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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
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WEATHER & PESTS

Sunny and dry weather conditions persisted over much of the state, allowing farmers to apply post-emergence herbicide and fertilizer treatments, harvest hay, and plant the last acres of soybeans. Following the extraordinary rainfall and flooding earlier this month, there is great disparity regarding the condition of crops in the state. In some instances, corn has shown rapid growth and has reached the V9 stage, while in many areas, fields are stunted and chlorotic due to sulfur or nitrogen deficiency. Soybean emergence has been uneven and some stand counts are reported to be lower than expected. Preliminary estimates of crop and agricultural losses due to storms and flooding are being compiled by the USDA's National Agricultural Statistics Service (NASS) and should be released on June 30. Although conditions continued to favor the reproduction and development of insects, surveys this week detected very little change in populations. Insects and diseases at this stage in the growing season have not been as influential as the weather.

LOOKING AHEAD

EUROPEAN CORN BORER: The treatment interval for first generation larvae has opened in the most advanced southern areas of the state, including Beloit, Juneau, Lone Rock, Madison and Sullivan. Fields should be examined closely at this time to appraise the percent of infested whorls and the development of this pest. Insecticides must be applied before larvae bore into corn stalks and midribs in order to be effective.

SOYBEAN APHID: Economic population densities of 250 aphids per plant may begin to develop by the first or second week of July in some locations. Surveys directed at determining when the first aphids begin to colonize fields, the rate of population build-up in soybeans, and when populations reach or exceed the economic threshold should be initiated at this time. Weekly scouting throughout July is recommended.

APPLE MAGGOT: Expect the first flies of the season to emerge by June 30 near Madison, July 7 near Racine, July 8 near Eau Claire, July 16 near Wausau, and July 18 near Crivitz, once 900 degree days (base 50°F) have accumulated.

CORN EARWORM: Injury to field corn in the vegetative stages is a distinct possibility due to an unusually early and heavy flight of migrant corn earworm moths this month. The larval offspring produced by this flight should be detectable in infested corn fields in the week ahead. Examine plants for pinholes in the leaves similar to those caused by small European corn borer larvae.

Pheromone trap counts of 60 to 325 moths in the last 2 weeks indicate the need for close surveillance of fields.

European corn borer shot-hole feeding Krista Hamilton DATCP

CORN ROOTWORM: The degree day model for corn rootworm indicates 50% of larval hatch should occur following the accumulation of 684-767 degree days (base 52°F). The upper range of this threshold has been exceeded at locations throughout southern Wisconsin, including Janesville, Lancaster, Madison, and Monroe.

FORAGES

POTATO LEAFHOPPER: Nymphs are becoming more conspicuous and a combination of this stage as well as the adults range from 0.4-1.1 per sweep in 14-18 inch second growth alfalfa fields. Populations are low to moderate relative to the economic threshold of 2.0 per sweep for 12 inch alfalfa, but nevertheless are on the increase.

PEA APHID: Surveys this week found that populations in the south central counties increased to 8-9 per sweep from 1-3.5 per sweep the previous week. Counts in the east central counties of Brown, Manitowoc, Outagamie and Sheboygan remained static at about 1 per sweep. Populations in Dunn and Eau Claire counties ranged from 1-4.4 per sweep, and similar counts were noted in Clark and Marathon counties.

MEADOW SPITTLEBUG: Most of the nymphs have matured and adults are now predominant in alfalfa fields throughout the south. Counts vary from 1-4 per 10 sweeps. Mating is underway and dispersal already has begun into regrowth alfalfa and new seedings.

