COOPERATIVE PEST SURVEY BULLETIN

State of Wisconsin
Department of Agriculture
Trade & Consumer Protection

Agricultural Resource Management

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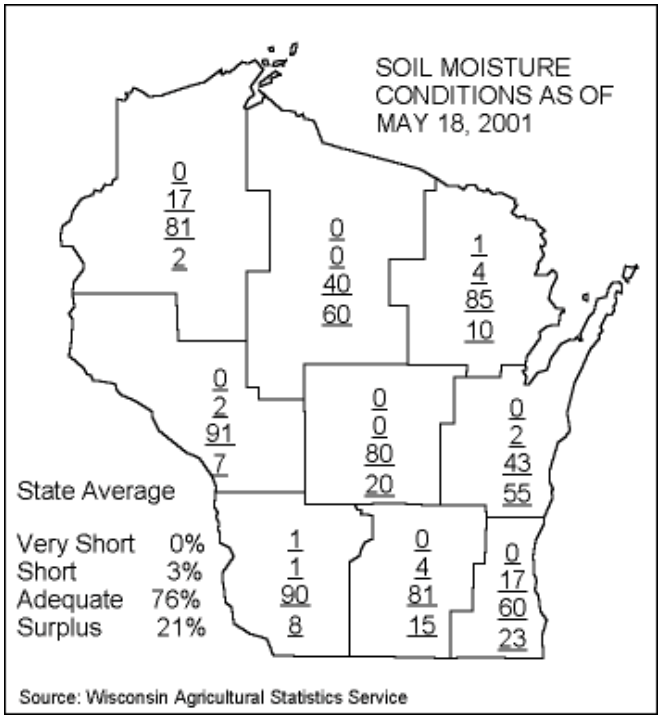
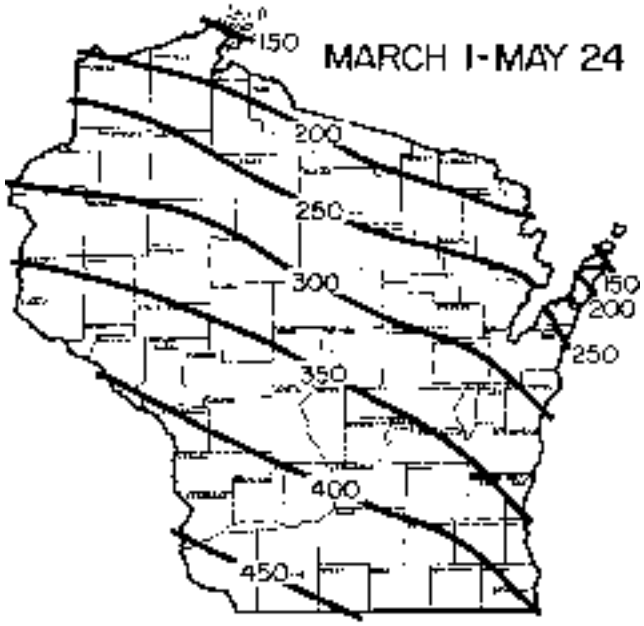




Historical Average Growing Degree-Days Accumulated Since March 1. (Wisconsin Agricultural Statistics Service)

WEATHER AND PESTS

Rain has limited fieldwork in central Wisconsin this week. Overall crop planting is proceeding rapidly, but still lagging behind the 5-year average. Blueberries and strawberries in the central part of the state are in full bloom and have good insect activity.

Gyspy moth spraying with Btk in the southern half of the state is done for this year, and has started in the northern half. Reports of **multi-colored Asian lady beetles** have tapered off as the unwanted multitudes leave buildings and head back out to do their jobs as beneficials for the summer. Now is the time to seal cracks and crevices and rig up that extra vacuum extension in preparation for their return in fall.

