

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

Cold, occasionally rainy weather dominated the state for much of the week. After a short-lived warm spell offered growers a brief planting window, fieldwork stalled as chilly conditions and soaking rain returned. Below-normal temperatures prevailed and a late May snowstorm occurred in northwestern Wisconsin on Sunday, with snowfall accumulations of nearly six inches recorded in Douglas County. The rain and snow further delayed the modest progress in corn and soybean planting made last week. According to the May 20 USDA NASS Crop Report, only 35% of intended corn acres have been planted, five days behind last year and 11 days behind the 5-year average. Soybean planting also continued behind the normal pace with an estimated 12% of the crop in the ground at the start of the week, 10 days behind the long-term average of 35%. The wet weather pattern this spring has been a major obstacle to fieldwork progress across the state, while low soil temperatures are slowing seed germination and emergence.

LOOKING AHEAD

BLACK CUTWORM: The peak damage window for corn is forecast to open over the weekend of May 25-26. A considerable portion of the state's acreage is under a high threat of infestation this year based on delayed

field preparation and planting, prevailing weedy conditions, and the consistent, moderate spring moth flights documented since mid-April. Localized outbreaks are expected. Scouting corn, including Bt hybrids, over the next 3-4 weeks is particularly important. The economic threshold for black cutworm is reached if 3% of plants have been cut and larvae are still present in the field. Spot treatment is an option for sites with patchy damage.

ALFALFA WEEVIL: Adults have become more common in alfalfa and spring egg deposition is increasing. Surveys to assess larval populations and defoliation levels should begin at this time.

EUROPEAN CORN BORER: Most overwintered larvae are in the pupal stage, but a few early spring moths could emerge before the end of the month. Degree day accumulations at advanced locations such as Beloit and Platteville will surpass the 374 heat units (modified base 50°F) required for corn borer moth emergence by May 27. Black light trappers are advised to carefully examine trap contents during the next two weeks. In 2018, the first corn borer moths appeared by May 30.

PLUM CURCULIO: Beetle migration into the orchard perimeter is expected to begin as spring temperatures rise. Apple growers who have experienced past problems with this pest should begin checking early-sizing cultivars

such as Ginger Gold, Ida Red and Liberty for crescent-shaped oviposition scars. The minimum size of fruitlets preferred for egg laying is 5 mm. Applications are not effective until fruit damage is observed.

POTATO LEAFHOPPER: Migrants were collected in low numbers on May 20-22 from alfalfa fields in Dane, Grant, Iowa, Monroe and Vernon counties. Their recent appearance confirms that the first distinct migration event of 2019 has occurred.

CODLING MOTH: Evening temperatures will be appropriate for moth flight this weekend. Close monitoring of traps is suggested for southern and central Wisconsin orchards until the biofix is established. Conditions required for codling moth flight are wind speeds between 3-5 miles per hour when temperatures are above 62°F without rain. If temperature fluctuations lead to inconsistent moth activity, the biofix date should be assigned to the warmest, calmest night.



Codling moth

Giancarlo M. www.naturamediterraneo.com

FORAGES & GRAINS

PEA APHID: Alfalfa sampled this week contained low counts of 1-65 aphids per 100 sweeps, an increase over the 1-35 per sweep last week.

ALFALFA WEEVIL: Larvae were collected for the first time this season on May 22 in Iowa and Grant counties. Surveys in the south-central and southwest areas found low counts of 1-3 per 100 sweeps in about 10% of alfalfa fields checked. Regular scouting to assess leaf feeding damage should begin next week and continue through first harvest and early second-crop regrowth. A

DEGREE DAYS JANUARY 1 - MAY 22

LOCATION	50°F	2018	NORM	40°F
Dubuque, IA	333	455	445	750
Lone Rock	318	394	—	691
Beloit	310	379	453	684
Sullivan	282	316	400	614
Madison	296	364	426	673
Juneau	245	326	—	559
Racine	224	260	—	535
Waukesha	267	279	—	595
Milwaukee	234	276	336	553
Hartford	246	306	—	557
Appleton	200	296	—	493
Green Bay	187	280	335	475
Big Flats	243	345	—	563
Hancock	222	301	414	521
Port Edwards	229	307	403	526
La Crosse	272	401	475	640
Eau Claire	253	364	413	571
Cumberland	184	287	354	425
Bayfield	114	219	—	327
Wausau	173	279	350	405
Medford	171	272	308	398
Crivitz	176	298	—	434
Crandon	157	265	282	376

Method: Modified B50; Modified B40 as of January 1, 2019. NORMALS based on 30-year average daily temps, 1981-2010.

defoliation level of 40% of stems with weevil feeding in the first crop signals the larval population is high and an early harvest would be beneficial.

