

# 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

Drier weather and lower humidity settled across the state, with comfortable afternoon highs ranging from the lower 80s to around 90°F. A few isolated showers and thunderstorms occurred in the northwest early in the week, but most areas remained dry. The seasonable mid-July temperatures promoted continued rapid development of summer crops and maintained overall positive crop prospects. Corn silking advanced eight days ahead of last year and 5 days ahead of the 5-year average, showing remarkable progress after a late start to the planting season. More than 29% of the state's soybeans are blooming and 2% are already setting pods, four days ahead of 2017 and the long-term average. Despite minor declines in some areas due to moisture stress and storm damage, crop ratings remain very favorable with 81-86% of alfalfa, corn, potatoes, soybeans and wheat acres reported in good to excellent condition.

## LOOKING AHEAD

**EUROPEAN CORN BORER:** Summer moths are appearing in the Columbia, Dodge, Fond du Lac and Monroe County black light traps. The predominant stages noted in fields this week were fifth-instar larvae and pupae. Egg laying is beginning near Beloit, La Crosse, Spring Green and other advanced locations. The treatment window for

second-generation larvae will open during the week of July 15 with the accumulation of 1,550 degree days (modified base 50°F).

**SPOTTED WING DROSOPHILA:** Reports indicate fly emergence is accelerating. The appearance of SWD adults signals that eggs are being laid and the small white larvae should be detectable in fruits. Berry growers are advised to begin sampling for larvae to help determine fruit marketability and whether management actions are working. Larval sampling methods are provided in the FRUIT section.

**SOYBEAN APHID:** Aphid pressure is gradually building in R1-R2 soybean fields, although the typical average is still very low at fewer than five aphids per plant. Monitoring efforts should be increased as soybeans advance through the early to intermediate reproductive growth stages.

**APPLE MAGGOT:** Counts of 1-12 flies per trap were reported in the past week from 11 of 27 apple orchard locations. Fly emergence is expected to escalate during July and peak in August. Apple growers concerned about this pest can set a minimum of three traps per 10 acres at this time, increasing the density to one trap every 200-300 feet along the orchard perimeter as the season progresses. The traps should be hung at eye-level near wild hosts and early-ripening cultivars.

**CORN ROOTWORM:** Beetles are emerging in southern Wisconsin. Both the northern and western species have been observed in Dane, La Crosse and Rock counties as of July 12.



Northern corn rootworm beetle

Krista Hamilton DATCP

**JAPANESE BEETLE:** Numbers are increasing in fruit and field crops over much of the state. This beetle could become a serious problem again this season since soil moisture levels, particularly in southern Wisconsin, have generally been favorable for larval survival. Damage to fruit trees, ornamentals and field crops will continue to intensify this month. Spot treatment of individual trees or problem areas may be necessary.

## FORAGES & GRAINS

**POTATO LEAFHOPPER:** Counts in surveyed fields are well below the economic threshold of two leafhoppers per plant for alfalfa 12-inches and taller, and most sites have averages below 0.5 leafhoppers per sweep. Economic counts have not been found as of July 13. Nymphs are appearing more frequently in sweep nets indicating populations are increasing.

**PLANT BUG:** Surveys conducted across the northern one-half the state yielded counts of 0.1-1.2 per sweep (average 0.4 per sweep), which are standard for this time of year and still very low in comparison to the economic threshold of five per sweep in alfalfa.

**PEA APHID:** Levels of this insect vary considerably by region of the state. Alfalfa sampled in northeastern Wisconsin (Brown, Oconto, Lincoln, Marinette counties) contained very high counts of 9-30 aphids per sweep,

