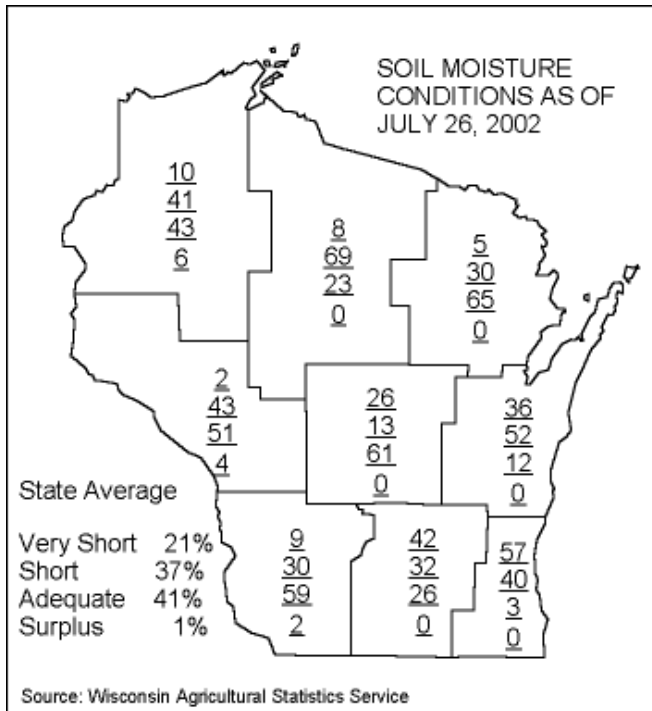


Cooperative Pest Survey Bulletin

Agricultural Resource Management

Bureau of Plant Industry

WI Department of Agriculture, Trade & Consumer Protection, PO Box 8911, Madison, WI 53708-8911 Phone: 1-800-462-2803 Fax: 608-224-4656 Web: Wisconsin.gov

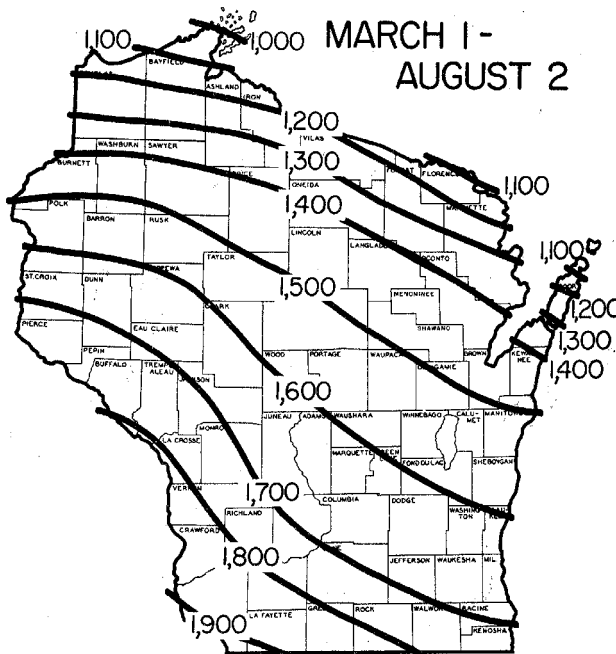


WEATHER AND PESTS

Much-needed rain provided relief for crops throughout Wisconsin, but did miss a few crucial areas. Corn jumped from 11% silked last week to 43% silked this week! Cherry and apple harvesting are getting underway. **Potato leafhopper** continues to threaten hay crops, and **fall webworm** is visible on various tree species throughout the state.

Growing degree days from March 1 through July 31 were:

Site	GDD*	Normal GDD	Base 48	Base 40
SOUTHWEST				
Dubuque, IA	1819	1900	1724	2901
Lone Rock	1726	1800	1623	2783
SOUTHCENTRAL				
Beloit	1800	1800	1628	2895
Madison	1702	1700	1586	2747
Sullivan	1734	1675	1568	2814
Juneau	1687	1606	1555	2726
SOUTHEAST				
Waukesha	1702	1675	1540	2758
Hartford	1663	1605	1541	2686
Racine	1666	1700	1542	2684
Milwaukee	1622	1625	1518	2624
EAST CENTRAL				
Appleton	1559	1500	1497	2437
Green Bay	1438	1440	1386	2738
CENTRAL				
Big Flats	1650	1625	1566	2652
Hancock	1637	1585	1555	2631
Port Edwards	1561	1600	1520	2523
WEST CENTRAL				
LaCrosse	1820	1800	1655	2889
Eau Claire	1678	1650	1566	2671
NORTHWEST				
Cumberland	1486	1550	1481	2394
Bayfield	1119	1000	1149	1907
NORTH CENTRAL				
Wausau	1438	1500	1476	2356
Medford	1361	1485	1394	2247
NORTHEAST				
Crivitz	1345	1351	1317	2250
Crandon	1287	1300	1293	2146