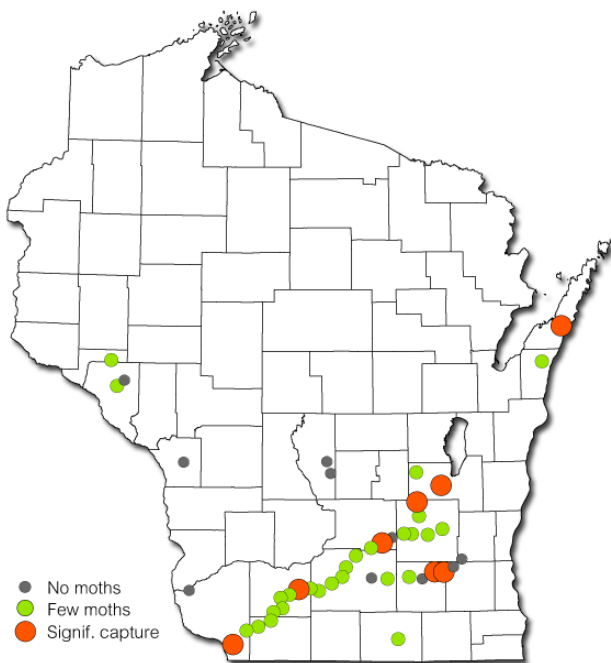
POTATO LEAFHOPPER: A migration appears to have occurred in the past week, with leafhoppers collected from 17 of 40 (43%) alfalfa fields sampled from May 20-22. This insect arrives annually in Wisconsin in mid- to late May, as harvest of the first alfalfa crop is approaching. These long-distance migrants are predominantly mated females which arrive ready to lay eggs and initiate a new generation.

TARNISHED PLANT BUG: Adults are common in alfalfa, though counts remain very low. Surveyed fields in Dane, Grant, Iowa, Monroe, Sauk and Vernon counties had an average of six per 100 sweeps. The economic threshold for plant bugs in alfalfa of five per sweep (or 500 individuals per 100 sweeps) is seldom exceeded in Wisconsin until July or August.


CORN

BLACK CUTWORM: Significant flights were again registered at several DATCP monitoring sites during the week ending May 22. Nine traps, one each in Columbia, Dane, Dodge, Door, Fond du Lac, Grant, Iowa, Jefferson and Kewaunee counties, reported their highest count of the season. This week's largest capture was 48 moths near Barneveld in Iowa County. The cumulative total count to date is 1,133 moths in 44 traps, with 262 of those collected in the past week.

Black Cutworm Counts May 16-22, 2019



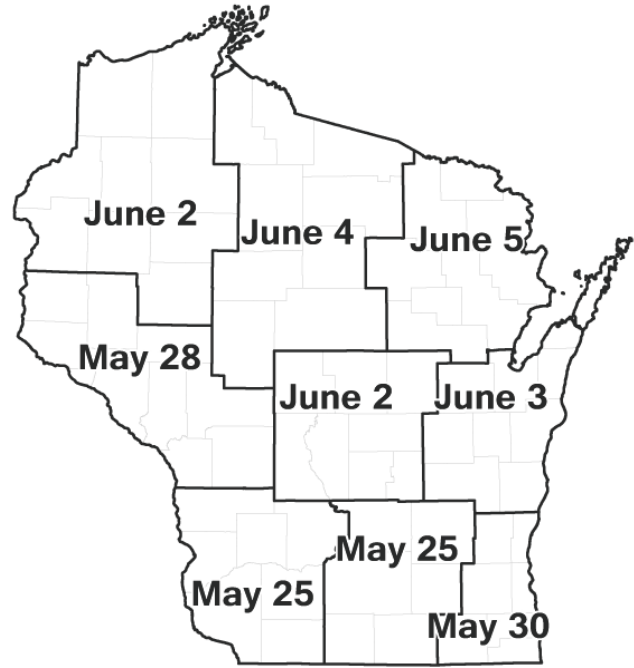
- No moths
- Few moths
- Signif. capture

