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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

Cloudy skies and wet conditions prevailed this week, as showers and thunderstorms brought brief heavy rains to the region. High temperatures generally ranged from the 70s to lower 80s across the state. Surplus precipitation saturated soils and left standing water in many fields, but maintained adequate soil moisture for corn, soybeans and regrowth alfalfa. Persistent rainfall since late May has provided the dense, grassy foliage favored by armyworm larvae, and outbreak conditions developed in the eastern and central parts of the state. A vast acreage of wheat was treated from June 16-18, and many additional fields may be sprayed before the threat subsides. Alfalfa has shown exceptional growth, and harvest of the second crop is already underway in the southwest. Despite excessive moisture, frequent cloudy days and the latest armyworm problems, most crops are faring remarkably well.

LOOKING AHEAD

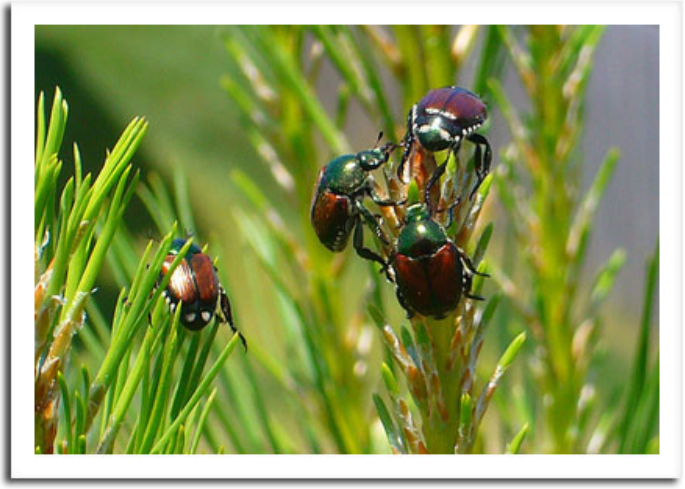
EUROPEAN CORN BORER: Larvae produced by the spring flight of moths are primarily in the first and second instars, and fresh whorl-feeding injury is apparent in corn in the southern and west-central areas. Several fields checked in Jackson, La Crosse, Monroe and Trempealeau counties showed light-moderate infestations affecting 2-21% of plants. Early-stage larvae were especially numerous in a few fields near Centerville and Ettrick in Trempealeau County. The most effective treatment window for first generation corn borers has closed at Beloit and other advanced southern locations, but remains open for another 2-14 days in the southeast and central areas.

SLUGS: Frequent rainfall during the past three weeks has favored activity by this nocturnal pest. Considerable leaf injury was reported in a corn field near Marshfield in Wood County, while light feeding is common in all areas. Treatment may be in order to reduce field crop or home garden damage.

EUROPEAN EARWIG: This insect is also very abundant again this year in gardens, greenhouses and basements, and is likely to remain so for several more weeks. Reports of damage to hostas, lettuce, marigolds, petunias, potatoes and zinnias have been received from Dane, Grant, La Crosse and Sauk counties. Wet weather this month is likely contributing to the high populations.

JAPANESE BEETLE: Emergence of adults is probable in the week ahead. This beetle, remarkable for its unusually wide host range, now occurs nearly statewide. Damage to fruit, garden, nursery and field crops should be expected throughout July, particularly in the generally infested southeast and south-central areas. The grubs feed on the

roots of turf grasses, vegetable, weeds, nursery stock and field crops.



Japanese beetles foggychan flickr.com

ALERTS

TRUE ARMYWORM: Larvae are concentrating in wheat fields in the central and east-central counties in numbers sufficient to justify treatment. Reports from consultants, county extension agents and a crop spraying service indicate that the heaviest infestations are located in the Markesan area of Green Lake County, although portions of Brown, Dodge, and Fond du Lac counties are also affected to some extent. By one estimate, 1,200 acres of wheat have been sprayed in the last two days and additional treatments are planned.

Due to the severity of these infestations and the potential for larger outbreaks, it is very important that farmers check wheat and corn immediately and consult their county agents for control recommendations. A survey of the east-central area is tentatively set for next week.

