

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
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WEATHER & PESTS

Seasonably warm, mostly dry weather returned this week. Light showers occurred in the southern and central portions of the state, but other areas remained dry. Above-normal temperatures were favorable for fieldwork and emergence of corn, soybeans and early-planted potatoes. Harvest of first growth alfalfa began in the south-central and southwest counties, while planting of corn and soybeans continued at an efficient pace. Many acres of corn have emerged throughout the south and other crops such as oats, peas and winter wheat are developing rapidly. Insect activity also increased measurably with the mild temperatures, particularly in apple orchards, and problems may develop with the hot, humid conditions predicted for next week. Based on degree day accumulations through May 20, the growing season is now 3-16 days ahead of last year and 2-10 days ahead of normal, depending on the region of the state.

LOOKING AHEAD

CODLING MOTH: Substantial numbers of moths are appearing in pheromone traps in the southern and north-western areas. Reports of activity were received from 17 of 29 orchards in the past week, with a high count of 51 moths per trap near Stoughton in Dane County. Biofix was set from May 17-19 in the south.

ALFALFA WEEVIL: Larvae have become increasingly evident in alfalfa, but counts remain low. Leaf tip feeding is still very light in the southern half of Wisconsin and only a few fields are showing 5-10% defoliation. Since most alfalfa is near the optimal stage for harvest and the weather is agreeable, there is no reason why significant injury should occur.

PLUM CURCULIO: Warm weather conditions this week caused an increase in plum curculio activity. Adults began migrating into apple orchards by late April, but their progress was delayed by low temperatures in the previous two weeks. With the hot weather predicted for the remainder of the month, it is recommended that growers continue scouting early varieties at regular intervals for evidence of feeding and oviposition.

EUROPEAN CORN BORER: The spring flight began this week with the capture of 1-4 moths at the Janesville and Marshfield black light trap locations. According to the European corn borer phenology model, the majority of moths should emerge around June 1-7 in the southern areas, June 5-11 in the central areas, and a week or more later in the northern areas.

BLACK CUTWORM: Larvae from migrants that arrived in late April are mostly in the second and third instars, and should grow large enough to begin cutting corn seedlings by May 29. Scouting is imperative for all corn fields dur-

ing the 10-14 days after emergence and until the 5-leaf stage. Early detection and control is advantageous because later rescue treatments are often ineffective.

FORAGES

ALFALFA WEEVIL: Larvae are noticeable but not numerous, averaging 4 per 10 sweeps in most fields. Damage is expected to intensify over the next two weeks and control may be warranted if tip feeding exceeds 40% more than 7-10 days ahead of the suggested harvest date. It is important that chemical treatments not be applied unless absolutely necessary. Harvesting early is the preferred control method.

PLANT BUGS: Alfalfa surveyed in the southern counties showed mixed counts of 1-6 per 10 sweeps, which is low in comparison to the threshold of 5 per sweep. First and second instar nymphs of the alfalfa plant bug are appearing more commonly.

PEA APHID: This aphid was the predominant insect found in alfalfa this week. Representative counts range from 5-22 per 10 sweeps in Columbia, Dane, Jefferson, Portage and Rock counties and from 18-170 per 10 sweeps in Crawford, Grant, Sauk and Vernon counties. Winged adults comprise about 10% of the population, signaling that migration to peas is imminent.



Pea aphids

www.bbsrc.ac.uk.png

MEADOW SPITTLEBUG: Nymphs are still very small but have moved to the tips of alfalfa plants, in addition to the axils. The highest numbers of spittle masses are present in the margins of fields and only range from 1-2 per 20 alfalfa stems.

DEGREE DAYS JANUARY 1 - MAY 20

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	461	343	—	469	947
Lone Rock	460	346	—	443	912
Beloit	501	353	—	497	983
Madison	426	225	401	419	873
Sullivan	458	343	386	437	904
Juneau	416	320	—	401	850
Waukesha	379	328	—	364	796
Hartford	360	311	—	353	781
Racine	329	300	—	340	748
Milwaukee	318	294	295	324	729
Appleton	367	261	318	361	789
Green Bay	299	218	306	301	707
Big Flats	419	315	—	380	822
Hancock	420	304	401	384	822
Port Edwards	403	294	368	371	807
La Crosse	463	348	432	447	912
Eau Claire	412	324	372	389	838
Cumberland	371	284	339	331	762
Bayfield	247	174	227	211	583
Wausau	364	239	318	329	748
Medford	365	258	273	331	758
Crivitz	310	211	—	294	704
Crandon	327	202	276	282	686

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

POTATO LEAFHOPPER: Populations throughout the southern half of the state remain stationary at 1-3 per 10 sweeps. Reproduction has not yet started.