Wisconsin Department of Agriculture, Trade and Consumer Protection 

Based on the consistent flights recorded since mid-April and prevailing weedy, wet fields conditions ideal for oviposition as migrants arrived this spring, many fields are considered at high risk of black cutworm damage. Included in this category are poorly drained and low-lying fields, those next to areas of natural vegetation or with reduced tillage (especially soybean residue). The start of the primary damage period has been estimated for May 25 in south-central and southwestern Wisconsin, May 28 in the lower west-central area, and June 2 in the central region. Crop consultants and growers are advised to begin inspecting corn (including Bt hybrids) for leaf pinholes and other signs of feeding during early season stand assessment. Scouting a few days before estimated cutting dates is recommended. It is important to recog-

nize that Bt hybrids containing the Vip3A, Cry1A.105, Cry2Ab2, and Cry1F proteins provide suppression of this pest, but the larvae can still cut young plants.

Estimated Start Date of Black Cutworm Peak Damage Period 2019



Wisconsin Department of Agriculture, Trade and Consumer Protection 

SLUGS: Minor leaf feeding was observed in damp, weedy cornfields in Monroe and Vernon counties. Slugs may become an issue if fields remain wet, particularly in no-till or reduced-till systems with heavy residue and little soil disturbance.



Slug leaf feeding

Krista Hamilton DATCP

WIREWORM: Current field conditions are very suitable for this soil pest, which can bore into the base of corn

plants and destroy the growing point. It is not uncommon for both wireworms and black cutworms to occur in the same field at the same time. Accurate identification is important since rescue treatment for wireworms is ineffective once damage is observed.

EUROPEAN CORN BORER: Emergence of the first spring moths may start in the next two weeks in advanced southern locations. Most overwintered larvae are in the pupal stage, a period which requires about 10 days to complete at average daily temperatures of 65°F. Degree day accumulations near Beloit and Platteville, currently the warmest locations in the state, are expected to reach the 374 units (modified base 50°F) needed for moth emergence by May 27.



European corn borer moth

www.sequella.co.uk

TRUE ARMYWORM: Another sizeable capture of 77 moths was reported from Janesville in the past week, while nine other black light traps from East Troy to Marshfield also reported small flights. True armyworm flights sometimes precede larval outbreaks by 3-4 weeks. Growers can expect armyworms to begin appearing in fields by early June.

SOYBEANS

SOYBEAN APHID: Aphid colonization of emerging soybeans will likely be delayed until the second week of June this season, considering only 12% of the state's intended soybean crop has been planted so far. During the last decade, the first recorded aphid observations have ranged from as early as May 24 in 2007 to as late as June 9 in 2009. In most years, aphids are detectable by the time soybeans reach the V1 stage.

BEAN LEAF BEETLE: Overwintered adults were found in two of 40 alfalfa fields sampled in the past week. The beetles were collected in Grant and Vernon counties. Populations of this soybean pest were probably reduced to some extent by the polar vortex in late January and early-season defoliation problems are not anticipated.



Bean leaf beetle

Krista Hamilton DATCP

FRUITS

CODLING MOTH: Spring moth emergence is likely to begin over the weekend of May 25-26. Apple growers should continue checking traps daily until the biofix is established. In some years, determining this event is complicated by fluctuating temperatures that lead to inconsistent emergence. The biofix is either the date of the first sustained flight of moths captured multiple days in a row or when counts exceed the threshold of five moths per trap per week. This date marks the point at which to begin counting degree days (base 50F) to determine the optimal treatment window for first-generation larvae.

SPOTTED TENTIFORM LEAFMINER: Moth emergence has peaked in the southern two-thirds of the state and is now declining. Populations are transitioning to first-generation larvae. The scouting procedure for STLM is to sample 10 terminals and fruit spurs per tree on 2-3 trees per orchard block. Sapfeeder mines should be noticeable on the undersides of leaves. The economic threshold is one mine per 10 leaves.

OBLIQUEBANDED LEAFROLLER: The first flight began during the period of May 16-22, with moths reported from cooperating orchards in Fond du Lac, Ozaukee and Pierce counties. Larvae of various sizes and their characteristic

folded leaves are still evident at many sites, signaling that moths should continue to emerge well into June. Checking terminals for small, first-generation OBLR larvae is advised 7-10 days after the first OBLRs are captured. Although there is no direct correlation between trap counts and larval populations, scouting is important since orchards that collect even low counts (< five moths per trap) can develop significant larval problems a few weeks after a flight has occurred. A population averaging three or more larvae per tree is considered economic.