Historical Average Growing Degree-Days Accumulated Since March 1. (Wisconsin Agricultural Statistics Service)

GDD (Growing Degree-Days) are synonymous with degree-days above modified base 50°F, with no low temperature below 50°F or above 86°F used in calculation. See map for Historical Average Growing Degree Days.

ALERTS

Spanish and Hmong Synopses- We are now offering a weekly distillation of information from the Cooperative Pest Survey Bulletin in both Hmong and Spanish. The Hmong version is targeted at information of interest to market gardeners, while the Spanish version contains primarily information relating to nursery pests. Look for the translations on our web site each Monday morning. Please visit <http://datcp.state.wi.us/arm/environment/insects/pest-bulletin/> to access these new versions. Comments, suggestions or questions may be sent to bulletin@datcp.state.wi.us

LOOKING AHEAD

A brief forecast of pest-related events growers can anticipate in the upcoming week

Soybean aphid – In most areas of the state populations have not reached economic levels, but growers should continue to monitor populations and rates of increase closely.

Bean leaf beetle – Defoliation is widespread and severe throughout the south. For plants in the R4-R6 growth stages, consider treating when there are 10 or more bean leaf beetles per foot of row and 20% defoliation, or at least 15 bean leaf beetles per foot of row and at least 10% pod damage.

European corn borer – Moth activity is escalating in the south. Growers should scout for 2nd generation egg masses in both corn and snap beans in the week ahead.

Corn rootworm - Growers should begin monitoring corn rootworm populations closely at this time, and continue to do so for the remainder of the season. The number of adults present this season can be used to estimate the level of next year's population and to help decide whether treating with a soil insecticide will be warranted. Check fields at least three times, at 7-10 day intervals, through mid-September. See **CORN** section for scouting procedure and economic threshold.

Codling moth – Growers can anticipate the peak emergence of second generation adults at 1,600 DD (base 50°F) and peak egg laying by second generation adults at 1,700 DD. In the south, peak egg laying is likely to occur in the week ahead.

Apple maggot – The degree day model for apple maggot indicates peak adult emergence occurs around 1,600 DD (base 50°F), peak egg laying around 1,750 DD, and the end of adult emergence at 2,800 DD. In many areas of the state, peak egg laying is rapidly approaching.

CORN

European corn borer – An increase in black light trap counts at several reporting sites indicates a heavy emergence of moths is occurring at several southern locations. Egg masses were detected in Green Co. earlier this week, and pupae have increased in the central region of the state, where infestation levels ranged from 22%-100%, and averaged 64%. Pupae were found as far north as Portage Co. In Marathon and Shawano Cos., 1st generation larvae are still in the 3rd-5th instars, and infestation levels ranged from 20% to 50%.

European corn borer 5th instar larva



Corn rootworm – Considerable variation in corn rootworm beetle populations was noted during this week's survey efforts. Counts in all Dane Co. fields surveyed far exceeded the economic threshold, ranging from 2.1 to 6.7 per plant, but mostly fell below threshold in Grant and Green and Cos., where counts ranged from 0-1.5 per plant. Several Marquette, Waushara and Waupaca Co. fields also had counts exceeding the threshold of 0.75 beetle per plant (ranging from 1.1 to 4.7 per plant).

As mentioned in last week's Bulletin, now's the time for growers who intend to plant continuous corn to begin monitoring populations closely. The number of adults present this season can be used to estimate the density of next year's population. Beginning in the week ahead, check fields at least three times, at 7-10 day intervals, and continue through mid-September. Examine 50 plants and count the number of beetles per plant. Corn rootworm beetles often hide in the silks and axils, so examine plants closely. Place your hand over the silks and count the

beetles on the other areas of the plant first, to prevent beetles from escaping from the silks while you count the rest of the plant. Calculate the number of beetles per plant during each of the three samplings.