Growing degree days from March 1 through May 23 were:

Site	GDD*[1]	2000 GDD	Normal GDD	Base[1] 48	Base[1] 40
SOUTHWEST					
Dubuque, IA	514	479	381	541	958
Lone Rock	463	442	341	481	898
SOUTHCENTRAL					
Beloit	533	451	348	568	1001
Madison	460	397	338	495	901
Sullivan	488	406	318	513	947
Juneau	470	405	290	506	919
SOUTHEAST					
Waukesha	437	382	312	332	874
Hartford	431	381	285	464	860
Racine	390	351	306	419	797
Milwaukee	373	336	297	400	770
EAST CENTRAL					
Appleton	380	347	252	402	764
Green Bay	327	293	223	349	698
CENTRAL					
Big Flats	408	380	284	415	793
Hancock	407	372	277	415	791
Port Edwards	369	358	275	372	725
WEST CENTRAL					
LaCrosse	450	477	318	460	844
Eau Claire	392	426	275	400	755
NORTHWEST					
Cumberland	349	357	235	358	701
Bayfield	238	226	109	235	511
NORTH CENTRAL					
Wausau	325	326	236	332	660
Medford	318	317	229	329	654
NORTHEAST					
Crivitz	304	294	180	316	653
Crandon	305	278	172	308	624

[1]Data 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.

CORN

European corn borer – Soon females will begin seeking out the tallest, most advanced fields for egg laying. Egg laying begins at 450 DD, generally once corn has grown 16 inches tall. First generation spring moths peak around 631 DD (base 50). Scout for egg masses on the undersides of leaves, near the midrib. A few moths have been observed flying about in Iowa, Lafayette and Grant Cos.

Black cutworm – Pheromone trap catches rose significantly in Monroe and Green Cos. this week. Flight activity occurred over the weekend, when temperatures were considerably higher. Most larvae may now be reaching the developmental stage where they're capable of cutting seedling corn. Larvae are nocturnal feeders and can cut several plants in a single night. Growers should monitor young corn closely to prevent **black cutworm** damage.

FORAGES

Trap Catches from 5/16-5/21:	
Lancaster	3
Evansville	4
Monroe	10
Madison	3

Potato leafhopper –DATCP inspectors have been finding a few adults in fields, but the usual obvious migration has not been observed. When conditions are favorable, populations can increase rapidly, and once potato leafhopper feeding injury becomes apparent, it is too late for control. This week's cool, wet weather may have temporarily slowed activity, but feeding and population growth can be expected to resume once it warms up. The threshold for **potato leafhopper** in alfalfa varies with plant height and is listed below:

Height of Alfalfa **(inches)**	Ave. # Plh per Sweep
<3	0.2 adult
3-6	0.5 adults
8-10	1.0 adult or nymphs
12-14	2.0 adults or nymphs

Meadow Spittlebug – **Spittlebug nymphs** were observed in Richland, Crawford, Iowa and Dane Cos. late last week. **Meadow spittlebug** populations rarely grow large enough to cause economic damage, but occasionally stunting may occur when conditions are favorable. Nymphs are pale yellow or green in color and stay within the protective spittle masses commonly seen on alfalfa stems. Small numbers of **meadow spittlebug** adults were observed in the same alfalfa fields; however, most adults won't begin appearing until mid-June. Adults are brown, wedge-shaped and mottled with gray and black markings. Adults will remain active throughout the summer. Eggs aren't laid until September and only one generation occurs each season. Populations in excess of one nymph per stem are considered economically significant.

VEGETABLES

Armyworm – **Armyworm** (*Pseudaletia unipuncta*) moths were reported late last week covering a lawn in northern Dane Co. and this week flying around an oak tree in Rock Co. Six moths were caught in a blacklight trap, in Iowa Co., this week. **Armyworms** recently severely damaged wheat, grass pastures and field corn in southern and central Illinois. They are migrants from the south. The larvae from this early migration usually do not cause significant damage. The next generation of larvae, that occurs in July, usually causes the most damage to crops, particularly small grains and corn. Mature (6th instar) larvae are about 1 ½ inches long. The larvae have orange and white longitudinal stripes. Dark bands of color encircle the bases of the prolegs. **(DNR in part)**

