



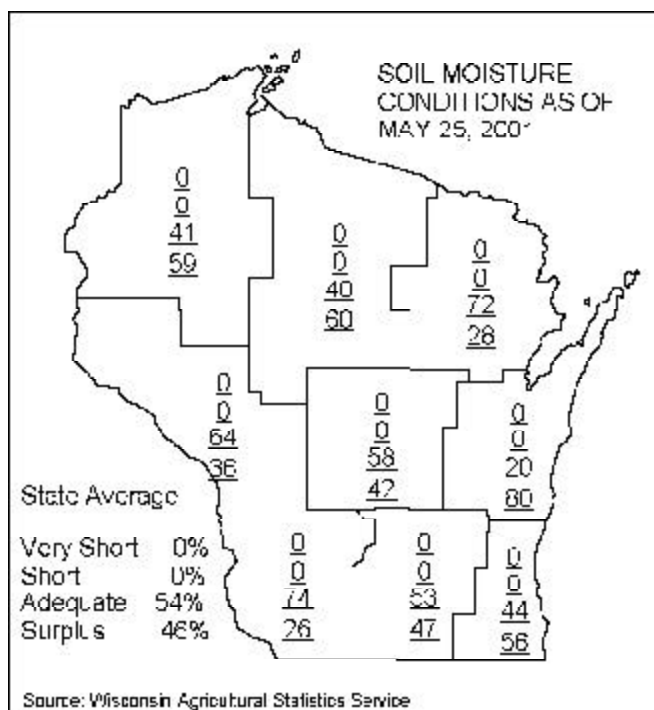
COOPERATIVE PEST SURVEY BULLETIN

State of Wisconsin
Department of Agriculture
Trade & Consumer Protection

Agricultural
Resource
Management

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WEATHER AND PESTS



Wet field conditions and continued rains left farmers little choice but to wait it out this past week. Almost all field crops are developing a bit behind average. Cherry and apples have bloomed in central and southern Wisconsin.

Daylily rust has now been detected in 7 states (Alabama, California, Georgia, Florida, Louisiana, Mississippi, and South Carolina) (see **ALERTS**). **Forest tent caterpillars** are prolific in northern Wisconsin. Despite the name, these caterpillars don't make a nest. They defoliate a variety of hardwoods and can be identified by the whitish-yellow spots on their blue-brown backs.

Growing degree days from March 1 through May 30 were:

Site	GDD*1	2000 GDD	Normal GDD	Base ¹ 48	Base ¹ 40
SOUTHWEST					
Dubuque, IA	559	626	560	590	1059
Lone Rock	506	570	520	525	992
SOUTHCENTRAL					
Beloit	575	579	545	612	1096
Madison	500	516	500	535	988
Sullivan	529	523	490	555	1040
Juneau	510	523	445	549	1011
SOUTHEAST					
Waukesha	473	492	450	500	963
Hartford	469	490	440	505	952
Racine	419	534	475	451	878
Milwaukee	404	428	450	433	853
EAST CENTRAL					
Appleton	418	449	390	441	855
Green Bay	361	381	350	383	782
CENTRAL					
Big Flats	454	494	440	461	889
Hancock	451	484	435	461	861
Port Edwards	412	468	420	415	820
WEST CENTRAL					
LaCrosse	501	623	618	513	949
Eau Claire	442	553	425	454	864
NORTHWEST					
Cumberland	400	469	400	410	806
Bayfield	274	303	200	265	587
NORTH CENTRAL					
Wausau	364	427	375	371	749
Medford	361	418	350	371	746
NORTHEAST					
Crivitz	340	366	325	351	738
Crandon	345	387	310	345	711

¹Data from Bill Bland et. al., Soil Science, Univ. of Wisconsin-Madison.

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.

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

ALERTS

Daylily rust - **Daylily rust** has now been detected in 7 states (Alabama, California, Georgia, Florida, Louisiana, Mississippi, and South Carolina). Suspect samples from other states (including Massachusetts, Texas, Michigan) submitted to USDA have been negative. So far in Wisconsin, **daylily rust** has not been found.

Apple ermine moth - Suspect caterpillars of **apple ermine moth** were submitted to the USDA this week. The caterpillars were found at a nursery dealer in Wisconsin who received crabapple nursery stock from a nursery in Oregon. The county where the stock originated has had catches of **apple ermine moth** in previous years.