FORAGES

ALFALFA WEEVIL: Larval counts in Jackson, Jefferson, La Crosse, Monroe, Trempealeau and Walworth counties have been reduced to less than 0.5 per sweep, and the threat from this early-season pest has passed. Leaf tip feeding in second growth alfalfa is generally below 10% in the southern and west-central areas. Conversely, any first crop alfalfa that was not harvested by early June has been degraded to the point that quality and yield have been seriously compromised.

DEGREE DAYS JANUARY 1 - JUNE 17

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	1004	713	—	1026	1775
Lone Rock	975	684	—	972	1714
Beloit	1057	717	—	1056	1828
Madison	939	659	823	946	1672
Sullivan	980	692	820	963	1713
Juneau	918	648	—	927	1637
Waukesha	849	647	—	860	1549
Hartford	822	618	—	841	1526
Racine	780	566	—	826	1479
Milwaukee	756	564	664	797	1447
Appleton	814	533	712	834	1520
Green Bay	705	463	684	763	1392
Big Flats	870	603	—	852	1555
Hancock	886	599	827	864	1574
Port Edwards	837	567	769	827	1524
La Crosse	971	664	891	968	1708
Eau Claire	864	620	790	867	1574
Cumberland	772	550	746	748	1435
Bayfield	547	361	526	535	1133
Wausau	758	477	702	754	1420
Medford	759	502	625	763	1426
Crivitz	681	427	—	690	1344
Crandon	675	412	593	646	1292

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

POTATO LEAFHOPPER: Populations remain below economic levels in alfalfa. Representative counts in southern and central Wisconsin vary from 0.1-1.0 per sweep, with an average of 0.3 per sweep. Adults are well distributed over the state and have been found as far north as Polk and Sawyer counties.

PEA APHID: Surveys show numbers have decreased in the past two weeks. Alfalfa fields sampled in the southern half of the state contained fewer than 7.0 per sweep, with localized exceptions. A few fields in the Holmen area of La Crosse County had 25 or more aphids per sweep. The average count for the period of June 11-17 was 3.2 per sweep, a moderate decline from 8.1 the week before.

CORN

STALK BORER: Larval infestations remain light in most corn fields, seldom exceeding 5% and then primarily near field margins. An occasional field in Jefferson and Rock

counties had injury rates of 10-19% in the edge rows, but significant damage is not expected to result since the plants are beyond the V7 stage.

WESTEN BEAN CUTWORM: The first moths could appear in pheromone trap collections next week, with 25% emergence occurring by July 4 in the southern counties. Network cooperators should install traps over the weekend and email GPS coordinates or nearest street address to krista.hamilton@wi.gov by Thursday, June 25.

EUROPEAN CORN BORER: Surveys this week found light-moderate larval infestations in the west-central area. Early-stage larvae were unexpectedly common, with about 1/3 of the fields examined showing 2-21% of plants with whorl feeding injury. Larvae in one field in Trempealeau County had begun boring into the midribs of leaves, but most feeding was still confined to the whorls. Corn growers concerned about European corn borer control should assess the percentage of infested whorls in the immediate future and not wait any length of time to spray if a protective treatment is justified. Bt corn producers are also advised to scout fields to evaluate the performance of their transgenic hybrids.

European corn borer leaf feeding *Krista Hamilton DATCP*

SOYBEANS

SOYBEAN APHID: Colonies are increasing gradually in soybeans. Surveys conducted in V2-R1 fields in Dane, Jefferson, La Crosse, Rock, Trempealeau, Walworth and Waukesha counties yielded low densities of 1-38 aphids per infested plant on 1-28% of plants. Aphids are still relatively scarce and could not be found in 70% of surveyed fields. Crop advisors, field scouts and growers should begin monitoring soybeans next week.

ROSE CHAFER: Beetles are especially prevalent in the central part of the state. The moderate-sized, tan scarabs are common in many soybean fields, where they are causing skeletonization of the leaves. Similar to the Japanese beetle, this pest feeds on a wide variety of plants, including apple, cherry, corn, dahlia, elder, elm, foxglove, geranium, grape, hollyhock, hydrangea, pear, peony, poppy, rose, Virginia creeper, wisteria and many other agricultural and ornamental crops.

Rose chafer *flickr.com*

FRUITS

APPLE MAGGOT: Emergence began last week at Dodgeville in Iowa County, but no new flies were registered from June 11-17 at any cooperating orchard. Recurrent rains this month should stimulate a heavy emergence, with the potential for record apple maggot fly counts for the second consecutive year.

