

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, tranquil weather favored continued crop development across the state. Temperatures averaged 1 to 4°F above normal, with most areas recording daytime highs in the lower to mid-80s. A few thunderstorms occurred in the northwest on Tuesday evening as a cold front moved southeast through Wisconsin, but conditions were otherwise dry and very suitable for harvesting of alfalfa and small grains. Most of the state's crops have made up for spring planting delays and progress is now on pace with last year and ahead of the short-term average. In terms of temperatures, the growing season remains 10-14 days behind last year and 5-9 days behind the 30-year normal. The degree day accumulation at Milwaukee on August 17 was 1,820 using a base of 50°F, which compares to 2,137 degree days on the same date last summer and a normal total of 1,913 degree days.

LOOKING AHEAD

CORN ROOTWORM: Results of the annual survey show a pronounced increase in beetle populations in the southwestern areas. The average count is 1.1 beetles per plant in the southwest district, 1.4 per plant in the south-central district, 0.7 per plant in the southeast district, and 0.9 per plant in the central district. These figures compare to an

economic threshold of 0.75 beetle per plant and very low average counts of 0.2-0.4 per plant in the same counties last season. Preliminary survey findings are summarized on page 104.

EUROPEAN CORN BORER: The treatment window for second generation larvae has either closed or is expected to close shortly in southwest, south-central and west-central Wisconsin. Management decisions must be made in the immediate future, before the caterpillars have bored into corn stalks and ears.

WESTERN BEAN CUTWORM: Moth numbers have decreased to very low levels, signaling the end of the adult flight. The cumulative count as of August 17 was 4,357 moths in 175 pheromone traps. Individual counts from the 2011 trapping program are provided on the **PEST WATCH** website at <http://www.pestwatch.psu.edu> and can be requested by emailing clarissa.hammond@wi.gov. Network participants may remove their traps at this time.

SOYBEAN APHID: Surveys indicate that a small percentage of fields have been treated for control of this pest since late July, but in most instances foliar sprays have not been warranted. Aphid counts in 74 fields sampled from August 11-17 ranged from 1-103 per plant, with an average of only 13 per plant. All soybean acreage should be examined in the immediate future to evaluate aphid

densities. Final treatments must be applied before the R5.5 growth stage.



Soybean aphids

Krista Hamilton DATCP

CORN EARWORM: Large flights of 63-285 moths were registered in Dane County again this week. The risk of egg laying is likely to continue through late August, so regular scouting and control measures are still in order. Sweet corn is susceptible to infestation as long as green silks are present.

FORAGES

POTATO LEAFHOPPER: Representative counts in central and western Wisconsin are generally below economic levels. Two fields in Monroe County and one in Richland County contained 2.1-3.4 per sweep, but these were exceptional. Most sites yielded less than 1.5 per sweep and populations appear to be on the decline. Routine monitoring is recommended through late August.

PEA APHID: Counts remain very low in all surveyed areas, rarely exceeding 3.1 per sweep. Levels of this insect have been unusually low all season long.

CORN

CORN EARWORM: The late July-early August migration has resulted in light infestations across the state. Larvae ranging from $\frac{3}{4}$ - $1\frac{1}{2}$ inches were observed in Dane, Iowa, Green, La Crosse, Monroe, Racine, Richland and Vernon counties in the past week. Sweet corn producers should continue to check fields regularly for this pest as long as moths are appearing in pheromone traps and green silks

DEGREE DAYS JANUARY 1 - AUG 17

LOCATION	50°F	2010	NORM	48°F	40°F
Dubuque, IA	2262	2449	—	2083	3571
Lone Rock	2175	2397	—	1940	3473
Beloit	2292	2563	—	2065	3616
Madison	2119	2379	2061	1925	3389
Sullivan	2116	2432	2102	1934	3382
Juneau	2041	2335	—	1869	3269
Waukesha	1897	2230	—	1874	3095
Hartford	1893	2189	—	1877	3070
Racine	1835	2199	—	1822	3018
Milwaukee	1820	2137	1913	1814	2981
Appleton	1857	2184	1920	1836	3013
Green Bay	1755	2038	1851	1818	2884
Big Flats	1877	2179	—	1811	3056
Hancock	1904	2212	2025	1825	3088
Port Edwards	1853	2131	1949	1807	3015
La Crosse	2136	2396	2237	1961	3415
Eau Claire	1948	2196	2021	1902	3144
Cumberland	1748	1986	1929	1754	2891
Bayfield	1416	1610	1514	1473	2461
Wausau	1703	1966	1861	1726	2815
Medford	1723	1956	1687	1724	2837
Crivitz	1655	1943	—	1706	2759
Crandon	1544	1780	1506	1563	2610