DEGREE DAYS MARCH 1 - JUNE 26

LOCATION	50°F	2007	NORM	48°F	40°F
Dubuque, IA	920	1180	—	981	1631
Lone Rock	837	1124	—	878	1490
Beloit	947	1152	—	987	1651
Madison	824	1079	996	874	1476
Sullivan	893	1040	997	929	1567
Juneau	844	1033	—	886	1493
Waukesha	811	1007	—	855	1460
Hartford	788	1021	—	832	1430
Racine	739	970	—	790	1382
Milwaukee	725	976	864	774	1361
Appleton	748	996	876	788	1359
Green Bay	683	902	843	726	1290
Big Flats	762	1026	—	780	1350
Hancock	768	997	997	791	1360
Port Edwards	719	1009	932	741	1293
La Crosse	818	1200	1013	850	1459
Eau Claire	723	1090	960	747	1319
Cumberland	612	1009	949	624	1161
Bayfield	456	738	652	454	937
Wausau	638	930	860	651	1181
Medford	597	906	766	610	1131
Crivitz	614	871	—	642	1189
Crandon	564	842	716	562	1066

Method: ModifiedB50; Sine48; ModifiedB40 as of March 1, 2008. NORMALS based on 30-year average daily temps, 1971-2001.

ALFALFA WEEVIL: Populations in alfalfa continue to decrease as more larvae enter the pupal stage. Counts have been reduced to 1 per 10 sweeps in second crop regrowth in the south central part of the state, 4 per 10 sweeps in the east central area, and comparable numbers of larvae were documented in the northwest and north central counties. A few scattered fields still have comparatively high larval numbers. One unharvested field near Reedsburg in Sauk County contained counts of 3 per sweep, but it was difficult to make a proper evaluation in the remaining first growth alfalfa stands due to lodging.

CORN

EUROPEAN CORN BORER: Population levels of this insect are low in most fields. Observations in Columbia, Monroe, Rock, Sauk and Walworth counties showed the typical infestation affecting fewer than 12% of the plants.

Occasional fields near Poynette in Columbia County, Evansville in Rock County, and Elkhorn in Walworth County were 19-21% infested with new larvae, but these were exceptional. A significant portion of the fields (71%), some presumably Bt hybrids, had no detectable larval population. Females continued to deposit eggs this week, and 1st instar larvae were the predominant development stage as of June 26.

European corn borer whorl feeding (1st instar) *Krista Hamilton DATCP*

TRUE ARMYWORM: Surveys of V4-V8 fields in the south central and west central counties revealed a widespread but very light armyworm infestation, with leaf feeding noted on 0-4% of the corn plants. First generation larvae in eastern Columbia County were 1¾ inches and nearly mature by June 24, indicating that they are not likely to feed much longer. Field populations were below economically significant levels in all areas checked. Nonetheless, continued scouting for localized outbreaks is advised, particularly in the marginal rows of corn adjacent to small grains or alfalfa.

Armyworm leaf feeding injury *Krista Hamilton DATCP*

STALK BORER: This insect was the most prevalent and damaging mid-season corn pest noted this week. Examination of fields in the south central and southeast counties found 0-14% of plants in the marginal rows with ragged leaves or dead whorls indicative of stalk borer activity. Feeding injury was not as prevalent or severe in the interior of fields where a maximum of 4% of plants were affected. Spot treatments of heavily infested rows should be made between 1,400 and 1,700 degree days (base 41°F), or prior to the V7 stage of corn growth. Larvae were 1-1¼ inches long and estimated to be in the 5th-6th larval instars on June 25. Stalk borers complete 7-10 instars and feed for a period of 8-10 weeks.

CORN ROOTWORM: The first appearance of beetles normally should be expected by July 4th, but with the season delayed by 7-15 days, emergence of adults from the soil may not begin until the second or third week of July. Generally the western species precedes the northern species in emergence by approximately 4-5 days. The greater portion of the adult population is not likely to appear until early to mid-August.

