

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

Warm, very humid weather prevailed during the first week of August, favoring summer crop development and fieldwork. Occasional showers maintained abundant moisture reserves for reproductive crops in some locations, while adding water to already soggy fields in others. Above-average temperatures continued to promote rapid growth of the state's corn and soybeans, and many farmers are reporting the best crops in recent memory. Corn progress is significantly ahead of both 2009 and the long-term average in all areas, with 89% of the annual crop at or beyond the silking stage by August 2. This is 41 percentage points ahead of last year and 21 points ahead of the 5-year average. Warm nighttime temperatures proved suitable for activity by nocturnal pest insects.

# LOOKING AHEAD

GREEN CLOVERWORM: Populations are the highest in many years, and the larvae are reportedly causing noticeable damage to soybean fields in the central and southern areas. Defoliation in Iowa, Lafayette and Rock counties has been extensive enough that treatments have been applied since late July. The adults have become increasingly common, indicating that a subsequent brood of larvae should occur later this month. WESTERN BEAN CUTWORM: Moths continue to be registered in pheromone traps, although activity has declined substantially. The cumulative count on August 5 was 10,227 moths in 140 traps, a 77% increase over 2,305 moths at the same time last year. Reflective of the very high numbers this season, larvae in various stages are prevalent in scattered corn fields statewide, especially in the central and northeast areas. Larvae could persist throughout August and possibly into September.

**CORN EARWORM:** Source populations in the southern and south-central US are very large, and the risk of damaging moth flights is expected to remain high next week. A nightly count of 10 moths for 2 consecutive evenings should be viewed as an early warning to begin monitoring silking sweet corn fields. Significant flights were registered this week in Dane County.

LATE BLIGHT: This disease was detected late last week in the Antigo area of Langlade County. Since July 14, potato fields afflicted by late blight have been verified in Adams, Brown, Marquette, Portage and Sauk counties.

CELERY LEAFTIER: Unusually high numbers of this small, brown moth have been observed in backyards, at lights, and in soybean fields since late July. Surveyed fields in Columbia, Dane, Dodge, Grant, Iowa, Jackson, Monroe, La Crosse, Ozaukee, Vernon and Washington counties are moderately-heavily infested. The larvae consume foliage of beets, celery, kale and other vegetables, but are not considered a threat to field crops. Another larval generation can be expected by September.



Celery leaftier moth

Krista Hamilton DATCP

SOYBEAN APHID: Densities statewide are considerably lower than in previous years. A very small percentage of fields contain moderate populations of 25-75 aphids per plant, but at this time it is speculated that colonies may not exceed economic levels before most soybean acreage reaches the full seed (R6) stage. Control treatments are not economical at or beyond R6.

### FORAGES

POTATO LEAFHOPPER: Nymph production increased sharply last week and remains high. Alfalfa fields, especially in the central part of the state, are showing foliage with yellowing caused by this insect. The average count this week was 2.1 per sweep in Adams, Juneau, La Crosse, Monroe, Vernon, Waushara and Wood counties. A second growth alfalfa field in Vernon County averaged 6.4 per sweep. Regular monitoring throughout August is advised since counts still vary widely and are not consistently above treatment thresholds.

**PEA APHID:** Counts are generally very low in all surveyed areas, but one Juneau County field yielded 7-10 per sweep. This insect has been virtually nonexistent in alfalfa over the past eight weeks, likely due to earlier heavy rains facilitating the spread of fungal pathogens.