## DEGREE DAYS JANUARY 1 - JULY 11

LOCATION	50°F	2017	NORM	40°F
Dubuque, IA	1623	1541	1377	2542
Lone Rock	1439	1365	—	2320
Beloit	1409	1400	1394	2283
Sullivan	1305	1285	1305	2135
Madison	1398	1353	1327	2262
Juneau	1335	1267	—	2160
Racine	1183	1230	—	1989
Waukesha	1231	1240	—	2041
Milwaukee	1226	1221	1193	2041
Hartford	1279	1223	—	2097
Appleton	1334	1185	—	2123
Green Bay	1286	1150	1156	2068
Big Flats	1357	1244	—	2178
Hancock	1256	1148	1289	2032
Port Edwards	1268	1129	1257	2051
La Crosse	1525	1385	1456	2399
Eau Claire	1440	1254	1301	2247
Cumberland	1193	958	1197	1929
Bayfield	961	724	—	1629
Wausau	1163	989	1170	1910
Medford	1136	945	1065	1874
Crivitz	1212	1045	—	1952
Crandon	1102	858	919	1814

*Method: Modified B50; Modified B40 as of January 1, 2018.  
NORMALS based on 30-year average daily temps, 1981-2010.*

whereas numbers in the northwestern and west-central areas (Chippewa, Dunn, Pierce, Pepin, St. Croix counties) were much lower, ranging from 0.5-9 per sweep and averaging 3 per sweep. Pea aphid counts usually decrease abruptly by mid-summer.

## CORN

**CORN ROOTWORM:** Beetles of the northern and western species have been noted in Dane, La Crosse, and Rock counties since the last report. Results of last summer's beetle survey suggest overall larval rootworm populations, and the threat of root damage to continuous corn, could be down this season when compared with 2017.

**CORN EARWORM:** Pheromone traps in Dane, Dodge, and Fond du Lac counties registered low counts of 1-13 migrants, and a weekly total of 25 moths in six traps. Six other monitoring sites reported zero moths this week. The economic threshold for this pest is 5-10 moths in three

consecutive nights for corn, and seven per trap per week for tomatoes. Counts from July 5-11 were as follows: Arlington 0, Beaver Dam 6, Cottage Grove 2, Hancock 0, Janesville 0, Madison North 1, Marshfield 0, Prairie du Chien 0, Ripon 13, Sun Prairie 2, Watertown 1, and Wausau 0.

**JAPANESE BEETLE:** The annual emergence is well underway. Beetles are common in corn, soybeans, and fruit crops, and perimeter damage can be expected later this month. Low counts of 1-20 beetles per 100 plants were found in the edges of several cornfields in Green, La Crosse, Monroe, Sauk, Rock, Trempealeau and Walworth counties this week, and beetles were observed at about 42% of the sites surveyed.



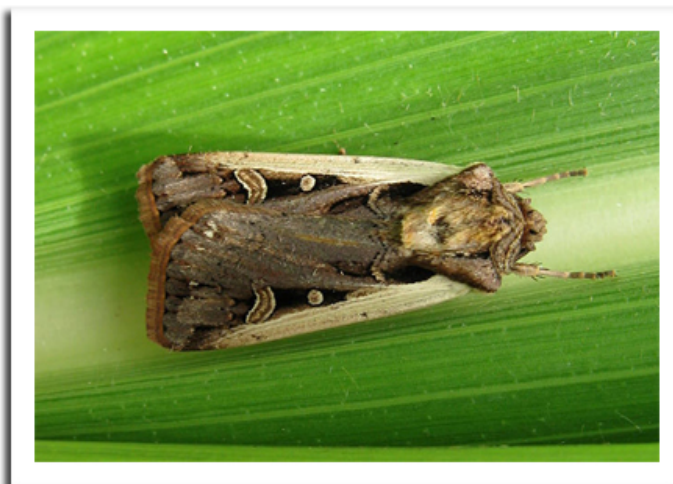
Japanese beetles feeding on corn silks

Krista Hamilton DATCP

For corn, the primary concern is to protect the silks from clipping since heavy beetle feeding on corn silks can impair pollination. Treatment may be justified for fields with three or more beetles per ear and silks that have been clipped to  $\frac{1}{2}$  inch when pollination is occurring (less than 50% complete). Japanese beetles aggregate on plants in the edge rows, emphasizing the importance of obtaining a representative sample from several areas throughout the field before making control decisions. Border row spot treatments may be sufficient if the beetles and damage are confined to the field edges. Beetles must be on the outside of the ear to be killed by contact insecticides.

