COOPERATIVE
PEST SURVEY BULLETIN

State of Wisconsin
Department of Agriculture
Trade & Consumer Protection

Agricultural
Resource
Management

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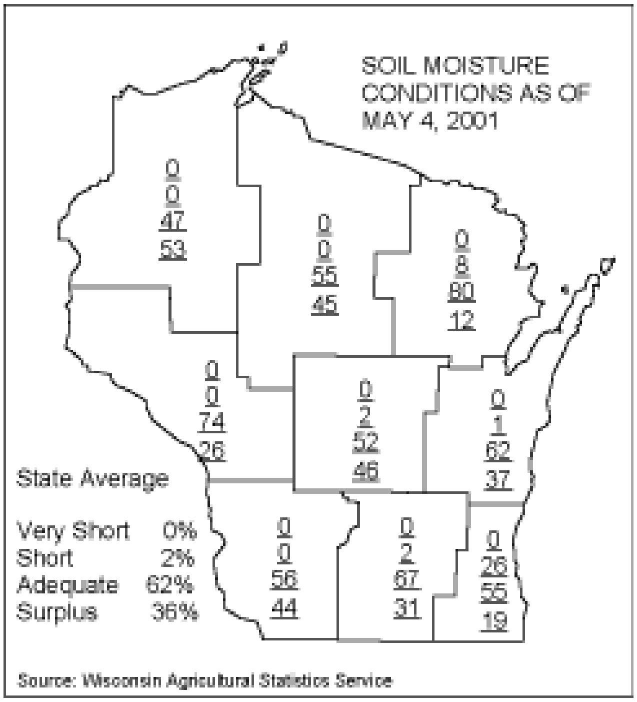
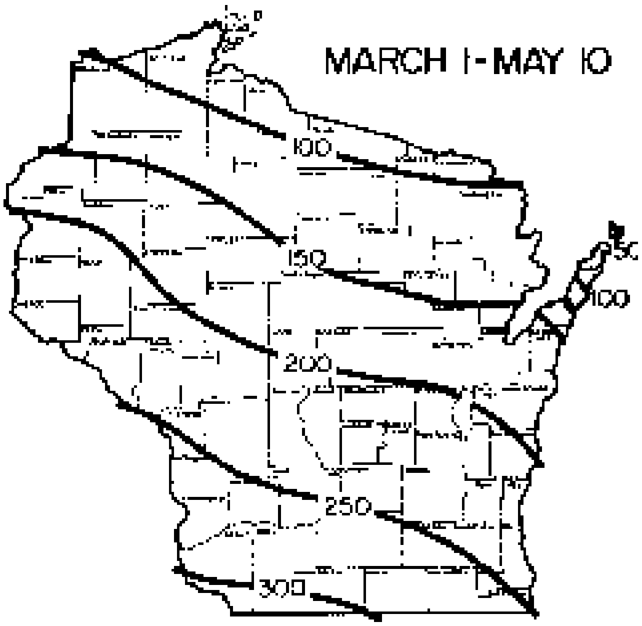


Source: Wisconsin Agricultural Statistics Service



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

WEATHER AND PESTS

Too much rain in some parts of the state have hampered tillage and planting. Planting progress for most crops is well below last year's and also below the five-year average.

Gypsy moth spraying commenced on Thursday in Dane, Jefferson, Grant, Iowa and Rock Cos. Two applications of Btk will be made at each site about 7-10 days apart. Later in June, some sites where Btk cannot be used will have pheromone flakes applied for mating disruption.

Growing degree days from March 1 through May 9 were:

Site	GDD*[1]	2000 GDD	Normal GDD	Base[1] 48	Base[1] 40
SOUTHWEST					
Dubuque, IA	327	388	295	347	646
Lone Rock	298	365	251	312	613
SOUTHCENTRAL					
Beloit	355	370	268	373	698
Madison	298	327	254	316	615
Sullivan	321	334	237	340	657
Juneau	304	335	215	325	630
SOUTHEAST					
Waukesha	285	313	235	304	602
Hartford	278	316	212	295	586
Racine	257	285	229	271	545
Milwaukee	242	278	220	254	521
EAST CENTRAL					
Appleton	236	293	191	242	499
Green Bay	200	244	162	207	451
CENTRAL					
Big Flats	258	322	202	263	528
Hancock	257	316	201	262	525
Port Edwards	229	305	193	229	472
WEST CENTRAL					
LaCrosse	277	398	234	287	555
Eau Claire	240	358	190	247	490
NORTHWEST					
Cumberland	204	295	171	212	444
Bayfield	130	181	68	125	302
NORTH CENTRAL					
Wausau	198	278	164	195	423
Medford	194	267	153	195	420
NORTHEAST					
Crivitz	187	236	128	188	422
Crandon	180	250	117	174	391

