

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

Rain and scattered thunderstorms stalled spring fieldwork following a week of significant planting progress. After a pattern of warm, mostly dry late April weather expedited planting throughout the state, several days of widespread showers temporarily slowed field activities. According to the latest USDA NASS crop report, spring tillage and planting operations were well ahead of both last year and the 5-year average at the start of the week. Oat producers had seeded 37% of the state's crop, 21 percentage points or two weeks ahead of last year and nine points or four days ahead of the average. Substantial planting of corn had also started, with 11% of this year's intended acres already in the ground compared to only 3% last season and a 5% average. April has provided 15.6 days of weather suitable for fieldwork, the most favorable early planting window in five years. The opportunity to resume normal spring routines has brought Wisconsin farmers and gardeners a welcome diversion from the uncertainty associated with the COVID-19 pandemic.

LOOKING AHEAD

BLACK CUTWORM: Counts have been low since the first moths appeared in survey traps on April 8. The DATCP network of 44 pheromone traps monitoring the

annual black cutworm (BCW) migration has reported only 109 moths this month, and intense flights of nine moths in two nights have been not been documented as of April 29. The scarcity of BCW moths may signal a low risk for spring infestations.

BROWN MARMORATED STINK BUG: A milder-than-average winter is likely to have favored survival of this invasive pest. Growers in southern and eastern Wisconsin where BMSB has been established for 10 years should expect to see stink bug damage in field, fruit, and vegetable crops this season. With the recent addition of Dodge, Green, Lafayette and Waupaca counties, BMSB reports have now been confirmed in 32 of Wisconsin's 72 counties.

BOXWOOD BLIGHT: Consumers should closely inspect all boxwood plants for blight symptoms before purchase and installation. Boxwood blight was found on shrubs at a Dane County residence last October, marking the first report of the disease in the landscape. Isolating new boxwood shrubs from established boxwoods for one month before planting is strongly recommended, along with routine weekly checks of plants for symptoms. Purchasing boxwood shrubs from local reputable suppliers is always advised. Information on boxwood blight, including descriptions of symptoms, can be found at https://datcp.wi.gov/Pages/Programs_Services/BoxwoodBlight.aspx.

EASTERN TENT CATERPILLAR: Egg hatch is underway as far north as Wausau in Marathon County. The distinctive silk webbed tents will become noticeable on apple and other host trees by mid-May. Use of insecticides is not necessary to control this caterpillar. Defoliated trees usually grow new leaves, and natural enemies such as birds, parasitic wasps, and disease organisms also help to regulate populations.



Eastern tent caterpillar minnesotaseasons.com

GYPSY MOTH: Larvae from overwintered eggs are expected to begin emerging in the week ahead. Horticultural oil applied directly to the egg masses will remain an effective treatment for 1-2 more weeks in the central and northern areas of the state. Golden Pest Spray Oil and other oil products labeled for gypsy moth control are available online or at garden centers and retailers.

LILY LEAF BEETLE: Gardeners and homeowners are asked to be on the lookout for the invasive red lily leaf beetle (LLB) this spring and to take measures to prevent it from spreading. First detected in Marathon County in 2014, LLB now occurs in at least 12 Wisconsin counties, including six new counties as of last season: Dane, Door, Oneida, Pierce, Price and Taylor. The bright red overwintered beetles should begin emerging in the week ahead. Without intervention, defoliation caused by the adults and their larvae will eventually kill lily plants.

FORAGES & GRAINS

ALFALFA WEEVIL: Overwintered adults were collected from Green and Lafayette County alfalfa fields on April 28, indicating spring egg deposition has started. The first appearance of larvae is expected during the week of

DEGREE DAYS JANUARY 1 - APRIL 29

LOCATION	50°F	2019	NORM	40°F
Dubuque, IA	155	171	211	422
Lone Rock	125	172	—	369
Beloit	136	167	216	393
Sullivan	102	153	182	326
Madison	114	158	200	350
Juneau	79	127	—	270
Racine	75	115	—	291
Waukesha	89	143	—	307
Milwaukee	77	120	157	294
Hartford	74	132	—	263
Appleton	58	87	—	233
Green Bay	47	76	141	203
Big Flats	86	116	—	283
Hancock	68	106	187	245
Port Edwards	75	103	183	251
La Crosse	115	137	221	341
Eau Claire	111	107	184	316
Cumberland	67	72	146	205
Bayfield	26	42	—	140
Wausau	46	70	148	183
Medford	46	64	124	183
Crivitz	48	69	—	193
Crandon	38	60	113	155

Method: Modified B50; Modified B40 as of January 1, 2020. NORMALS based on 30-year average daily temps, 1981-2010.