Pea Aphid – Populations in alfalfa fields are on the rise. Soon winged migrants will leave alfalfa fields in search of their preferred host, peas. **Pea aphids** suck plant juices, transmit viruses, and produce a sticky-substance called honeydew that may cause problems at harvest when **aphid** populations grow large enough. In Wisconsin, yield losses due to **pea aphids** rarely occur, yet it is still a good idea to scout pea fields weekly beginning now-early June. Using a 15" sweep net, take 20 sweeps in 5 separate areas of a field and calculate the number of **aphids** per sweep. Treatment may be warranted when more than 35 **aphids** are collected per sweep or 2 **aphids** per plant, *and* the peas are more than ten days from harvest.

Late Blight of Potato - No samples of **late blight** have been observed in WI yet. However, there were reports of green plants on cull piles and emerging volunteer plants a week ago and there are still many fields with volunteers. Now that growers are beginning to catch up on planting, there may be a short break to take a tour of fields where potatoes were planted last year. Look for emerging volunteers and make some plans to kill or remove these volunteers as soon as possible. Now is also a good time to resurvey your properties for any remaining cull piles that escaped prior detection. All cull piles are supposed to be eliminated or destroyed by May 20 so that cull piles do not serve as sources of inoculum of the **late blight** fungus. Cull piles include potatoes removed from storage because of decay or poor quality, potatoes mixed with soil removed from storage as the storage was emptied, and the chips or slivers remaining from the seed cutting operation. Regardless of the source of the cull piles, living potatoes are capable of sprouting and, if **late blight** inoculum is present, cull piles can serve as early-season sources of inoculum. Regardless of whether green potatoes

in unwanted places are from cull piles or volunteers, they should be killed now. Easier said than done perhaps, but they should be buried, fed to livestock, desiccated or otherwise killed.

There are now several choices for **late blight** control that can be used early in the season. Some of these materials are new to the industry while others have new names this year. We still have the standards of mancozeb and chlorothalonil. This past winter we discussed the banded application of Curzate plus either mancozeb or chlorothalonil at emergence or hilling. In addition, Acrobat is now available as a 50 WP and can be mixed with either mancozeb or chlorothalonil. Previcur (Formerly Tattoo C) is available without chlorothalonil and can be mixed with your protectant of choice. Most recently EPA approved the label for Gavel DF, a new **late blight** material that contains zamoxate and mancozeb. Thus we find ourselves with a broad spectrum of materials, all of which provide control of **late blight**. We also have Quadris that provides excellent control of **early blight** and at higher rates, also controls **late blight**. For organic growers, copper hydroxide is the material of choice and this should be applied regularly through the season on a tight schedule to insure that plants are protected.

Current P-Day and Severity Value Accumulations (as of May22, 2001)

Location	P-Day Total	Severity Value Total
Antigo emerging 5/18	24	5
Grand Marsh emerging 5/13	79	3
Hancock emerging 5/10	82	1
Plover emerging 5/10	79	5

We continue to collect weather data from sites near Hancock, Plover, Grand Marsh and Antigo. We also process these data and post current P-Day and Severity Value accumulations on our web site at *http://www.plantpath.wisc.edu/wivegdis/index.htm* You can also retrieve weather information for all four locations at this web site along with current weather radar and past research reports. **(UWEX)**

Bacterial soft rot- According to a cooperator in central Wisconsin one field in Adams Co. had a severe case of **Bacterial soft rot** caused by *Erwinia caratovora.* He also reported trace level of *Rhizoctonia solani* in Waushara Co. Plants are most severely damaged by *Rhizoctonia solani* in the spring shortly after planting.

GINSENG

Special ginseng pesticide registration granted - Wisconsin ginseng growers can make **six applications** of the pesticide **Dithane DF** under a special pesticide registration issued by the US Environmental Protection Agency to the Department of Agriculture, Trade and Consumer Protection.