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

ALERTS

Codling Moth – The first flight of the season is underway throughout much of the state.

Cooperators planning to use pheromone traps to time sprays should monitor traps daily until the *biofix*, the starting date of the first sustained flight of male moths captured in pheromone traps, is reached. Sprays target larvae emerging from the egg stage, and should be applied when 250 DD (base 50°F) have accumulated after the cumulative capture of 5 moths per trap. A second application may be necessary 14-21 days following the first application.

In addition to pheromone trapping, regular scouting and the use of a degree day model are also important in timing sprays. The degree day model below (base 50°F) can be used to predict codling moth development:

1st moth	occurs	at	248 DD
1st egg hatch	“	“	491 DD
1st moth peak flight	“	“	500 DD
Egg hatch 50% complete	“	“	713 DD
2nd moth peak flight	“	“	1577 DD

Alfalfa blotch leafminer – Masses of adults were swept in Grant, Green, Lafayette and Dodge County alfalfa fields. Alfalfa growers should monitor for adult pinhole feeding in upper leaflet surfaces. This type of damage isn’t considered to be problematic, but noting the percentage of pinhole feeding damage is fundamental in determining whether treatment is necessary. Control is warranted when 30-40% of leaflets show pinholes.

CORN

Black Cutworm – Pheromone traps have been in place since mid-April, but we have not yet seen any signs of a mass migration. This is very late for the appearance of this insect, which typically arrives in mid-April. The late arrival of **black cutworm** suggests this insect may present greater problems in late-planted corn that is smaller in circumference and more vulnerable to damage at its growing point. In contrast, early-planted corn is larger in circumference and the growing point is higher on the plant, therefore less subject to damage. In newly emerged corn plants, the growing point is at or below ground level. When the growing point is damaged badly enough, or if the plant is entirely cut, it doesn’t produce any yield. Additionally, late-appearing BCW can present problems for potato growers because in some areas it is the only attractive, succulent plant available. Trap counts from 5/2-5/09 are listed at right.

Nearest Town	# BCW
Clyde	0
Darlington	0
Evansville	1
Lancaster	0
Madison	1
Monroe	0

FORAGES

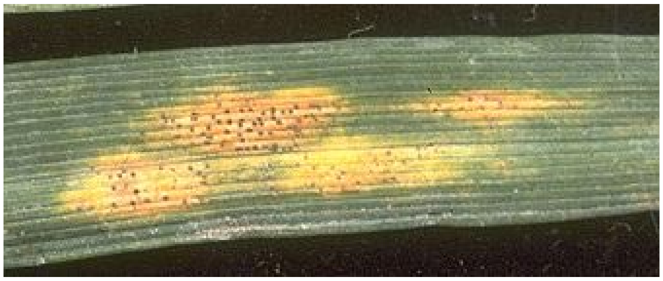
Alfalfa weevil – Low numbers (< 1/sweep) of **alfalfa weevil** larvae were observed in 14-20 inch alfalfa fields surveyed in Grant, Green, Lafayette, Sauk, Columbia, Dodge, Crawford and Jefferson Cos. Growers should scout for **alfalfa weevil** larval feeding damage in regrowth following the first cutting.

Spring black stem (caused by the fungus *Phoma medicaginis var. medicaginis)* - This disease was detected in several alfalfa fields in Dane, Columbia and Jefferson Cos. Even though each plant was infected, the severity level was less than 1 %. As the name indicates, **Spring black stem** is found early in the season, with most damage occurring prior to the first cutting. During periods of cool, wet weather, spores ooze from the tiny fruiting bodies and are splashed to young leaves and stems resulting in small, irregular, dark brown to black spots on leaves and stems.