SPOTTED TENTIFORM LEAFMINER: The expected increase in moth numbers was observed at several monitoring locations in the past week. Pheromone trap counts have been relatively low since the first flight ended in late May, but activity by second flight is escalating. Peak flights are expected to occur by the first week of July in the southwest, south-central and central counties.

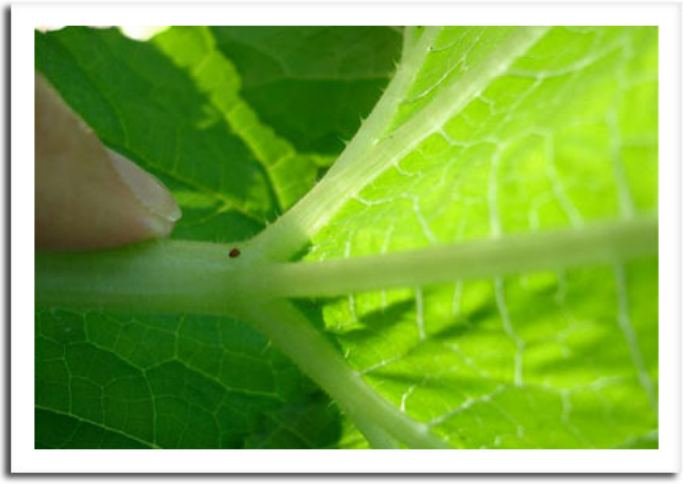
CODLING MOTH: High populations persist in some orchards, namely those in the southeast and northeast. Economic captures of 5 or more moths were registered

in Dane, Fond du Lac, Iowa, Oneida, Racine and Waukesha counties, and an increase from 27 to 50 moths was charted at Niagara in Marinette County. Oviposition is intensifying in these areas.

VEGETABLES

CABBAGE LOOPER: Late-stage larvae from an earlier migration in May have been observed in cabbage transplants in southern Wisconsin. Although numbers currently are insignificant, their presence indicates the potential for larger populations later this season. The subsequent generation of larvae appearing next month could cause considerable damage unless controlled.

SQUASH VINE BORER: Squash, pumpkin and zucchini growers are advised to closely inspect susceptible plants over the next three weeks for the flat, brown eggs deposited at the base of stems. Larvae bore into the stems of crops upon hatch, necessitating early monitoring and control as soon as the eggs are noticed. Damage is more likely to occur in gardens and commercial plantings previously infested by this pest. Growers should promptly pull and destroy wilted plants.



Squash vine borer egg *bonnieplants.com*

CORN EARWORM: Low numbers of moths have been registered in black light and pheromone traps since late May, signaling a very light migration is occurring. A report from Mendota in north-central Illinois indicates larvae were found in peas last week.

SPOTTED CUCUMBER BEETLE: These insects, also known as “southern corn rootworm beetles”, have been noted in alfalfa, corn and various vine crops in the past several weeks. Spotted cucumber beetles are of primary concern to cucumber and melon growers due to their capacity to transmit bacterial wilt. A count of 4-5 beetles per 50 plants indicates the potential for disease transmission.

Spotted cucumber beetle *icmp2005 bugguide.net*

NURSERY & LANDSCAPE

GUIGNARDIA LEAF BLOTCH: This leaf spot disease is developing on horsechestnut and buckeye trees in Ozaukee and Washington counties. Symptoms include irregular, reddish-brown leaf lesions with yellow margins that twist and distort affected foliage as they increase in size and severity. Disease development can be suppressed by disposing of fallen leaves in autumn to reduce future inoculum levels.

Guignardia leaf blotch on buckeye *Liz Meils DATCP*

WHITE PINE WEEVIL: Severe injury caused by this weevil was noted on white pines at nurseries and Christmas tree farms in Clark County. Scouting for evidence of larval

attack, including wilted leaders and brown, discolored needles on the top lateral growth is recommended at this time. This insect can be controlled by pruning the infested area 6-10 inches below the wilted leader before adults emerge in late July or August. Pruned tops should be removed from fields and properly disposed of to prevent reinfestation.

