



Wisconsin Pest Bulletin

Volume 49, No. 1

April 2, 2004

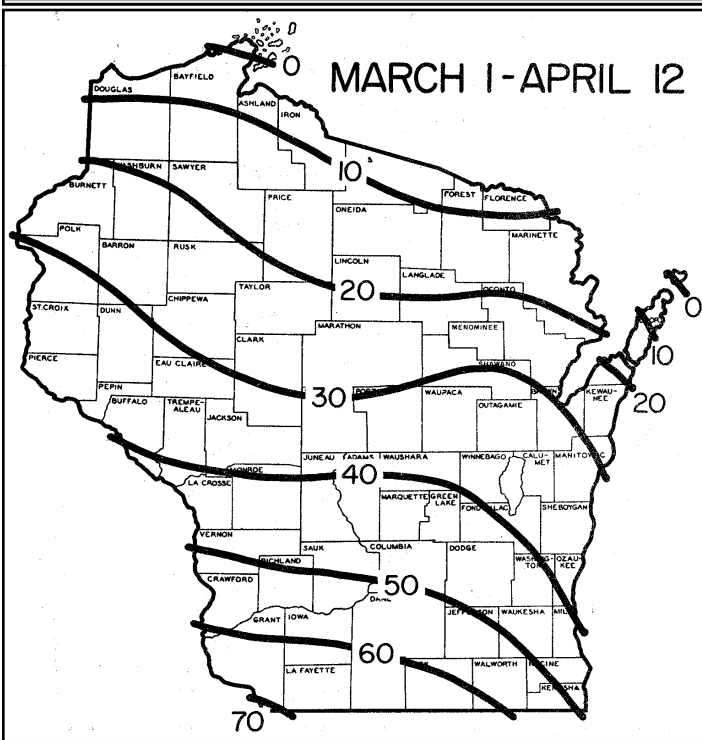
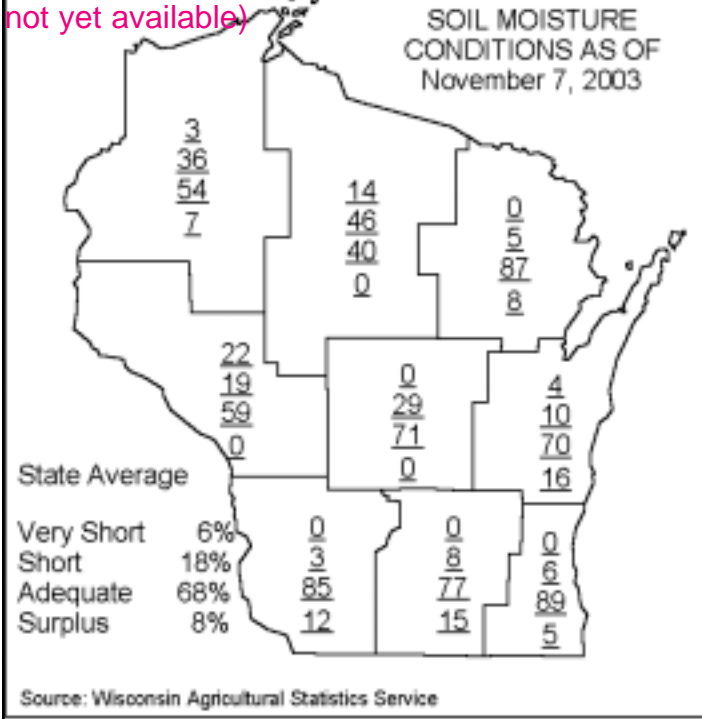
Wisconsin Department of Agriculture, Trade & Consumer Protection

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Website: www.datcp.state.wi.us

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(Current soil moisture map not yet available)



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

Weather and Pests

Scattered warm sunny days and spring rains, both requisites for the greening of Wisconsin, are having a measured effect on the landscape. Grasses and spring flora are responding to the mild conditions with rapid growth. Portions of southern Wisconsin are expecting a series of partly cloudy days with highs in the 50's and lows in the 30's, somewhat cool conditions for the early spring field