**WESTERN BEAN CUTWORM:** Moth emergence continued for the fourth week, with very low counts reported as far north as Wausau in Marathon County. The DATCP network of 54 pheromone traps captured only 21 moths, for a cumulative total of 27 moths since the flight began around June 20. Peak flight, or 50% adult emergence,

should occur over the southern half of the state in the next two weeks. Oviposition on corn and dry beans is expected to increase as the moth flight escalates. In rare fields where egg masses and small larvae are found on 5% or more of the corn plants, an insecticide treatment applied at 90-95% tassel emergence will be most effective. This application timing increases the chance that the caterpillars will be exposed to the insecticide. Routine scouting should continue throughout the month.



Western bean cutworm moth

Jocelyn Smith University of Guelph

**TRUE ARMYWORM:** Larvae are somewhat common in low numbers in corn and alfalfa. DATCP surveys indicate that infestation rates range from 1-8% and are still well below the 25% treatment threshold. Nevertheless, these recent field observations emphasize the need for continued scouting of corn and lodged grains.



True armyworm larva

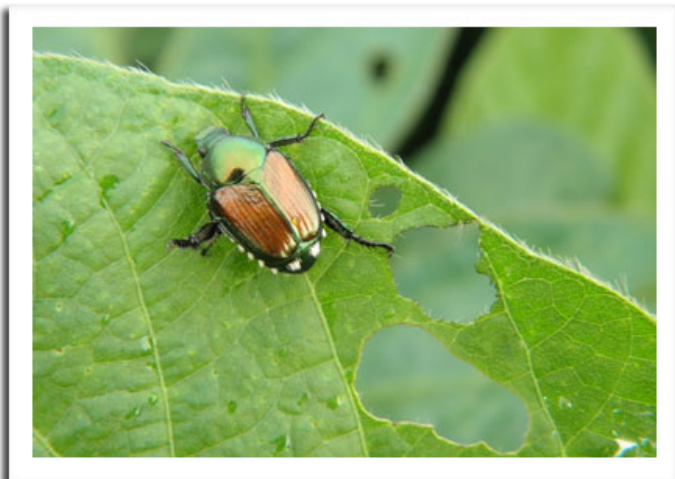
Krista Hamilton DATCP

**EUROPEAN CORN BORER:** The second flight began from June 28-July 4, with captures of 9-46 moths reported from

the Beaver Dam, Pardeeville, and Ripon and Sparta black light trap sites. Counts were lower at most sites this week (<16 per trap), with the exception of Pardeeville in Columbia County where a total of 108 ECB were collected. The appearance of summer moths signals that eggs are being deposited on corn, peppers, potatoes, snap beans and other vegetable hosts. If seasonal temperatures continue, black light traps could register peak emergence during the second week of August in portions of the southern and central districts. The treatment window for second generation larvae extends from 1,550-2,100 degree days (modified base 50°F).

## SOYBEANS

**JAPANESE BEETLE:** Soybeans across the southern two-thirds of the state are showing 1-10% of plants with light to moderate leaf injury by a combination of Japanese beetles, bean leaf beetles, grasshoppers and various caterpillars. Japanese beetle is currently the most prevalent defoliator. Leaf injury by these insects should not be allowed to exceed 20% (incidence and severity) between the bloom and pod-fill stages and 30% in the pre-bloom soybeans.



Japanese beetle on soybean leaf

Krista Hamilton DATCP

The recommended sampling method is to select 10 plants throughout the field, choosing a trifoliolate from the upper, middle and lower canopy on each plant, for a 30-leaf sample. Compare the 30 leaflets with an online defoliation estimating guide to determine the average percent defoliation, and if feeding is progressing through the canopy. Scouting several areas in the field interior, in addition to field edges where beetles are most numerous, is required for an accurate assessment. Spot treatment may

be considered for severely defoliated border areas. Recall that soybeans can tolerate considerable defoliation without yield loss and defoliation is commonly overestimated.