May 17-23 in southern Wisconsin. Mild temperatures last winter, including unusual warmth in February, likely favored overwintering survival of alfalfa weevil egg and adult populations.

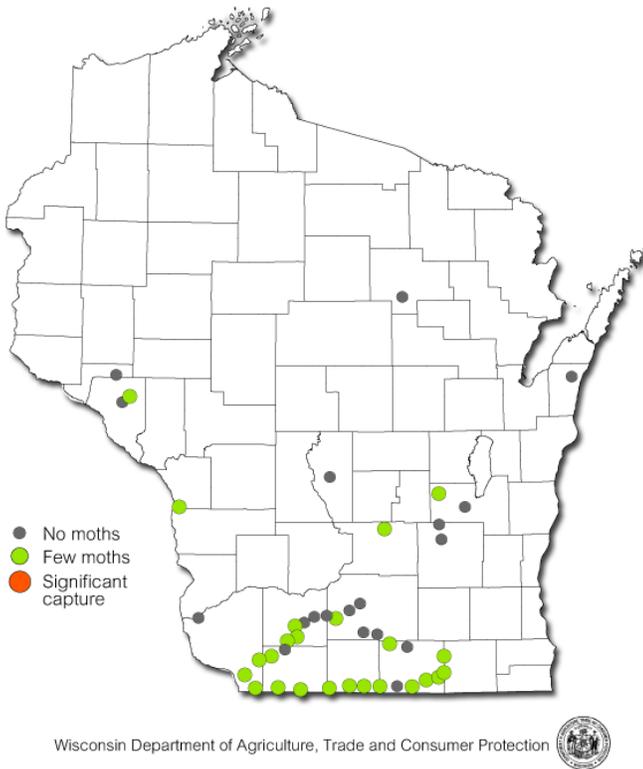
PEA APHID: Egg hatch was confirmed on April 27. Alfalfa sampled in the southwest counties had very low counts of 0-14 aphids per 100 sweeps. Pea aphid densities will continue to increase throughout May and peak about two weeks before the first alfalfa harvest. The long-established threshold for this pest remains at 100 per sweep.

TARNISHED PLANT BUG: Adults of this species are already active in four to eight-inch alfalfa fields. The levels noted this week were extremely low at less than four per 100 sweeps, but this generalist pest will soon begin feeding on flower buds in apple orchards, strawberry plantings, and vegetable crops, where it has greater potential to cause economic damage.

CORN

BLACK CUTWORM: Moth counts have been unusually low this spring. Although the first capture of the season was recorded on April 8, no significant or “intense” flights of nine moths in two nights have occurred as of April 29. The DATCP monitoring network has collected only 109 moths in 44 traps throughout the month.