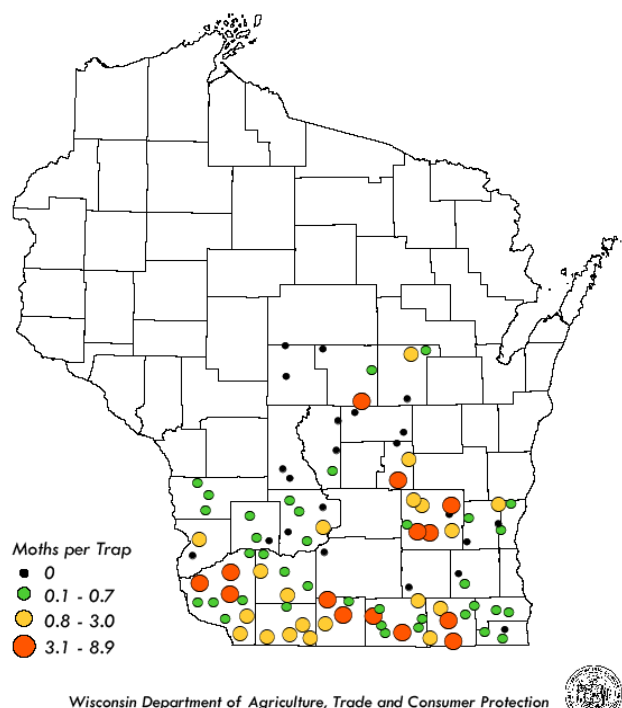
Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2011.
 NORMALS based on 30-year average daily temps, 1971-2001.

are present. Counts during the period of August 11-17 were as follows: Chippewa Falls 0, Coon Valley 8, S Cottage Grove 16, East Troy 1, Hancock 38, Janesville 7, Keyeser 63, Madison 38, Manitowoc 0, Marshfield 2, Mazomanie 2, Prairie du Chien 0, N Sun Prairie 285, S Sun Prairie 37, and Wausau 3.

CORN ROOTWORM: The annual beetle survey continued during the last reporting period. Preliminary results show a marked increase in populations in the southern areas as compared to 2010. Scattered fields in Dodge, Grant, Green, Green Lake, Portage, Rock and Walworth counties contained high adult populations in the range of 4.0 or more beetles per plant, and individually some plants had more than 38 beetles. The average population is 1.1 per plant in the southwest district, 1.4 per plant in the south-central district, 0.7 per plant in the southeast district, and 0.9 per plant in the central district. A count of 0.75 or more beetles per plant signals the potential for severe root feeding damage to non-Bt, continuous corn

next season. Economic populations were found in 34 of the 93 (37%) fields surveyed as of August 17.

Preliminary Corn Rootworm Survey Results



EUROPEAN CORN BORER: Egg deposition is expected to continue for another 1-2 weeks. The treatment interval for second generation larvae has closed near Beloit, Madison, La Crosse and Sullivan, and remains open only a few more days in the southeast and central districts. Inspections for egg masses and small larvae should occur before 2,100 degree days (base 50°F). Larvae from the current flight are primarily in the first and second instars in the southwest and west-central areas.

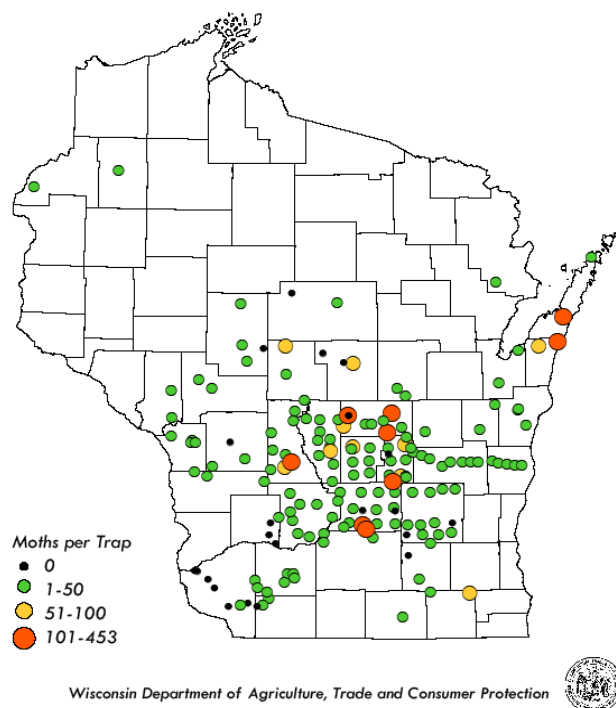


European corn borer moth

www.sequeila.co.uk

WESTERN BEAN CUTWORM: Moth counts have declined substantially at most pheromone trap locations. Results of the statewide trapping program are being organized for publication in the August 25 issue of the Wisconsin Pest Bulletin. As of August 17, the state total count is 4,357 moths in 175 traps, which represents a 60% decrease from 10,807 moths trapped in 2010. The highest individual count for the eight-week monitoring period was 453 moths near Spring Lake in Waushara County. Pheromone traps may be removed at this time.

