

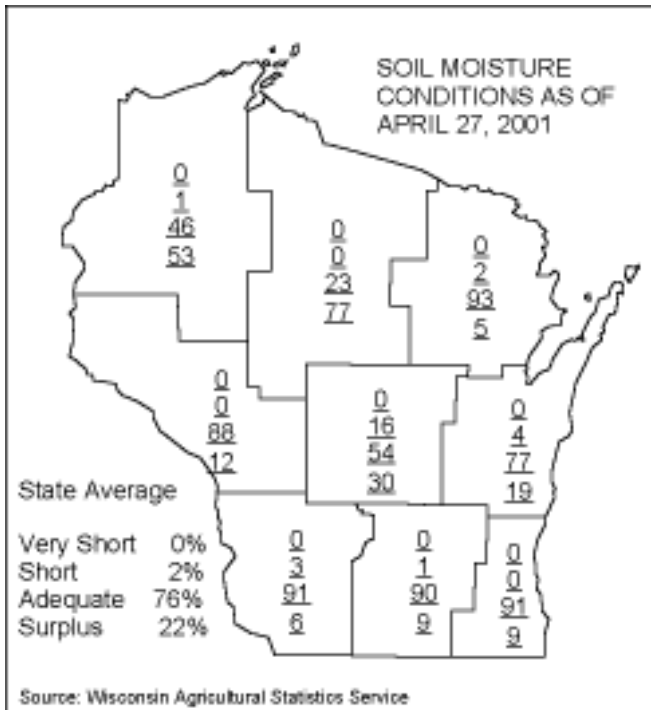


COOPERATIVE PEST SURVEY BULLETIN

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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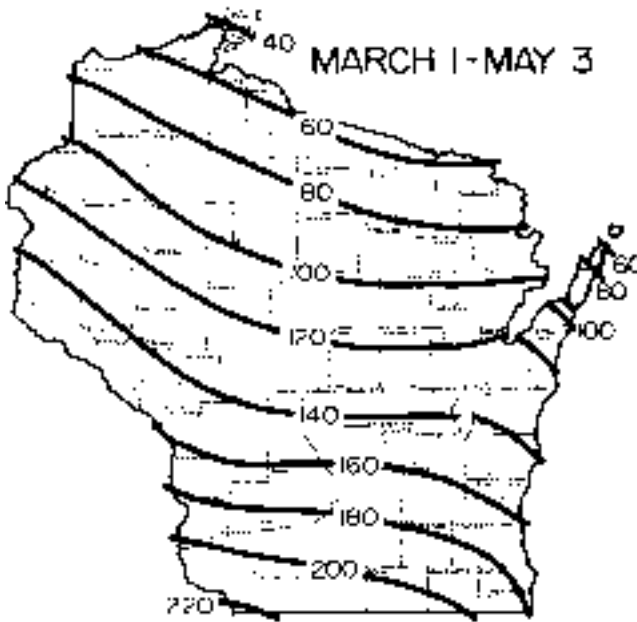
WEATHER AND PESTS

Warm weather allowed farmers to get a lot of field work in this past week. Spring planting is still behind historical norms across much of the state.

Gypsy moth spraying is tentatively set for late next week in Rock Co. Spraying will then progress to Dane Co. and northwards.

Growing degree days from March 1 through May 2 were:

Site	GDD*	2000 GDD	Normal GDD	Base 48	Base 40
SOUTHWEST					
Dubuque, IA	254	279	216	264	507
Lone Rock	237	257	180	243	489
SOUTHCENTRAL					
Beloit	270	256	202	277	546
Madison	235	222	186	241	485
Sullivan	249	224	175	257	518
Juneau	239	224	155	248	498
SOUTHEAST					
Waukesha	223	201	173	231	473
Hartford	218	204	152	226	461
Racine	200	174	170	204	423
Milwaukee	189	169	163	193	404
EAST CENTRAL					
Appleton	181	182	134	181	384
Green Bay	150	109	114	151	341
CENTRAL					
Big Flats	204	217	138	203	415
Hancock	202	217	138	202	411
Port Edwards	177	208	130	174	364
WEST CENTRAL					
LaCrosse	214	203	161	214	427
Eau Claire	182	242	127	181	371
NORTHWEST					
Cumberland	147	189	114	148	327
Bayfield	93	108	44	89	216
NORTH CENTRAL					
Wausau	147	180	110	143	318
Medford	144	168	100	142	313
NORTHEAST					
Crivitz	135	140	89	132	316
Crandon	128	156	77	121	285