Dithane DF is used to control **Alternaria leaf** and **stem blight** and **Phytophthora leaf blight.** Growers are reminded to alternate Dithane DF with Quadris, allowing for 12 applications at minimum 7 day intervals. Growers may apply Dithane DF at a rate of 1.5 pounds of active ingredient per acre, mixed in a minimum of 80 gallons of water. A 28 day pre-harvest interval must be observed. Dithane DF is approved until October 15, 2001.

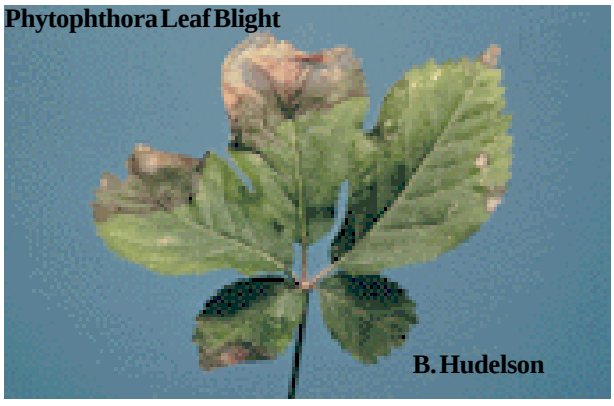
Dithane DF contains the active ingredient mancozeb and is manufactured by Rohm and Haas Company. The department estimates that up to 2,500 acres of ginseng may be treated.

Ginseng growers are also reminded that agricultural workers applying Dithane DF must wear coveralls over a long-sleeve shirt and long pants, chemical-resistant gloves, shoes and socks. While mixing and loading the pesticide into spray equipment a chemical-resistant apron and goggles or a face shield must also be worn. Entry into treated fields is prohibited for 24-hours following an application unless the protective equipment listed above is worn. For questions on the special pesticide registration contact Ed Bergman, pesticide registration coordinator, 608/224-4546.

Cultivated ginseng – Dr. Michael Drilias reports a killing frost of seedlings at Rib Falls Research Gardens during the night of May 18, 2001. The gardens had not been covered.

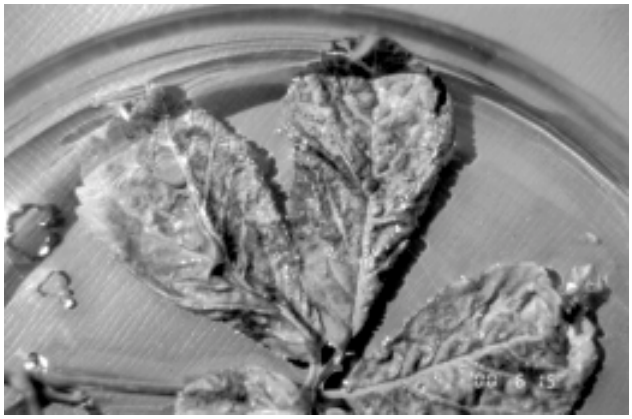
Phytophthora leaf blight and **root rot** - Damage is scattered throughout a three year old research plot. Wet and cold weather are prime growing conditions for this fungal disease.

Phytophthora Leaf Blight



Plant disease diagnostic clinic – Dr. Brian Hudelson reports

three year old plants with **foliar phytophthora** and **rusty root**. Three year old plants with maroon to purple blotching were submitted to the clinic. Leaves are often distorted or puckered up. These symptoms often show up after a cold snap but they do not seem to get worse over time. See photo below.



Control treatments are not available and not necessary.

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Stock that is not hardy - DATCP nursery inspectors are still finding a lot of stock that is not hardy for the zone it is being sold in. Trees such as gamble oak, english oak, and japanese maple, magnolia and shrubs such as some rhododendrons are not hardy in northern Wisconsin. Stock that is planted north of its hardiness range may survive through several mild winters but will eventually succumb to a cold snap. Stock that is planted on the edge of its hardiness zone is unlikely to thrive or flower.

Aphids - Various **aphids** were observed on spirea, viburnum, roses and Asiatic lilies at nursery dealers in Eau Claire, Dane and Green Cos.

