



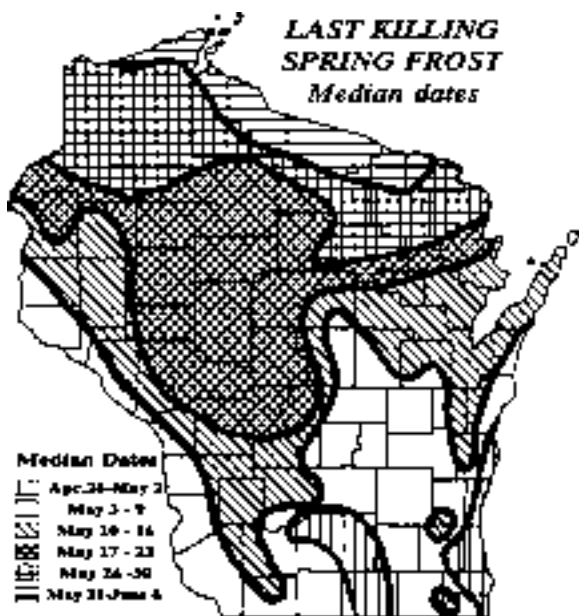
# COOPERATIVE PEST SURVEY BULLETIN

State of Wisconsin  
Department of Agriculture  
Trade & Consumer Protection

Agricultural  
Resource  
Management

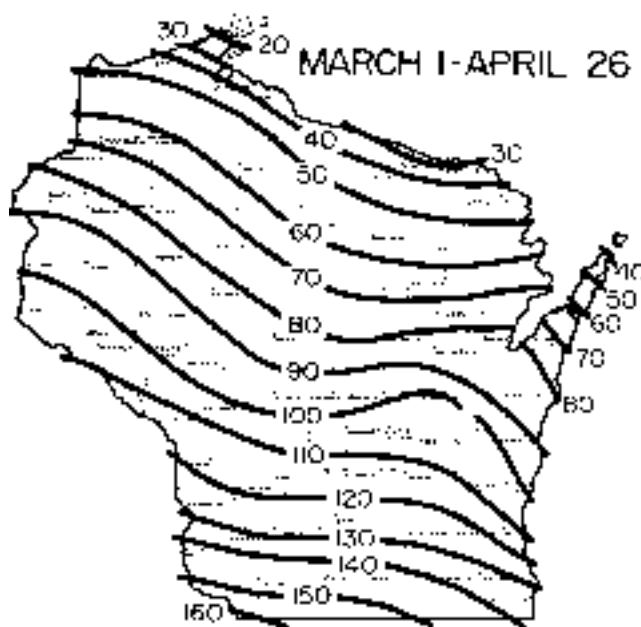
BUREAU OF PLANT INDUSTRY P.O. BOX 8911 MADISON, WI 53708-8911  
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## WEATHER AND PESTS



Wet weather halted most fieldwork across the state and most work is being done on high ground or sandy soils. Eighty-nine percent of the winter wheat state-wide had little or no damage due to winter freezing

Activity of a couple of apple pests is fast approaching. **Spotted tentiform leafminer** adults are laying eggs in some parts of the state (see **ALERTS** for more information).



Growing degree days from March 1 through April 25 were:

Site	GDD*	2000 Normal GDD	Base 48	Base 40
<b>SOUTHWEST</b>				
Dubuque, IA	143	207	152	328
Lone Rock	131	187	123	319
<b>SOUTHCENTRAL</b>				
Beloit	160	190	143	373
Madison	128	161	129	313
Sullivan	140	164	122	345
Juneau	131	163	107	325
<b>SOUTHEAST</b>				
Waukesha	121	150	119	309
Hartford	116	151	103	296
Racine	108	135	106	271
Milwaukee	98	128	112	254
<b>EAST CENTRAL</b>				
Appleton	92	130	89	236
Green Bay	75	109	77	209
<b>CENTRAL</b>				
Big Flats	105	152	93	256
Hancock	103	147	93	251
Port Edwards	85	140	85	213
<b>WEST CENTRAL</b>				
LaCrosse	118	208	107	269
Eau Claire	82	170	83	209
<b>NORTHWEST</b>				
Cumberland	53	126	75	171
Bayfield	23	71	24	96
<b>NORTH CENTRAL</b>				
Wausau	63	122	71	177
Medford	58	113	65	168
<b>NORTHEAST</b>				
Crivitz	59	96	59	183
Crandon	46	105	49	151

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

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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.