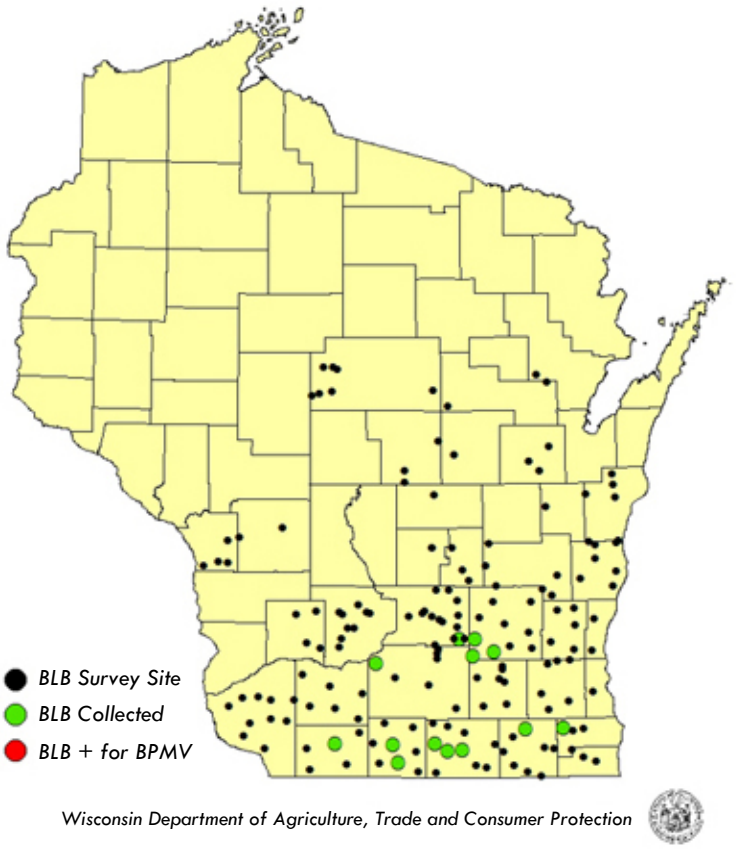
CORN LEAF APHID: Light infestations of this insect are apparent in corn whorls in Columbia and Sauk counties. Colonies consisting of about 10-20 aphids per plant are affecting approximately 5-10% of the plants. It is most critical to monitor the build-up of corn leaf aphid populations during the late whorl to pollen shed stages.

SOYBEANS

BEAN LEAF BEETLE: The annual survey of 167 first crop alfalfa fields from May 14-June 4 yielded just 21 overwintered bean leaf beetles, the lowest number obtained since surveys for this soybean pest were initiated 6 years ago. This figure represents a substantial decrease from the 509 beetles collected during the 2007 survey, 171 beetles collected in 2006, 180 beetles collected in 2005, 180 beetles collected in 2004, and 101 beetles collected in 2003. The accompanying map provides an indication of the distribution of overwintered beetles earlier this spring. Each of the black circles signifies a first crop alfalfa field, and each of the green circles signifies a field at which beetles were collected. Only 8% (13 of 167) of the first crop alfalfa fields surveyed contained beetles. Laboratory testing of the 21 beetles subsequent to the field portion of the survey showed all were negative for bean pod mottle virus

(BPMV), indicating a negligible risk for early season BPMV transmission to soybeans. Results of the spring survey also suggest that winter survival of beetles was significantly lower than in previous years.

2008 SPRING SURVEY FOR OVERWINTERED BEAN LEAF BEETLES AND BPMV IN ALFALFA



Annual bean leaf beetle survey results, 2003-2008

Year	No. Sites	No. Sites with BLB	No. BLB Collected	No. Sites with BLB+ for BPMV
2003	107	40	151	~31
2004	101	62	180	8
2005	204	51	180	1
2006	202	81	171	3
2007	183	86	509	11
2008	167	13	21	0

Survey results based on 200 sweeps (4 sets of 50) per first crop alfalfa field sampled.