Columbine leafminer - Small mines were noted on columbine at a nursery in Washington Co.

Eastern spruce gall adelgid - Black hills spruce in Eau Claire Co. had several pineapple-like galls formed from nymphal feeding by this insect.

Fletcher scale - Yews at nursery dealers in Green, Rock and Dane Cos. had very high levels of this small insect on twigs and branches. Plants were ordered off sale and returned to supplier or treated at the appropriate time.

Forest Tent Caterpillars - Larvae are doing well across the entire Marinette Co. area. **Forest** and **eastern tent caterpillars** are very active and growing quickly in Price Co. **(UWEX)**

Leafcurling aphid - Nursery dealers in Dane Co. had light amounts of this insect on green ash.

Spittlebug - Nymphs of this bug and the spittle surrounding them were found on potentilla, burning bush and spirea at nursery dealers in Green and Kewaunee Cos.

Thrips - Mums, impatiens and marigolds at nursery dealers in Dane, Green and Kewaunee had light levels of damage caused by **thrips** feeding.

Anthracnose - Daylilies at nursery dealers in Dane and Washington Cos. had light amounts of this disease.

Anthracnose on Daylily

Oak Tatters - Heavy tattering of mature and young bur oaks occurred in northern Dane Co. Trees near roads, plowed fields, yard trees and interior forest trees are affected. **(DNR)**

Botrytis - Asiatic lilies at a nursery dealer in Dane Co. were lightly affected by *Botrytis elliptica*. Hosta, impatiens and New Guinea impatiens in Green, Green Lake and Kewaunee all had leaf spots attributed to *Botrytis cinaeria*.

Botrytis leaf spot on Asiatic lily

Ascochyta leaf spot - Columbine at a nursery dealer in Washington Co. had light amounts of leaf spotting from this fungus.

Bacterial blight - Forsythia in Dane Co. and hydrangea and lilac in Eau Claire, Green Lake, and St. Croix Cos. had moderate to heavy levels of this disease on their foliage at various nursery dealer locations.

Black spot - Assorted roses at nursery dealers in Eau Claire, Green Lake, Green, Milwaukee, St. Croix and Waukesha Cos. had this common fungus. Hardest hit were 'Dream Roses'.

Canker - 'Snowdrift' crabapple at nursery dealers in Dane and Eau Claire Cos. were being killed by a canker.

Cedar-apple rust - Telial horns were fully expanded on juniper branches at a residence in Dane Co.

Cercospora leaf spot - Zinnias at a nursery dealer in Green Co. had moderate levels of this disease and pansies at a nursery dealer in Washington Co. had moderate amounts of leaf spotting.

Dothiora taxicola - Black hills spruce at a nursery in Oneida Co. had moderate amounts of this fungal disease. Norway spruce at a nursery dealer in Vernon Co. were infected with this disease. The spruce had just arrived from a nursery in British Columbia.

Peony Redleaf Spot Fungus - Red Peony at a nursery dealer in Eau Claire Co. had trace levels of this disease.

Phyllosticta leaf spot - This disease was noted on silver maple in a Waukesha Co. nursery dealer. It was also noted on Hosta at a nursery dealer in Dane Co.

Powdery mildew - Roses in Dane, Green, Green Lake and St. Croix Cos. had this easily identifiable fungus on the upper side leaves.

Rose mosaic virus - 'Oklahoma' roses at nursery dealers in Green and Waukesha Co. were infected with this disease.

Rust - Amelanchier in Green Lake and Marquette Cos. had small orange spores appearing on the leaves. Potentilla in Washington Co. was also infected with **rust.**

Septoria leaf spot - Nursery dealers in Green Lake Co. had variegated and pagoda dogwood with characteristic purplish spots on their foliage.

Septoria leaf spot and bacterial leaf spot - Randy magnolias at a nursery dealer in Walworth Co. were being hit by these two diseases. Heavy damage was occurring on the foliage.