**GREEN CLOVERWORM:** Larvae are appearing in southern Wisconsin soybean fields. Numbers are still low and defoliation is light (<3% fieldwide), but outbreaks of this caterpillar occur every 5-6 years and conditions are favorable for damaging populations to develop this season.



Green cloverworm larva

Krista Hamilton DATCP

**SOYBEAN APHID:** Surveys continue to find very low densities in most fields. None of the 42 soybean fields sampled from July 5-11 had an average count above 25 aphids per plant. However, scattered fields had individual plants with 200 or more aphids concentrated mostly in the field margins, indicating populations are building. As densities increase, growers and crop advisors are reminded that the aphid treatment threshold established back in 2000 remains valid today, and that insecticide treatment should not be considered until the economic threshold of 250 aphids per plant on 80% of the plants has been exceeded. Aphid counts have not begun to approach this level in any soybean field surveyed by DATCP as of July 12.

## FRUITS

**CODLING MOTH:** Several apple orchards are 1,000 or more degree days (modified base 50°F) beyond the first biofix, and treatments for second generation larvae are starting. An increase in moth counts from the spring to summer flight suggests that some degree of fruit injury is probable and fruits should be closely inspected for damage. Apple growers are reminded to rotate insecticides between generations to prevent resistance to

chemical materials. Localized larvicide applications are usually an acceptable alternative to orchard-wide treatment for sites with variable larval pressure between cultivars or blocks.



Codling moth larval damage to apples

Patrick Clement flickr.com

**APPLE MAGGOT:** Captures on red spheres and yellow sticky traps have increased, with reports of flies appearing on traps at 11 of 27 cooperating locations from Kenosha to Bayfield County. The highest count for the week was 12 flies on a yellow sticky board at Sinsinawa in Grant County. Maintaining traps will be important as emergence continues and oviposition on apples increases in late July and early August.



Apple maggot fly

Thaddeus McCamant Central Lakes College

**SPOTTED TENTIFORM LEAFMINER:** The second flight should peak soon at most monitoring sites. Several orchards reported counts above 500 moths per trap in the past week, with a high of 1,053 moths per trap registered in Marquette County. Heavy egg laying can be expected

as long as pheromone traps are attracting high numbers of moths. Apple orchards with populations greater than one mine per leaf or a history of infestation should consider controlling second-generation larvae to reduce build-up of leafminers before the third flight begins in late July or August.

**SPOTTED WING DROSOPHILA:** Berry growers in southern and western Wisconsin have reported finding initial larval infestations in their blackberries and raspberries in past two weeks, indicating sampling for larvae in fruit should begin. To sample from a planting, place at least 15 ripe fruit in a plastic bag and lightly squeeze each fruit. Add a strong salt solution (1 cup salt to 1 gallon water), enough to cover all of the fruit, to the bag. If present, small white SWD larvae will emerge and rise to the top of the liquid after 30 minutes.

A more complete guide to the sampling process is available at [http://www.canr.msu.edu/ipm/uploads/files/SWD/SWD\\_2013-Salt\\_Sugar\\_Boil\\_Test-6-20-2013.pdf](http://www.canr.msu.edu/ipm/uploads/files/SWD/SWD_2013-Salt_Sugar_Boil_Test-6-20-2013.pdf).

Managing SWD requires persistence and the use of as many control techniques as possible.



Spotted wing drosophila maggot in raspberry

umaine.edu

**JAPANESE BEETLE:** Beetles are appearing in southern and Wisconsin apple orchards and vineyards. Damage to fruits, ornamentals and field crops is expected to intensify later this month and control may be necessitated to prevent fruit loss. Most chemical treatments are only effective against Japanese beetle when populations are low and the beetles are first immigrating into vineyards and orchards. Fruit growers should note the daily location of beetles when timing an insecticide application since the beetles feed in trees during the day and move to the ground at night.