Black Cutworm Counts April 23-29,2020



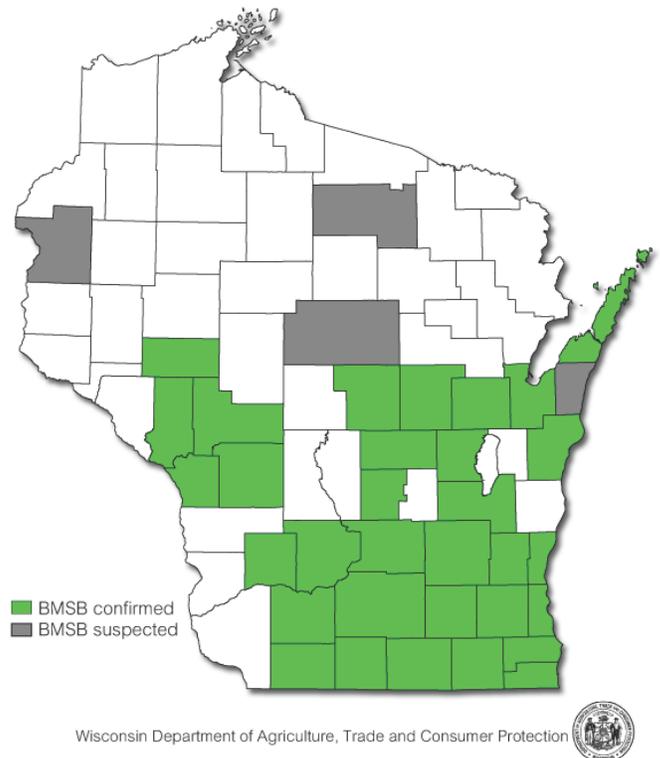
Similar reports from Illinois, Iowa and Minnesota indicate captures in those states have also been very low, while Indiana has registered multiple intense captures (as high as 60-86 moths per trap per week) since early April. Spring weather systems have apparently not been conducive for moth flights into Wisconsin, but appear to have instead directed migrations eastward. Counts for DATCP’s 44 trap sites are summarized in the above map and in the table on page 8.

TRUE ARMYWORM: DATCP black light trap network participants are reminded to install traps by May 1 to detect potentially damaging early spring armyworm migrations. One moth was captured in a Fond du Lac County pheromone trap during the April 23-29 monitoring period, while no moths were reported in the Columbia and Grant County black light traps.

SOYBEANS

BROWN MARMORATED STINK BUG: Crop advisors and soybean growers are reminded to be alert for this invasive pest this season and send a photo of any suspects to the UW Insect Diagnostic Lab for official confirmation <https://insectlab.russell.wisc.edu/samples/>. Brown marmorated stink bug (BMSB) is now firmly established throughout the southern half of the state, and its range has also expanded into western Wisconsin in the last two to three years. Soybeans and corn are both at high risk of infestation and crop damage is anticipated this summer. In addition, the milder-than-average winter of 2019-2020 could contribute to higher BMSB populations this summer. A map showing confirmed BMSB county records since the first Wisconsin detection 10 years ago is provided below.

Brown Marmorated Stink Bug Status in WI April 2020



SOYBEAN APHID: Overwintered eggs on buckthorn have begun hatching with the warmer weather of late April. After 2-3 generations on buckthorn, winged females are produced that will disperse to soybean fields in early June. Although DATCP surveys last season found the lowest aphid populations in 18 years, there is the potential for the pest to reach or exceed economic levels

every year. As is the case with BMSB, mild winter temperatures are likely to have favored survival of soybean aphid eggs on buckthorn and may lead to higher aphid pressure on the 2020 soybean crop.



Spring soybean aphids on buckthorn

Chris DiFonzo, Michigan State

FRUITS

GRAPE FLEA BEETLE: Emergence of overwintered adults is underway. Scouting twice weekly on warm, sunny afternoons, particularly along border rows of vineyards where damage potential is highest, is suggested from the bud swell stage and continuing until the buds have grown to ½ inch or more. A sample size of 25 vines in five separate locations is recommended by the UW when scouting. Feeding injury affecting 5% of buds signals a damaging population.



Grape flea beetles and bud injury

www.omafra.gov.on.ca

SPOTTED TENTIFORM LEAFMINER: The first reported moths of the season were captured in Dane County by

April 8. Counts in the following three weeks have been low, except at the cooperating orchards in Marquette and Marathon counties where moderate to high weekly catches of 482 and 728 moths were reported April 23-29. The spring STLM flight is expected to gain momentum for 3-4 weeks and peak during the latter part of May.

CODLING MOTH: Mating disruption (MD) products should be deployed in orchards two weeks before the start of the spring codling moth flight, which DATCP trapping records indicate has occurred between May 13 and 23 in the last five years. According to Peter Werts of the IPM Institute in Madison, the labor requirement associated with newer mating disruption products has lessened, making this non-toxic approach to codling moth control more practical than in the past, as well as cost-competitive compared to traditional insecticide spray programs. DATCP cooperators using mating disruption for codling moth management this year are asked to specify “MD” in their weekly reports.