There are no alfalfa varieties listed as resistant to **Spring black stem**, and no fungicides are specifically labeled for control of this disease. The effects of **Spring black stem** can be minimized to some extent through the adoption of good alfalfa management practices. Maintenance of proper soil pH and fertility levels, and harvesting at regular intervals, will provide for optimum plant vigor and help plants withstand some of the effects of the disease.

SMALL GRAIN

Speckled leaf blotch (**Septoria leaf blotch**) - **Speckled leaf blotch,** caused by the fungus *Septoria tritici,* was detected on winter wheat in Dane and Columbia Cos. with a severity level of less than 1 %. The initial symptoms are small yellow spots on the leaves. These spots expand and later turn light tan producing lesions. Lesions contain very small round black speckles that appear like grains of black pepper. The black speckles are fungal fruiting bodies. The black fruiting bodies can usually be seen without the aid of a magnifying glass. Control options include the use of resistant and foliar fungicides. Cultural controls are not very effective for this disease.



(Courtesy of http://www.oznet.ksu.edu/dp_path-ext/factsheets/wheat/wheat13.htm)

POWDERY MILDEW (caused by *Blumeria graminis f. sp. tritici*) - This disease was detected on winter wheat in Dane, Columbia and Jefferson Cos. with a 100 % incidence and a severity of about 1 %. It is recognized by small, patches (colonies) of cottony growth (mycelia). These cottony mycelia occur on the upper and lower leaf surfaces. The canopy within a lush stand of wheat is an ideal environment for **POWDERY MILDEW** to develop. It is most prevalent on the lower leaves of susceptible varieties in late April or early May when wheat is in the joint to flag-leaf stage of development. This disease can cause a reduced kernel size and test weight, and ultimately lower yield. The earlier in the spring that **POWDERY MILDEW** begins to develop on the plant, and the higher on the plant it infects by flowering, the greater the yield loss. Growing resistant varieties is the most economical way to control **POWDERY MILDEW**. Use of a balanced fertilization program, incorporating wheat residues into the soil, crop rotation and destroying volunteer wheat will lessen the amount of overwintering inoculum in the field. Fungicides are available that provide excellent control of **POWDERY MILDEW**.

(Courtesy of *http://www.ppws.vt.edu/stromberg/smallgrain/biology/wpmildew.html*)

VEGETABLES

Aster Leafhopper –This pest feeds on a diversity of plants including field crops, vegetables, weeds, and flowers, and transmits **Aster Yellows**, an untreatable disease that many plants are susceptible to.

Aster leafhoppers become infected with the pathogen while feeding on infected plants, and may arrive in Wisconsin already infected with the **aster yellows** pathogen. For this reason, it is important to closely monitor **aster leafhopper** spring migration closely. Low number of adults were observed in alfalfa and wheat fields surveyed in Grant, Dane, Green, Lafayette, Columbia and Dodge Cos.

Asparagus beetles (both species) - Egg laying was commonly observed on asparagus, variety Martha Washington, in northern Dane Co. **(DATCP retiree)**

APIARY

MID-WEST BEEKEEPING WORKSHOPS - Master Beekeeping Workshop at the University of Nebraska, Apiculture Lab near Mead, NE. June 28-30, 2001. Contact Dr. Marion Ellis, Phone: (402) 472-8696. Email: mellis3@unl.edu.

Successful Queen Rearing Short Course at the University of Nebraska, Apiculture Lab near Mead, NE. June 27-29, 2001. Contact Dr. Marla Spivak, Phone: (612) 624-4798. Email: spiva001@tc.umn.edu

University of Illinois **Short Course on Bees And Beekeeping**. July 28-29, 2001. Contact Ms. Tish Cundiff at (217) 333-2910. Email: entowork@life.uiuc.edu.