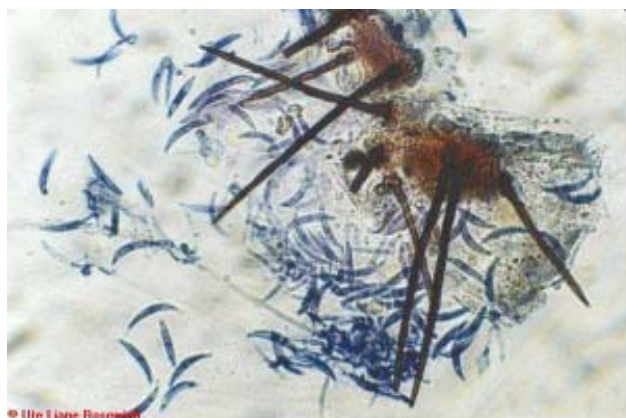
Treating with a soil insecticide the following year is warranted when an average of 0.75 beetles per plant is found during any of the samplings. A second option for growers is to rotate to a crop other than corn. Corn rootworm does not generally present problems in fields where any crop other than corn was grown in the previous year.

Corn earworm – Pheromone trap catches remain low at the trapping sites throughout the state. A few moths have turned up in black light traps, but the bulk of activity isn't expected for another 2-3 weeks. Producers are encouraged to scout now for larvae in sweet corn tips.

Goss's bacterial wilt – Symptoms of **Goss's wilt** are appearing in corn fields across much of the state, particularly in the northwest region of the state. This leaf blight (also called leaf freckles) is caused by *Clavibacter michiganensis* subsp. *nebraskensis*. The bacteria overwinters in crop debris, and is often found in no-till or corn-on-corn situations.

The disease may be mistaken for Stewart's wilt, a disease of regulatory significance (Goss's wilt is not). The two diseases may be differentiated by the presence of "freckles" in leaf lesions of Goss's wilt (dark green to black, water-soaked irregular spots within the lesion), and orange vascular bundles in plants systemically infected by Goss's wilt. (No systemic infections have been identified this year, however.) Crop rotation will help reduce the incidence of this disease, and resistant hybrids are available.

Anthracnose



© Ute Liane Bagnall
Crop Protection Compendium - Global Module, 3rd Edition. © CAB International, Wallingford, UK, 2001

Anthracnose – Corn leaf blights are slow to develop this

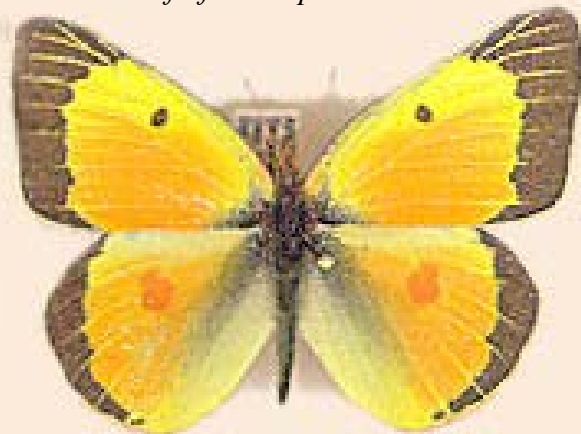
year, perhaps because of the unusually hot and dry conditions. In addition to widespread light infection by common **maize rust** (reported previously) and localized infections by **Goss's wilt** (see above), corn fields around the southern part of the state are showing low levels of **anthracnose leaf blight**. Caused by the fungus *Colletotrichum graminicola*, anthracnose lesions are widely variable, depending upon genotype, age of leaf and the environment. Whatever the lesion size or shape, the disease can usually be diagnosed in the field with a hand lens, thanks to the presence of setae (dark hairlike structures arising from the lesions). The disease is favored by hot, wet weather.



FORAGES

Alfalfa caterpillar – The light to moderate amounts of defoliation evident in Marquette, Waushara and Portage Co. alfalfa fields was attributed to the high numbers of large, late instar larvae. An average of 0.6 to 2.9 third to fifth instar larvae were collected per sweep from 10-12" fields. The threshold for alfalfa caterpillar is 10 per sweep. Alfalfa caterpillar populations rarely reach economic levels, and like most other occasional pests of alfalfa, cutting is usually effective in reducing populations.