White pine weevil leader damage Konnie Jerabek DATCP

COTTONY MAPLE SCALE: The white, cottony egg masses produced by this pest of deciduous trees and shrubs were noted in light-moderate amounts on euonymus and red maples in Ozaukee and Washington counties. Hatch of mobile crawlers is expected to have begun in southern and central areas of the state, where 900-1,200 degree days (before 50°F) were surpassed this week. Chemical treatments directed against the crawler stage should be considered only after two consecutive years of heavy infestation. Light infestations may be pruned out and destroyed.

Cottony maple scale www.vniles.com

POTATO LEAFHOPPER: Autumn Blaze maples in a Washington County nursery are showing leaf cupping and other symptoms of leafhopper injury. Late harvest of alfalfa frequently forces large numbers of these insects onto nearby hosts, including nursery stock. Recent heavy rains may have temporarily reduced their activity in some areas, but nymph production began early this year, indicating the possibility of substantial populations by mid-July.

FOREST

FOREST TENT CATERPILLAR: An infestation of 400-500 acres of aspen, oak and other hardwoods was observed at Devils Lake State Park in eastern Sauk County, extending into western Columbia County. Localized outbreaks were also reported in southwestern Waupaca County. Most caterpillars are in the late instars and some have pupated. Department of Natural Resources specialists plan to conduct an aerial survey to determine the extent of damage.

Forest tent caterpillars duskie78 flickr.com

EASTERN TENT CATERPILLAR: The Western Region DNR Forest Health Specialist reports that it has been a “banner year” for this caterpillar in the northwest. Populations apparently are the highest he has observed in 30 years.

JACK PINE BUDWORM: Larval surveys conducted by DNR personnel late last month indicate very low populations for 2010. A very small percentage (3-4%) of plots in Bayfield and Douglas counties are expected to develop noticeable defoliation, but no epidemics are predicted for Burnett, Polk, Oneida, Vilas and Washburn counties.

YELLOWHEADED SPRUCE SAWFLY: Larvae are reported to have severely defoliated white spruce trees in plantations in Lincoln and Oneida counties earlier this month. A few of the plantings were more widely spaced than is recommended. Horticultural oil, soap sprays and insecticides are effective if applied early, about 10 days after bud caps are shed. The only practical control option at this time of year is dislodging larvae with a forceful spray of water.

GYPSY MOTH: Severe outbreaks are occurring in Langlade, Brown, Marinette, Menominee, Oconto, Oneida and Shawano counties. Defoliation is most apparent on oaks, but aspens, beech, hazelnuts and small white pines have also been damaged. According to a report from the Boulder Lake area of Langlade County, the caterpillars are extremely abundant on trees, vehicles and campers. Larvae are causing defoliation at sites in Columbia, Dane, Rock and Sauk counties as well. Activity should subside in the southern areas by late June, but may continue for another 2-3 weeks farther north.

Gypsy moth larvae *managebaycounty.mi.gov*

GYPSY MOTH SPRAY PROGRAM: Mating disruption treatments, consisting of pheromone flakes aerially applied by agricultural spray planes, are planned for next week at selected locations in southwestern Wisconsin. The tiny flakes contain a sex-attractant pheromone that reduces gypsy moth reproduction by confusing male moths in search of female mates. Approximately 181,920 acres in Bayfield, Buffalo, Chippewa, Clark, Crawford, Douglas, Eau Claire, Grant, Iowa, Jackson, La Crosse and Vernon counties will receive pheromone flake treatments this summer.

APHIDS: Sugar maples in northeastern Wisconsin are showing a yellowing of the leaves, possibly caused by aphids in the genus *Periphyllus*. Large numbers of aphids were observed on leaf undersides by late May, and symptoms began appearing about two weeks ago. It remains unclear if the yellowing is attributable to the aphids, drought stress, or a combination of the two.

Periphyllus spp. aphids on maple *Brian Schwingle WDNR*

TRAPPING NETWORKS

BLACK LIGHT TRAPS: Nocturnal moth activity remained about the same as reported previously. Spotted cutworm adults were fairly numerous in trap collections at Marshfield and Wausau, while flights of true armyworms continued for the seventh week in the south. Counts of European corn borer moths have declined to low levels in the southern and central areas, signaling the end of the spring flight. Insignificant numbers of celery loopers, dingy cutworms and variegated cutworms were registered at a few sites.