Growing degree days from March 1 through April 1 were

Site	GDD*	Base 48	Base 40
SOUTHWEST			
Dubuque, IA	55	56	155
Lone Rock	49	50	141
SOUTHCENTRAL			
Beloit	56	54	153
Madison	44	44	131
Sullivan	52	49	143
Juneau	45	43	131
SOUTHEAST			
Waukesha	48	46	139
Hartford	43	41	127
Racine	47	44	132
Milwaukee	41	39	121
EAST CENTRAL			
Appleton	19	17	73
Green Bay	16	15	67
CENTRAL			
Big Flats	31	30	104
Hancock	26	23	90
Port Edwards	19	17	76
WEST CENTRAL			
LaCrosse	47	49	137
Eau Claire	15	14	69
NORTHWEST			
Cumberland	6	5	44
Bayfield	0	0	22
NORTH CENTRAL			
Wausau	6	5	47
Medford	3	3	37
NORTHEAST			
Crivitz	2	3	37
Crandon	0	7	30

* GDD are degree days above modified base 50 deg. F. with no temperature below 50 deg. F. or above 86 deg. F. used in calculation.

work that is scheduled to commence in the upcoming week. In the northeast, swift snowmelt and consecutive heavy rain showers caused flooding over the weekend. Temperatures cooled enough to limit additional snowmelt, at least for the time being.

Very little insect activity has been noted thus far this season, aside from the reappearance of overwintered multicolored Asian ladybeetles and box elder bugs. While the imminent battle against the bugs may still seem distant, it's not too early to begin preparing for the rush of pest activity. A few warm days in a row is all it will take to speed up insect development.

Alerts

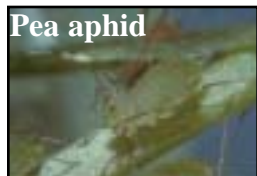
Soybean Dwarf Virus--First report on soybeans in Wisconsin (see "Soybean" section).

Looking Ahead

Alfalfa weevil – In some respects, alfalfa weevils are the harbingers of alfalfa pest insect activity. Emerging from their protective winter sites earlier than most other alfalfa pests, the return of alfalfa weevils to hay fields signals that the time to begin scouting fields is right around the corner. Interestingly, alfalfa weevils do not hibernate. Females begin laying eggs in fall and may continue to do so, even during the winter months, whenever temperatures reach 33°F or higher. It is estimated that for every degree above 33°F female weevils will lay an average of 0.697 eggs per day. This suggests egg laying may already be underway in some southern counties. Scouting efforts should be initiated at 300 degree days (base 48°F), and should target sandy areas of fields and south facing slopes first.

Black cutworm - Pheromone traps were placed in the far southern portion of Rock, Green, Lafayette and Grant Cos. earlier this week in anticipation of the arrival of the migratory corn pests. Staff will check traps regularly through May to pinpoint when the first migrants arrive and to determine when corn seedlings are most vulnerable to cutting.

Pea aphid – Pea aphids are a second pest which scouts are likely to see in alfalfa fields early in the season. Pea aphids overwinter as eggs in alfalfa, red clover and other perennials and biennials, and hatch in early spring. All early spring pea aphids are female; male pea aphids don't appear until late summer. The early emerging female aphids do not need to mate to reproduce, nor do they have an egg stage. Rather, they produce live young, often at extraordinarily high rates when conditions are favorable. While peas are the preferred host of pea aphids, monitoring aphid activity

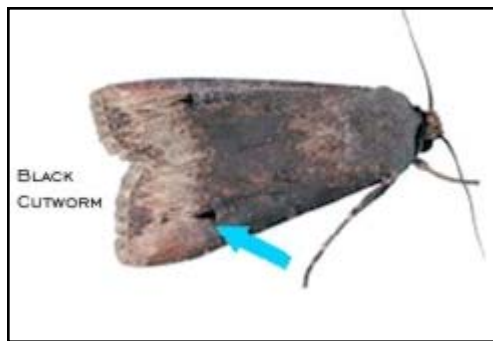


in alfalfa is helpful in forecasting when migration to pea fields is likely to occur. Early-season pea aphid surveys should be directed at determining: 1) when the first aphids appear in alfalfa, and 2) when the winged forms begin appearing. Later on it will be important to detect the first aphids in peas and the rate of population build-up. The threshold for pea aphids in alfalfa is 100 aphids per sweep.