Alfalfa caterpillar adult



<http://www.ento.okstate.edu/dd/insects/alfalfacaterpillar.htm>

Potato leafhopper – This week's survey efforts found substantial variation in counts between regions of the state and individual fields. In the Southwest, counts were relatively low, averaging 0.1 per sweep in 10-12" Green and Lafayette Co. fields. Populations were notably higher second growth alfalfa in the central region of the state, ranging from 0.4 to 34 adults and nymphs per sweep. Injury was most evident on older regrowth and at dry sites. Severe hopperburn, ranging from 40-86%, was noted in numerous fields in this region. Fields in Marathon, Marinette, Oconto and Shawano Cos. did not exhibit nearly the same levels of hopperburn observed farther south. Counts of leafhoppers in these counties ranged from 0.2 to 0.7 leafhoppers per sweep.

At this time of year potato leafhopper injury is frequently mistaken for drought stress or nutrient deficiency, but in the severely damaged Central fields surveyed, above-threshold leafhopper counts supported our suspicions that potato leafhopper was to blame for the extreme yellowing. Growers should continue to monitor populations closely to prevent injury to the third crop.

Pea aphids – Pea aphid counts in alfalfa appear to have declined over the past two weeks, possibly due to an increase in parasitism by braconid wasps and predation by lady beetles. Counts averaged about 16 per sweep, but range from 2-33 per sweep in Marquette, Portage, Waupaca, Waushara Cos.

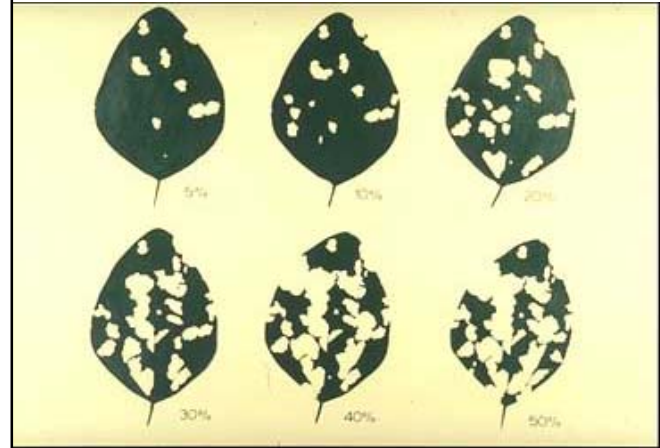
Grasshoppers- Many fallow fields in Marquette Co. have heavy infestations of this common pest, in some cases severe enough to strip all the alfalfa leaves from plants. (UWEX)

SOYBEANS

Bean leaf beetle – Numerous reports of severe defoliation attributed to bean leaf beetle feeding have come from surveyors, consultants and homeowners throughout the entire southern region of the state. According to an article by Mike Gray in the *University of Illinois-Extension Pest Management and Crop Development Bulletin*, soybeans become increasingly vulnerable to defoliation during the early reproductive stages and can withstand only 20% defoliation during the R4-R6 stages. In many regions of the state, soybean fields are approaching these stages. No economic threshold currently exists for bean leaf beetle in Wisconsin, but the University of Missouri-Extension recommends the following for plants in the bloom stage through seed maturity: 10 or more bean leaf beetles per foot of row and 20 percent defoliation or at least 15 bean leaf beetles per foot of row and at least 10 percent pod damage.

The following web sites offer helpful information on scouting for bean leaf beetle and economic thresholds. Soybean Health Website at <http://www.plantpath.wisc.edu/soyhealth/>, Ohio State University at <http://ohioline.osu.edu/icm-fact/fc->

Soybean Defoliation Levels



University of Illinois Extension

The Pest Management and Crop Development Bulletin

23.html, the University of Missouri-Columbia at <http://muextension.missouri.edu/xplor/agguides/pests/g07150.htm>) and the University of Nebraska-Lincoln at <http://www.ianr.unl.edu/pubs/Insects/g974.htm>.