SOYBEAN APHID: Light, localized infestations were detected in 6 of 40 soybean fields (V1-V4 stages) examined during the period of June 20-26. In Columbia and Sauk counties, 3-34% of the plants were infested with densities of 1-153 aphids per plant, and an average of 7 aphids per infested plant. In Rock and Walworth counties, 1-3% of the plants were infested with densities of 1-7 aphids per plant, and an average of 1 aphid per plant. In a single Clark County field, a total of 17 aphids were detected on 4% of the plants. Examination of 26 additional fields in Clark, Dane, Dunn, Dodge, Eau Claire, Marathon, Rock and Waushara counties failed to reveal any aphids. The population densities noted were low in comparison to the economic threshold of 250 per plant (on 80% of the plants), with only a few fields in the Poynette area of Columbia County and the Sauk City area of Sauk County containing plants with more than 100 soybean aphids.

SMALL GRAINS

DISEASE SURVEY OF WINTER WHEAT: DATCP survey specialists conducted a disease survey of winter wheat fields between May 5 and June 19, sampling 103 fields in 11 counties comprising 50% of the wheat acreage in the state. Wheat fields ranged in maturity from Feekes stage 8.0 (flag leaf visible) to Feekes stage 10.5.3 (flowering complete to base of spike). Counties surveyed and the number of randomly selected fields examined were as follows: Brown (9); Calumet (8); Columbia (1); Dane (6); Dodge (14); Door (9); Fond du Lac (16); Kewaunee (8); Manitowoc (8); Sheboygan (11); Winnebago (13). Leaf samples were collected in almost every field for laboratory confirmation of diagnoses and future testing for wheat viruses.

POWDERY MILDEW: Powdery mildew was the most widespread disease encountered, occurring in 87 of the 103 fields surveyed. Incidence (the percentage of plants with symptoms) ranged from 1 -100%. Severity (the average percentage of infested plants affected) ranged from trace to 20%. Generally, severity was low.

SEPTORIA LEAF SPOT COMPLEX: Septoria sp. was detected in only 7 fields and both incidence and severity were low. Septoria leaf blotch can be troublesome during wet growing seasons, but despite apparently suitable conditions, the disease was rarely encountered this year.

HEAD SCAB: Two of the 103 wheat fields, both in Winnebago County, displayed the bleached-head symptoms of head scab, caused by *Fusarium* spp. In both fields the incidence was low.

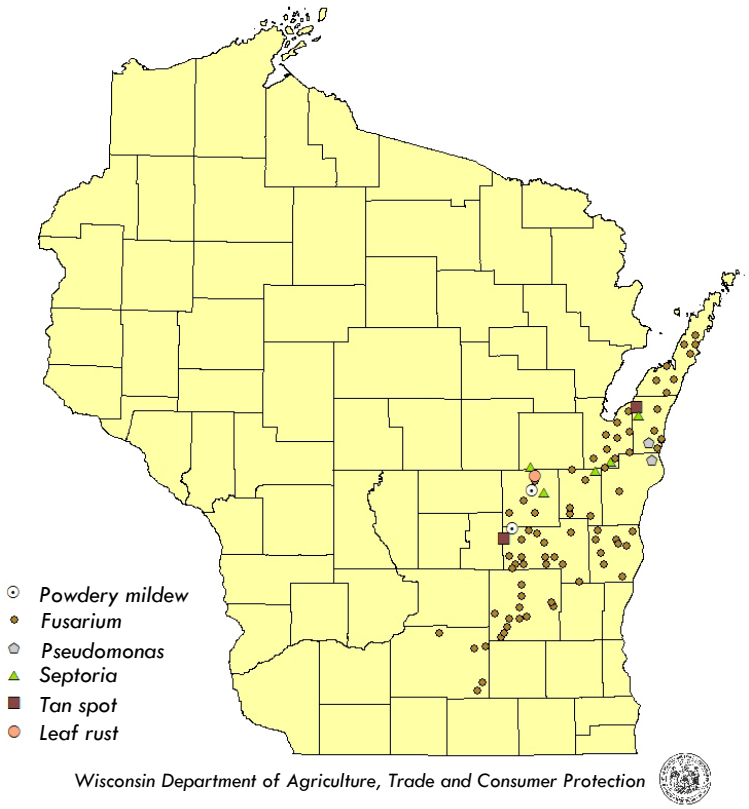
ASCOCHYTA LEAF SPOT: Ascochyta leaf spot was confirmed in 5 fields by laboratory testing. No control measures are usually required for this minor disease.