## VEGETABLES

**STRIPED CUCUMBER BEETLE:** These yellow beetles with black stripes have been uncommon so far this season. Surveys in 10 community gardens and CSAs in the past week found only a single beetle at a Dane County site. The sampling protocol involved examination of 20 host plants per location. Despite their current scarcity, growers should continue to monitor cucurbits for beetles and signs of bacterial wilt. Control is warranted for populations of one beetle per plant in melons, cucumbers and young pumpkins, and five beetles per plant for less-susceptible cucurbits such as watermelon and squash.



Striped cucumber beetles inside squash blossom Krista Hamilton DATCP

**CORN EARWORM:** Twenty-five specimens were captured at six pheromone trap sites in Dane, Dodge, Fond du Lac counties during the last reporting period. The highest individual count was 13 moths near Ripon in Fond du Lac County. The primary migration of moths from the southern U.S. could begin by late July or early August. Participants in the corn earworm trapping network should begin replacing lures on a weekly basis.

**LATE BLIGHT:** Disease severity value (DSV) accumulations near Grand Marsh, Hancock and Plover have exceeded the late blight risk threshold, indicating that the requirements for disease development have been met in these locations. In the Antigo area, the DSV accumulation is above-threshold for early and mid-plantings, but still below-threshold for later potato plantings. Commercial potato fields infected with this disease have not been confirmed in Wisconsin to date. The closest confirmed reports of potato and tomato late blight are from Pennsylvania. UW-Extension Vegetable Plant Pathologist

Dr. Amanda Gevens is advising potato growers to begin routine preventative fungicide applications to protect their crops. Registered fungicides for potato late blight in Wisconsin are provided in the following link:

<http://www.plantpath.wisc.edu/wivegdis/pdf/2018/2018%20Potato%20Late%20Blight%20Fungicides.pdf>



Late blight on potato

ag.umass.edu

**SQUASH BUG:** Low numbers of adults and egg clusters were observed at four of 10 vegetable sites sampled from July 5-11. The highest count recorded was four egg masses per 20 plants.



Squash bug eggs

Krista Hamilton DATCP

The treatment threshold for squash bugs is based on an average count of one egg mass per plant, although scouting for tiny eggs is impractical in larger plantings. If the insects are numerous and wilting is observed, chemical control may be considered. For gardens, hand picking and destroying the bugs and their eggs is most effective. Another option is to place cardboard or newspaper on the

ground next to the plants. At night the squash bugs will aggregate beneath the cardboard and can be destroyed in the morning. Organic growers may use pyrethrum (PyGanic) or the pre-mix with azadirachtin (Azera) directed against the nymphs. Growers should be aware that the smaller nymphs are more readily killed than the adults. Refer to UWEX publication A3422 "Commercial Vegetable Production in Wisconsin" for a list of registered insecticides.

**POTATO LEAFHOPPER:** Populations in vegetable crops have increased in the past two weeks as a result of drier weather conditions and alfalfa harvest operations. Reports indicate that counts are approaching economic levels in a few western Wisconsin snap bean plantings. Established economic thresholds are one per sweep or one nymph per 10 leaves in snap beans and three leafhoppers per sweep in potatoes when nymphs are present.

## NURSERY & FOREST

**ILARVIRUS IN RIVER BIRCH:** Leaf mottling and discoloration symptoms caused by Ilarvirus were confirmed in young river birch at a Vernon County grower last week. The infested trees were container-grown bare-root starts from a Minnesota supplier. Mosaic viruses such as this one typically express on leaves as a distinctive, pseudo-random pattern of yellow, chlorotic tissue which can lead to slow growth, reduced vigor, and susceptibility to other plant pathogens.



*Ilarvirus symptoms on river birch*

*Tim Boyle DATCP*

Ilarviruses are spread by mechanical inoculation by way of processes like poor pruning sanitation, insects, and contact with infected plants. Plants with virus symptoms should be removed from the growing or sales area and

destroyed by sealing them in a plastic bag along with their container and growing media. Close inspection of plants before purchase, sterilizing pruning tools between each cutting, and industry attention to careful propagation of virus-free stock are foremost in preventing spread of this and other nursery plant viruses.