Obliquebanded leafroller moth and pupa

Krista Hamilton DATCP

TARNISHED PLANT BUG: Nymphs can be anticipated by June. Strawberry plants beginning to bloom should be checked weekly for both adult and immature plant bugs. Control targeting the small first- and second-instar stages is most effective and can eliminate the need for a second treatment. The economic threshold for this insect in strawberries is four per 20 sweeps.

REDBANDED LEAFROLLER: Counts of this pest also remained low from May 16-22. The first flight peaked 1-2 weeks ago in most orchards and numbers have been declining. The second flight should start by early to mid-June. Apple growers are reminded to replace pheromone lures for both RBLR and STLM in preparation for the second flights.

PLUM CURCULIO: Adult migration into orchard edges is increasing, and oviposition scars will be detectable on developing fruitlets next week. Female weevils select early-sizing fruits 5 mm or larger for egg laying. Perimeter sprays can be used as an alternative to full cover sprays if PC injury is limited to the border rows. However, if oviposition scars are found beyond the first 4-5 rows

of trees, a cover spray is the better approach. Organic growers have the option of applying Surround® WP (kaolin clay). Another control strategy is to leave untreated “trap rows” of early varieties that are treated with an insecticide such as PyGanic on a warm night when the weevils are most active.



Plum curculio crescent-shaped egg laying scar

www.uvm.edu

OYSTERSHELL SCALE: Egg hatch and the onset of the first-generation nymph or “crawler” period is expected to begin next week in southern and western Wisconsin. The appearance of the dispersal stage indicates treatments should begin promptly. For smaller infestations in yards or on ornamental trees, the scale coverings and crawlers can be destroyed by scrubbing the bark with a mildly abrasive pad or sponge. Very heavily infested branches may need to be pruned.



Oystershell scale and crawlers

Krista Hamilton DATCP

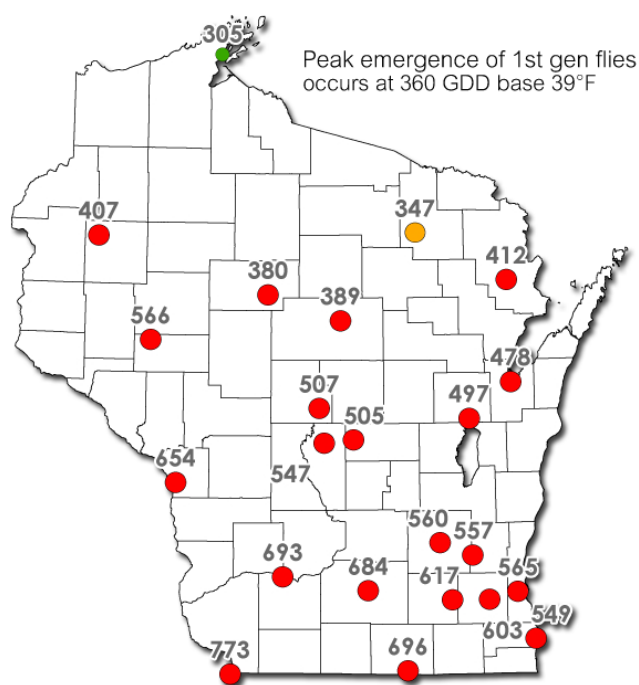
Activity by the mobile stage lasts only for 1-2 weeks before the crawlers settle onto branches and develop

protective waxy covers. Apple growers in central and eastern Wisconsin should also begin scouting for crawlers in the week ahead.

VEGETABLES

SEEDCORN MAGGOT: Damage to susceptible vegetable crops such as beans, corn and cucurbits remains a strong possibility. This spring's cool, wet weather pattern has prolonged the adult emergence period and delayed seed germination, creating favorable conditions for maggot infestation. Poor stand establishment is an early sign of maggot activity.

Seedcorn Maggot Degree Days May 22, 2019



Wisconsin Department of Agriculture, Trade and Consumer Protection

Pupation of first-generation maggots, also the brief fly-free period between the first and second generations, should begin around 846 degree days (sine base 39°F), or by May 29 near Madison. The map below shows the current SCM accumulation is 696 at Beloit, 684 in Madison, and 504 at Hancock.