HONEYBEE PESTICIDE KILL ALERT – Soybean growers are fighting a new pest, the **soybean aphid**, which was first identified during the 2000 growing season in the Midwest. According to Dr. John Wedberg, growers may be using the following insecticides: Asana XL, Ambushe 2 EC, Pounce 3.2EC, and Warrior T (synthetic pyrethroids), Furadan 4F (carbamate), Lannate LV and SP (carbamate), dimethoate (OP), in addition to Penncap-M and Lorsban 4E. Most of these pesticides are very toxic to foraging honeybees and must not be sprayed on flowering crops or weeds. These products should not be allowed to drift to blooming crops or weeds when bees are visiting the treatment area. Penncap-M is also highly toxic to humans, fish and birds. Bees may bring Penncap-M back to the hive, to store it with pollen where it can cause bee kills for months.

Beekeepers should notify farmers within 1 ½ mile radius of their apiary location in writing. The person who owns or controls the pesticide application using pesticides labeled "highly toxic to bees" must notify the beekeeper 24 hours in advance of spraying. **ATCP 29.51 Advance notice of pesticide applications (1)**. If you would like more information, or a copy of this rule, please contact your Apiary Program at (608) 224-4575.

HUMANS AND ANIMALS

Black flies - Biting of humans occurred in areas well removed from water this week. High water in streams often generates high populations because of the amount of food washed downstream into their larval "nets." When populations are high, biting can occur quite a distance from streams if there is sufficient wind to disperse them. In Price Co. biting was noticed last Friday. **(UWEX & DATCP retiree)**

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Aphids - Spirea bushes fresh off the truck had low numbers of aphid colonies on the tips of branches at several nursery dealers in Dane Co. Other **aphids** were found on hollyhock at a nursery dealer in Dane Co.

Snowball aphid - Small numbers of **aphids** were observed on highbush cranberry viburnum at a residence in Dane Co.

Symptoms include leaves turning off color and becoming distorted. Turning leaves like this over reveals the **aphids**.

Bagworm, *Thyridopteryx ephemeraeformis* - Several arborvitae that were defoliated last summer were discovered by an inspector this past week at a nursery dealer in Rock Co. Up to fifty bags per bush were counted. There were also bags on nearby weigela and smokebush. One bag was found on a taxus bush at a nursery dealer in Dodge Co. Eggs did not appear to be viable.

Bagworm from arborvitae in Rock Co.

Columbine leaf miner - Light to moderate numbers of mines were found on columbine at a nursery dealer in Rock Co.

Spruce spider mite - Damage was light to moderate on potted arborvitae at a nursery dealer in Dane Co. Eggs were visible on the needles but no adult mites were observed.

Spittlebug - Frothy masses encasing nymphs were becoming visible on potentilla and weigela at several nursery dealers in Rock Co.

Thrips - Geraniums flowers were being deformed from the feeding of **thrips** at a nursery dealer in Lafayette Co.

Eastern tent caterpillar - Numerous tents are appearing on black cherry and wild plum in northern Green Co. Tents are softball to soccer ball-sized. Theer was also a report of **forest tent caterpillars** hatching in Price Co. **(DNR & UWEX)**

Maple bladdergall mite - Galls were very evident on silver maple leaves at a Dane Co. residence and some of the galls have already turned red. **(DATCP retiree)**

Pink erineum mite - Galls were evident and common on the undersides of silver maple leaves at a Dane Co. residence. **(DATCP retiree)**

Black spot - Lesions were just starting to become visible at nursery dealers in Dane, Dodge, Milwaukee, Outagamie, Portage and Rock Cos.

Powdery mildew - The powdery mycelium was becoming visible on roses and columbine at nursery dealers in Dane, Milwaukee, Portage and Rock Cos.

Didymellina leaf spot - Bearded iris at nursery dealers in Dane and Waushara Cos. had small numbers of lesions from this common fungal pathogen of iris.

Shothole disease - Purpleleaf sand cherry at nursery dealers in Dane, Lafayette and Rock Cos. had light amounts of this foliar disease.

Anthracnose - Daylilies at nursery dealers in Dane and Waushara Cos. had the beginning symptoms of this foliar disease. Leaves were analyzed to make sure it was not the beginning of **daylily rust**.

Impatiens nectrotic spot virus - Large numbers of impatiens plants at a nursery dealer in Waupaca Co. were being affected by this virus.

Rose mosaic virus complex - Several rose bushes at nursery dealers in Milwaukee and Rock Cos. had symptoms of this disease. Bushes were ordered removed and destroyed.