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

Spotted Tentiform Leafminer – Cooperators who have not already, will soon be seeing the first peak adult flight of **spotted tentiform leafminer**. Keep in mind, pheromone traps catches do not indicate the level of infestation. Instead, counts are a measure of relative abundance, and can be used to time leaf sampling. The first leaf mines usually appear approximately one week after peak adult flight, or once 329 DD base 50°F have accumulated. Any decisions to control should be made based on the number of mines per leaf rather than the number of moths per trap.

CORN

Corn Flea Beetle: The 2001 **corn flea beetle** survey is underway in the southern half of the state. The survey range extends as far north as Pierce Co., but the northern regions are not scheduled for survey until next week. Survey work has been conducted in Dodge, Columbia, Fond du Lac, Sauk, Dane, Kenosha, Racine, Rock, Walworth and Waukesha Cos. **Corn flea beetle** has not been collected from any of the sites surveyed, however, two adults were collected in a Dane Co. alfalfa field during general pest survey. Results from survey efforts indicate one of two things. Either **corn flea beetle** was unable to survive the winter in these counties, or most **corn flea beetles** have not yet emerged from their overwintering sites. The survey began over a week ago, before temperatures began to rise significantly.

Last September pest survey staff surveyed for **corn flea beetle**, and tested the individual beetles collected for the presence of the **Stewart's Wilt** bacterium (*Pantoea stewartii*). Knowing the distribution of infected beetles heading into the winter months, along with winter temperatures and their effect on corn flea beetle survival, would allow us to better forecast where **Stewart's Wilt** outbreaks might occur during the summer of 2001. Because the **Stewart's Wilt** bacterium overwinters in the gut of **corn flea beetle**, if **corn flea beetle** survives the winter, the bacterium does as well. Thus, the prevalence and severity of **Stewart's Wilt** in a given season is contingent upon winter temperatures and **corn flea beetle** survival.

The temperature index for the 2000-2001 winter predicted little or no **Stewart's wilt** in most of Wisconsin, but some suspect this index underrates the risk of **Stewart's Wilt** in Wisconsin, particularly for the southern counties. The temperature index is calculated using air temperatures, but the **corn flea beetle** spends the winter beneath the snow cover, where it is protected from extreme temperatures. Consequently, air temperature may not reflect the actual temperatures that the beetles were exposed to, and the index may not be useful for predicting **corn flea beetle** survival.

The survey efforts currently underway are designed to determine where corn flea beetle survived the winter, and

whether the model we used to predict **corn flea beetle** survival is applicable to Wisconsin. Surveyors are revisiting each site where **corn flea beetles** carrying the Stewart's Wilt bacterium were collected last fall. As a reminder, 48% of the beetles tested positive for the **Stewart's Wilt** bacterium. Based on this high percentage of **corn flea beetles** carrying the bacterium, it is clear that the potential does exist for some severe **Stewart's Wilt** outbreaks this summer. In areas where **corn flea beetles** are retrieved during this spring survey, we will need to closely monitor for **Stewart's Wilt** later in the season. Complete survey results will be available in next week's Bulletin.

Black Cutworm – Despite the warmer temperatures, we have yet to see the first concentrated capture of **black cutworm** in pheromone traps. Monitoring efforts are aimed at tracking migratory flights. We're waiting for the first concentrated pheromone trap catch of 8-9 moths in a 1-2 night period. Catches from 4-25 to 5/2 ranged from 1-2 moths per trap in Darlington, Lancaster, Madison, Monroe and Evansville.