2011 Western Bean Cutworm Trap Counts



SOYBEANS

SOYBEAN APHID: Surveys conducted earlier this week failed to detect economic populations in 74 sampled fields. Densities ranged from 1-103 per plant and averaged only 13 per plant. A small proportion of the surveyed acreage appeared to have been recently treated or spot-treated. Based on the latest results and counts made in July, foliar insecticides have not been justified for the vast majority of Wisconsin soybean fields this season.

JAPANESE BEETLE: This beetle is still very common over a wide area of the state. Defoliation levels in Jackson, Eau Claire, La Crosse, Monroe, Richland, and Vernon counties varied from 2-25% in the past week, which is

below the 35% threshold for soybeans in the seed-fill stages.



Japanese beetle leaf skeletonization

Krista Hamilton DATCP

GREEN CLOVERWORM: Larvae of various maturities are causing light to moderate defoliation of soybeans in the southern and western counties. Damage is prevalent, but not especially severe. Control is probably unwarranted this year.



Green cloverworm

Krista Hamilton DATCP

FRUITS

APPLE MAGGOT: Counts in south-central and south-eastern Wisconsin orchards have shown a marked increase in the past week. The cooperators near Mequon and Rochester reported high counts of 13-25 flies per red sphere trap, and in Dane County, traps collected 6-7 flies. Economic counts of 1 or more flies per unbaited trap or 5 or more flies per baited trap were registered at 13 of 23 (57%) locations from August 11-17. Apple

growers should continue to maintain traps through mid-September.

SPOTTED WING DROSOPHILA: A Michigan State University Extension report states that SWD flies are active in portions of Michigan where high numbers were documented last fall (Van Buren, Ottawa and Allegan counties). Research there has found that SWD is most active in mid- to late summer and that daily high temperatures in the 70s are ideal for reproduction and growth. The report also notes that SWD populations are being suppressed by many of the standard insect management programs implemented for control of blueberry maggots and Japanese beetles. Fly emergence is expected to intensify next month and continue through October or early November.



Spotted wing drosophila

John Davis <http://bugguide.net>

VEGETABLES

CUCURBIT DOWNY MILDEW: Two new cases of this disease were confirmed in commercial cucumber fields in Waupaca and Waushara counties on August 12. Incidence and severity levels were estimated at 15% in both fields. Other counties reporting outbreaks since late-July include Columbia and Dane. The Cucurbit Downy Mildew ipmPIPE website <http://cdm.ipmpipe.org/> forecasts a low risk of infection for Wisconsin cucurbits at this time.

ONION MAGGOT: Late-summer flies should begin appearing in the southeastern counties next week. Larvae from this third and final generation will overwinter in cull onions or bulbs left behind in fields. Proper sanitation and rotating to a non-crop host are the recommended control for growers who experienced maggot problems earlier this season.

WEEDS

LATE-SEASON WEEDS: Many weeds will reach maturity and shed seeds in the next few weeks. Some fraction of those seeds will establish and develop into new plants next spring. Late August is an opportune time to conduct a brief field assessment of this season's most persistent species. These records should be instructive when formulating weed management programs for 2012.

NURSERY & FOREST

IMPRELIS® HERBICIDE: Last week the U.S. Environmental Protection Agency (EPA) issued an order to E.I. DuPont de Nemours (DuPont) directing the company to immediately halt the sale, use or distribution of Imprelis, a new broadleaf turfgrass herbicide. The order follows the EPA's investigation into why numerous evergreens and other trees have been harmed following the use of the herbicide. Test data has confirmed certain coniferous trees, including Norway spruce and balsam fir, as susceptible to being damaged or killed by Imprelis.

As of August 2011, DuPont has submitted to the EPA over 7,000 adverse incident reports involving damage to non-target trees related to Imprelis applications, including several cases from Wisconsin.



Chlorosis and necrosis beginning at branch tips

Liz Meils DATCP

Imprelis herbicide damage is typified by wilted or weeping branches and chlorosis (yellowing) and necrosis (browning) beginning at the branch tips. Browning symptoms first appear in the top of the tree and progress toward the base. If damage from Imprelis is suspected,

please contact a lawn care provider or the UW-Madison Plant Disease Diagnostic Clinic at <http://pddc.wisc.edu>.