CORN

BLACK CUTWORM: Light injury attributed to this insect was observed this week in a few scattered fields in western Dane and Sauk counties. Approximately 2% of the plants in the edge rows showed small, irregular holes in the leaves.

The larval offspring of moths that arrived late last month are in the early instars and should be capable of cutting corn seedlings by May 29. At current temperatures, the primary damage period could extend for 2-3 weeks. Crop consultants and field scouts are advised to carefully inspect corn for evidence of this pest next week and in early June. A rescue treatment should be considered if more than 5% of plants are damaged.

WIREWORM: This soil pest has been found in corn and alfalfa in some areas of the state, and like the black cutworm, can injure emerging plants in corn fields, home gardens and fresh-market gardens. In severe situations, treatment may be necessary.



Wireworms

www.omafra.gov.on.ca

SOYBEANS

BEAN LEAF BEETLE: Insignificant defoliation was noted in VE-V1 soybean fields near Spring Green and Franklin in Sauk County. Although fewer than 3% of the plants were affected, this observation emphasizes the need for close surveillance of emerging soybeans. Control may be warranted if populations exceed 39 beetles per foot of row or 40% of plants show defoliation during the vegetative growth stages.



Bean leaf beetle

Steve Scott bugguide.net

SOYBEAN APHID: The first soybean aphids of the 2010 growing season could begin to colonize Wisconsin soy-

bean fields by early to mid-June. Previous first detections occurred on June 9 in 2009, June 18 in 2008, May 24 in 2007, June 7 in 2006, and June 3 in 2005. It is speculated that populations may be reduced initially this season after a fungal pathogen caused unprecedented mortality at overwintering sites last fall. Surveys of buckthorn in Indiana, Ohio and Michigan two weeks ago found only very small colonies.

SMALL GRAINS

WHEAT DISEASES: Surveys conducted in 16 wheat fields in Racine, Walworth, Green, Dane, Dodge, Green Lake and Fond du Lac counties found stripe rust in 1 field (Dodge County, Feekes 10.1, the most advanced field surveyed), at trace levels and highly localized. Other fields checked had light infection with powdery mildew and Septoria leaf blotch, with fields generally in the Feekes 6-8 growth stages. Scouting wheat to determine the need to protect the emerged flag leaf from fungal diseases is encouraged.



Wheat stripe rust

pubs.caes.uga.edu

FUSARIUM HEAD BLIGHT: Wheat growers should anticipate the threat from Fusarium head blight, and take advantage of the information provided by the Fusarium Head Blight Risk Assessment Tool at http://www.wheatscab.psu.edu/riskTool_2010.html. This website provides current commentary on the wheat crop situation and offers an email alert system for growers.

STEM RUST: Aeciospores are being produced on barberry bushes in Dane and Ozaukee counties. Rust on barberry in Manitowoc and Marquette counties has not yet begun to produce spores.

FRUITS

OBLIQUEBANDED LEAFROLLER: Reports indicate there is great variability in development of this insect. Larvae range from the early instars in the southeast counties to late instars (near maturity) in the northwest and west-central counties. A few adults were registered for the first time this week in the southwest.



Obliquebanded leafroller moth

Ilona L. bugguide.net

CODLING MOTH: A significant increase in codling moth trap counts was charted in the last week. Numbers varied from 0-51 per trap, with an average of 5 per trap. Biofix was set at most southern Wisconsin orchards between May 17 and 19. Orchard IPM Specialist John Aue suggests that it might be beneficial to postpone larvicide applications until 350-450 degree days post-biofix, when the majority of the larval population will be active. Sprays applied at the traditional 250 degree day threshold may be too early to effectively control all of the larvae.

SPOTTED TENTIFORM LEAFMINER: The first flight has slowed considerably in the southern half of the state, and trap counts have declined to their lowest levels in five weeks. The second of three flights this season is expected to begin by early June in the southern and central areas, once 539-750 degree days (base 50°F) are surpassed. Assessments to determine the average number of first generation sapfeeder mines per leaf should be performed at this time.