CORN

European Corn Borer – A few moths have been observed this week flying in Grant, Iowa, Lafayette, Green and Marquette Cos. They do not do well in cold weather, below 50°F. Usually we see the peak flight about mid-June. We began this spring with a relatively low population. However, each moth may deposit about 400 eggs. Therefore, the population could increase significantly for the later summer

moth flight.

FORAGES

Alfalfa Blotch Leafminer – Adults, mines or pinhole feeding were found on alfalfa in several counties. A Grant Co. field had one leaf mine per stem on 100 stems. Two to 10 percent of the leaves on 10 stems contained leaf mines in Waushara Co., and 30 percent of the leaves on 10 stems in Adams Co. contained mines. These fields were close to harvest time. Few adults, 0.2-0.6 per sweep, were observed in Marathon and Lincoln Co. alfalfa fields earlier this week. Less than 10% pinhole feeding damage was also noted in fields surveyed. Adults are tiny, black, humpbacked flies, approximately 1/8 inch long (see photo). Using their ovipositors, adult females feed by piercing alfalfa leaflet surfaces, creating tiny pinholes and lapping up the sap. Larvae mine between the leaflet epidermis, creating conspicuous, comma-shaped mines visible on upper leaflet surfaces. These leaf mines can occupy anywhere from 20-80% of the total leaf surface.



http://gnv.ifas.ufl.edu/%7Einsect/orn/blotch_leafminer_fig2.htm

The **alfalfa blotch leafminer** was first detected in Minnesota in 1994. Prior to that, **alfalfa blotch leafminer** populations were known to occur only in the far Northeastern U.S. and Canada. **Alfalfa blotch leafminer** likely arrived with infested hay from Ontario. Since its detection in 1994, **alfalfa blotch leafminer** has spread at a rate of 50-60 miles per year. There are numerous parasitoids and predators that aid in controlling **alfalfa blotch leafminer** populations. To date **alfalfa blotch leafminer** has been detected in nearly every county in Wisconsin. At this time, the economic importance of **alfalfa blotch leafminer** remains unclear. Some research suggests leafmining may result in significant yield losses, but other studies suggest leafmining results in decreased quality. Control decisions should be made during the adult pinhole feeding stage. Treatment may be warranted when 30-40% of the leaflets show pinhole feeding damage.

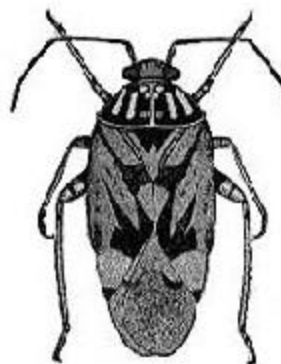
Alfalfa weevil – An average of 1 to 10 percent tip feeding was observed in several fields from Grant to Green Co. These fields were close to harvest. Three fields across Adams Co. ranged from zero to 30 percent tip feeding. Four fields surveyed in Marquette and Waushara Co. ranged from 20 to 30 percent tip feeding. Just a reminder that after this cutting comes off, the second crop regrowth is vulnerable to hungry larvae. Larvae seek shelter around the base of the plant. You have to get down and look closely around the base to discover them. If plants don't start to green-up in a few days or when you think they should, check for **alfalfa weevil** larvae.

Potato Leafhopper – Surveys in Grant, Lafayette, Green, Adams, Marquette, Portage, Marathon and Lincoln Cos. pulled out an average of 0.1 to 0.3 adults per sweep in 14+ inch alfalfa fields. These counts fall far below the economic threshold for alfalfa fields of this height (2.0 per sweep). A majority of alfalfa fields in these counties were nearing first cutting or had recently been cut. Growers in these counties are advised to monitor regrowth carefully. **Potato leafhopper** populations increase rapidly when conditions are favorable. The recent cool weather we have been experiencing is not favorable.



<http://www.pim.iastate.edu/ipm/icm/1999/6-21-1999/ipothopper.html>

Tarnished Plant Bug – Sweep net catches of **tarnished plant bug** ranged from 0.5 to 1.1 per sweep in 14+ inch alfalfa in Lincoln and Marathon Cos. Both the adult and nymph stages damage alfalfa by removing plant sap and injecting toxins, causing stunted, distorted and crinkled leaflets. Although **tarnished plant bug** is only an occasional pest of alfalfa, adults are considered to be a major pest of strawberries, vegetables, and a number of other fruits and flowers. The economic threshold currently available for alfalfa combines **alfalfa plant bug** and **tarnished plant bug** counts. The threshold for alfalfa less than 3 inches is 3/ sweep, and in alfalfa >3 inches is 5/sweep. Cutting early is often an effective control measure.