ALFALFA CATERPILLAR: Larvae of this species are very numerous in many alfalfa fields and some growers have become concerned about its damage potential. In the

## **DEGREE DAYS JANUARY 1 - AUG 4**

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	2139	1592	_	2144	3397
Lone Rock	2090	1525		2095	3318
Beloit	2237	1586	_	2195	3503
Madison	2070	1517	1828	2095	3289
Sullivan	2118	1554	1861	2063	3341
Juneau	2031	1518		2057	3234
Waukesha	1930	1569	_	1982	3112
Hartford	1894	1518	_	1975	3079
Racine	1885	1509		1958	3068
Milwaukee	1833	1479	1668	1925	3006
Appleton	1882	1392	1690	1975	3070
Green Bay	1740	1284	1629	1870	2908
Big Flats	1896	1381	_	1907	3060
Hancock	1923	1406	1805	1921	3092
Port Edwards	1851	1338	1725	1903	3017
La Crosse	2082	1551	1982	2042	3311
Eau Claire	1904	1464	1788	1946	3099
Cumberland	1722	1295	1701	1769	2863
Bayfield	1376	981	1314	1433	2437
Wausau	1703	1191	1641	1781	2842
Medford	1696	1205	1484	1781	2841
Crivitz	1659	1182	_	1749	2798
Crandon	1538	1067	1334	1598	2625

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

central and west-central areas, counts range from 0.5-4.5 per sweep. Several parasitized larvae were collected in sweep nets this week, indicating infestations are being reduced by natural controls.

# CORN

**TRUE ARMYWORM:** Surveys failed to detect any substantial damage this week. Infestation rates in Adams, Juneau, La Crosse, Monroe and Vernon counties were low and ranged from 1-5% in the margins of fields. Second generation larvae measured about <sup>3</sup>/<sub>4</sub>-1 inch long on August 4.

WESTERN BEAN CUTWORM: Black light and pheromone trap collections have declined to very low levels as the adult flight period subsides. Preliminary results of the annual trapping survey show an unprecedented increase in moth numbers in the state, from 4,928 last year to 10,208 as of August 5. Cumulative counts for the 140 pheromone traps distributed throughout the state are shown in the map below. Sites that registered 100 or more moths are represented by red and yellow circles.

> Western Bean Cutworm Trap Counts through August 2, 2010



EUROPEAN CORN BORER: The treatment window for second generation larvae has either closed or is expected to close shortly in south-central, southwest and west-central Wisconsin. Treatment decisions must be made in the immediate future, before the caterpillars have bored into corn stalks and ears.

CORN ROOTWORM: Corn surveyed in the central and west-central districts yielded averages of 0-1.3 beetles per plant, with economic counts of 0.75 or more beetles per plant in only 2 of 15 fields checked. Compared to recent years, populations are fairly low for early August.

CORN EARWORM: Moths appeared in significant numbers in Dane County this week. Sweet corn growers can expect infestations if silking fields are not monitored and sprayed punctually. Larvae were noted in Adams and Juneau County corn fields, and it is reported that treatments have begun in southern Wisconsin. Pheromone trap counts from July 30-August 5 were as follows: Cashton 12, Chippewa Falls 6, Coon Valley 10, Janesville 1, Madison 14, Marshall 28, Marshfield 27, Stoughton 60, and Sun Prairie 74.

#### SOYBEANS

SOYBEAN APHID: Surveys show populations are still abnormally low. Of the 31 fields examined during the period of July 30-August 5, only 1 in Monroe County had an average count above 50 aphids per plant and most had fewer than 20 per plant. It now appears densities may not attain the same magnitude as last year or previous years. Many soybean fields are approaching R6 or full seed, the development stage at which no yield benefit is gained by control treatments. Soybeans should be examined next week to appraise not only aphid populations, but also defoliation caused by the unusual assortment of caterpillars active in fields across the state.

CELERY LEAFTIER: Numbers are remarkably high in many fields. Reports from the University of Illinois-Extension indicate this small, European corn borer-like moth is extremely abundant in central and northern Illinois soybeans, and the adults were found in nearly all Wisconsin soybean fields checked in the past week. The larvae of this insect attack cultivated flowers, weeds, and vegetables, including beans, beets, celery and spinach, but their injury is seldom of economic importance.