BLACK CUTWORM: Larvae produced by moths that arrived last month are expected to reach the damaging late-instar stages by May 25. Cutworms feed on the stems of young plants at the soil line and can be destructive where transplants are planted through black plastic or a similar weed barrier. Heat that accumulates under

the plastic may attract and provide a protective covering for cutworms, making them more difficult to control. Beans, cabbage, carrots, celery, corn, lettuce, peas, peppers, potatoes and tomatoes are all at risk.



Black cutworm larva

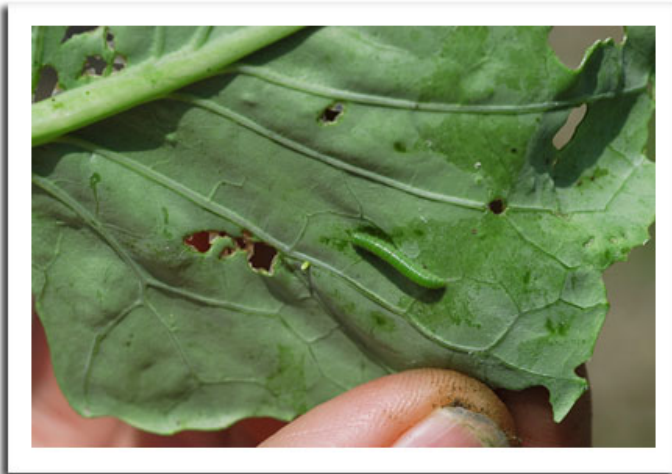
www.export.biocontrol.ch

Minor cutworm feeding can usually be tolerated and damaged plants replaced. Physical barriers such as tin cans or paper cups with bottoms removed are also effective. Economic thresholds have been established for the following vegetables: **SNAP BEANS:** two larvae per row foot; **POTATOES:** four larvae per row foot; **LEAFY GREENS:** 3% of stand affected. Insecticide rescue treatment using either sprays or granules in home gardens is usually impractical.

ONION MAGGOT: Peak emergence and egg laying by first-generation flies can be anticipated as 680 degree days (base 40°F) are reached in the next few days. The GDD accumulation was 684 near Beloit, 673 at Madison, 640 near La Crosse, 521 in Hancock, and 405 at Wausau as of May 22. Damage from the resulting first-generation maggots usually becomes evident around mid-June as onion seedlings start to wilt. Infested plants, when pulled, often break just below the rotting stem. Rotating this year's plantings as far away as possible from last year's onions is the most basic approach to onion maggot control. Preventative soil insecticides may be considered if 5-10% of last year's crop was damaged by onion maggot.

IMPORTED CABBAGEWORM: Adults are depositing eggs on cruciferous weeds and available early-planted cole crops. Close examination of transplants for eggs and small larvae is critical during the oviposition period. Infestation levels in cabbage that exceed 30% at

the transplant to cupping development stages may require control.



Imported cabbageworm larva

UM Extension

COLORADO POTATO BEETLE: Overwintered beetles are likely to begin dispersing from hibernation sites to plants near field edges next week. Oviposition on potatoes, tomatoes, eggplant and other hosts should begin before the end of the month. The bright orange-yellow eggs are deposited in clusters of 15-30 on the undersides of leaves. Egg hatch occurs in 4-9 days.



Colorado potato beetle

Jiri Bohdal www.naturephoto.cz

NURSERY & FOREST

NON-VIABLE NURSERY STOCK: Nursery plants offered for retail sale should be assessed for viability next week. Plants not that are leafed out or showing live buds will be considered nonviable and cannot legally be sold after June 1. Trees and plants in late dormancy or which are suspected to revive late may be rehabilitated outside of

retail sales areas and may be returned to sale when healthy, or must be destroyed or returned to the supplier. Plant materials shipped with plastic-wrapped roots such as dry bulbs, trees and shrubs are especially prone to moisture deficiency problems during transport and should be sold within three weeks of arrival at retail stores.

PLANT VIRUSES: Nursery grower and dealer inspections this spring continue to find a plethora of plant viruses. Potyvirus species have been confirmed in lungwort 'Mrs. Moon', sedum 'Autumn Joy', and spiderwort 'Zwanenburg.'