FORAGES

Meadow Spittlebug – **Meadow spittlebug** eggs are just beginning to hatch in fields surveyed in Green, Lafayette, and Dane Cos. Hundreds of tiny, orange first instar nymphs were collected in sweep nets, but their characteristic spittle masses are still very small and only visible when looking up close.



www.ag.ohio-state.edu/~ohioline/icm-fact/images/70.html

Meadow spittlebug is the insect that forms the spittle masses commonly seen in grassy areas along roadsides at this time of year. The spittle mass provides protection from predators and prevents desiccation. **Spittlebug** damage to alfalfa is uncommon, but occasionally populations can grow large enough to cause stunting.

Meadow spittlebug adults appear around mid-June and are brown, wedge-shaped and mottled with gray and black markings. Adults are active throughout the remainder of the summer, but don't lay eggs until September. Only one generation occurs each season. If **meadow spittlebug**

problems occur at all, they typically arise in the first crop. A population in excess of **1 nymph/stem** is considered economically significant.

Alfalfa Caterpillar – Low numbers (average of 0.1/sweep) of these bright green larvae with a prominent, white, longitudinal stripe were observed in alfalfa fields surveyed in Dane, Crawford, Green Cos. **Alfalfa caterpillars** rarely cause economic damage. Control is warranted when an average of 10 or more/sweep is observed.

Alfalfa Weevil – Both adults and 1st-2nd instar larvae were observed in fields surveyed in Dane, Green, Lafayette and Crawford Cos. earlier this week. Adults ranged from 1-3 per 50 sweeps and larval counts ranges from 1-5 per 50 sweeps. Larvae appeared stunted and pale yellow in color, perhaps due to parasitism. Larvae are typically bright green in color with a black head capsule.



www.ipm.iastate.edu/imagegal/coleoptera/curculionidae

VEGETABLES

Common asparagus beetle and **spotted asparagus beetle** – These beetles feed only on asparagus. The **common asparagus beetle** is more elongate, and the **spotted asparagus beetle** more round and a little larger. They have different markings. The **common asparagus beetle** is shiny bluish-black with three light yellow rectangular pairs of spots on the back, and has a red prothorax (area behind the neck). The **spotted asparagus beetle**, as the name implies, has 12 distinct black spots on its orange back. Eggs of the **common asparagus beetle** stick out from the asparagus stalk at a right angle, while the eggs of the **spotted asparagus beetle** lie lengthwise against the stalk. Both beetles over-winter in protected sites. The **common asparagus beetle** usually appears first in the spring.

The beetles feed as soon as they emerge. They cause the most damage when they chew on the tips of buds, which later turn brown. The females deposit eggs several days after emergence. Feeding damage and eggs on the spears may make the spears unmarketable.

Many insect predators and parasites attack **asparagus**

beetles. Removal of crop residue reduces overwintering sites. Larvae may be removed by hand in small plots. Scout after noon to find active beetles. For pesticide recommendations see UW-Extension Bulletin A3422 or contact your county agent.

Life Stage	Economic Threshold
Adults	5-10% of plants infested
Eggs	2% of spears with eggs
Larvae	50-75% of plants infested
Defoliation	10% of plants defoliated

APIARY

Winter mortality - Winter mortality of honeybee colonies kept in Wisconsin was at a record high during the winter of 2000/2001. Beekeepers in the northern half of the state report an average of 70% loss, in the southern half they lost 52%. Average Wisconsin winter mortality was 56%.

<u>Year</u>	<u>Winter Mortality</u>
1993	44%
1994	45%
1995	29%
1996	42%
1997	33%
1998	29%
1999	27%
2000	23%
2001	56%

This is twice the mortality rate compared to last year. Several factors may have played a role. The very cold and lasting winter caused a lot of starvation of bees. The lack of warm periods in late winter prevented bees to go on cleansing flights, resulting frequently in dysentery. Beekeepers with heavy losses also report problems with resistant **varroa mite** or resistant **American foulbrood**. Even though mortality rate seems to be correlated primarily with the severity of winter conditions, the reason for this winter's high losses are not fully understood.