Codling moth

Giancarlo M. www.naturamediterraneo.com

REDBANDED LEAFROLLER: Moths have been appearing in pheromone traps across southern and central Wisconsin since mid-April. Counts have ranged from 0-95 adults per trap. The first peak flight should occur in 2-3 weeks, with the earliest caterpillars becoming noticeable around petal-fall. Apple growers are advised to begin sampling for newly hatched RBLR larvae on foliage and waterspouts 10-12 days after the first moth is trapped.

EASTERN TENT CATERPILLAR: Egg hatch has begun in areas of the state that have accumulated 50 degree days (modified base 50°F) as of April 29. This includes most counties south of Wausau. The familiar tents associated

with this early-season caterpillar should become visible on wild cherry, apple, flowering crabapple and other host trees in the next two weeks.



Eastern tent caterpillar egg case extension.udel.edu/ornamentals

VEGETABLES

IMPORTED CABBAGEWORM: Adults have been active sporadically in the last month. The early spring appearance of these common yellowish-white butterflies signals egg laying is already underway on early-planted broccoli, cabbage, kale and other cole crops. Spring imported cabbageworm damage can be avoided by inspecting trans-plants for larvae and by installing floating row covers to prevent the butterflies from laying eggs on young plants.



Imported cabbageworm butterfly [papierdreams flickr.com](https://www.flickr.com/photos/papierdreams/)

SEEDCORN MAGGOT: Degree-day accumulations near Beloit, La Crosse, and Platteville have reached the 360 mark (sine base 39°F) required for peak or 50% emerg-

ence of first-generation flies. Peak fly emergence should occur during the week of May 3-9 across much of southern Wisconsin, with the exception of the south-easternmost counties. If appropriate, planting outside of the projected peak flight period is recommended. Seed-corn maggot flight periods can be monitored by using yellow dishpans filled with soapy water placed every 100 feet along the field perimeter. The traps should be checked and refilled every 4-6 days to determine when fly activity is increasing or decreasing.



Seedcorn maggot fly [Guillaume Jacquemin www.galerie-insecte.org](http://www.galerie-insecte.org)

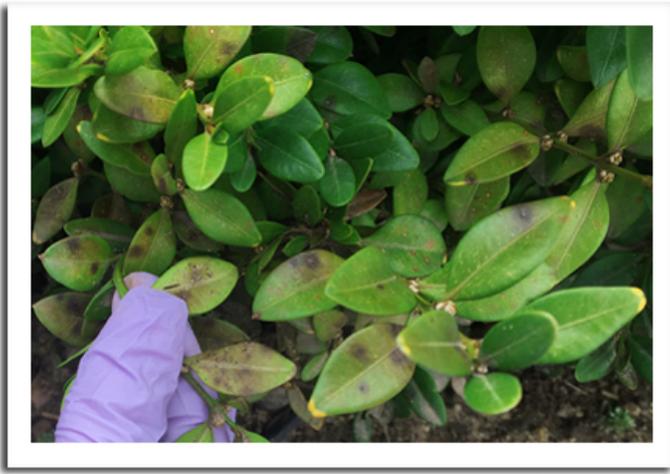
FLEA BEETLE: Overwintered adults are emerging from diapause and will soon begin invading unprotected seed beds. The most vulnerable period for seedlings and transplants is in the first two weeks after emergence. Floating row covers or other barriers to prevent flea beetle infestation of spinach, leafy greens and other spring vegetable crops should be installed as soon as possible.



Flea beetles on eggplant [Krista Hamilton DATCP](https://www.datcp.wisconsin.gov/)

NURSERY & FOREST

BOXWOOD BLIGHT: Last October boxwood blight was detected for the first time in the Wisconsin landscape at a Dane county residence. This lethal fungal disease of boxwood and pachysandra may cause complete leaf loss within days of the first onset of symptoms.