**JUNIPER SCALE:** Juniper scale was detected among 'Blue Rug' juniper plants in a Kenosha County nursery. This common yet potentially serious pest of juniper is always found attached to needles rather than the bark, particularly on the needle undersides. Juniper scale crawlers appear briefly in spring (for only ~ 24 hours) before adhering to needles to begin feeding on plant juices. Scale covering can remain attached to the needles for several years. Severely-infested plants turn yellowish-brown and appearing to be in need of fertilizer or water. Plants can decline due to scale feeding over time and may be killed by severe infestations.



*Juniper scale crawlers*

*Liz Meils DATCP*

As with other armored scales, treatments must be applied during the crawler stage to be effective. Applications of a high-quality 2% summer oil spray should only be made when the new needles are fully expanded to prevent injuring the needles. Using summer oils before or during needle expansion can result in yellowing and premature needle drop. Bifenthrin, cyfluthrin, or Orthene repeated at least two or three times at 10-day intervals can also provide scale control, although these aggressive treatments will also kill off natural enemies and should only be considered for extreme infestations.

**BUR OAK TIP BLIGHT AND BRANCH DIEBACK:** Widespread branch dieback on bur oak in forested areas of Chippewa, Eau Claire, Polk, Rusk, Sawyer, and Wash-

burn counties has been observed early this summer, with symptoms also reported in eastern Minnesota. Although a definitive diagnosis is not yet available, fungal tip blight coupled with insect activity are considered potential causal factors.



*Botryosphaeria canker on oak*

*Kansas State Extension*

Northwestern Wisconsin's cool, wet weather during the springs of 2017 and 2018 has contributed to record fungal infection outbreaks this season. One working hypothesis is that an insect similar to a gall wasp is wounding branch tips and allowing entry of *Botryosphaeria* shoot blight into bur oak trees. Current observations estimate twig and branch dieback affecting 20-30% of the infected trees, however new buds have been observed forming behind the dieback, so it is hoped the trees will recover over time.



*Botryosphaeria tip dieback on oak*

*Kansas State Extension*

*Botryosphaeria* infection is generally cyclical and often causes problems for a year or two before subsiding.

However, several concurrent years of infection can cause trees to appear stunted and tufted as the terminal buds and branches die back. A detailed report of the symptoms, diagnosis, and management recommendations for this emerging suspected insect/pathogen disorder will be published as laboratory results become available.

**ELM LEAFMINER:** Wild-grown Siberian elm trees around the perimeter of a St. Croix County nursery were found to have heavy elm leafminer damage, evident from a distance as large tan blotches on the leaves. The blotches develop when the leaf-mining larvae feed inside the leaf tissue, creating pockets between the upper and lower leaf layers. Elm leafminers remain burrowed in the ground until early spring, emerging as adults resembling small black wasps which deposit their eggs into slits on the upper surface of the leaves. After the larvae complete development in late spring or early summer, they drop to the ground. In instances of particularly severe infestations, the larvae may appear to be "raining" out of the trees, especially on windy days.



*Elm leafminer damage*

*Konnie Jerabek DATCP*

One control option is to spray immediately before the adults lay eggs on the leaves, but timing can be difficult, and spraying large elms increases the potential for pesticide drift. Another option is to use systemic imidacloprid, injected into the root zone and translocated to the leaf tissue well before the larvae begin to feed.