Alfalfa caterpillar – Look for bright green alfalfa caterpillar larvae to appear in alfalfa fields in mid- to late April.

Corn

Black cutworm – Earlier this week pest survey specialists put into place a network of 14 pheromone traps along the southern border of the state, from Rock to Grant Cos., in preparation for the spring arrival of black cutworm moths. Black cutworm is a migratory pest that typically arrives in Wisconsin around mid-April. Eggs are laid in the spring when adults fly into Wisconsin



from southern states, and larvae are pests of seedling corn and occasionally seedling soybean. Each weekly issue of the

Wisconsin Pest Bulletin through May will include reports of trap captures and an interpretation of what those counts might mean for growers. Documenting the arrival of migratory black cutworm moths and regular monitoring of traps will help us to anticipate when seedling corn will be most vulnerable to cutting. An indicator that moths may be arriving soon comes from Illinois, where the first black cutworm moth of the season was caught in a Pope Co. pheromone trap on March 9.

European corn borer – The population of larvae going into last winter was very low, averaging 0.3 borer/plant; that compares to 0.66 per plant in 2002, and a ten-year average of 0.54 borers per plant.

Corn borer densities were substantially lower in all agricultural district statistics last fall compared to the one before, and in most districts the average number of borers per plant declined by more than 50%.

Overwintered corn borer larvae typically begin pupating by mid-May, unless the weather turns cold. Moths should not be expected in black light trap catches before late-May or early-June. The fall larval abundance survey

results suggest Wisconsin farmers can expect a light first flight of moths early this summer. *A phenological side note:* Pupation of overwintering larvae generally begins about the same time mountain ash flowers.

Soybeans

Soybean Dwarf Virus - The appearance of the soybean aphid (*Aphis glycines*) in Wisconsin during the 2000 season raised concerns about the potential increase in the incidence of aphid-vectored viruses of soybeans. Surveys to determine the extent of virus infection in the state's soybeans have been conducted and are planned again for 2004, and comprehensive results from last

year's soybean virus survey will be included in the April 30th Pest Bulletin. One note of particular interest from the 2003 survey was the finding of Soybean Dwarf Virus (SbDV) on soybeans. Though the virus has previously been detected in red clover in the state, this is the first detection in soybean in Wisconsin. The virus causes widespread economic loss on soybeans in Japan, and has been reported on soybeans in Virginia, on various legumes in the southeast U.S. and in peas in California. The virus has been differentiated into a number of strains, by different host range and aphid vectors.

Soybeans in 286 fields distributed throughout the state were sampled for the virus. Five fields in four counties (Columbia, Lafayette, Sauk and Waushara) tested positive for SbDV by ELISA (enzyme-linked immunosorbent assay). Presence of the virus was confirmed by RT-PCR (reverse-transcriptase polymerase chain reaction). PCR results indicate that the strain present in Wisconsin is the dwarfing strain, SbDV-D. Several aphid species have been reported to vector SbDV, and at this time, vector relations in the WI infection are unclear. DATCP plans to conduct a survey of aphids on clovers (presumed to be the overwintering host of the virus in the state) this spring.