**FROGEYE LEAF SPOT:** Soybean fields in Lafayette and Rock counties are showing plants infected with this fungal disease. Diagnostic symptoms include angular spots with light gray centers and distinct purple to redbrown margins. The causal fungus can be seedborne.



Frogeye leaf spot

Anette Phibbs DATCP

## FRUITS

CODLING MOTH: Larvicides for control of the second

generation are being applied in orchards where 250 degree days have accumulated since the latest biofix. Reports indicate there is great variability in summer moth activity. Several locations are registering their highest counts in many years, while others are finding no moths at all. Trap counts this week ranged from 0-65 moths, with the high count reported from Niagara in Marinette County. Spray schedules should be maintained as long as moths are numerous.

APPLE MAGGOT: Emergence and oviposition continued for the eighth consecutive week, but activity has likely peaked statewide. Flies are expected to persist in orchards for several more weeks. Continued maintenance of red sphere traps is recommended.

**OBLIQUEBANDED LEAFROLLER:** The second and last of the moth flights this season is underway. Counts for the period of July 30-August 5 varied from 0-19 per trap, which is comparable to the numbers reported during the previous 2-3 weeks. Apple growers are advised to scout for the larvae at points where leaves are covering the fruit and where two fruits come into contact. Late season injury can be difficult to detect but may affect large numbers of fruits.

### VEGETABLES

SQUASH VINE BORER: Reports of extensive damage to summer squash in a few La Crosse County home gardens were received in the past week. The affected plants exhibited wilted leaves and vines, classic symptoms of squash vine borer infestation. Upon closer examination, the vines showed sawdust-like frass and exit holes. The wilted plants were promptly pulled and destroyed.

CABBAGE LOOPER: Low numbers of this pest have been registered near Chippewa Falls and Newburg consisttently since late July. The moths may be new migrants or the product of an earlier migration that occurred around mid-June. Counts from July 30-August 5 ranged from 3-4 moths per trap.

## NURSERY & LANDSCAPE

DOTHISTROMA NEEDLE BLIGHT: This damaging foliar disease has been found on Austrian pines at nurseries in

Kenosha and Walworth counties. The causal fungus infects needles and may kill pines after successive years of severe infection. Symptoms include needles that progressively turn light green, tan, and brown, while the bases remain green. Disease development is typically most severe in the lower crown. Copper fungicides effectively prevent infection. A mid-May application protects needles from previous seasons and a second application 4-6 weeks later protects current-year needles.

TAR SPOT: The pale yellow lesions appearing on Norway maple leaves in Brown, Waukesha and many other counties are the early signs of tar spot, a cosmetic fungal leaf spot disease. Severely infected leaves will soon develop black, tar-like lesions and may fall prematurely, but this disorder does not permanently damage trees. Raking and disposing of infected leaf litter in fall will reduce its development next season. In the rare event that treatment is warranted, three fungicide applications are necessary for control: one at bud break, one when leaves are half expanded, and one when leaves are fully expanded.



Tar spots on a maple leaf

soilplantlab.missouri.edu

LIRULA NEEDLECAST: Light amounts of this needlecast disease were apparent on the lower branches of balsam firs in Price County. Lirula is easily identified by a single longitudinal row of dark spores along the midrib on the undersides of second- and third-year needles. Environmental conditions that favor its development are high humidity, low temperatures and inadequate spacing. As with most fungal disorders, measures that increase air circulation are effective in preventing new infections.