Botrytis blight - Light amounts of **Botrytis blight** were observed on geraniums at nursery dealers in Dane and Lafayette Cos. and on new guinea impatiens at a nursery

Apple Insect Trapping Results

County City	Date	STLM	RBLR	CM	OBLR
Grant Co.					
Sinsinawa	5/1-5/7	12	28		
Lancaster	5/3-5/10		136		
Crawford Co.					
Gays Mills-	5/1-5/7	10	12		
Richland Co.					
Hill Point	5/1-5/7	350	43	0	
Sauk Co.					
Spring Gree	5/3-5/10	10	36	3	
Iowa Co.					
Dodgeville*	5/3-5/10	240	148	4	6
Green Co.					
Brodhead	5/1-5/8	120	4		
Dane Co.					
Deerfield	5/2-5/8	676	117	10	12
Middleton	5/3-5/10	6	45	3	
Waunakee	5/2-5/9	29	7		
Jackson Co.					
Hixton	5/1-5/7	180	6	2	
Trempealeau Co.					
Galesville	5/1-5/7	420	7	0	0
Pierce Co.					
Beldenville	4/29-5/5	30	25	1	0
Spring Valle	5/1-5/8	338	55		
Juneau Co.					
Mauston	4/28-5/6	285	26		
Fond du Lac Co.					
Rosendale	5/1-5/7	83	15	1	
	4/24-5/11	9	36		
	4/17-4/24	0	6		
Malone	4/30-5/7	150	17	0	
Marquette Co.					
Montello*	4/29-5/6	1512	127		
Ozaukee Co.					
Mequon	5/1-5/7	1350	19.5		
Brown Co.					
Oneida	4/30-5/7	400	15	8	
Bayfield Co.					
Washburn	4/27-5/4	0	0		

* indicates NEW COOPERATOR!

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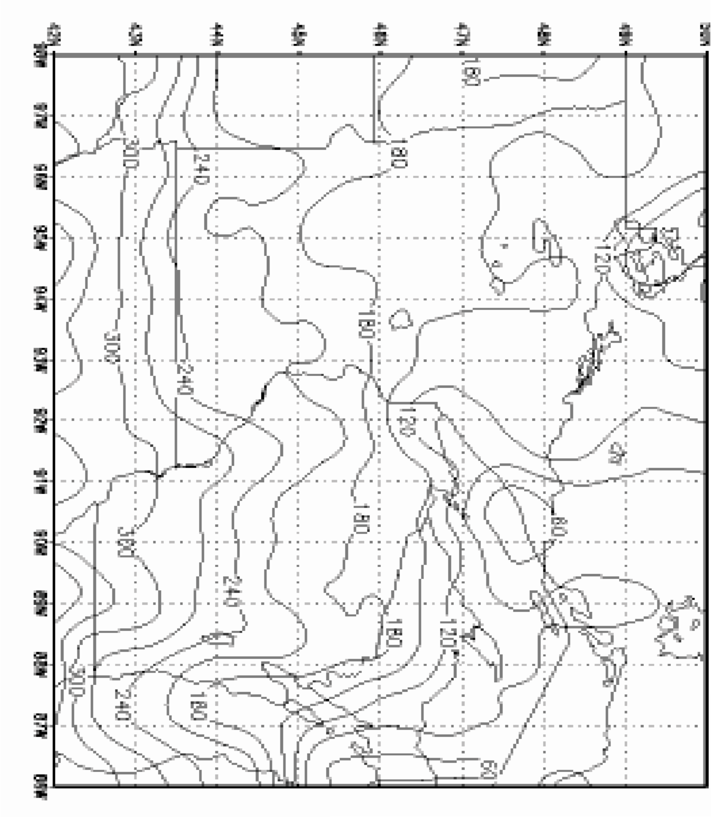

Degree Days (base 50°F) Jan 1 through May 9, 2001

Website of the Week

Daylily Rust *http://www.ncf.ca/~ah748/rust.html*
This site has links to information on daylily rust and a number of pictures of daylily rust and some other conditions which might fool you.

Each issue, we hope to highlight a website we believe our readers may find interesting. (Of course, this notice is provided for information only—no endorsement is meant or implied.)