Soybean aphid – Population densities throughout the state continue to increase, but at a much slower rate than we initially expected. Heavier infestations are becoming more and more prevalent in the south, while infestations in the north still remain relatively low. In one Grant Co. field, 100% of the plants were infested with as many as 281 winged and nonwinged aphids per plant. In another field, 100% of plants were infested with 2-226 aphids per plant, and a 100% level infestation was detected in a third Grant Co. field, where counts did not exceed 200 aphids per plant. Similarly, in Green and Dane Cos., infestations ranging from 88%-99% were detected, with up to 200 per plant (mostly in the 26-99 aphids per plant range), and in a Lafayette Co. field, a 70% infestation was observed, but per plant counts did not exceed 25 aphids.

As mentioned earlier, counts still remain relatively low farther north. In Marathon, Oconto and Wood Cos., levels of infestation ranged from 3-13% with fewer than 10 aphids per plant. A 100% infestation was detected in Shawano Co., but per plant aphid counts were lower than 25.

Fortunately, in most areas of the state populations have not reached economic levels. Growers should continue to monitor closely, but are cautioned to avoid unnecessarily treating fields based on trends in population dynamics from preceding years. In the *Wisconsin Crop Manager Soybean Aphid Update* (June 13, 2002), John Wedberg recommends the following: Wait to treat until aphids are abundant on the upper trifoliolate leaves, petioles and stems (i.e several hundred aphids per plant) but before plants show noticeable signs of damage. Damage symptoms include leaf distortion, plant stunting, yellowing of leaves, and leaves coated with

honey dew and/or sooty mold (which grows on the honeydew).

Two-spotted spider mite – White flecks associated with feeding by colonies of two-spotted spider mite injury were common in fields throughout the south, where it has become increasingly apparent that recent weather patterns have favored this pest. Drought-stressed plants provide ideal conditions for the development and reproduction of the two-spotted spider mite. The UW-Extension recommends treating soybeans when fields or field margins show signs of yellowing and several leaves have active mite colonies and damage prior to the R5.5-7.0 stages. Control is suggested in corn when an active infestation is found on one-third of the leaves on 50% of the plants, or if 15 to 20% of the leaf is covered with mites (Bryan Jensen, UW-Madison).

Downy mildew of soybean – Early symptoms of soybean downy mildew are appearing on soybeans in southern counties of the state (at least, on leaf tissue not yet eaten by the bean leaf beetle). The disease, caused by *Peronospora manshurica*, is characterized by pale yellow spots on the top of young soybean leaves. As the spots age, they will turn grayish-brown, and masses of gray spores will be produced on the underside of infected leaves. The disease may be seed-borne, and seed infection may reduce the quality and germination of soybean seed. Leaf infection has seldom been shown to have an economic impact.



VEGETABLES

Bean leaf beetle - Feeding damage on 66% of Blue Lake green beans was noted in a northern Dane Co. garden. Most pods had multiple scars. According to the observer, the older scars were scabby black and very unsightly.

European corn borer – Moth activity is escalating, indicating that pressure in beans and other susceptible crops can be expected to increase in the weeks ahead. Growers should begin scouting for egg masses on snap beans.

Soybean aphid – Fortunately, no soybean aphids were detected in Oconto Co. snap bean fields surveyed earlier this week. Additionally, very low numbers of **potato leafhopper**, fewer than 0.2 per plant, were observed in the same fields.

Blister beetle- Homeowner reports marginal feeding on potatoes in garden.; 2-8 per plant in Green Co.

Tobacco hornworms- These pests have been noted ravaging tomatoes and potatoes in gardens in Dane and Green Cos.

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Ash leaf curling aphid – Trace to light amounts of leaf curling were observed on green ash at nurseries in Dodge, Ozaukee and St. Croix Cos.

Birch leaf miner – Small numbers of mines were observed on river birch and whitespire birch at a nursery in St. Croix Co.

Bristly rose slug – Light amounts of feeding damage was seen on hybrid tea roses at a nursery in St. Croix Co.

Catalpa sphinx – A variety of small to large larvae were observed on catalpa in moderate amounts at a nursery in Lafayette Co.



Columbine sawfly – Light to moderate amounts of defoliation was occurring on columbine at nurseries in Rock and Shawano Cos.

Eastern spruce gall adelgid – White and black hills spruce at nurseries in Dodge, Oconto, Pierce, Sheboygan and St. Croix Cos. had light to moderate numbers of galls.

Eriophyid mites – Various leaf distortions were recorded from silver maple, walnut, river birch and linden at nurseries in Dodge Jefferson, Ozaukee, Sheboygan and St. Croix Cos.