LOOSE SMUT: The characteristic signs and symptoms of loose smut, such as wheat flowers replaced by masses of smut spores or heads consisting merely of empty rachis, were observed much less often than in most seasons. Only 2 fields surveyed showed symptoms of loose smut, and the incidence was far below 1%.

TAN SPOT: Samples from 3 fields in Dodge County were determined to have tan spot. Severity was below 2% in all fields, with infection limited to the lowest leaves.

LEAF RUST: Despite reports of leaf rust occurrence in UW research plots, this fungal disease was found at trace levels in only 3 fields, one of which was a seed company variety trial. No stem rust or stripe rust was detected by DATCP personnel.

2008 DATCP WINTER WHEAT SURVEY



PSEUDOMONAS LEAF BLIGHT: Plants from 11 fields tested positive for bacterial blight, caused by *Pseudomonas syringae*. The fields were located in Brown (2), Calumet (1), Dane (4), Fond Du Lac (1), Kewaunee (1) and Manitowoc (2) counties.

SOOTY MOLD: Sooty molds caused by a range of mostly-saprophytic fungi were widespread throughout the sampled fields, always confined to the lowest leaves buried in the canopy. Sooty molds are rarely a problem for wheat in Wisconsin, unless harvest is delayed and the infections move to the heads.

FRUITS

APPLE MAGGOT: Degree day accumulations are appropriate for the emergence of this pest near Beloit in Rock County, Lancaster in Grant County and Sullivan in Waukesha County. Red sphere and yellow sticky board visual traps should be in place to detect the first flies of the season, expected once 900 degree days (base 50°F) are surpassed.

SPOTTED TENTIFORM LEAFMINER: On the basis of the growing degree day model for the spotted tentiform leafminer, the peak of the second fight of moths is not expected to occur until 1,150 degree days (base 50°F) have been reached, or around early July this season. Despite this forecast, very high counts in excess of 1,000 moths per trap were reported from several orchards this week, which may reflect an early peak flight. The optimal sample period for first generation sapfeeder leaf mines begins 10-14 days after a peak flight has been registered. Orchards with populations greater than 1.0 mine per leaf or a history of infestation are candidates for control of second generation of leafminers. Pheromone trap counts ranged from 0-1,580 moths during the June 20-26 reporting period.

CODLING MOTH: Large flights of codling moths were registered in southern and central Wisconsin pheromone traps for the 5th successive week. Flight activity accelerated sharply in Bayfield County, with one orchard reporting counts as high as 43-101 moths per trap. Egg hatch is 50% complete over the southern two thirds of the state.

BORERS: John Aue of Threshold IPM Services advises growers with many young apple trees (< 5 years old) to place 1 trap per pest in orchards to monitor for the presence of dogwood borer and lesser peachtree borer, which occasionally infest younger stock. Fresh wounds

should be treated as soon as they occur to prevent infestation by these insects.

LIGHT BROWN APPLE MOTH: Suspect moths captured last week in pheromone traps baited with light brown apple moth (LBAM) lure were identified as the native species *Pyrausta orphisalis*. Orchardists monitoring for the presence of exotic fruit moths this season are reminded to replace lures by the first week of July.

WEEDS

COMMON LAMBSQUARTERS: This species was found in 18 of 20 (90%) fields surveyed from June 17-23 as part of the first annual weed survey in corn, a cooperative effort between DATCP and UW-Extension Weed Scientist, Chris Boerboom. Lambsquarters populations exceeded densities of 100 plants per m^2 in some Sheboygan County fields before management occurred on June 17 and 18.