In the Iris family, the *Iris germanica* cultivars 'Calypso Dancer', 'Lemon Pop', 'Libation', 'Treasured', 'Celestial Snow', 'Baboon Bottom', 'Whoopem Up', 'Girls Gone Wild', 'Campfire Tales', and 'Harvest of Memories' all tested positive for potyvirus at the state's Plant Industry Bureau Laboratory, as did *Iris pumila* 'Blue Denim'.



Tobacco rattle virus in bleeding heart

Tim Boyle DATCP

Tobacco rattle virus (TRV) was found in bleeding heart varieties 'Gold Heart' and 'Valentine', in the astilbe cultivars 'Glut' and 'Purple Candles,' and in sedum 'Mr. Goodbud', which also tested positive for tobacco mosaic virus (TMV).

An Ilarvirus, likely tobacco streak virus (TSV), was detected in astilbe 'Maggy Daley' and 'Visions in Red'.

A begonia hybrid, 'Baladin' tested positive for impatiens necrotic spot virus (INSV), and hosta virus X (HVX) was diagnosed in the hosta hybrid '*Undulata albomarginata*'.

Plant viruses cannot be directly controlled by chemical application. Depending on the virus disease, the means

of control include chemical or biological control of the virus's vector(s), prevention of viral establishment in previously uninfected stock, removal and proper disposal of infected plant materials, consumer education to recognize plant virus symptoms, and making an industry-wide effort to develop virus-resistant varieties and implement tighter virus-free certification standards. An extensive gallery of nursery plant virus symptoms, compiled by the DATCP Plant Industry Lab, can be found at <https://datcp.wi.gov/Documents/PlantVirusSymptoms.pdf>.



Hosta virus X in hosta

Marcia Wensing DATCP

ROOT ROT: Repeated rain along with mild days and cool nights brought reports of water-related plant issues from many areas throughout the state this week. Prolonged, excessive soil moisture from weather and overwatering have predisposed many container plants to rot diseases, with rhizoctonia crown rot, fusarium root rot, and rhizoctonia root rot trending at nursery inspection sites statewide.



Daylily foliar symptoms indicative of Fusarium root rot Tim Boyle DATCP

In southeastern Wisconsin, ligularia 'Midnight Lady' was diagnosed with black root rot, while Pythium, a soft rot, was found on several iris species. Root-bound plants often show symptoms of rot diseases, as overgrown roots clog container drainage and exacerbate already-high environmental moisture problems.

POWDERY MILDEW: The wet spring weather has also been favorable for powdery mildew on ornamentals. Plants infected with powdery mildew are characterized by patches of grayish-white powdery fungal spores, primarily on the upper leaves, which if not controlled cause foliage to yellow and senesce prematurely. Cultural practices to increase air circulation and reduce ambient moisture throughout the plant stock help to minimize mildew development. Chemical control through applications of copper-based fungicides may also be an option.



Early powdery mildew symptoms on rose

Tim Boyle DATCP

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 16 - 22

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	3	0	—	—	—	—			
Brown	Oneida	24	6	0	—	—	—			
Columbia	Rio	—	—	—	—	—	—			
Crawford	Gays Mills	—	—	—	—	—	—			
Dane	DeForest	2	1	0	0	—	0			
Dane	Mt. Horeb	21	5	0	0	—	0			
Dane	Stoughton	9	30	0	0	—	0			
Fond du Lac	Campbellsport	200	8	0	2	—	3			
Fond du Lac	Malone	11	19	0	—	—	0			
Fond du Lac	Rosendale	0	0	0	0	—	0			
Grant	Sinsinawa	—	—	—	—	—	—			
Green	Brodhead	—	—	—	—	—	—			
Iowa	Mineral Point	100	14	0	0	—	—			
Jackson	Hixton	13	27	0	0	—	0			
Kenosha	Burlington	18	13	0	0	—	—			
Marathon	Edgar	1440	52	—	—	—	7			
Marinette	Niagara	0	18	0	0	—	0			
Marquette	Montello	891	27	0	0	—	0			
Ozaukee	Mequon	35	14	1	41	—	0			
Pierce	Beldenville	97	5	0	1	—	0			
Pierce	Spring Valley	39	42	0	0	—	0			
Racine	Raymond	60	4	—	—	—	—			
Racine	Rochester	78	8	0	—	—	—			
Richland	Hill Point	52	18	0	—	—	0			
Sheboygan	Plymouth	133	5	0	—	—	0			
Walworth	East Troy	28	26	0	—	—	—			
Walworth	Elkhorn	—	—	—	—	—	—			
Waukesha	New Berlin	20	5	—	—	—	—			