Boxwood blight

Marcia Wensing DATCP

This season it is important to be on high alert for blight symptoms on both newly-purchased and already-established boxwood shrubs. Symptoms include brown circular leaf spots with darker borders, black twig lesions, leaf drop, and die-back. Boxwoods are most susceptible to infection during the spring and fall when temperature ranges from 65 to 75°F and foliage stays wet. Symptomatic plants and fallen leaves and branches should be immediately removed and disposed of by burning, burying at least two feet deep, or double-bagging in plastic and landfilling.

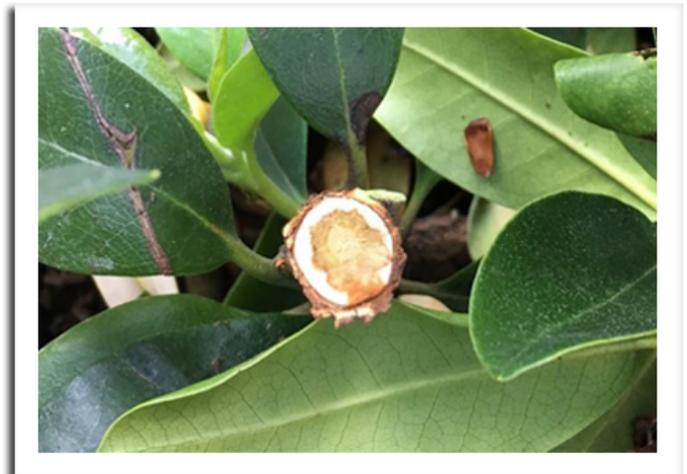


Boxwood blight

massnrc.org

The UW-Madison Plant Disease Diagnostics Clinic is currently accepting a limited number of physical samples for plant disease analyses. Please visit the clinic's website at <https://pddc.wisc.edu/> for detailed information on the prescreening and prioritization process for sample submission.

RAMORUM BLIGHT: DATCP and the UW are advising consumers who purchased azaleas, rhododendrons and 'Double Red Knockout' roses in 2019 to closely monitor plants for leaf and shoot dieback symptoms this season. On August 23, *Phytophthora ramorum*, or Ramorum blight, was intercepted in Wisconsin on rhododendron imported from Washington State. Another potential introduction was reported in October on 'Double Red Knockout' rose plants at Walmart. The roses originated in an Oklahoma nursery where blight-infected plants were found, and all were sold before regulatory actions could be taken.



Sudden oak death in rhododendron

Tim Allen DATCP

Suspect plants should be sent to the UW-Madison Plant Disease Diagnostic Clinic for free testing. Please check the PDDC website <https://pddc.wisc.edu/> for more information on submitting samples during the COVID-19 crisis.

APPLE INSECT & BLACK LIGHT TRAP COUNTS APRIL 23 - 29

COUNTY	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	DWB ⁵	LPTB ⁶	BMSB ⁷	AM RED ⁸	YELLOW ⁹
Bayfield	Keystone	—	—							
Bayfield	Orienta	—	—							
Brown	Oneida	—	—							
Columbia	Rio	25	93							
Crawford	Gays Mills	—	—							
Dane	Mt. Horeb	3	11							
Dane	McFarland	—	—							
Dane	Stoughton	6	52							
Fond du Lac	Campbellsport	0	0							
Fond du Lac	Malone	0	5							
Fond du Lac	Rosendale	3	2							
Green	Brodhead	8	31							
Iowa	Mineral Point	195	123							
Jackson	Hixton	4	0							
Kenosha	Burlington	3	6							
Lafayette	Belmont	21	12							
Marathon	Edgar	728	10							
Marinette	Niagara	—	—							
Marquette	Montello	482	40							
Ozaukee	Mequon	—	—							
Pierce	Beldenville	—	—							
Pierce	Spring Valley	—	—							
Racine	Raymond	0	0							
Racine	Rochester	11	56							
Richland	Hill Point	18	95							
Sheboygan	Plymouth	—	—							
Walworth	East Troy	0	0							
Walworth	Elkhorn	0	0							
Waukesha	New Berlin	0	0							
Wood	Rudolph	—	—							

¹Spotted tentiform leafminer; ²Redbanded leafroller; ³Codling moth; ⁴Obliquebanded leafroller; ⁵Lesser peachtree borer; ⁶Dogwood borer; ⁷Brown marmorated stink bug; ⁸Apple maggot red ball; ^{*}Unbaited; ^{**}Baited; ⁹Apple maggot yellow board.