Fall webworm- These defoliating caterpillars have been making webs in branches throughout the state, eating a variety of deciduous tree leaves. **(DNR in part)**

Honeylocust pod gall midge – Light to moderate damage was occurring on honeylocust at a nursery in St. Croix Co.

Japanese beetle – Heavy amounts of feeding damage was recorded from hollyhock and ligularia at a nursery in Racine Co. Leaf feeding reports are also coming in from the city residents of Eau Claire. **(DNR in part)**

Leafhoppers – Moderate to severe amounts of damage were observed on various maple species, Kentucky coffee tree, hackberry, siberian pea shrub and crapapples at nurseries in Jefferson, Portage, Racine, Sheboygan and St. Croix Cos. Up to four or five leafhoppers per leaf were observed on new horizon elm in Jefferson Co.

Linden borer- Found in little leaf lindens in heavy amounts at a nursery in Polk Co.

Pine bark adelgid - This small fuzzy white insect was found in light amounts on understory white pine seedlings in La Crosse Co. (DNR)

Pine needle scale – Low numbers of scales were found on Scotch pine at a nursery in Ozaukee Co., and on understory white pine seedlings in La Crosse Co. (DNR in part)

Pine pitch midge-Found in moderate amounts in white pine at a nursery in Polk Co.

Pine root collar weevil- was observed on Scotch pine in moderate amounts at a nursery in Pierce Co.

Spruce gall midge (*Mayteola picea*) - Damage caused by spruce gall midge was observed on white spruce in heavy amounts at a nursery in Washburn Co.

Spruce needle miner – Moderate amounts of damage were noted on white spruce at a St. Croix Co. nursery.

Spruce spider mite – Heavy amounts of feeding injury by this mite was found on Colorado spruce at a nursery in Dodge Co. On emerald arborvitae damage was light at a nursery in Jefferson Co.

Yellownecked caterpillar – A heavy infestation was found on red oak at a nursery in Ozaukee Co.

Asteroma leaf spot – American linden at nurseries in Dodge, Lafayette and Racine Cos. had light to moderate amounts of leaf spotting.

Aster yellows – Purple coneflowers at a nursery in Rock and Polk Cos. were showing symptoms of this disease, caused by a phytoplasma.

Black spot – Light to heavy amounts of leaf spotting were observed on various roses at nurseries in Jefferson, Rock, Racine, Sheboygan, and St. Croix Cos.

Cedar – quince rust – Thornless cockspur hawthorn at nurseries in Jefferson, Lafayette and Racine Cos. had moderate amounts of this rust infecting fruits and twig.

Entomosporium leaf spot – Light to moderate amounts of this

fungal leaf spot were observed on serviceberry at a nursery in Jefferson Co.

Fir – broom rust – Small numbers of brooms were observed on balsam fir at a nursery in Polk and St. Croix Cos.

Fire (botrytis) – A severe infection of Asiatic lilies was found at a nursery in Rock Co. Sclerotia can remain viable in the soil for many years and once established will usually remain an annual problem.

Guignardia leaf blotch – Horsechestnut at nurseries in Jefferson, Ozaukee and Rock Cos. had light to moderate amounts of leaf blotching due to this fungal disease.

Gymnosporangium rust – Trace to heavy amounts of rust were seen on various hawthorn species at nurseries in Dodge, Jefferson, Lafayette, Rock, Racine and St. Croix Cos.

Impatiens necrotic spot virus – Small numbers of New Guinea impatiens plants were found infected with this virus at a nursery in Rock Co.

Insolibasidium leaf blight – Arnold's red honeysuckle had moderate amounts of leaves affected by this fungal pathogen at a nursery in Dodge Co.

Lophodermium needle blight – Moderate to heavy amounts of injury were observed on red and Scotch pine at nurseries in Waukesha and Waupaca Cos.

Peach leaf curl – Light amounts of leaf distortion were noticed on red leafed peach at a nursery in Jefferson Co.

Pestalotiopsis – This fungal needle blight was found on arborvitae at a nursery in Jefferson Co.

Phomopsis blight – Blue rug juniper had moderate amounts shoot death at a nursery in Jefferson Co.

Phyllosticta leaf spot – Light amounts of leaf spotting were reported on red, silver, sugar and Norway maples at nurseries in Dodge, Jefferson, Marathon, Shawano, and St. Croix Cos.