### APPLE INSECT & BLACK LIGHT TRAP COUNTS JULY 30 - AUGUST 5

COUNTY	DATE	SITE	STLM <sup>1</sup>	RBLR <sup>2</sup>	CM <sup>3</sup>	OBLR⁴	OBLR⁵	AM RED <sup>6</sup>	AM YELLOW <sup>7</sup>
Bayfield	7/30-8/05	Keystone	6	2	2	2		*16	*8
Bayfield	7/30-8/05	Bayfield							
Bayfield	7/26-8/02	Orienta	16	1	0	0		0	0
Brown	7/30-8/05	Oneida	150	4	12	3		*2	0
Chippewa	7/30-8/05	Chippewa Falls 1		31	15	2	0	*5	0
Chippewa	7/30-8/05	Chippewa Falls 2							
Dane	7/28-8/04	Deerfield	590	15	7	4		*2	0
Dane	7/30-8/05	McFarland							
Dane	7/29-8/04	Stoughton	172	82	12	2		*2	*2
Dane	7/30-8/05	West Madison							
Dodge	7/30-8/05	Brownsville							
Fond du Lac	7/29-8/04	Campbellsport	60	6	0	12		*]	0
Fond du Lac	7/30-8/05	Malone	1000	31	9	6		0	0
Fond du Lac	7/30-8/05	Rosendale							
Grant	7/30-8/05	Sinsinawa							
Green	7/30-8/05	Brodhead							
lowa	7/30-8/05	Dodgeville	450	29	41	6	0	*]	0
lowa	7/30-8/05	Mineral Point	360	164	6	5	2	0	0
Jackson	7/30-8/05	Hixton	62		0	2	0	*]	*]
Kenosha	7/30-8/05	Burlington	175	5	7	0		*7	0
Marinette	7/23-8/05	Niagara	1672	0	65	5		*3	0
Marquette	7/25-8/01	Montello	258	12	1	0		0	0
Ozaukee	7/25-8/01	Mequon	0	6	3	0		**47 *5	
Pierce	7/30-8/05	Beldenville	100	64	10	6	0	*]	*]
Pierce	7/29-8/05	Spring Valley	137	6	1.5	3	1	**2	0
Racine	7/30-8/05	Raymond	1920	106	15	19		0	0
Racine	7/30-8/05	Rochester	30	40	8	5		*5	0
Richland	7/29-8/02	Hillpoint	525	9	3	3	1	0	0
Sheboygan	7/30-8/05	Plymouth							
Walworth	7/30-8/05	East Troy							
Walworth	7/30-8/05	Elkhorn							
Waukesha	7/30-8/05	New Berlin	1600	23	25	13		0	0

<sup>1</sup>Spotted tentiform leafminer; <sup>2</sup>Redbanded leafroller; <sup>3</sup>Codling moth; <sup>4</sup>Obliquebanded leafroller EASTERN; <sup>5</sup>Obliquebanded leafroller WESTERN; <sup>6</sup>Apple maggot red ball; <sup>\*</sup>Unbaited AM trap; <sup>\*\*</sup>Baited AM trap; <sup>7</sup>Apple maggot yellow board.

COUNTY	DATE	SITE	ECB <sup>1</sup>	TA <sup>2</sup>	BC₩ <sup>3</sup>	SCW⁴	DCW⁵	CE⁵	CEL <sup>7</sup>	WBC <sup>8</sup>	FORL <sup>9</sup>	VCW <sup>10</sup>
Chippewa	7/30-8/05	Chipp Falls	7	3	0	0	20	1	1	1	0	0
Columbia	7/30-8/05	Arlington	0	2	1	1	1	0	0	2	0	0
Grant	7/30-8/05	Lancaster	9	0	0	0	0	0	2	2	0	0
Manitowoc	7/30-8/05	Manitowoc			—				—			—
Marathon	7/30-8/05	Wausau			—			_	—			
Monroe	7/30-8/05	Sparta		0	0	8	0	0	7	26	5	0
Rock	7/30-8/05	Janesville	1	9	0	0	0	0	31	0	7	0
Walworth	7/30-8/05	East Troy			—			_	—			
Wood	7/30-8/05	Marshfield	17	27	11	3	21	2	4	4	5	3
Vernon	7/30-8/05	Coon Valley	9	15	4	3	18	3	7	21	0	0

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