Common lambsquarters Krista Hamilton DATCP

VELVETLEAF: Plants averaged 3.5 inches tall in survey sites left untreated or untilled through the week of June 23, although the tallest individuals measured 8 inches. Densities in the fields checked ranged from 1- 100 plants per m^2. Velvetleaf continues to be one of the most prevalent weed species in corn fields at this time.

COMMON RAGWEED: Few fields included in the survey contained populations of this rapidly growing species. In the locations where it was noted, densities ranged 1-50 per m^2 and the average height was less than 6 inches. Common ragweed was present in corn fields in Dodge, Fond du Lac and Sheboygan counties from June 17-23.

GIANT RAGWEED: Plants ranging from 2-8 inches were observed in 2 of 20 survey sites this week. Ragweed distribution within the fields was sporadic, with densities ranging 11-50 per m^2. Giant ragweed has become increasingly apparent along field margins and in soybean fields.

GRASSES: Grasses were the most abundant category of weeds observed in corn that remained untreated this week. The average density in one exceptionally grassy field in Sheboygan County was greater than 500 plants per m^2. All of the grasses observed in each field are combined under this general category, which includes species such as field sandbur, giant foxtail, quackgrass, smooth crabgrass and large crabgrass.

HERBICIDE TREATMENTS: One of the stated objectives of the survey of weeds in corn, in addition to estimating common weed heights and densities, was to document the approximate date corn fields received post-emergence herbicide applications. Treatments in many of the southern counties were delayed this season by flooding, frequent storms and strong winds. Of the 45 corn fields surveyed since June 6, 71% were sprayed or tilled between June 19 and 23. Only 22% remained untreated as of June 24. Considerable yield losses are expected to occur at these locations.

NURSERY & LANDSCAPE

FLOOD DAMAGE: Recent inspections have found a high incidence of flood, hail, and heavy wind damage in many nurseries, particularly in southeast Wisconsin where some fields had up to 3 feet of standing water this week. Fields have finally begun to dry, permitting growers to assess damage levels and take measures to prevent future root rot problems.

BLACK KNOT: Heavy amounts of this common fungal disease were noted on Canadian red cherry in Walworth County. Black knot is easily identified by irregular, black swollen galls or “knots” which form on branches and vary in size from ½ inch to 1 foot long. Shoots and branches bearing knots should be pruned (a minimum of 5 inches beyond the knot) during the winter or early in spring, before the fungal spores are released. When knots develop on the trunks of the trees, removal and destruction of the entire tree is advised.

NECTRIA CANKER: Little-leaf linden trees in Walworth County are reported to be showing symptoms of this disease. Similar to black knot, cankers that occur on twigs or small branches can be pruned out, but larger trunk cankers require trees to be removed and destroyed to prevent the spores from infecting surrounding trees. A follow-up fungicide application subsequent to pruning may help to protect wounds against infection.

Nectria canker spores on Linden *Liz Meils DATCP*

POTATO LEAFHOPPER: Evidence of potato leafhopper feeding, such as cupped leaves, were noted on maple trees in Walworth County. The harvest of nearby alfalfa fields often forces high numbers of adults onto nursery stock and other susceptible hosts, which may have been the case this week. Treatment of leafhoppers is justified when high populations are present and symptoms are obvious.

Potato leafhopper nymphs on maple leaf *Liz Meils DATCP*

ARBORVITAE LEAFMINER: The discolored foliage tips and exit holes appearing in light to moderate amounts on arborvitae in Walworth County were attributed to the arborvitae leafminer. Larvae of this insect feed inside the needles, causing the foliage to become hollow and turn brown. Light infestations can be controlled by pruning out infested tips before adults emerge in June and July; heavy infestations may be treated with a systemic insecticide spray in fall or early spring. In addition, there are also at least 26 species of parasitoids that are effective as biological control agents against this leafminer.