**ALERTS**

**Benomyl** - DuPont has announced that it will voluntarily withdraw the use of all forms of benomyl (Benlate) at the end of the year. No sales will occur after December 31, 2001 and existing stocks will likely be out of circulation by the end of 2002. The company spokesman states that the decision is economic in nature—citing the high costs of meeting the increased regulatory requirements due to the Food Quality Protection Act (FQPA). This announcement caught many by surprise as EPA lists of products slated for re-registration didn't indicate that benomyl would be addressed until 2002 or 2003. (UWEX)

**Spotted Tentiform Leafminer** – In a vast majority of the state egg laying is well underway, and the first peak flight is rapidly approaching (150 DD base 50°F). The first larvae can be expected once 209 DD have been reached, and the first mines generally appear after 329 DD have accumulated.

**Redbanded Leafroller** – Traps counts are on the rise, indicating that the first peak flight isn't far off (106-160 DD base 50°F).

**Codling Moth** – It's not too early to place pheromone traps for codling moth, especially in the southern portion of the state. The first moths can be expected at 248 DD base 50°F. Monitor trap catches closely to determine the starting date, or biofix, of the first sustained flight of male moths. This generally occurs when the 5<sup>th</sup> moth has been captured. The first peak flight takes place once 500 GDD have been reached.

**CORN**

**Black Cutworm** – The first adults were captured in pheromone traps over the weekend, indicating the others aren't far behind. **Black cutworm** migrations are based on weather patterns, so the threat from year to year isn't easy to forecast. The earliest moths typically arrive on warm spring nights when winds are out of the south. Monitoring efforts are aimed at tracking migratory flights. With warm weather ahead, we'll be watching for the first concentrated pheromone trap catch of 8-9 moths in a 1-2 night period. In turn, concentrated trap catches can be used to predict when most **black cutworm** larvae have reached the 4<sup>th</sup> instar, the developmental stage where they first become capable of cutting corn seedlings. Fields with an abundance of weeds and/or delayed planting due to wet conditions are most susceptible to attack. Pheromone trap counts from 4/17-4/25 are listed below:

Trap Site	Number of BCW
Madison	1
Monroe	2
Evansville	0
Darlington	3

Lancaster 1

**FORAGES**

**Alfalfa Weevil** – With recent warm temperatures, **alfalfa weevil** adults have begun emerging from their overwintering sites in grassy ditches, fencerows, etc. and migrating into alfalfa fields, where they'll soon begin laying eggs. Peak egg laying occurs around early May. After egg laying, adults feed on alfalfa foliage for a short time, then leave alfalfa fields for preferred summer hibernation sites. Beyond late May to early June adults are seldom encountered in alfalfa fields.

Scouting for **alfalfa weevil** should begin once 300 GDD (base 48°F) have been reached. Initially young larvae chew tiny holes in alfalfa leaflets, but as they develop and increase in size, their appetites increase as well. Heaviest damage typically occurs when the first cutting is ready for harvest. Monitoring **alfalfa weevil** activity is most important in the first crop.

Spot scouting late this week and the next is encouraged. Warm, sandy areas, or southern facing slopes are the best areas to check first. A growing degree day model for alfalfa weevil is listed below:

<u>Life Stage</u>	<u>GDD Required to Complete Indicated Life Stage (base 48°F)</u>	<u>Accumulated Degree Days</u>
Egg	300	300
1 <sup>st</sup> instar	71	371
2 <sup>nd</sup> instar	67	438
3 <sup>rd</sup> instar	66	504
4 <sup>th</sup> instar	91	595
pupa	219	814

**Pea Aphid** – Small numbers of **pea aphids** were detected in alfalfa fields this week, however, **pea aphids** are not considered an economic pest of alfalfa. Rather, **pea aphids** attack peas, causing wilting, stunting and yellowing of leaves, and they're also capable of transmitting a number of viruses. Although **pea aphid** is not a pest of alfalfa it is important to monitor populations in alfalfa fields to determine when population begin migrating to pea fields, where heavy



[www.gov.mb.ca/agriculture/crops/insects/fad14s00.html](http://www.gov.mb.ca/agriculture/crops/insects/fad14s00.html)

populations can cause extensive damage. Migration often occurs in late May or early June.