CRANBERRY REPORT: Warm temperatures this week spurred several noteworthy events in the cranberry growing areas of the state. Plant development advanced

to the roughneck stage in many beds, and hooks are beginning to show at bog edges on the 'Ben Lear' variety. Insect activity also accelerated in response to the seasonable weather. Numbers of spanworms, loopers, false armyworms and cutworms are increasing, and early instar larvae and webbing of the sparganothis fruitworm are appearing at some sites.

APPLE SCAB: Hot, humid weather in the days ahead is likely to precipitate a second round of scab lesions from a very early infection period. Signs of any major outbreaks should be evident by May 23-24.

WEEDS

WEED CONTROL: Emerging corn is now entering the critical period of weed control, the interval in the crop life cycle during which weed growth must be suppressed to prevent yield loss. Corn fields kept free of weeds through the V6-V8 stages should not incur significant losses. For soybeans, the critical period extends through the V3 development stage.

COW PARSNIP: Early flowering plants are visible in forested areas in the southern and west-central counties. The sap of cow parsnip contains a toxin that causes phytophotodermatitis (severe skin burns) with exposure to sunlight. Caution should be taken to avoid direct contact with the sap when removing plants or working in wooded areas.



Cow parsnip leaf

David Eagen WDNR

WILD PARSNIP: Rosettes of this invasive and toxic plant are appearing along roadsides in the southern half of the state. Similar to cow parsnip, this member of the carrot

family also causes a severe skin rash and blistering when its sap contacts skin and is exposed to sunlight.



Wild parsnip rosette

Clarissa Hammond DATCP

NURSERY & LANDSCAPE

EUONYMUS CATERPILLAR: Nursery inspectors report that second instar larvae are feeding on euonymus in Dane County. Both the larvae and webbing are still fairly small. Prompt removal of infested branches is advised, before defoliation worsens and webbing expands to envelope the entire plant. For larger infestations, several insecticides, including the bacterial agent Btk, are available.



Euonymus caterpillar

Liz Meils DATCP

COLUMBINE SAWFLY: Larvae were abundant on the columbine variety 'Origami Red and White' in Chippewa County. According to the inspector, about half of the potted plants had been completely defoliated. Removing the larvae and infested leaves by hand is the recommended control.

CINARA APHID: Moderate-heavy colonies are infesting Black Hills spruce and white spruce in Dane County. These large brown or black aphids generally have no effect on conifers, except in drought years or in high population situations when black sooty mold develops on needles and branches.

TOBACCO RATTLE VIRUS: Numerous ornamentals have been submitted to the Plant Industry Laboratory for diagnosis in past weeks, many of which displayed ringspots and color bleeding caused by tobacco rattle virus (TRV). Recent inspections found virus symptoms on peony 'Double Pink' and 'Double White' in Dane County, on peony 'Kansas' in Chippewa County, and on various bleeding hearts in Brown, Calumet, Dane, Jefferson, Washington and Waukesha counties (official diagnosis is pending). As of May 21, fourteen positive cases have been verified from Wisconsin greenhouses and nurseries. Plant varieties found to be infected this season include anemone, astilbe, bleeding heart, barrenwort, delphinium, hosta, larkspur, Oriental lily, peony and Virginia bluebells.



Tobacco rattle virus on peony

Liz Meils DATCP

FALL CANKERWORM: Larvae measuring about 5/8 inch in length were noted in the Lake Mills areas of Jefferson County on May 20. Historically, periodic, widespread outbreaks have occurred in the southern counties. Preferred hosts include oak, elm, box elder and apple.

TRAPPING NETWORKS

BLACK LIGHT TRAPS: A modest increase in activity by nocturnal moths occurred this week. The first European corn borers were registered at a few locations, and low

numbers of true armyworms appeared in traps at East Troy, Janesville, Marshfield and Wausau. Other species collected during the last reporting period were the black cutworm, celery looper, forage looper and variegated cutworm.

TRUE ARMYWORM: Adults have been flying on warmer evenings for several weeks and continue to appear in black light traps. Counts generally have been low, except from May 4-5 when 183 moths were collected at Janesville. No reports of serious larval infestations in small grains or feeding injury have been received to date.