GINSENG

Ginseng phenology – Dr. Michael Drilias reports from the Rib Falls Research garden that seedlings have grown to ½ inch in height, with a maximum of 2 inches. Plants in two year old gardens are up ½ inch with scattered plants reaching 2¼ inches. In three year old gardens plants have also emerged by ½ inch with a few scattered once reaching 2¾ inches in

height.

No significant disease or pest outbreaks have been observed so far.

GINSENG PESTICIDE SHORTLIST 2001

Always read and follow label directions. You are solely responsible for the accurate application of pesticides and the results of treatments

APPROVED FOR USE

FUNGICIDES:

ALIETTE WDG/WSP
DITHANE DF
FIXED COPPER
 CHAMPION
 CHAMP FORMULA 2
 KOCIDE 101, -DF, -2000, -LF, -4.5LF
KODIAK microbial fungicide
MAXIM 4FS
QUADRIS Flowable Fungicide
ROVRAL 4FL, IPRODIONE 50W AG, -4L
RIDOMIL
 RIDOMIL GOLD GR,
 RIDOMIL GOLD WSP, -GOLDEC
SOILGARD 12G microbial fungicide

FUMIGANTS:

BASAMID
METAM SODIUM (Several Products)

HERBICIDES:

FUSILADEX
DYNAWEED
ROUNDUP ULTRA
TOUCHDOWN, -5
DACTHAL W-75

INSECTICIDES:

ALL CROP COMMERCIAL
AGR. MULTIPURP.
DIAZINON (SEVERAL PRODUCTS)
GARLIC BARRIER AG
PYRETHRIN (SEVERAL PRODUCTS)

NEMATOCIDE: DITERA WDG

SLUG AND SNAIL CONTROLS:

DEADLINE (SEVERAL PRODUCTS)
DIAZINON 14%
METALDEHYDE 7.5% GRANULES
MICROFLO SNAIL AND SLUG
KILLER PELLETS/MEAL
SLUGFEST
SNAIL AND SLUG AG

FERTILIZERS GRANTED SPECIAL USE PERMIT
CREEKWOOD 5-4-5 ORG.FERT.FOR GINSENG
DRAMMATIC ORG.FISH FERT.FOR GINSENG 2.5-1.0-0.2
KELP MEAL 1-0.15-2 FOR GINSENG
LIQUID FISH FOR GINSENG 2-4-0.5
MIDCO LIQUID COMPOST 5-1-1
MIDCO BRAND FERTILIZER 0-10-10
TOOTS LIQUID FISH 2.5-1.0-0.2

NOT APPROVED FOR USE

APRON SEED TREATMENT
BRAVO
BORDEAU MIX (commercially available)
BLUESHIELD
CAPTAN
CAL CROP USA ENVIREPEL
CUPROXAT
DEVIRINOL
DYFONATE
ENOZ NAPHTHALENE MOTH BALLS
FURADAN 4F
GUARDIAN SPRAY
ISOTOX SEED TREATER (F)
LORSBAN
2,4,-D, MCPA
MANEB 80
MALATHION
MOUSE BAIT
PCNB 10G
PYRELLINE.C.
PYRONYL
QUANTUM SEED TREATMENT
RIDOMIL PC 11 G
ROUNDUP
ROTACIDE
SEVIN
SLUG BAIT OTHER than labelled for use on ginseng
TERRACLOR 10G
TERRACLOR 75 WP
TOPSIN 70 WSB
TOPSIN F 5G

This list is a short summary for your **information** only. In compiling this short list we strive to be as up to date and as accurate as this format allows. For more detailed information please check pesticide labels and **“CONTROL OF DISEASES, PESTS AND WEEDS IN CULTIVATED GINSENG IN WISCONSIN -2001”**. If you have questions related to the legality of the use of pesticides in the production of ginseng please contact the department at (608) 224-4500.