<http://www.ext.vt.edu/departments/entomology/factsheets/tarplant.html>

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Plant bug on arborvitae - a plant bug, *Dichroscytus* sp., was found on arborvitae nursery stock at a nursery dealer in Ozaukee Co. According to the literature species in the genus feed on conifers, with one species feeding on juniper and arborvitae.

Spittlebug - Various perennials and shrubs had light to heavy amounts of spittle masses at nursery dealers in Crawford, Ozaukee, Richland, Sauk, Sheboygan and St. Croix Cos.

Thrips - Damage from **thrips** feeding was found at nursery dealers on marigolds in Milwaukee Co., mums in Grant Co., dahlias in Richland Co., mini roses in Crawford Co. and marigolds in Milwaukee Co.

Aphids - Moderate to heavy numbers were observed on various annuals and perennials at nursery dealers in Crawford, Grant, Richland, Sauk, St. Croix and Waukesha Cos.

Fletcher scale - Inspectors are still seeing heavy numbers of **scales** on densiformis yews at nursery dealers in Columbia, Fond du Lac, Grant, Jefferson, Richland, Rock, Sauk and St. Croix Cos. Crawlers were observed on most plants examined.

Spruce spider mite - Light to moderate damage was noted on arborvitae at nursery dealers in Rock and St. Croix Cos.

Bark beetles - Several white pine at nursery dealers in St. Croix Co. had moderate stem damage from unknown **bark beetles**.

Honeylocust pod gall midge - Pod galls were noticeable on honeylocust at a nursery dealer in Fond du Lac Co.

Imported willow leaf beetle - Moderate amounts of skeletoning were noticed on willows at a nursery dealer in Columbia Co.

Leafminers - Mines were evident on hawthorn in Rock Co, on hollyhock in Crawford Co. and on columbine throughout the state.

Powdery mildew - Light to heavy infections were found at nursery dealers on roses in Ozaukee, Richland, Sauk and Waukesha Cos. Moderate amounts were found on zinnias in Milwaukee Co.

Black spot - Moderate amounts were found on roses at nursery dealers in Columbia, Crawford, Fond du Lac, Grant, Jefferson, Milwaukee, Ozaukee, Richland, Sauk, St. Croix and Waukesha Cos.

Apple scab - Severe infections were found mainly on 'Radiant' and 'Profusion' crabapples at nursery dealers in Crawford, Grant, Richland and Waukesha Cos.

Rose mosaic virus complex - Infected roses were found at nursery dealers in Crawford, Grant, Richland and St. Croix Cos. Plants were ordered destroyed.

Bacterial blight - Lilacs were showing light to moderate symptoms of this disease at nursery dealers in Fond du Lac, Grant, Jefferson, Ozaukee, Rock, Sheboygan and St. Croix Cos.

Golden canker - Pagoda dogwood at a nursery dealer in Rock Co. had light amounts of twig cankering.