### VEGETABLES

**Cabbage Maggot** - Cole crop seedlings are most vulnerable to this early-season pest. Affected plants appear wilted, stunted or discolored, and are more susceptible to diseases such as **soft rot** and **black leg**. **Cabbage maggot** development is favored by cool temperatures, while high temperatures during July and August suppress growing populations.

Because of the cooler early-season temperatures, early plantings are most susceptible to damage. Time plantings to avoid peak fly emergence. Transplants should be planted 1 week before peak emergence, and seeds should be sown at least 3 weeks before or 1 week after fly emergence. These events can be anticipated using the degree day table below:

#### **Cabbage Maggot Degree Day Model**

<u>Growth Stage</u>	<u>Cumulative DD base 43</u>
1st gen. adult flies emerge	300
2nd gen. adult flies emerge	1476
3rd gen. adult flies emerge	2652

Growing Broccoli, Cauliflower, Cabbage and Other Cole Crops in Wisconsin: A Guide for Fresh Market Growers UW-Cooperative Extension #A3684

**Wireworms** – **Wireworms** are slender, hard-bodied reddish brown larvae that feed on the seed and roots of beans, corn and potatoes. The adults are click beetles that make a clicking noise as they turn themselves upright. Seed tunneling by larvae may result in gaps in the stand, or irregular growth.

**Wireworms** may bore into the base or stalks of plants causing stunting or wilting. You may have **wireworm** damage this year if corn follows alfalfa, clover, or sod, or if grassy weeds are in the field. Wireworms may live in the soil 2-6 years. They prefer porous, well-drained soil. Therefore, corn after an alfalfa crop, that had feeding on first year taproots, may be at risk. Seed treatments and soil insecticides recommendations are available from your county agent and UW-Extension publication A3646.

### APIARY

**Small hive beetle, *Aethina tumida*** - **Small hive beetle** was found in a package of bees that was shipped to Delaware from an as yet undetermined state.

Wisconsin requires that bees are treated before they are moved to this state but we also conduct a spring survey to do a random check for **Small hive beetle**, **American foulbrood** and **Varroa mite**. Beekeepers who would like their packages and nucs checked, please call Anette Phibbs at (608) 224-4575

or send an email to [Anette.Phibbs@datcp.state.wi.us](mailto:Anette.Phibbs@datcp.state.wi.us). For up-to-date fact sheets please also check our website at <http://datcp.state.wi.us/static/arm/pib/apiary.htm>.

### GINSENG

**Special registration for ginseng herbicide** - Wisconsin citizens have until May 4 to comment on a new use of the herbicide Dacthal W-75 in ginseng gardens. Dacthal W-75 is already federally registered for use on vegetable crops and ornamental turf. The Wisconsin Department of Agriculture, Trade and Consumer Protection is proposing a five-year special pesticide registration and preliminary environmental assessment for the use of Dacthal W-75 to control annual grasses and broadleaf weeds in ginseng. Special registration allows states to register pesticide products for specific uses without prior federal approval. The procedure gives states flexibility to meet local needs, such as controlling a plant disease or insect outbreak.

Ginseng growers would use Dacthal during the first two years of production, when seedlings and two-year-old plants are not large enough to shade out weeds. Use of Dacthal on 3 year old ginseng that is harvested in the 3<sup>rd</sup> year would be a label violation. Without the use of herbicides growers have to rely on cost prohibitive hand-weeding of gardens.