Current as of 5/3/01.

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Non-hardy azaleas and rhododendrons - Nursery dealer inspections have turned up a number of outlets selling azaleas and rhododendrons which are not hardy in Wisconsin. These dealers have been advised that these plants must be removed or labeled as not hardy.

Imported willow leaf beetle - Adults were observed feeding and mating on willow at a residence in Sauk Co.

Pine bark adelgid - Egg clusters were visible at the base of buds on white pine at a nursery dealer in Dane Co.

Aphids - Various perennials at a nursery dealer in Dane Co. had small numbers of **aphids**.

Spruce spider mite - No mites were found but damage was moderate on globe Colorado spruce at a nursery dealer in Dane Co.

Shothole disease - Shotholes were evident on purple leaf sandcherry at several nursery dealers in Dane Co.

Rose mosaic virus complex - 'Mirandy' rose at a nursery dealer in Dane Co. was afflicted with **rose mosaic virus complex**.

Septoria leaf spot - Spirea bushes at several nursery dealers in Dane Co. were just starting to show symptoms of this foliar fungal pathogen.

Leaf blotch of peony - Damage was light on various peonies at a nursery dealer in Dane Co.

The counties, number of sites, and acreages are: Adams - 3 sites(12,341A); Columbia - 10 sites(8,559A); Dane - 7 sites(5,488A); Grant - 3 sites(2,281A); Iowa - 3 sites(2,120A); Jackson - 1 site(747A); Jefferson - 1 site(530A); Lincoln - 1 site(7,765A); Marathon - 2 sites(13,558A); Marquette - 3 sites(4,404A); Portage - 2 sites(2,753A); Richland - 1 site(551A); Rock 4 sites(1,562A); Sauk - 6 sites(38,030A); Vilas - 1 site(1,627A); Waushara - 4 sites(16,136A); and Wood - 3 sites(1,428A).

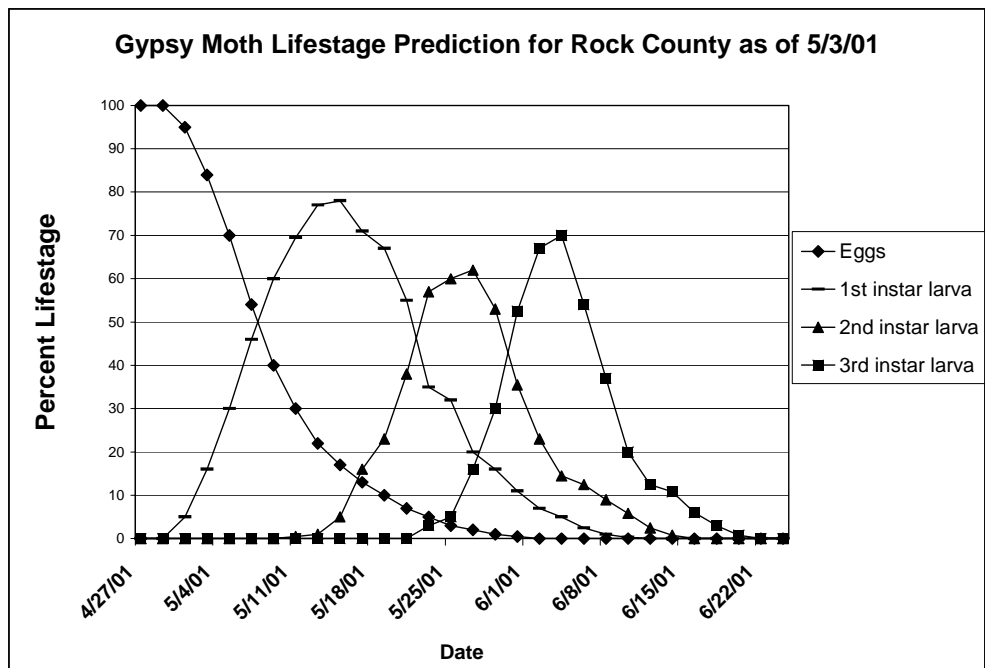
For more information on the **gypsy moth program**, call our hotline at 1-800-642-MOTH or visit our website at <http://datcp.state.wi.us/static/gypsymoth/>