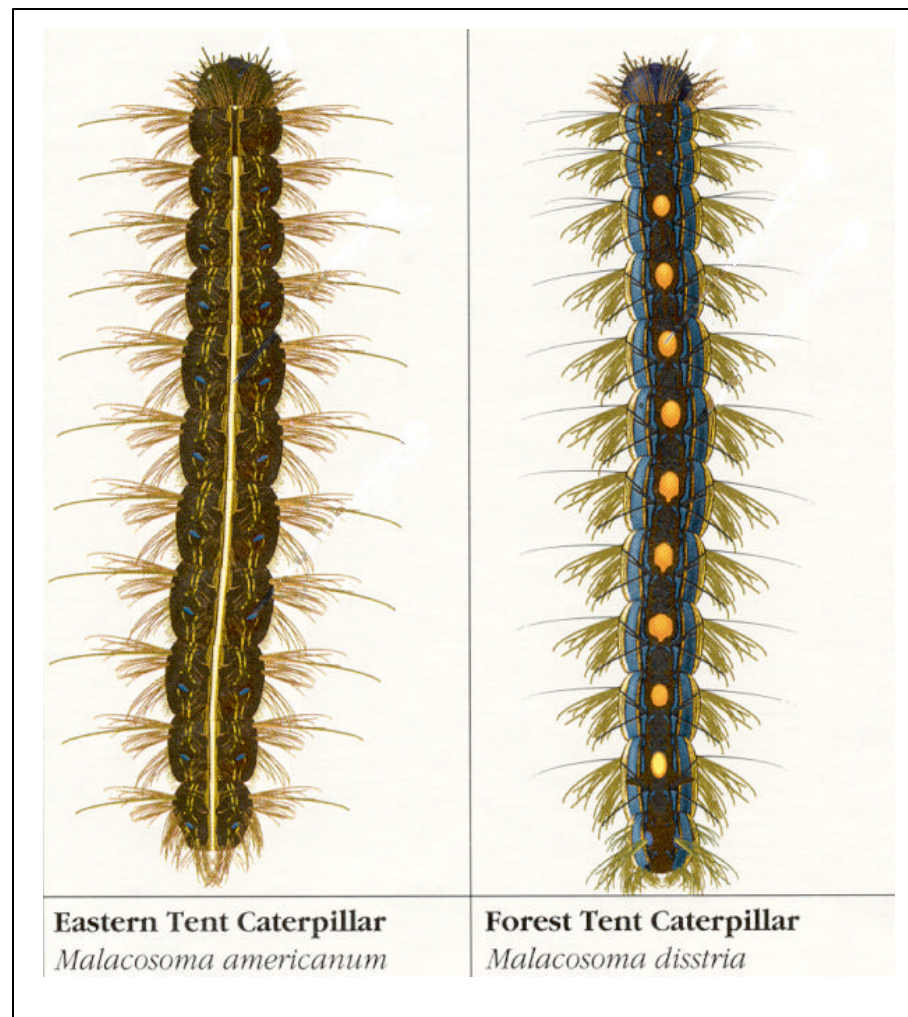
Septoria leaf spot - Leaf spots were most common on phlox, spirea and dogwood at nursery dealers in Columbia, Crawford, Grant, Jefferson Ozaukee and Sauk Cos. Evening primrose at a nursery dealer had leaf spots caused by *Septoria* sp.

Leaf blotch of peony - Peonies at nursery dealers in Fond du Lac, Ozaukee and St. Croix Cos. had light to moderate amounts of this fungal disease.

European Pine Sawfly — Scattered defoliation of Scotch, mugo and red pine has occurred in Dane County. Some colonies have finished feeding and have dropped to the ground. This spring sawfly eats only the old needles while the new needles are developing. Heavily defoliated trees will fill out again by mid to late June. (DNR)

Gypsy Moth — Heavy numbers of caterpillars have been reported in scattered locations in Sheboygan and Washington counties. (DNR)

Fall Cankerworm — Heavy defoliation of hardwoods is occurring in scattered locations in Columbia Co. This inchworm feeds on a variety of hardwoods in the spring.



Defoliated trees will produce a second crop of foliage in a few weeks. This cool, wet spring weather will help defoliated trees recover. The adult moths are active in the fall. (DNR)

Dothistroma needle blight - A nursery dealer in Ozaukee Co. had Austrian pine with moderate amounts of needle blight.

Anthraco - Various oak species at a nursery dealer in Fond du Lac had moderate amounts of leaf infection from **anthracnose**.

Crown gall - A number of *Euonymus colorata* at a nursery dealer in Waukesha Co. had galls on their stems. Plants were ordered destroyed.

Rust - Various **rust** species were found on green ash, spiderwort and hollyhock at nursery dealers in Columbia Co.

Iris leaf spot - Light amounts of leaf spots were found on iris at a nursery dealer in Jefferson Co.

Impatiens necrotic spot virus - Samples of phlox and New Guinea impatiens sent to the Plant Industry Diagnostic Lab came back positive for **Impatiens necrotic spot virus (INSV)**. Samples were collected from a garden center in Columbia Co. Symptoms on phlox included a stunting of the plant and deformation and twisting of new leave

Leaf blotch of peony - Peonies at nursery dealers in Fond du Lac, Ozaukee and St. Croix Cos. had light to moderate amounts of this fungal disease.

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Cercospora leaf spot - Pansies at a nursery dealer in Washington Co. had moderate amounts of this leaf spot caused by *Cercospora violae*.

Rust - Various **rust** species were found on green ash, spiderwort and hollyhock at nursery dealers in Columbia Co.

