

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

Cooler weather predominated following an exceptionally warm and stormy Memorial Day weekend. After the passage of a cold front on Monday, temperatures abruptly fell from the 80s and 90s to the 60s by Wednesday. Seasonably cool conditions lingered for the remainder of the week, with reports of frost occurring in the north-central and northeastern areas. At the end of May, the outlook for the state's major field crops is mixed but generally favorable. Planting of corn, oats and soybeans is nearly complete, ahead of last year and the five-year average for all three crops. Last weekend's rain, although locally excessive in portions of the north, was beneficial for southern Wisconsin, where soil moisture levels are currently rated as very short to short for an average of 36% of crop lands. The spring of 2012 (March-May), according to the National Weather Service, has been the warmest on record for Madison, Milwaukee and possibly several other locations in the state.

LOOKING AHEAD

EUROPEAN CORN BORER: The most advanced corn will be susceptible to infestation by first generation corn borers during the first week of June. Egg deposition has been occurring for several weeks and the spring moth flight has peaked across the southern half of the state.

Early signs of damage, including leaf pinholes and shotholes, should become noticeable in southern and central Wisconsin corn fields in the next 1-2 weeks.

EMERALD ASH BORER: Beetles were noted in West Bend on May 29, approximately 12-14 days earlier than in the previous two years. A comprehensive detection survey including 2,118 traps is now underway in 61 Wisconsin counties. Residents within 15 miles of an infestation concerned about their ash trees should consult with an arborist or tree care professional in the immediate future. A variety of treatments are available, though none are guaranteed to prevent or reverse an infestation.

SQUASH VINE BORER: The adult emergence period is expected to begin by June 5 in the far southern areas, a few days later than last predicted. Pumpkins, squash and other vine crops should be examined for eggs and evidence of feeding from 900-1,000 degree days (base 50°F). Controls must be applied when the adults are first noticed and before the larvae bore into vines.

CHERRY SCALLOP SHELL MOTH: Extension Entomologist Phil Pellitteri reports that these moths are appearing in high numbers in Wood County. The gregarious, nest-making larvae of this insect are defoliators of black cherry and other native cherry trees. Periodic outbreaks are uncommon in Wisconsin but can last for 2-3 years before populations are significantly reduced by an egg-

parasitizing wasp. It remains unclear if the abundance of moths in the central area of the state this spring will result in a full-scale larval outbreak in June.



Cherry scallop shell moth

miacy.homestead.com

FORAGES

ALFALFA WEEVIL: Larvae are common but not numerous in second crop alfalfa. The average count in the past week was 1 per sweep, with 10-70% leaf tip feeding. Individual fields in Green and Richland counties showed 2-4 larvae per sweep and 50-70% defoliation, but these cases were exceptional. Damage is expected to subside by early to mid-June as the remaining third and fourth instar larvae enter the non-feeding pupal stage.

POTATO LEAFHOPPER: Numbers have not changed significantly since the last report. Representative counts in the southern, central and east-central areas range from 0.1-1.2 per sweep, with an average of 0.4 per sweep. As of May 30, economic populations of leafhoppers have not been noted in any DATCP-surveyed alfalfa field.

PLANT BUG: Alfalfa fields in the southern half of the state are showing low populations of 0.2-1.5 per sweep. The economic threshold is 5 per sweep. Nymphs are now more abundant than adults in most fields.

PEA APHID: Surveys in Calumet, Dane, Fond du Lac, Grant, Green, Iowa, Lafayette, Richland, Rock, Sauk and Vernon counties yielded variable counts of 0.7-8.0 aphids per sweep and an average of 3.2 per sweep. Populations appear to have declined slightly with the recent heavy rain and harvesting of first crop alfalfa.

DEGREE DAYS JANUARY 1 - MAY 30

LOCATION	50°F	2011	NORM	48°F	40°F
Dubuque, IA	836	455	549	846	1487
Lone Rock	831	428	—	820	1442
Beloit	865	464	556	837	1507
Madison	801	383	527	805	1410
Sullivan	794	393	499	782	1398
Juneau	746	347	—	732	1335
Waukesha	668	299	—	656	1240
Hartford	654	288	—	651	1219
Racine	612	245	—	625	1179
Milwaukee	598	242	422	607	1156
Appleton	644	279	459	645	1202
Green Bay	569	226	426	593	1119
Big Flats	720	326	—	695	1280
Hancock	711	316	515	686	1271
Port Edwards	675	307	502	651	1228
La Crosse	782	396	587	768	1392
Eau Claire	671	335	515	660	1246
Cumberland	553	299	450	555	1102
Bayfield	395	182	—	384	832
Wausau	581	271	444	578	1102
Medford	574	277	394	582	1109
Crivitz	520	221	—	526	1041
Crandon	497	239	358	485	987

Method: ModifiedB50: Sine48: ModifiedB40 as of Jan 1, 2012. NORMALS based on 30-year average daily temps, 1981-2010.