Soybean aphid – After an unparalleled soybean aphid season in 2003, it is difficult to forecast what soybean growers can expect of the soybean aphid in 2004. Some

encouraging news comes from University of Illinois Extension's The Bulletin, in which the author, Kevin Steffy, suggests that soybean aphids may not be as problematic in 2004 as they were in 2003. The article (No. 1 Article 7/March 18, 2004) reads as follows:

"In 2001, Dr. David Voegtlin, aphid research specialist in the Center for Economic Entomology in the Illinois Natural History Survey, established a network of suction traps to enable us to monitor the flights of soybean aphids throughout any given season. The captures of soybean aphids in these traps have been pretty revealing, and some trends may be starting to develop. For example, captures of flying soybean aphids in the fall of 2002 were noticeable, whereas there were no captures of flying soybean aphids in the fall of 2001. Because an outbreak of soybean aphids occurred in 2003 and soybean aphids were few and far between in 2002, the capture of aphids during the fall may provide some insight into the potential for infestations to develop the following season. It is interesting to note that very few aphids were captured in the suction traps during the fall of 2003. The relatively low numbers of soybean aphids captured in suction traps in the fall of 2003 and the presence of very large numbers of multicolored Asian lady beetles suggest that soybean aphids may not get off to a fast start in 2004."

Let's keep our fingers crossed.

Forages

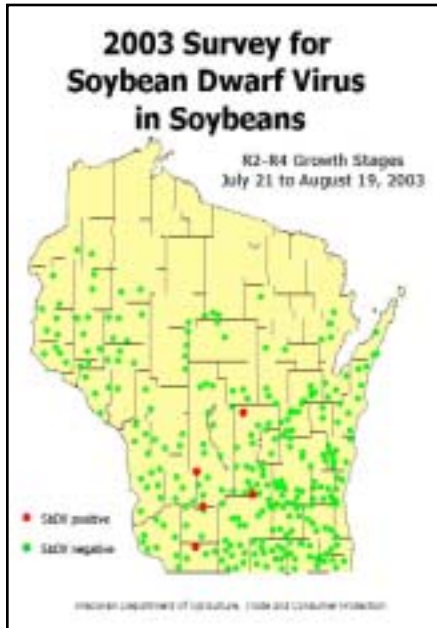
Alfalfa brown root rot - In 2003, brown root rot (caused by *Phoma sclerotoides*) was found in Wisconsin. This disease is a northern disease which may contribute to winterkill in much of the state. To date, the fungus has only been documented in Pierce, Shawano, Marathon and Outagamie counties. *P. sclerotoides* grows best at temperatures between 30 and 60 deg. F., and grows little if at all at typical summer temperatures.

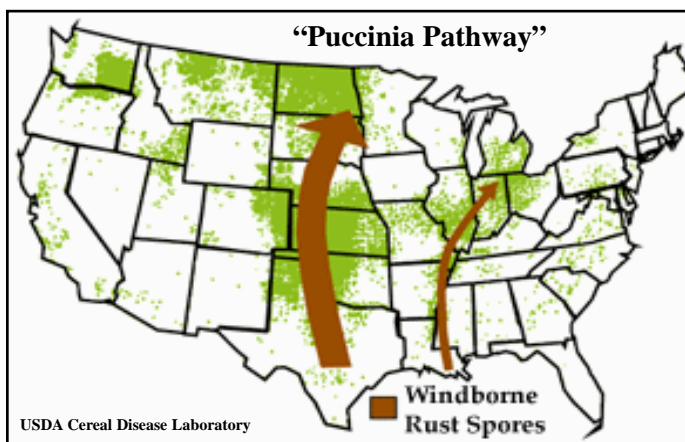
Infected plants may begin normal growth in the Spring, but lose vigor and die near the time of first cutting. Root symptoms vary from small dark circles on roots to large rotted areas on the taproot. Rhizobium nodules may be infected or absent. Although this is primarily a root disease, upper crown and lower stem tissues can also be infected.