FOREST

EMERALD ASH BORER: The installation of purple panel traps is underway in 71 Wisconsin counties. As of May 19, seasonal field workers have set 1,485 traps, or 19% of the expected total. Phenology models indicate that the adult flight period may begin this weekend in the south-central, southwest and west-central areas, and in about 5-12 days in the southeast. Preventive insecticide treatments of ash trees should be applied at this time. In most instances, a tree care professional will be required to administer the approved insecticides. Further information on EAB insecticide options is available at <http://www.emeraldashborer.wi.gov/articleassets/InsecticideOptionsForProtectingTreesFromEAB.pdf>.

weather last week. Some of the defoliation can be attributed to frost injury. Symptoms of anthracnose vary by host plant, but typically appear as irregular necrotic spots on the leaves that merge to form large dead areas. The defoliation should not be mistaken for emerald ash borer injury. No corrective action is needed, aside from disposing of infected leaf litter and debris to reduce inoculum sources.



Ash anthracnose

www.extension.umn.edu



EAB trapper setting purple panel trap

Mick Skwarok DATCP

ANTHRACNOSE: A report from the Northeast Region DNR Forest Health Specialist indicates that ash trees in Brown, Milwaukee, Oconto, Outagamie, Waupaca and Wood counties are dropping leaves prematurely due to this fungal disease, probably aggravated by cold, wet

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 14 - 20

COUNTY	DATE	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	AM RED ⁶	AM YELLOW ⁷
Bayfield	5/14-5/20	Keystone	0	17	0	0	—		
Bayfield	5/14-5/20	Bayfield	—	—	—	—	—		
Bayfield	5/10-5/17	Orienta	4	0	0	0	—		
Brown	5/14-5/20	Oneida	650	1	4	0	—		
Chippewa	5/14-5/20	Chippewa Falls 1	0	8	7	0	0		
Chippewa	5/14-5/20	Chippewa Falls 2	—	—	—	—	—		
Dane	5/12-5/19	Deerfield	0	0	3	0	0		
Dane	5/14-5/20	McFarland	0	0	51	0	0		
Dane	5/13-5/20	Stoughton	8	6	1	0	—		
Dane	5/14-5/20	West Madison	0	0	0	0	0		
Dodge	5/14-5/20	Brownsville	7	3	1	0	—		
Fond du Lac	5/14-5/20	Campbellsport	45	2	0	1	—		
Fond du Lac	5/14-5/20	Malone	10	2	0	0	—		
Fond du Lac	5/14-5/20	Rosendale	23	6	1	0	—		
Grant	5/14-5/20	Sinsinawa	0	0	1	0	0		
Green	5/14-5/20	Brodhead	0	0	2	0	—		
Iowa	5/14-5/20	Dodgeville	32	6	38	16	7		
Iowa	5/14-5/20	Mineral Point	0	0	4	0	0		
Jackson	5/14-5/20	Hixton	36	6	0	0	0		
Kenosha	5/14-5/20	Burlington	40	0	2	0	—		
Marinette	5/14-5/20	Niagara	96	0	0	0	—		
Marquette	5/14-5/20	Montello	10	3	0	0	—		
Ozaukee	5/12-5/19	Mequon	90	1	4	0	—		
Pierce	5/14-5/20	Beldenville	150	8	14	4	0		
Pierce	5/13-5/20	Spring Valley	47	31	0	0	—		
Racine	5/14-5/20	Raymond	39	0	0	0	—		
Racine	5/14-5/20	Rochester	70	0	8	0	—		
Richland	5/11-5/17	Hillpoint	14	1	1	0	1		
Sheboygan	5/14-5/19	Plymouth	46	5	4	0	—		
Walworth	5/14-5/20	East Troy	3	1	0	0	—		
Walworth	5/14-5/20	Elkhorn	0	3	0	0	—		
Waukesha	5/14-5/20	New Berlin	34	0	5	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	5/14-5/20	Chipp Falls										
Columbia	5/14-5/20	Arlington										
Dane	5/14-5/20	Mazomanie										
Grant	5/14-5/20	Lancaster										
Manitowoc	5/14-5/20	Manitowoc										
Marathon	5/15-5/20	Wausau	0	8	0	0	0	0	0	0	0	0
Monroe	5/14-5/20	Sparta										
Rock	5/14-5/20	Janesville	1	20	1	0	0	0	2	0	0	2
Walworth	5/13-5/20	East Troy	0	2	0	0	0	0	0	0	1	0
Wood	5/13-5/20	Marshfield	4	22	5	0	0	0	3	0	1	1

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