Virus - Bleeding heart in a Dane Co. nursery was infected with an unknown **virus.**

STATE/FEDERAL PROGRAMS

Pine shoot beetle - Two **pine shoot beetle** (*Tomicus piniperda L.*) specimens were trapped in a Lindgren funnel trap in Kenosha Co. on 5/15/01. Identification was made by Ramona Parks, USDA-PPQ, Chicago, IL, on 5/21/01. We will begin to notify industry and affected agencies, as well as enter the data into NAPIS as a new county record. **(USDA)**

FRUIT

Linden looper – This distinctive larva, with a red head, black, blue and yellow striped back and bright yellow underside was found enjoying a meal on blueberry leaves in Iowa Co. The Linden looper is known as a forest pest of American basswood, apple, ashes, birches, maples, oaks and poplars. It is also a pest of prunus and ribes species. The populations vary widely from year to year.

Plum curculio - **Plum curculios** damaged about 80% of the fruits on an untreated Cortland apple tree in northern Dane Co. The damage was discovered late last week. The little fruits were slightly bigger than a pencil eraser when the damage was found. This weevil needs moisture early in the spring to rebuild its body moisture before leaving hibernation. The adult is more active on warm, damp, cloudy days. To monitor the **plum curculio,** tap the foliage on small limbs in the early morning during petal fall and first cover. Catch the weevils on a beating tray or sheet. Check developing fruit for feeding and oviposition injury. Temperatures in the 70 to 75º F range for 2 days before petal fall offers ideal conditions for feeding and mating. Petal-fall sprays and first and second cover sprays are directed at the adult and the egg laying period. (**DATCP retiree, in part)**.

Apple scab - The message for this week isn't too much different from last week. Young fruit should be protected, and sterol inhibitor fungicides alone are not sufficient. Protectant fungicides include captan, the EBDCs, ferbam, thiram, and the strobilurins. More details are available through your extension office. With the rains that came May 21-23, it is very likely that the last of the ascospores were released, and southern parts of the state are now out of primary infection. **SCAB** lesions from earlier infection periods are now showing up on unsprayed trees in southern Wisconsin. By the end of primary infection, leaves are relatively resistant to infection. However, fruit are very susceptible. Growers should be scouting orchards and if **SCAB** lesions are found, then fungicides will be need to protect fruit, at least until hot summer weather slows down **SCAB (UWEX)**.

Apple Insect Trapping Results

County City	Date	STLM	RBLR	CM	OBLR
Grant Co.					
Sinsinawa	5/15-5/21		2	4	
Lancaster	5/17-5/23	0	9	0	
Crawford Co.					
Gays Mills-W2	5/8-5/14	0	5	1	0
Richland Co.					
Hill Point	5/15-5/21	90	23	2	0
Iowa Co.					
Dodgeville*	5/18-5/24	25	6	7	4
Avoca	5/17-5/23	0	0	0	
Green Co.					
Brodhead	5/17-5/23	0	23	8	0
Dane Co.					
Deerfield	5/16-5/22	110	22	4	8
Jackson Co.					
Hixton	5/16-5/22	328	12	2	0
Dunn Co.					
Menomonie	5/15-5/22	22	4		
Trempealeau Co.					
Galesville	5/13-5/20	6	1	0	0
Pierce Co.					
Beldenville	5/13-5/19	41	306	0	
Spring Valley	5/15-5/22	138	243	0	
Juneau Co.					
Mauston	5/13-5/20	230	24	4	0
Fond du Lac Co.					
Rosendale	5/14-5/21	83	31	1	
Malone	5/14-5/21	20	12	0.50	0
Marquette Co.					
Montello*	5/13-5/20	222	165	3	0
Ozaukee Co.					
Mequon	5/15-5/21	210	4.5	6.2	
Racine Co.					
Rochester*	5/15-5/23	20	3	6.3	0
	5/4-5/9	777	28	2	10
Bayfield Co.					
Washburn	5/11-5/18	0	0		

* indicates NEW COOPERATOR!

http://datcp.state.wi.us/static/pestbull

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