The distribution and extent of brown root rot is the target of our earliest pest survey efforts this season. DATCP's survey should help to determine the presence and prevalence of winter rot in southern Wisconsin. --*UWEX in part*

Small grains

Rust of small grains- Current reports on the rust situation (March 16, 2004) in the southern states





indicates that no wheat stem rust has been reported yet in the U.S. and that both wheat leaf rust and wheat stripe rust findings are below last year's levels. Cereal rusts overwinter in the Gulf region, and spores blow north every spring to infect the Wisconsin wheat crop. The alternate host of stem rust, common barberry, was the focus of intensive eradication efforts from the mid-1920s to 1976, in an effort to stabilize the races of the disease. Stripe rust, long common in the Pacific Northwest, has been on the increase in the South and Midwest over the last few years. The disease was found in Wisconsin in 2002, the first report in many years. (current info from *the Cereal Rust Bulletin*, <http://www.cdl.umn.edu/crb/crbupd.html>)

Apiary

Spring medicating – Mind the mites but beware of AFB. Early to mid-April is the time to start Terramycin. Beware of buying nucs or hives; infested comb is the number one source of American foulbrood (AFB). For detailed information please visit our web site or call the Apiary Program at (608) 266-7132.

Varroa Mite Control Treatments – Overwintered colonies treated with CheckMite+ last fall do not require another treatment this spring. Consider management methods such as open bottom boards, drone comb removal, resistant bees such as Russian / SMR and hygienic stock to manage mite loads. The new biopesticides Sucroside (sucrose octanoate) (approved for use) and Api Life Var (pending approval as of date of publication) provide alternatives, especially for the hobby beekeeper.

CheckMite+ has been approved by EPA for use on honey bees in Wisconsin for 2004!

Spring Feeding - The most successful ways to feed in spring in Wisconsin are: 1) Using a 1:1 sugar syrup solution in feeder pails inverted over the hole in the inner cover with an empty hive body and cover on top; or 2) Using a side board feeder. Add a pollen patty.

Insecticide use on soybeans – Soybeans are no longer

an insecticide free crop. Soybean growers are fighting a new insect pest, the soybean aphid, which was first identified in 2000 and is now spread throughout Wisconsin. Dry and hot summer weather may trigger an aphid explosion in soybean fields during soybean bloom. This could cause problems for honey bees foraging in soybeans.

Pyrethroids (Warrior, Mustang, Asana, Baythroid) and organophosphates (Lorsban, Dimethoate) are the two kinds of insecticides commonly used and registered for use on soybeans. Dimethoate is no longer recommended because of its variable efficacy! Pyrethroids are less toxic to bees than organophosphates. The newly approved biopesticide Avachem Sucrose Octanoate [40%] is registered for use on soybeans for aphid control.

Pesticides that are very toxic to foraging honeybees and should not be sprayed on flowering crops or weeds. Product labels instruct that these products should not be allowed to drift to blooming crops or weeds if bees are visiting the treatment area.

Pesticide application notification - Let your landowner or co-op know where your bees are! Even apiaries that are close by and obvious to you may go unnoticed by the pesticide applicator. Don't assume they know you and your beekeeping business. It won't hurt to point out that your bees are working for them, too by pollinating their soybeans and adding to yield. Ask pesticide applicators to spray in the evening and choose the least toxic product. A little communication can go a long way.

Take advantage of state rule *ATCP 29.151 Advance notice of pesticide applications* (1). It requires pesticide applicators to notify you, before they will spray but first you, the beekeeper must notify the farmers within 1 ½ mile radius of your apiary location in writing. Then 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.

Forest, Shade Trees, Ornamentals and Turf

Sudden Oak Death – In response to the presence of *Phytophthora ramorum* on several varieties of camellia plants at a California nursery, USDA has regulated the interstate movement of 28 *P. ramorum* (Sudden Oak Death) hosts and 31 associated host plants from all California nurseries beginning March 29, 2004. Four western oak species, *Rhododendron* spp, and Douglas Fir are among the hosts. For the list of plant species regulated for *Phytophthora ramorum* see www.aphis.usda.gov/ppq/isp/sod. The quarantine will last for 60 days or until testing is completed and suspect nursery stock is found free of *P. ramorum*. Currently, California Department of Food and Agriculture and the County Agriculture Offices will not approve or permit

the interstate movement of nursery stock unless the nursery meets the following criteria. Inspected nurseries that were found negative for *Phytophthora ramorum* prior to March 29, 2004 will be allowed to ship stock interstate after entering into a compliance agreement with USDA. Nurseries containing hosts or associated hosts of *Phytophthora ramorum* that were NOT inspected for ramorum leaf blight or SOD symptoms, prior to March 29, 2004, will not be permitted to ship stock interstate until the required samples test negative for SOD. Nurseries found positive must destroy infected stock and must hold susceptible stock within 10 meters of the diseased stock for 90 days and until proven free of Sudden Oak Death.