CORN

EUROPEAN CORN BORER: The spring flight has peaked in the southern and central areas. Larvae resulting from the flight are in the early instar stages and fresh whorl-feeding injury should become evident during the first two weeks of June. The optimal treatment window for first generation corn borers has opened in the southernmost areas of the state with the accumulation of 800 degree days (base 50°F), although no Wisconsin corn field qualifies for treatment at this time.

TRUE ARMYWORM: Larval infestation rates ranged from 1-12% in corn fields examined from May 24-30. These averages are considered non-economic, but actual populations may be larger and more widespread than indicated by our surveys. Continued scouting of corn and small grains is strongly advised this month. In addition, the DATCP black light trapping network continues to report significant moth flights, indicating the potential for

a consistent population of first generation larvae for several more weeks.

STALK BORER: Migration of stalk borer larvae from grasses and broadleaf weed hosts into corn is expected to accelerate next week. Spot treatment may be warranted for corn fields that show 10% of plants with leaf feeding. Damage should become pronounced by mid-June.



Stalk borer leaf feeding

Krista Hamilton DATCP

SOYBEANS

SOYBEAN APHID: Surveys for aphids in the southwest and west-central counties were negative as of May 30. The initial colonization of Wisconsin soybeans can be anticipated by mid-June.

BEAN LEAF BEETLE: Soybean fields in La Crosse, Monroe, Richland and Vernon counties are showing 2-10% of plants with minor defoliation caused by this insect. Damage is currently limited to a few holes in the leaves, but injury could become more severe next week as additional beetles migrate to emerging soybeans.

FRUITS

OBLIQUEBANDED LEAFROLLER: The first flight of moths continued for the sixth week and is expected to persist through early June. Apple growers who have experienced late-season OBLR problems in recent years should consider setting additional traps now to determine where to concentrate sampling efforts. In addition, monitoring the second brood now appearing in terminals will also indicate the potential for problems in August.

APPLE MAGGOT: Degree day accumulations in south-central, southwest and west-central Wisconsin will be appropriate for fly emergence by June 5. Red sphere and yellow sticky traps should be placed at this time to detect the earliest adults. The treatment threshold remains at five flies per trap per week for traps enhanced with an ammonia lure and one fly per trap per week for unenhanced traps.

CODLING MOTH: Most apple orchards are 250 or more degree days (base 50°F) beyond the first biofix and treatments for first generation larvae have been applied. Larvicides or other controls should be maintained to prevent problems by the current and subsequent summer generations. Apple growers are reminded that pheromone lures degrade rapidly at warm temperatures and should be replaced every 3-4 weeks.

ROSE CHAFER: This beetle has been observed on perennials and in home gardens in the past week. The adults deposit eggs in the soil that hatch into grubs which feed on the roots of grasses, weeds and garden plants. Defoliation is expected to increase in the next 3-4 weeks, especially in areas of the state with sandy soils.



Rose chafer beetle

Krista Hamilton DATCP

VEGETABLES

COLORADO POTATO BEETLE: Overwintered adults are now colonizing potato fields in the Central Sands region of the state. The bright orange-yellow eggs deposited by the females should be apparent on the undersides of leaves in the week ahead. At normal early June temperatures, the eggs hatch in 4-8 days and larvae mature to the third instar stage in another 5-9 days. These early

individuals are usually less destructive than the summer generation. Treatment is justifiable for potatoes when defoliation of pre-flowering, 6-8 inch plants surpasses 20-30%.

VARIEGATED CUTWORM: Reports of eggs and small larvae continue to circulate. The problem appears to be limited to the northern half of the state, from Eau Claire County east to Door County and northward. University of Wisconsin-Extension Entomologist Phil Pellitteri notes that he has not observed a variegated cutworm egg population of this magnitude in his 35 years in the lab. The unprecedented numbers of larvae emerging from the eggs laid on the siding and windows of northern Wisconsin homes indicates the potential for extremely high larval populations in home gardens and field crops in June.



Variegated cutworm larva

Phil Pellitteri UWEX

CORN EARWORM: Low numbers of moths were registered near Janesville, Prairie du Chien and Ripon since the last report. Cumulative counts range from 3-37 per trap as of May 30. These very early migrants are unlikely to have any impact on corn or other hosts. According to insectforecast.com, the risk of additional corn earworm migrants entering the state through June 5 is low.

WINTER CUTWORM: Moths were observed in Dane, La Crosse, Rock and Trempealeau counties from May 24-30, 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 of this exotic European species have occurred sporadically in the state in the

past 4-5 years, although economic damage to agricultural crops has never been documented.



Winter cutworm moth, *Noctua pronuba*

Willem 54 11-29-08

WEEDS

WILD PARSNIP: Mechanical control of wild parsnip is advised at this time. Plants along roadsides are already 1-2 feet tall and will become increasingly difficult to manage by mid-June. Mowing plants is an option, but is usually a less effective approach than removal in the long-term. Protective equipment must be used when handling wild parsnip to prevent exposure to its toxic sap.