Pine gall rust – Trace to heavy

Phyllosticta leaf spot on maple



<http://www.extension.umn.edu/projects/yardandgarden/ygbriefs/p414anthracnosemaple.html>

numbers of galls were observed on Scotch pine at nurseries in Oconto, Ozaukee, and Waukesha Cos.

Rose mosaic virus-observed in “Country Dancer” shrub rose at a nursery in Pierce Co.

Rhizosphaera needle cast – White spruce at nurseries in Oconto, Sheboygan, and St. Croix Cos. had moderate amounts of needle loss from this fungal disease.

Shot hole disease – Light to heavy amounts of shotholing was observed on purple leaf plum, Canada red chokecherry, Newport plum and Nanking cherry at nurseries in Dodge, Jefferson, and Rock Cos.

Swiss needle cast – A Sheboygan Co. nursery had moderate amounts of this fungal disease affecting their douglas-fir.

Tar spot – Light to moderate amounts of black spots were observed on silver and red maples at nurseries in Dodge, Marinette, Ozaukee, Racine and Sheboygan Cos.

Venturia shoot blight – Light amounts of leaf spotting on poplar was occurring at a nursery in Jefferson Co.

White pine blister rust- Observed on white pine in moderate amounts, at a nursery in Polk Co.

STATE/ FEDERAL PROGRAMS

Gypsy moth spray program- Pheromone flakes were used to treat a record number of acres- 309,375- in Wisconsin this year. Treatment dates were June 25-30, July 16,17, 21, 22, 23, 24,and 25. The Cooperative Gypsy Moth Program used up to six air tractors per day and treated 257,975 acres, while the Chequamegon National Forest applied flakes to 51,400 acres. Wisconsin set a new record by treating 50,100 acres in one day (July 24) operating from the JFK Memorial Airport in Ashland.

Gypsy moth trapping program - Trappers have checked approximately 40% of their traps and have caught 19,615 male gypsy moths as of 7/31/02. Moth flight has begun in all but the northwestern part of the state. Counties with the highest catch are: Adams 992; Calumet 1,088; Columbia 413; Green Lake 206; Jefferson 306; Kenosha 453; Kewaunee 265; Marinette 4,677; Milwaukee 806; Oconto 578; Rock 363; Sheboygan 1,037; Walworth 272; Waukesha 4,805; and Waupaca 1,893. These totals do not include cooperator data. Some counties have not been checked yet. Trap check will continue for 1-2 weeks in the south and for about 3 more weeks in the north.

For more information on the gypsy moth program, please call our hotline at 1-800-642-MOTH or visit our website at <http://datcp.state.wi.us> and type gypsy moth in the search box

FRUIT

Codling moth - Dissections of untreated Cortland apples yielded 3 larvae per 20 fruits at a site in northern Dane Co. on July 31. Two larvae were in the 3rd instar and the other was a 5th instar. According to a degree day model developed at Michigan State, peak emergence of second generation adults can be anticipate at 1,600 DD (base 50°F) and peak egg laying by second generation adults at 1,700 DD.

Apple maggot – No adults were observed and no oviposition punctures were noted on apple fruit at a northern Dane Co. site. The degree day model for apple maggot indicates peak adult emergence can be anticipated around 1,600 DD (base 50°F), peak egg laying around 1,750 DD, and the end of adults emergence at 2,800 DD. In many areas of the state, peak egg laying is rapidly approaching.

Potato leafhopper – In Richland and Crawford Co. orchards, potato leafhoppers were reported to be creating leafcurling symptoms and hopperburn injury in a number of the apple trees that had not yet set terminal buds (consultant).

European earwig - Several dozen lively adults were observed on fresh watermelon rinds on the night of July 30 in Dane Co. Reports from a Dane Co. residence indicate encounters with this pest have increased significantly in the last week.

WEBSITE OF THE WEEK

UW Extension Plant Disease Diagnostics Clinic

<http://www.plantpath.wisc.edu/pddc/pddcgraphics/index.htm>

From the homepage: “The University of Wisconsin-Madison/ Extension Plant Disease Diagnostics Clinic provides assistance in identifying plant diseases and provides educational information on plant diseases and their control.” That rather low-key introduction is a substantial understatement—this site is a wonderful treasure of information on plant diseases. Sure, there’s information on the services provided by the clinic, but there are also UW publications (including PDFs of the outstanding series of *University of Wisconsin Garden Fact Sheets*), a calendar of events, Master Gardener and crop scout training resource materials and much, much more. Highly recommended.