FALL WEBWORM: Webs constructed by the larvae of this pest are conspicuous on birch trees and other hosts statewide. Fall webworm is a native species that feeds on a wide range of deciduous forest, shade, fruit and ornamental trees. Its characteristic webs appear at this time of year, later than nests made by other web- and tent-making species found in Wisconsin.

This pest is primarily a cosmetic problem that can be controlled by removing and destroying the web and the surrounding branches. Insecticides or *Bacillus thuringiensis* (Bt) products are also effective against small larvae. Fall webworm feeding rarely results in severe damage and populations are usually regulated by more than 50 different species of parasites and 36 species of predators.



Fall webworm on crabapple tree

Liz Meils DATCP

TWO-SPOTTED SPIDER MITE: Columbine and daylilies in an Eau Claire County nursery were exhibiting light symptoms of mite infestation. Affected leaves initially have a speckled or stippled appearance, and later develop a reddish cast, with eventual desiccation occurring. Conventional control options include dormant horticultural spray oil or registered miticides. Populations should be monitored closely prior to applying a chemical treatment. Repeat applications may be needed if heavy populations persist.

APPLE INSECT & BLACK LIGHT TRAP COUNTS AUGUST 11 - 17

COUNTY	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	AM RED ⁶	YELLOW ⁷	GDD 50°F
Bayfield	Keystone	37	19	0	1	—	*3	*9	
Bayfield	Orienta	55	1	0	0	0	*1	0	
Brown	Oneida	—	—	—	—	—	—	—	
Chippewa	Chippewa Falls	0	6	20	10	3	*2	*0	
Columbia	Rio	—	—	—	—	—	—	—	
Dane	Deerfield	120	17	4	0	—	*6	*0	
Dane	Mt. Horeb	49	171	4	13	—	0	0	
Dane	McFarland	—	—	—	—	—	—	—	
Dane	Stoughton	97	62	4	4	0	*7	**1	
Dane	West Madison	50	30	3	6	—	—	—	
Fond du Lac	Campbellsport	—	—	—	—	—	—	—	
Fond du Lac	Malone	—	—	—	—	—	—	—	
Fond du Lac	Rosendale	68	34	2	0	—	*2	*0	
Grant	Sinsinawa	—	—	—	—	—	—	—	
Green	Brodhead	3	24	4	2	4	0	0	
Iowa	Mineral Point	90	73	3	11	2	0	0	
Jackson	Hixton	52	12	3	0	0	0	1	
Kenosha	Burlington	380	52	11	8	—	2	0	1858
Marinette	Niagara	83	2	9	8	—	0	0	1557
Marquette	Montello	80	0	2	0	—	*1	*0	
Ozaukee	Mequon	100	17	14	6	—	*13	*0	
Pierce	Beldenville	401	15	214	3	1	0	0	
Pierce	Spring Valley	156	22	4	0	0	*1.5	*0	
Polk	Turtle Lake	—	0	3	2	—	**6	*0	
Racine	Raymond	681	69	8	1	—	*0	*0	
Racine	Rochester	226	86	15	1	—	*25	*1	
Richland	Hillpoint	240	44	5	25	—	**6	**2	
Sheboygan	Plymouth	—	—	—	—	—	—	—	
Walworth	East Troy	5	2	1	0	—	**1	**0	
Walworth	Elkhorn	3	1	0	3	—	**0	**0	
Waukesha	New Berlin	159	25	14	5	—	*0	*0	

¹Spotted tentiform leafminer; ²Redbanded leafroller; ³Codling moth; ⁴Obliquebanded leafroller EASTERN; ⁵Obliquebanded leafroller WESTERN; ⁶Apple maggot red ball; *Unbaited AM trap; **Baited AM trap; ⁷Apple maggot yellow board.

COUNTY	SITE	ECB ¹	TA ²	BCW ³	SCW ⁴	DCW ⁵	CE ⁶	CEL ⁷	WBC ⁸	FORL ⁹	VCW ¹⁰
Chippewa	Chippewa Falls	14	0	0	0	10	0	1	1	0	0
Columbia	Arlington	2	1	0	0	2	0	0	0	0	0
Dane	Mazomanie	1	0	0	0	4	0	0	2	0	0
Grant	Prairie du Chien	4	0	0	0	0	0	0	17	9	0
Manitowoc	Manitowoc	1	26	2	8	0	0	9	1	27	31
Marathon	Wausau	4	0	0	7	78	4	2	4	3	0
Monroe	Sparta	12	0	0	6	0	0	0	0	0	0
Rock	Janesville	0	3	0	0	0	0	2	0	0	0
Walworth	East Troy	0	0	2	0	10	1	0	4	4	0
Wood	Marshfield	17	8	0	6	12	2	6	4	7	0
Vernon	Coon Valley	6	2	0	0	14	3	0	0	7	0

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