FRUIT

APPLE SCAB - Rainfall the evening of April 30 resulted in an important **apple scab** infection period for parts of Wisconsin. This rain followed a prolonged dry, warm period. This means that ascospores likely were ripe and ready for release, just waiting for rain. The warm weather in the week leading up to the rain pushed trees quickly from green tip to tight cluster and even pink in some locations for some varieties. With new tissue expanding so rapidly, it was not practical to keep it protected with fungicide. Thus, most growers likely had tissue unprotected when the rain hit. If trees were not protected earlier in the day on April 30, then an after-infection fungicide (Nova, Rubigan, or Procure) mixed with a protectant fungicide should have been applied May 1 or 2 to arrest fungal growth and scab symptom development. Some scab prediction models discount rainfall at night, because ascospore dissemination is generally less favorable at night. However, the ascospore load leading up to

STATE/FEDERAL PROGRAMS

Gypsy moth program - Treatment sites for 2001 have been finalized. Fifty-seven sites in 17 counties covering 119,877 acres will be treated this year. Out of the 57 sites, 43 sites (55,581 acres) will be treated with Btk and 14 sites (64,296 acres) will be treated with pheromone flakes. Btk applications are scheduled to start around May 11 to May 15 with the first application. A second application will be made 7-10 days later. There will be only one application of the pheromone flakes and that is scheduled for late June.



the April 30 rainfall was probably very high. It is extremely risky to discount night rain under such conditions. **UWEX**

Apple Insect Trapping Cooperator Comments–

Racine Co.: Codling moth flight has begun. Apple trees are blossoming now, and some varieties may hit full blossom today. Others are just starting to open.

Pierce Co.: First green on Macintosh was on 4-27-01.

Dane Co.: Apricot trees full blossom. Apple trees show little pink.

Apple Insect Trapping Results

County	City	Date	STLM	RBLR	CM	OBLR
Grant Co.						
	Sinsinawa	4/23-4/30	16	33		
	Lancaster	4/25-5/2	33	29		
Crawford Co.						
	Gays Mills-W2	4/21-4/28	200	3		
Richland Co.						
	Hill Point	4/24-4/30	210	42		
Sauk Co.						
	Spring Green	4/26-5/2	1	28		
Iowa Co.						
	Dodgeville*	4/26-5/3	288	133		
Dane Co.						
	Deerfield	4/23-4/30	182	48	0	0
	Middleton	4/26-5/2	3	38		
	Waunakee	4/25-5/2	19	7		
Pierce Co.						
	Beldenville	4/23-4/30	0	3	4	0
	Spring Valley	4/20-4/30	2	45		
Juneau Co.						
	Mauston	4/22-4/29	115	8		
Racine Co.						
	Rochester*	4/25-5/3	1420	141	13	5
Fond du Lac Co.						
	Malone	4/32-4/30	50	34	0	
Marquette Co.						
	Montello*	4/22-4/29	687	93		
Ozaukee Co.						
	Mequon	4/24-4/30	1090	53		
Brown Co.						
	Oneida	4/23-5/1	320	39		

* indicates NEW COOPERATOR!

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Website of the Week

Gypsy Moth Phenology Model <http://emily.soils.wisc.edu/wimnext/gypsy/gypsy moth.html>
Thanks to Dr. Bill Bland and Martha Andersen in the UW Soils Dept. we now have a site which can predict the lifestage development of gypsy moth. Simply pick a county, run the model, and examine the output. Output is either as a table or a line graph. Very useful for those needing to know when apply controls for gypsy moth.

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.)