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	0	0	0	0	0	0	0	7	0	0
Columbia	Pardeeville	0	0	0	0	0	1	0	2	0	0
Dodge	Beaver Dam	0	0	0	0	0	0	0	12	0	0
Fond du Lac	Ripon	0	0	0	0	0	0	0	4	0	0
Grant	Prairie du Chien	0	0	0	0	0	0	0	0	0	0
Manitowoc	Manitowoc	0	0	0	0	0	1	0	7	0	0
Marathon	Wausau	0	0	0	0	0	0	0	1	0	0
Monroe	Sparta	0	0	0	0	0	0	0	1	0	0
Rock	Janesville	0	2	0	0	0	0	0	77	0	0
Walworth	East Troy	0	0	0	0	0	0	0	3	0	0
Wood	Marshfield	0	0	0	0	0	0	0	1	0	0

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

BLACK CUTWORM PHEROMONE TRAP COUNTS 2019

COUNTY	SITE	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Adams	Brooks	—	0	—	0	0	1	0	
Adams	Grand Marsh	—	0	—	0	0	0	0	
Buffalo	Alma	0	0	0	0	3	1	1	
Buffalo	Gilmanton	0	0	1	0	2	2	0	
Columbia	Columbus	0	1	3	3	4	0	0	
Columbia	Hampden	1	12*	13*	7	20*	4	21*	
Columbia	Leeds	0	6	0	3	4	1	1	
Dane	Blooming Grove	0	1	4	1	2	0	0	
Dane	Blue Mounds	1	0	2	3	1	5	3	
Dane	Cross Plains	7	1	0	5	8	2	6	
Dane	Deerfield	3	8	3	5	9	2	2	
Dane	Middleton	0	0	0	1	2	1	1	
Dane	Springfield	0	0	6	13*	15*	7	6	
Dane	Vienna	0	0	0	3	4	0	5	
Dodge	Beaver Dam	0	1	9	12*	12*	1	3	
Dodge	Calamus	0	9	5	3	12*	7	9	
Dodge	Hubbard	0	8	5	4	5	1	2	
Dodge	Lowell	0	3	5	1	0	2	2	
Dodge	Oak Grove	0	3	2	6	2	4	7	
Dodge	Waupun	0	7	7	13*	19*	3	14*	
Door	Sturgeon Bay	—	—	1	5	5	2	21*	
Fond du Lac	Lamartine	0	0	7	3	1	3	13*	
Fond du Lac	Ripon	1	1	20*	9	11	1	4	
Grant	Dickeyville	0	0	6	7	2	4	17*	
Grant	Platteville	1	0	3	15*	13*	5	6	
Grant	Prairie du Chien	0	0	0	2	0	4	0	
Iowa	Brigham E	0	0	1	3	14*	0	2	
Iowa	Brigham W	1	0	8	2	13*	8	48*	
Iowa	Dodgeville E	1	1	2	14*	7	6	5	
Iowa	Dodgeville W	0	0	6	9	4	4	7	
Iowa	Mineral Point E	0	0	7	6	18*	3	4	
Iowa	Mineral Point W	0	0	3	5	14*	3	2	
Jefferson	Ixonia E	0	9	14*	13*	6	4	14*	
Jefferson	Ixonia W	2	15*	2	4	7	7	17*	
Jefferson	Johnson Creek	1	7	2	0	0	1	0	
Jefferson	Milford	0	3	0	2	3	0	2	
Kewaunee	Algoma	—	—	0	0	2	4	5	
La Crosse	West Salem	—	—	—	—	2	0	—	
Lafayette	Belmont	0	0	3	3	6	3	4	
Lafayette	Kendall	0	0	4	7	4	1	4	
Pepin	Durand	—	0	0	2	6	—	2	
Rock	Janesville	5	11*	3	3	4	2	2	
Washington	North Lake	1	6	0	0	0	0	0	
Waukesha	Oconomowoc	0	4	2	1	1	0	0	

*Intense capture occurs when 9 or more moths are caught in a 2-night period. Week 1 (April 4-10), Week 2 (April 11-17), Week 3 (April 18-24), Week 4 (April 25-May 1), Week 5 (May 2-8), Week 6 (May 9-15), Week 7 (May 16-22), Week 8 (May 23-29).