## APPLE INSECT & BLACK LIGHT TRAP COUNTS JULY 4 - 11

COUNTY	SITE	STLM <sup>1</sup>	RBLR <sup>2</sup>	CM <sup>3</sup>	OBLR <sup>4</sup>	DWB <sup>5</sup>	LPTB <sup>6</sup>	BMSB <sup>7</sup>	AM RED <sup>8</sup>	YELLOW <sup>9</sup>
Bayfield	Keystone	41	2	1	15	8	2	0	0	0
Bayfield	Oriente	28	0	0	0	23	5	0	—	—
Brown	Oneida	250	13	4	16	47	3	0	0	0
Columbia	Rio	—	—	—	—	—	—	—	—	—
Crawford	Gays Mills	133	—	0	4	25	3	—	0	0
Dane	DeForest	—	—	—	—	—	—	—	—	—
Dane	Mt. Horeb	184	132	1	0	41	11	0	—	—
Dane	Stoughton	60	16	5	2	16	1	0	0	0
Fond du Lac	Campbellsport	44	27	0	6	13	3	0	0	0
Fond du Lac	Malone	56	80	9	7	54	10	0	**2	0
Fond du Lac	Rosendale	231	83	12	11	13	8	0	0	3
Grant	Sinsinawa	41	32	29	—	—	—	—	8	12
Green	Brodhead	38	110	1	5	47	22	—	—	—
Iowa	Mineral Point	325	116	18	3	86	5	0	0	*0
Jackson	Hixton	34	18	2	0	5	0	0	0	0
Kenosha	Burlington	205	59	5	21	103	1	0	1	0
Marathon	Edgar	372	16	4	2	40	18	0	1	8
Marinette	Niagara	157	27	0	17	13	6	—	0	0
Marquette	Montello	1053	89	2	0	12	2	0	0	0
Ozaukee	Mequon	90	48	3	4	1	0	—	*1	—
Pierce	Beldenville	65	32	0	11	—	7	—	1	2
Pierce	Spring Valley	202	81	0 <sup>MD</sup>	2	71	34	0	0	3
Racine	Raymond <sup>•</sup>	663	68	16	23	5	22	—	—	—
Racine	Rochester	181	53	9	6	35	0	0	*3	0
Richland	Hill Point	164	62	0	14	20	8	0	0	1
Sheboygan	Plymouth	909	0	0 <sup>MD</sup>	13	0	3	0	**0	1
Walworth	East Troy	50	10	0	5	0	15	—	0	0
Walworth	Elkhorn	12	0	0	10	12	3	—	0	0
Waukesha	New Berlin <sup>•</sup>	350	40	30	36	11	50	—	—	—

<sup>1</sup>Spotted tentiform leafminer; <sup>2</sup>Redbanded leafroller; <sup>3</sup>Codling moth; <sup>4</sup>Obliquebanded leafroller; <sup>5</sup>Lesser peachtree borer; <sup>6</sup>Dogwood borer; <sup>7</sup>Brown marmorated stink bug; <sup>8</sup>Apple maggot red ball; \*Unbaited; \*\*Baited; <sup>9</sup>Apple maggot yellow board; <sup>•</sup> Counts are for two-week period, June 28-July 11; <sup>MD</sup>Mating disruption.

COUNTY	SITE	BCW <sup>1</sup>	CEL <sup>2</sup>	CEW <sup>3</sup>	DCW <sup>4</sup>	ECB <sup>5</sup>	FORL <sup>6</sup>	SCW <sup>7</sup>	TA <sup>8</sup>	VCW <sup>9</sup>	WBC <sup>10</sup>
Columbia	Pardeeville	1	2	1	1	108	8	0	17	1	1
Dodge	Beaver Dam	4	2	0	3	11	13	2	19	0	0
Fond du Lac	Ripon	0	3	0	2	16	4	0	17	0	0
Grant	Prairie du Chien	2	0	0	0	0	1	0	1	0	0
Manitowoc	Manitowoc	0	2	0	3	0	12	9	9	0	2
Marathon	Wausau	3	8	0	0	6	64	56	22	0	1
Monroe	Sparta	0	0	0	0	9	0	0	0	0	0
Rock	Janesville	1	0	0	0	0	5	0	20	0	0
Walworth	East Troy	1	0	0	0	0	12	0	3	0	0
Wood	Marshfield	5	10	0	0	3	10	6	12	0	0

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