Leafminer injury on arborvitae *Liz Meils DATCP*

FOREST

GYPSY MOTH SPRAY PROGRAM: The first pheromone flake applications to disrupt the gypsy moth mating cycle began on June 25 in Chippewa, Eau Claire and Jackson counties, where approximately 13,665 acres were treated. Other counties scheduled for flake treatments are Ashland, Bayfield, Price and Taylor.

GYPSY MOTH TRAPPING PROGRAM: Trap setting was at 78% complete as of June 25, with more than 25,000 traps deployed. Approximately 32,400 traps are expected to be set in 51 Wisconsin counties, including the ports of Green Bay, Marinette, Milwaukee and Superior, by next week.

GYPSY MOTH: Regional Gypsy Moth Suppression Coordinator Mark Guthmiller of the WDNR has observed and received reports of gypsy moth population collapse due to the common fungal disease *Entomophaga maimaiga* and the viral disease nucleopolyhedrosis virus (NPV) in portions of southern Wisconsin. Larval mortality was noted in Adams, Columbia, Dane, Juneau, Sauk and

Walworth counties. Mark anticipates additional reports will be received in the next few weeks.

In a Dane County park, complete defoliation of crabapple trees was reported on June 26. Numerous clustered larvae, from about half-grown to mature, were noted, with about 5-10% pupation. Defoliated trees were also observed in the UW-Madison Arboretum.

TRAPPING NETWORKS

BLACK LIGHT TRAPS: The emergence of European corn borer moths has accelerated at 7 black light trap sites since the previous week, but numbers are still extremely low. Counts averaged 10 moths per trap from June 20-26, which compares to 3.9 moths per trap from June 13-19, and 4.4 moths per trap from June 6-12. True armyworm numbers decreased at all locations except Lancaster, while a few more celery looper appeared in traps at Chippewa Falls, East Troy, Janesville, Lancaster and Manitowoc. Spotted cutworms were noted at 7 locations this week, compared to only 2 last week, and 21 more bristly cutworms were reported from Janesville. Levels of all of the nocturnal pests monitored using black light traps have been exceptionally low so far this season.

CABBAGE LOOPER: The trapping network cooperator located in northern Illinois reported the capture of 8 cabbage looper moths over the weekend (June 20-22), signaling that the first migrant moths should soon appear in Wisconsin. Traps are in place this season to monitor the emergence and adult flight period of this insect. Cooperation by growers in southeast and west central areas and participation from UW-Extension agents are vital in supplementing our own survey efforts.

CORN EARWORM: High average nightly counts ranging from 2-30 moths continue to be reported in Wisconsin and the central part of the Midwest. Counts this week were 7 at Cashton, 26 at Janesville, 32 at Lancaster, 3 at Manitowoc, 60 at Tomah (site B), 6 at Tomah (site A), and 8 at Sparta. Egg deposition is expected to be intense at this time and fields should be watched for evidence of larval feeding. The eggs produced by this early flight of moths hatch in 2-6 days and the larvae grow approximately 1 mm per day.

INSECT EXTRAS

EASTERN TENT CATERPILLAR: The expected increase in adult numbers occurred at several black light trap sites in the past week, and in many areas cocoons are numerous near previously infested trees.

DOGBANE LEAF BEETLE: Low numbers of these metallic blue-green beetles were observed feeding on dogbane in rural areas throughout the south central counties.

Dogbane leaf beetle *farm1.statis.flickr.com*

MONARCH BUTTERFLY: Small larvae, estimated to be in the 2nd instar, were noted on milkweed plants in Columbia County on June 24.

IMPERIAL MOTH: This species has begun appearing in black light trap collections. A single specimen was captured in the Mazomanie trap in western Dane County during the June 20-26 monitoring period.