APPLE INSECT & BLACK LIGHT TRAP COUNTS JUNE 11 - 17

COUNTY	DATE	SITE	STLM[1]	RBLR[2]	CM[3]	OBLR[4]	OBLR[5]	AM RED[6]	AM YELLOW[7]
Bayfield	6/11-6/17	Keystone	0	0	0	0	—	0	0
Bayfield	6/11-6/17	Bayfield	—	—	—	—	—	—	—
Bayfield	6/07-6/14	Orienta	0	0	0	0	—	—	—
Brown	6/11-6/17	Oneida	450	0	11	0	—	—	—
Chippewa	6/11-6/17	Chippewa Falls 1	0	2	2	0	0	0	0
Chippewa	6/11-6/17	Chippewa Falls 2	—	—	—	—	—	—	—
Dane	6/11-6/17	Deerfield	378	21	14	3	—	0	0
Dane	6/11-6/17	McFarland	0	0	5	0	—	0	0
Dane	6/10-6/16	Stoughton	158	42	6.5	3	—	0	0
Dane	6/11-6/17	West Madison	214	20	4	8	—	—	—
Dodge	6/11-6/17	Brownsville	20	0	3	9	—	0	0
Fond du Lac	6/11-6/17	Campbellsport	100	1	0	5	—	0	0
Fond du Lac	6/11-6/17	Malone	1000	1	7	34	—	0	0
Fond du Lac	6/11-6/17	Rosendale	58	39	3	1	—	0	0
Grant	6/11-6/17	Sinsinawa	28	9	0	2	0	0	0
Green	6/11-6/17	Brodhead	11	33	1	2	0	0	0
Iowa	6/11-6/17	Dodgeville	—	3	43	6	1	0	0
Iowa	6/11-6/17	Mineral Point	112	33	1	6	—	0	0
Jackson	6/11-6/17	Hixton	28	1	4	8	4	—	—
Kenosha	6/11-6/17	Burlington	275	0	3	2	—	—	—
Marinette	6/11-6/17	Niagara	57	0	50	36	—	—	—
Marquette	6/07-6/14	Montello	384	0	4	0	—	—	—
Ozaukee	6/11-6/17	Mequon	—	—	—	—	—	—	—
Pierce	6/11-6/17	Beldenville	27	0	0	0	0	—	—
Pierce	6/10-6/17	Spring Valley	216	0	1	7	1	—	—
Racine	6/11-6/17	Raymond	262	3	14	16	—	—	—
Racine	6/11-6/17	Rochester	700	12	32	7	—	0	0
Richland	6/08-6/15	Hillpoint	930	3	1	5	5	—	—
Sheboygan	6/11-6/17	Plymouth	—	—	—	—	—	—	—
Walworth	6/11-6/17	East Troy	—	—	—	—	—	—	—
Walworth	6/11-6/17	Elkhorn	—	—	—	—	—	—	—
Waukesha	6/11-6/17	New Berlin	585	3	15	11	—	—	—

[1]Spotted tentiform leafminer; [2]Redbanded leafroller; [3]Codling moth; [4]Obliquebanded leafroller EASTERN; [5]Oblique-banded leafroller WESTERN; [6]Apple maggot red ball; *Unbaited red ball; **Baited red ball; [7]Apple 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	6/11-6/17	Chipp Falls	2	0	0	2	4	0	0	0	0	0
Columbia	6/11-6/17	Arlington	—	—	—	—	—	—	—	—	—	—
Dane	6/11-6/17	Mazomanie	—	—	—	—	—	—	—	—	—	—
Grant	6/11-6/17	Lancaster	0	9	0	1	2	0	0	0	0	2
Manitowoc	6/11-6/17	Manitowoc	—	—	—	—	—	—	—	—	—	—
Marathon	6/11-6/15	Wausau	4	0	0	38	0	0	1	0	0	0
Monroe	6/11-6/17	Sparta	0	0	0	6	0	0	0	0	0	0
Rock	6/11-6/17	Janesville	0	4	0	0	0	0	5	0	0	0
Walworth	6/11-6/17	East Troy	0	0	0	9	0	0	0	0	0	0
Wood	6/11-6/17	Marshfield	21	7	0	41	1	0	3	0	0	2

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