Dothiora taxicola- Colorado blue spruce and white spruce from a nursery dealer in Vernon Co. both had this mysterious disease. Not much is known of its host range, life cycle or distribution.

STATE/FEDERAL PROGRAMS

Gypsy moth program - Aerial spraying with Btk is finished except for Vilas Co. Aerial spraying with pheromone flakes will start some time towards the latter part of June. For more information on the **gypsy moth** program call 1-800-642-MOTH.

Gypsy moth trappers have begun blanketing the state with **gypsy moth** traps. Traps are green or orange cardboard, and either triangular or shaped like a milk carton. Trap setting will continue for the next four or five weeks. We appreciate landowners who have allowed us to set traps on their private property.

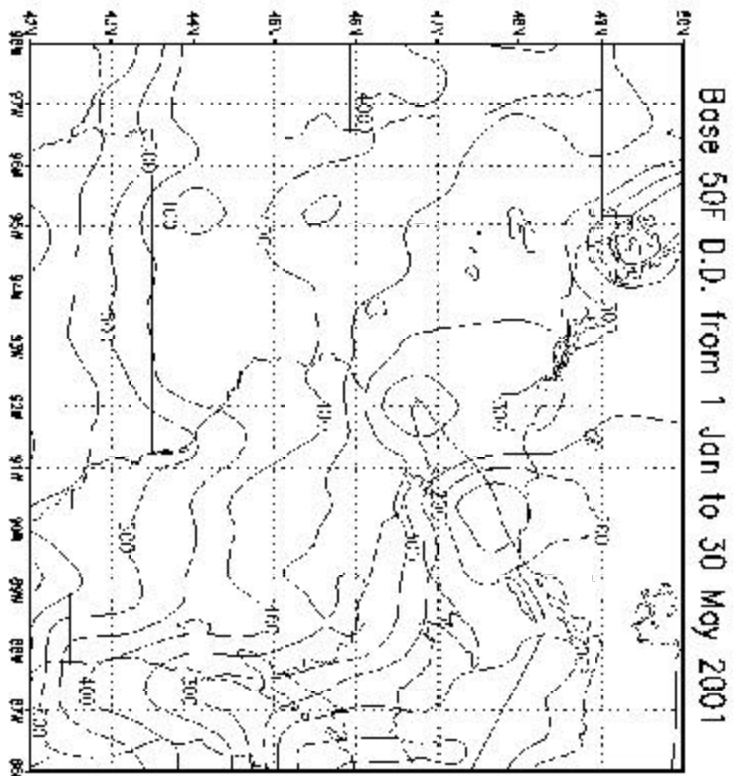
FRUIT

Apple Insect Trapping Results

County	Date	STLM	RBLR	CM	
City					
OBLR					
Crawford Co.					
Gays Mills-W2	5/14-5/21	10	0	0	0
Gays Mills-	5/17-5/23	390	1	11	0
Gays Mills	5/23-5/30	42	3	1	0
Richland Co.					
Hill Point	5/22-5/29	12	0		
Indian Hollow	5/17-5/23	125	6	19	
Indian Hollow	5/24-5/30	92	0	7	0
Richland Cente	5/17-5/23	29	2	12	
Richland Cente	5/24-5/30	23	4	11	0
Iowa Co.					
Avoca	5/24-5/30	10	0	0	
Dane Co.					
Deerfield	5/23-5/28	0	1	0	
Dunn Co.					
Menomonie	5/23-5/30	105	6	0	0
Pierce Co.					
Spring Valley	5/23-5/29	51	13	0	
Grant Co.					
Lancaster	5/24-5/30	0	6	0	
Fond du Lac Co.					
Rosendale	5/21-5/28	17	6	0	
Malone	5/18-5/26	15	7	0	0
Brown Co.					
Oneida	5/14-5/26	30	7	3	
Ozaukee Co.					
Mequon	5/22-5/28	20	0	0.1	
Racine Co.					
Rochester*	5/24-5/30	31	1	3	1

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Web Site of the Week

The Plant Pathology Internet Guidebook

<http://www.ifgb.uni-hannover.de/extern/ppigb/ppigb.htm>

A worldwide resource guide of almost startling breadth. Links to on-line field guides, societies, schools and companies, meetings, jobs, disease forecasting services and more. Despite the name, includes considerable information on entomology and IPM. If only the rest of the Internet was this good....