COUNTY	SITE	BCW ¹	CEL ²	CE ³	DCW ⁴	ECB ⁵	FORL ⁶	SCW ⁷	TA ⁸	VCW ⁹	WBC ¹⁰
Columbia	Arlington	—	—	—	—	—	—	—	—	—	—
Columbia	Pardeeville	0	0	0	0	0	0	0	0	0	0
Dodge	Beaver Dam	—	—	—	—	—	—	—	—	—	—
Fond du Lac	Ripon	—	—	—	—	—	—	—	—	—	—
Grant	Prairie du Chien	0	0	0	0	0	0	0	0	0	0
Langlade	Antigo	—	—	—	—	—	—	—	—	—	—
Manitowoc	Manitowoc	—	—	—	—	—	—	—	—	—	—
Marathon	Wausau	—	—	—	—	—	—	—	—	—	—
Monroe	Sparta	—	—	—	—	—	—	—	—	—	—
Walworth	East Troy	—	—	—	—	—	—	—	—	—	—
Waushara	Hancock	—	—	—	—	—	—	—	—	—	—
Wood	Marshfield	—	—	—	—	—	—	—	—	—	—

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

BLACK CUTWORM PHEROMONE TRAP COUNTS 2020

COUNTY	SITE	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Adams	Adams	0	0	0	0				
Buffalo	Alma	0	0	0	0				
Buffalo	Gilmanton	0	0	0	1				
Columbia	Pardeeville	0	0	0	2				
Dane	Blue Mounds	—	—	0	1				
Dane	Cross Plains	—	—	0	0				
Dane	Middleton	—	—	0	0				
Dane	Montrose	—	—	1	0				
Dane	Oregon	—	—	0	0				
Dodge	Beaver Dam	0	1	2	0				
Dodge	Waupun	0	0	0	0				
Fond du Lac	Lamartine	0	0	0	0				
Fond du Lac	Ripon	0	1	0	2				
Grant	Dickeyville	—	—	0	9				
Grant	Hazel Green	—	—	3	7				
Grant	Platteville	—	—	0	2				
Grant	Prairie du Chien	0	0	0	0				
Green	Cadiz	—	—	0	6				
Green	Clarno	—	—	0	9				
Green	Jefferson	—	—	1	1				
Iowa	Brigham E	—	—	0	0				
Iowa	Brigham W	—	—	0	0				
Iowa	Dodgeville E	—	—	1	0				
Iowa	Dodgeville W	—	—	1	4				
Iowa	Mineral Point E	—	—	0	1				
Iowa	Mineral Point W	—	—	0	2				
Kewaunee	Algoma	0	0	0	0				
La Crosse	La Crosse	—	0	11	6				
Lafayette	Belmont	—	—	0	3				
Lafayette	Kendall	—	—	1	0				
Lafayette	Monticello	—	—	1	2				
Lafayette	Shullsburg	—	—	0	2				
Langlade	Antigo	0	0	0	0				
Pepin	Durand	3	0	0	0				
Rock	Avon	—	—	1	6				
Rock	Beloit	—	—	0	2				
Rock	Bradford W	—	—	5	1				
Rock	Bradford E	—	—	0	1				
Rock	Fulton	—	—	0	0				
Rock	Johnstown	—	—	0	2				
Rock	Newark	—	—	0	0				
Rock	Turtle	—	—	0	2				
Rock	Union	—	—	1	1				
Waushara	Hancock	0	0	0	0				

*Intense capture occurs when 9 or more moths are caught in a 2-night period. Week 1 (April 2-8), Week 2 (April 9-15), Week 3 (April 16-22), Week 4 (April 23-29), Week 5 (April 30-May 6), Week 6 (May 7-13), Week 7 (May 14-20), Week 8 (May 21-27).