Imperial moth *www.wikimedia.org*

APPLE INSECT & BLACK LIGHT TRAP COUNTS JUNE 20 - 26

COUNTY	DATE	SITE	STLM[1]	RBLR[2]	CM[3]	OBLR[4]	AM RED[5]	AM YELLOW[6]
Bayfield	6/20-6/26	Apple Hill			*4			
Bayfield	6/20-6/26	Bayfield Apple			*53			
Bayfield	6/20-6/26	Blue Vista			*9.67			
Bayfield	6/20-6/26	Erickson's			*4.17			
Bayfield	6/20-6/26	Hillcrest			0			
Bayfield	6/20-6/26	Lobermeier	9	24	0	0		
Bayfield	6/16-6/23	Orienta	8	0	0	0		
Brown	6/20-6/26	Oneida	975	0	15	14		
Chippewa	6/20-6/26	Chippewa Falls	*31	*0	*10.6	*14.75		
Dane	6/17-6/25	Deerfield	1232	0	10	55	0	0
Dane	6/20-6/26	Stoughton	140	31	8	8		
Dane	6/20-6/26	West Madison	86	7	14	22		
Dodge	6/20-6/26	Brownsville	90	0	0	5	0	0
Fond du Lac	6/20-6/26	Campbellsport 1	40	0	0	28		
Fond du Lac	6/20-6/26	Campbellsport 2	20	0	0	30		
Fond du Lac	6/20-6/26	Malone	1000+	0	4	18		
Green	6/20-6/25	Brodhead	74	0	5	0		
Iowa	6/20-6/26	Dodgeville	590	1	101	1	0	0
Iowa	6/20-6/26	Mineral Point	61	11	0	2	0	0
Kenosha	6/20-6/27	Burlington	567	3	3.2	3		
Marquette	6/20-6/25	Montello	460	1	0	0	0	0
Ozaukee	6/19-6/25	Mequon	15	0	4	0		
Pierce	6/20-6/26	Beldenville	20	1	3	8		
Pierce	6/19-6/26	Spring Valley	48	27	7.5	35		
Racine	6/19-6/26	Rochester	400	0	5.43	19		
Racine	6/20-6/26	Raymond	1580	0	17	17		
Richland	6/20-6/26	Hill Point	190	0	31	50		
Sheboygan	6/20-6/26	Plymouth	36	0	16	6		
Waukesha	6/20-6/26	New Berlin	1153	0	36	22		
Walworth	6/20-6/26	East Troy	0	10	0	0		
Walworth	6/20-6/26	Elkhorn	0	0	0	0		

[1]Spotted tentiform leafminer; [2]Redbanded leafroller; [3]Codling moth; [4]Obliquebanded leafroller; [5]Apple maggot red ball; *Unbaited red ball; **Baited red ball; [6]Apple maggot yellow board; *Counts were averaged.

COUNTY	DATE	SITE	ECB[1]	TA[2]	BCW[3]	SCW[4]	DCW[5]	CE[6]	CEL[7]	ALFL[8]	FORL[9]	VCW[10]
Chippewa	6/18-6/25	Chipp. Falls	23	1	0	6	6	0	2	0	0	0
Columbia	6/19-6/25	Arlington	16	3	0	3	0	0	7	0	1	0
Dane	6/19-6/25	Mazomanie	17	0	0	2	0	0	0	0	0	0
Grant	6/19-6/26	Lancaster	10	17	0	3	0	0	10	0	5	0
Manitowoc	6/19-6/26	Manitowoc	1	5	0	4	0	0	1	0	1	0
Marathon	6/20-6/26	Wausau	—	—	—	—	—	—	—	—	—	—
Monroe	6/19-6/26	Sparta	0	0	0	0	0	0	0	0	0	0
Rock	6/19-6/25	Janesville	4	78	0	3	0	0	18	0	2	0
Walworth	6/19-6/26	East Troy	1	0	0	0	0	0	1	0	0	0
Wood	6/20-6/26	Marshfield	18	30	0	14	0	0	12	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]Alfalfa looper; [9]Forage looper; [10]Variegated cutworm.