For copies of the environmental assessment or to comment on the registration, contact Ed Bergman, P.O. Box 8911, Madison, WI 53708-8911, 608/224-4546 or review the assessment Monday-Friday, 7:45 a.m.-4:30 p.m., at the department offices, 2811 Agriculture Dr., Madison, 2nd floor. Comments received on or before 4:30 p.m., Friday, May 4, will become part of the preliminary environmental assessment record. Send comments to Ed Bergman.

**Ginseng phenology** – Dr. Michael Drilias reports from the Rib Falls Research garden that seedling roots are starting to grow and have reached up to ½ inch as of April 26. Two year old gardens with southern exposure are up to ½ inch. No emergency is apparent in 3 year old gardens but buds are swollen. **Soft slugs** were observed but did not cause any damage.

**Control of diseases, pests and weeds in cultivated ginseng in Wisconsin – 2001** is available now! Free copies can be picked up at the Ginseng Board of Wisconsin office, or requested from Dr. Michael Drilias at (608) 265-5283.

A web version will soon be downloadable from the ginseng homepage at <http://www.plantpath.wisc.edu/ginseng/>. Dr. Brian Hudelson at the Plant Disease Diagnostic Clinic, UW-Madison is maintaining the ginseng homepage which includes fact sheets on ginseng diseases and other clinic information <http://www.plantpath.wisc.edu/pddc/>

**FOREST, SHADE TREE, ORNAMENTALS AND TURF**

**Eastern spruce gall adelgid** - Light to heavy amounts were noted on black hills spruce at a nursery in St. Croix Co. Overwintering females become active at about 50 DD base 50. Greyish to green overwintering females can be observed at the base of swelling buds. The body is covered with masses of waxy, white fibers making them easily detectable. Feeding by adult females initiates gall formation; feeding by nymphs completes gall formation. Once galls are formed, insecticides are largely ineffective in controlling this insect. There are no males of this species.

**Zimmerman pine moth** - Larvae begin moving from their overwintering sites at about 100 DD base 50. This is the time to control the young larvae. Applications should be made when *Magnolia X soulangiana* is in pink bud to early bloom or when sugar maple is just starting to bloom.

**FRUIT**

**Grape flea beetle** - Adults emerge from the soil in April. They chew holes in buds. Once the buds are ½ inch or more the **Grape flea beetle** can no longer cause significant damage. Look for the shiny metallic beetles in late April on grape canes and buds. They will be out on warm sunny days. Survey a minimum of 25 vines, at each of five locations throughout the vineyard. Continue to monitor until bud development is past the critical stage. Consult your county office for control options.

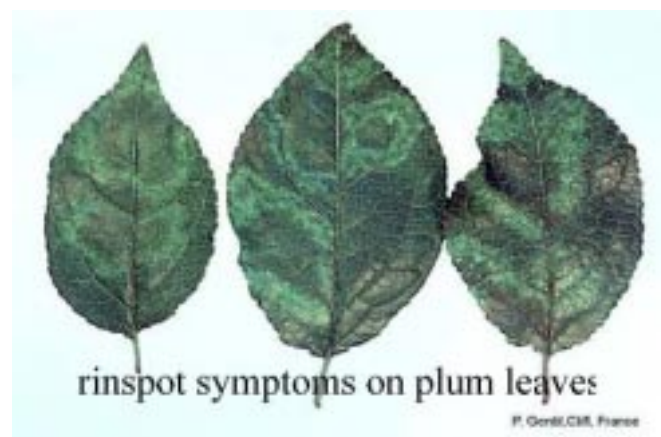
**Plum pox virus** – A reminder that both nursery and stone fruit growers should keep an eye out for **Plum pox virus (PPV)** on peaches, plums and apricots. This virus of *Prunus* species was found in Pennsylvania in 1999 and in Ontario in 2000. More than 100 million stone fruit trees are infected in Europe.

Symptoms of PPV vary somewhat from host to host, but frequently cause chlorotic ringspots on leaves and fruit. Other symptoms may include color-breaking in some peach blossoms, deformed fruit and early fruit drop in plums and apricots, leaf deformation in a number of species, and ringspots on peach pits. Because several other conditions may cause similar symptoms, and because trees may be infected with PPV and show no symptoms, laboratory confirmation of infection is necessary. DATCP will provide laboratory testing of suspect trees at no cost to growers.