BLACKLIGHT TRAPPING RESULTS									
through July 31									
Trap Site	Euro. Corn Borer	Army-Worm	Black Cutworm	Vari. Cutworm	Spot. Cutworm	Celery Looper	Forage Looper	Corn Earworm	Corn Earworm <i>Pheromone</i>
South Central									
Arlington ² through 7	110								
Madison	95	1							
Mazomanie	82	23	4	0	2	0	12	3	
Janesville	90	126	0	0	0	60	16	1	
Reedsburg	120								
West Central									
Coon Valley									2
through 7/24									3
East Central									
Oakfield	97	0	0	0	0			4	4
Manitowoc	0	8	0	0	17	3		0	
Central									
Marshfield	23	8	1	0	0	0	14	15	
Northwest									
Chippewa	30								
Cameron	1								
New Richmond	5								2

APPLE INSECT TRAPPING RESULTS							
County	Date	STLM	RBLR	CM	OBLR	AM	AM
Crawford Co.							
Gays Mills-W2	7/22-7/29	450	0	1	0	0	0
Gays Mills-E2	7/23-7/30	88	3	0	1	1	0
Richland Co.							
Hill Point							
Richland Center-W	7/23-7/30	115	6	4	0	0	0
Richland Center-E	7/23-7/30	85	18	1	1	0	0
Dane Co.							
Deerfield	7/22-7/29	258	10	3	0	0	0
Pierce Co.							
Spring Valley	7/24-7/31	146	12	1	0	0	1
Beldenville	7/21-7/27	320	165	6	1	0	0
Jackson Co.							
Hixton	7/23-7/29	22	5	1	0	0	0
Fond du Lac Co.							
Rosendale	7/15-7/22	23	5	4	3	0	0
	7/22-7/29	13	6	2	1	0	0
Malone	7/22-7/29	20	6	4	0	0	0
Adams Co.							
Oxford	7/22-7/29	301	22	0	6	0	0
Marquette Co							
Montello	7/22-7/29	696	7	6	0	0	0
Ozaukee Co.							
Mequon	7/21-7/29	150	6	1.5			7.3
Racine Co.							
Rochester	7/25-8/1	778	0	11.5	0	0.23	0
Brown Co.							
Oneida	7/22-7/29	10	3	1	1	0	0

MID-SEASON GYPSY MOTH TRAP CHECK 2002 DATA

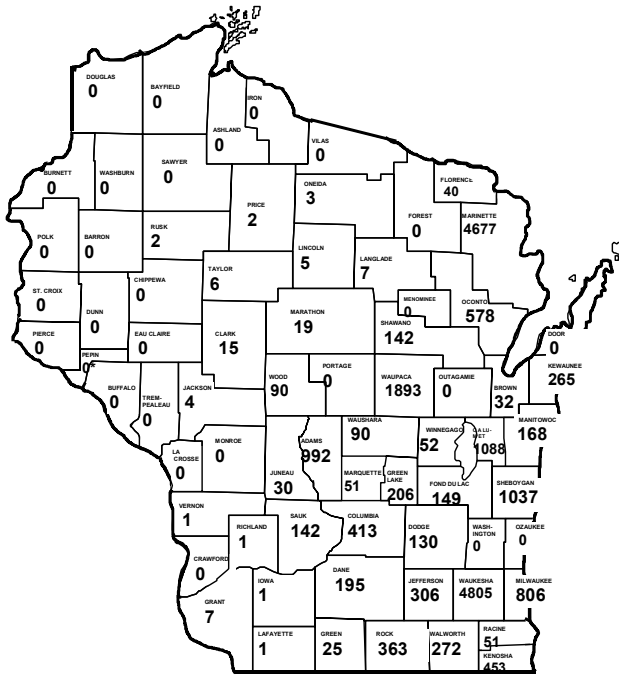
(as of 7/31/02)

Trap check results.

19,615 moths

This does not include cooperator data.

Not all counties have started the mid-season trap check.



Wisconsin Department of Agriculture, Trade, and Consumer Protection

Base 50F D.D. from 1 Jan to 31 July 2002