Wild parsnip

wiseacre-gardens.com

SOYBEAN WEEDS: Control of weeds in soybeans should occur 9-19 days post-emergence depending upon row spacing, and sometimes again prior to canopy closure. The need for a second application of glyphosate or another material is based on the density and timing of secondary flushes of weeds. Roundup Ready soybeans,

despite appearing vigorous, can suffer yield loss if weeds are allowed to grow beyond 4-6 inches.

NURSERY & FOREST

ELM LEAFMINER: Larvae and leaf damage were noted on elm 'Pioneer' in an Ozaukee County nursery. The larval stages of this pest feed in between the epidermal layers of elm leaves, causing severe browning and eventual leaf drop. Damage is generally aesthetic and control is rarely needed, but repeated defoliation by leaf miners can impact the health of infected trees.



Elm leafminer injury

ext.colostate.edu

GYPSY MOTH SPRAY: *Bacillus thuringiensis* var. *kurstaki* (Btk) treatments were applied to approximately 2,270 acres in Bayfield, Douglas and Sawyer counties on May 29-30, marking the completion of all Btk spraying in the state for the 2012 season. Mating disruption, or pheromone flake treatment, is scheduled to begin by mid-June in southwestern Wisconsin. The pheromone flakes are intended to interfere with population growth by disrupting gypsy moth mating.

GYPSY MOTH SURVEY: Traps are now being placed at sites in 50 Wisconsin counties. As of May 30, about 3,195 traps, or 17% of the expected total, have been set. An estimated 19,000 traps will be deployed this year as part of the annual trapping program.

BLACK SPOT: Symptoms of this fungal disease were observed on several rose cultivars at garden centers in Outagamie and Waukesha counties. Diagnostic characteristics are small, round black spots on the leaf surface which enlarge and cause leaves to turn yellow

and prematurely fall. Development of this rose disorder is favored by humid, wet conditions and can be alleviated by increasing air circulation and removing infected leaves and debris.



Black spot on rose

Liz Meils DATCP

FLETCHER SCALE: Egg hatch and the emergence of mobile crawlers may begin in the next few days in southern Wisconsin. This scale pest of arborvitae, juniper and yew can cause premature needle drop or branch dieback. For severe infestations, horticultural oils or soaps, insect growth regulators, or conventional insecticides may be used as soon as the crawlers are noticed.



Mature Fletcher scale eggs on yew

Liz Meils DATCP

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 24 - 30

COUNTY	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	AM RED ⁶	YELLOW ⁷	GDD 50°F
Bayfield	Keystone	0	12	1	1				
Bayfield	Orienta	6	1	—	—				
Brown	Oneida	—	—	—	—				
Chippewa	Chippewa Falls	0	0	8	14				
Columbia	Rio	6	0	1	28				
Crawford	Gays Mills	9	0	10	2				
Dane	Deerfield	323	—	1	0				
Dane	McFarland	113	41	4	0				
Dane	Mt. Horeb	0	1	19	19				
Dane	Stoughton	12	0	12	6				
Dane	West Madison	22	0	11	18				
Dodge	Brownsville	0	4	6	3				
Fond du Lac	Campbellsport	—	—	—	—				
Fond du Lac	Malone	0	1	14	17				
Fond du Lac	Rosendale	3	17	1	0				
Grant	Sinsinawa	—	—	—	—				
Green	Brodhead	2	0	6	46				
Iowa	Mineral Point	—	0	20	23				
Jackson	Hixton	42	6	3	2				
Kenosha	Burlington	40	0	0	9				
Marathon	Edgar	11	18	11	2				
Marinette	Niagara	8	0	42	0				
Marquette	Montello	2	2	3	0				
Ozaukee	Mequon	0	0	23	18				
Pierce	Beldenville	2	0	26	3				
Pierce	Spring Valley	0	3	11	13				
Polk	Turtle Lake	0	1	14	0				
Racine	Raymond	9	1	8	17				
Racine	Rochester	0	1	31	10				
Richland	Hillpoint	127	0	2	5				
Sheboygan	Plymouth	0	0	51	3				
Walworth	East Troy	0	5	0	2				
Walworth	Elkhorn	1	3	1	3				
Waukesha	New Berlin	2	2	8	21				

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	8	0	0	0	0	0	1	0	0	0
Columbia	Arlington	3	1	0	0	0	0	3	0	1	0
Crawford	Prairie du Chien	0	0	0	0	0	0	0	0	3	1
Fond du Lac	Ripon	3	38	0	0	0	0	0	0	2	0
Manitowoc	Manitowoc	0	11	0	0	0	0	1	0	8	0
Marathon	Wausau	4	49	5	28	0	2	12	0	2	0
Portage	Plover	7	0	0	0	0	0	0	0	0	0
Rock	Janesville	1	14	0	0	0	0	5	0	4	0
Wood	Marshfield	4	13	2	10	0	0	3	0	1	2

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