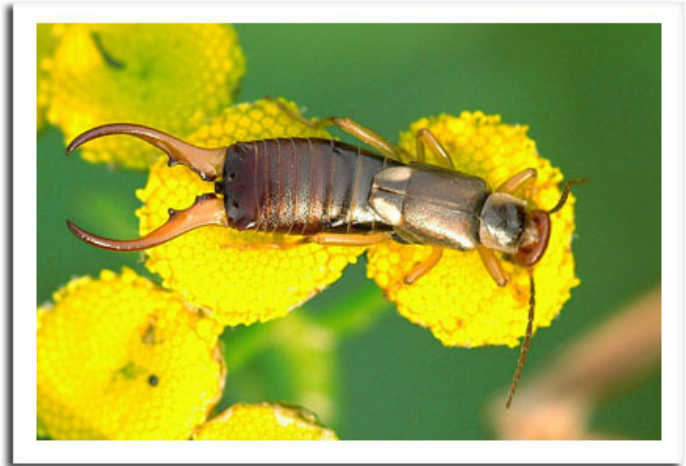


*Guignardia leaf blotch on horsechestnut*

Liz Meils DATCP

**MAPLE PETIOLE BORER:** Sugar maples in Washington County are exhibiting withered, flagged leaves caused by larvae of the maple petiole borer. Boring within the petioles results in premature leaf drop, after which the larva emerges to pupate in the soil. No corrective action is needed.

**EUROPEAN EARWIG:** These insects are very abundant this season in homes, gardens and greenhouses, and are likely to remain so for several more weeks. Numerous reports of damage to marigolds, hostas, verbena, basil, zinnias, petunias and dahlias have been received from around the state. The wet spring weather has contributed to the high populations observed since early June.



*European earwig*

[www.commanster.eu](http://www.commanster.eu)

**VIBURNUM BORER:** Exit holes and empty pupal cases associated with the larval stages of this clearwing moth were observed on the 'Cranberrybush' and 'Mohican viburnum' varieties in Ozaukee County. Diagnostic characteristics are swellings or cracks on the main stems and branches, as well as sawdust-like frass which exudes from the entrance site at the base of plants. Immediate removal and destruction of infested nursery stock is recommended as the viburnum borer eventually kills its host plant.

## TRAPPING NETWORKS

**BLACK LIGHT TRAPS:** European corn borer counts in black light traps have decreased to very low levels, possibly signaling the end of the first flight. Numbers have been extremely low at all 10 trap sites since the spring flight of moths began in late May. The moderate-heavy flights of spotted cutworm moths reported from Manitowoc and Marshfield in the last two weeks appear to have subsided. By contrast, the first western bean cutworm moths are appearing in traps near Arlington, Mazomanie and Sparta. Insignificant numbers of celery loopers, forage loopers and cutworms were registered at several locations.

# APPLE INSECT & BLACK LIGHT TRAP COUNTS JULY 3 - 9

COUNTY	DATE	SITE	STLM <sup>1</sup>	RBLR <sup>2</sup>	CM <sup>3</sup>	OBLR <sup>4</sup>	OBLR <sup>5</sup>	AM RED <sup>6</sup>	AM YELLOW <sup>7</sup>
Bayfield	7/03-7/09	Keystone	68	0	0	47	—	0	0
Bayfield	7/03-7/09	Bayfield Apple	—	—	—	—	—	—	—
Bayfield	7/03-7/09	Superior View Farms	—	0	2	6	—	0	0
Bayfield	6/29-7/06	Oriente	2	0	0	0	—	—	—
Brown	7/03-7/09	Oneida	160	33	1	0	—	—	—
Chippewa	7/03-7/09	Chippewa Falls 1	—	28	1.3	2	4	0	0
Chippewa	7/03-7/09	Chippewa Falls 2	—	—	—	—	—	—	—
Dane	7/02-7/09	Deerfield	539	101	2	6	—	0	0
Dane	7/03-7/09	Stoughton	850	146	5	0	—	0	0
Dane	7/03-7/09	West Madison	102	16	4	0	—	—	—
Dodge	7/03-7/09	Brownsville	20	4	1.5	3	—	0	0
Fond du Lac	7/03-7/09	Campbellsport	225	7	0	32	—	0	0
Fond du Lac	7/03-7/09	Malone	1000	33	4	21	—	0	0
Fond du Lac	7/03-7/09	Rosendale	—	—	—	—	—	—	—
Grant	7/03-7/09	Sinsinawa	74	19	0	0	—	—	—
Green	7/03-7/09	Brodhead	21	60	3	1	0	0	0
Iowa	7/03-7/09	Dodgeville	273	89	65	5	4	—	2
Iowa	7/03-7/09	Mineral Point	600	106	0	5	—	0	0
Jackson	7/03-7/09	Hixton	35	6	2	9	0	0	0
Kenosha	7/03-7/09	Burlington	700	155	6	70	—	0	0
Marquette	7/03-7/09	Niagara	936	0	8	16	—	—	—
Marquette	7/03-7/09	Montello	41	8	0	1	—	1	0
Ozaukee	7/03-7/09	Mequon	200	8	3	10	—	0	0
Pierce	7/03-7/09	Beldenville	455	0	30	19	0	0	4
Pierce	7/02-7/09	Spring Valley	504	15	0	2	0	0	0
Racine	7/03-7/09	Raymond	998	38	11	10	—	0	0
Racine	7/03-7/09	Rochester	620	16	13	15	—	2	0
Richland	7/01-7/07	Hillpoint	310	98	2	4	—	0	0
Sheboygan	7/03-7/09	Plymouth	75	24	0	1	—	0	0
Walworth	7/03-7/09	East Troy	50	0	30	4	—	0	0
Walworth	7/03-7/09	Elkhorn	155	91	0	4	—	0	0
Waukesha	7/03-7/09	New Berlin	489	25	31	4	—	0	0

<sup>1</sup>Spotted tentiform leafminer; <sup>2</sup>Redbanded leafroller; <sup>3</sup>Codling moth; <sup>4</sup>Obliquebanded leafroller EASTERN; <sup>5</sup>Oblique-banded leafroller WESTERN; <sup>6</sup>Apple maggot red ball; <sup>\*</sup>Unbaited red ball; <sup>\*\*</sup>Baited red ball; <sup>7</sup>Apple maggot yellow board.

COUNTY	DATE	SITE	ECB <sup>1</sup>	TA <sup>2</sup>	BCW <sup>3</sup>	SCW <sup>4</sup>	DCW <sup>5</sup>	CE <sup>6</sup>	CEL <sup>7</sup>	WBC <sup>8</sup>	FORL <sup>9</sup>	VCW <sup>10</sup>
Chippewa	7/03-7/11	Chipp Falls	8	0	0	0	5	0	0	0	0	0
Columbia	7/03-7/11	Arlington	0	3	1	6	0	0	1	1	1	0
Dane	7/03-7/11	Mazomanie	1	2	0	0	0	0	0	1	0	0
Grant	7/03-7/11	Lancaster	1	1	0	2	0	0	1	0	1	0
Manitowoc	7/03-7/11	Manitowoc	2	4	0	5	0	0	2	0	3	0
Marathon	7/03-7/11	Wausau	4	4	0	35	0	0	0	0	0	0
Monroe	7/03-7/11	Sparta	0	0	0	4	0	0	0	5	2	0
Rock	7/03-7/11	Janesville	0	3	0	0	0	0	4	0	4	0
Walworth	7/03-7/11	East Troy	0	0	5	0	0	0	0	0	5	0
Wood	7/03-7/11	Marshfield	11	1	1	32	2	0	0	0	0	2

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