PPV is spread in a non-persistent manner by at least 14 species of aphids, including several species which are widespread in North America. This method of transmission moves the virus relatively small distances over time. The main method of long-distance transmission of PPV is through the movement of infected nursery stock or propagative material. *Prunus* trees planted within the last six to eight years (the time frame that PPV is believed to have been in

North America) are of particular concern.

To report a suspect tree, call 800-462-2803. More information on PPV can be found at <http://sharka.cas.psu.edu/>



## Apple Insect Trapping Results

## County

City	Date	STLM	RBLR	CM
<b>Grant Co.</b>				
Sinsinawa	4/16-4/23	2	11	
Lancaster	4/17-4/25	6	32	
<b>Crawford Co.</b>				
Gays Mills-W2	4/4-4/23	0	0	
<b>Richland Co.</b>				
Hill Point	4/15-4/23	2	30	
<b>Iowa Co.</b>				
Dodgeville*	4/19-4/26	0	11	
<b>Green Co.</b>				
Brodhead	4/15-4/22	188	48	
<b>Dane Co.</b>				
Deerfield	4/8-4/22	22	24	
Waunakee	4/17-4/25	22		
<b>Juneau Co.</b>				
Mauston	4/15-4/22	0	0	0
<b>Jackson Co.</b>				
Hixton	4/17-4/24	0	0	0
<b>Racine Co.</b>				
Rochester*	4/19-4/24	504	40	
	4/4-4/24	604	52	
<b>Fond du Lac Co.</b>				
Malone	4/9-4/23	0	3	
<b>Marquette Co.</b>				
Montello*	4/15-4/22	10	46	
<b>Brown Co.</b>				
Oneida	4/20-4/22	210		

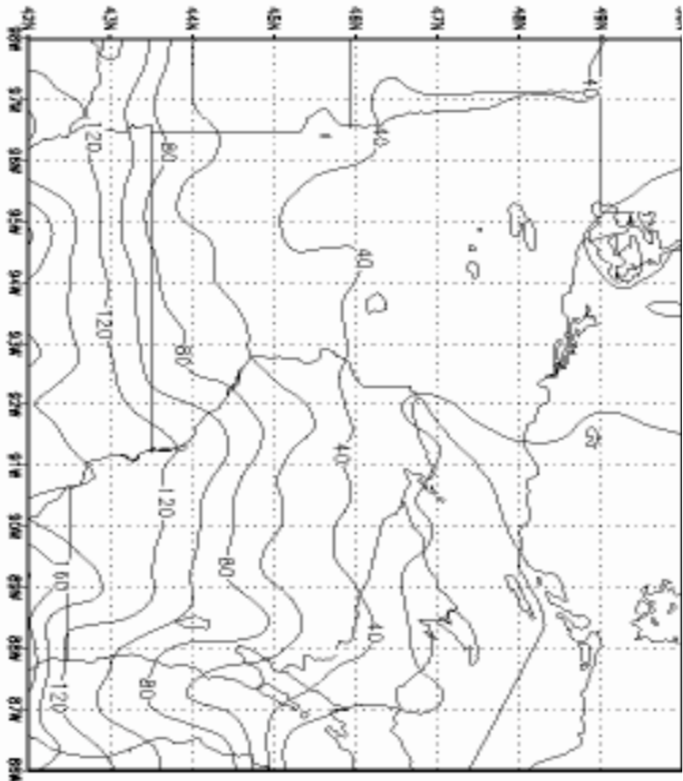
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PO Box 8911  
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Degree Days (base 50°F) Jan 1 through April 25, 2000



**Website of the Week**

Radcliffe's IPM World Textbook <http://ipmworld.umn.edu/ipmsite.htm>

This is what the Internet should be. Currently 62 chapters, contributed by a wide range of international experts, this site provides a wealth of information. Extensive links also make it an invaluable tool.

*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.)*

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