Sudden Oak Death is a fungal disease of certain trees, shrubs and plants. It causes fatal cankers on trees and leaf blights on some of the affected shrubs. The disease spreads rapidly from plant to plant, but it is unclear how the disease spreads. Based on available research it is believed the disease favors a particular climate. A US Forest Service risk assessment indicates Wisconsin is at low risk for establishment of Sudden Oak Death.

Oak wilt - A reminder that we are entering the period of the year when pruning oak trees increases the risk of oak wilt. The fungus responsible for oak wilt spreads primarily through root grafts between adjacent trees, but the only way it can spread to new stands of trees is by being carried by insect vectors, mostly sap beetles in Wisconsin. The fungal mats produced under the bark of diseased trees are attractive to the insects, as are fresh wounds on healthy oaks. Avoid pruning or wounding oak trees in April, May and June if at all possible, and try to put off any pruning of oaks until November-March, when both the fungus and the sap beetles are inactive. Some municipalities have passed ordinances prohibiting the pruning of oaks during the high risk periods; the city of Green Bay prohibits pruning oak trees from March 15-October 15. —DNR in part

Drought stress on conifers - Considerable drought injury from last year is showing up on conifers in the northwest and north central parts of the state. If more



Todd Lanigan, WI DNR

than 50% of a tree is showing discoloration, the tree's survival is in doubt.

State/Federal Programs

GYPSY MOTH TRAPPING PROGRAM - The entire state will be trapped again for the eighth consecutive year. Trapping densities are set at 1 per 9 sq. miles in the eastern quarantine counties, 1 per 4 sq. miles in most of the central quarantine counties, 1 per 2 sq. miles in the central non-quarantined counties and 1 per sq. mile in the western counties. Trapping densities in delimitation blocks are 1 per sq. mile, 4 per sq. mile and 9 per sq. mile. The eastern half of the state will be trapped using milk carton traps while delta traps will be used in the western half.

Delimitation trapping is an intense trapping grid used to define the boundaries of a possible gypsy moth infestation or to evaluate a treatment block. Milk carton or delta traps are used depending on the number of moths caught in that area last year. The results of this trapping will help determine if a treatment will be done next year or if the Btk treatment worked in the current year or if the mating disruption treatment worked from the previous year.

Trapping will begin the week of May 24, 2004. If you have any questions about the GYPSY MOTH PROGRAM, please call our hotline at 1-800-642-MOTH or visit our website at:

<http://www.datcp.state.wi.us/arm/environment/insects/gypsy-moth/>

Fruit

Exotic fruit moths – This year, as part of a statewide exotic fruit moth detection effort, several orchard cooperators will be trapping for exotic moths in addition to five endemic moth species. The four exotic moths, described below, have all been found in the Pacific Northwest. Apple growers can help to keep these pests out of Wisconsin by carefully inspecting imported nursery stock.

Apple ermine moth – In 2001, live apple ermine moth (AEM)



larvae were found at a south central Wisconsin nursery, likely imported on nursery stock from Oregon. AEM has not been found since then;

however, localized infestations may already occur in Wisconsin but have not yet been detected. AEM feeds exclusively on apple. To scout for AEM, watch for communal webs and larvae beginning at late bloom. The webs look similar to those of Eastern tent caterpillar but are smaller, about the size of a tennis ball. When AEM larvae pupate, they line up in tightly packed clusters in the webs. A cocoon resembles the tip of a Q-tip. Cooperators should set traps by early May and expect to catch AEM from late June through September if moths are present. Adults moths are white with black dots.



Apple ermine moth adult

Cherry bark tortrix – Cherry bark tortrix (CBT) is another moth which currently occurs in the Pacific Northwest, but may have made its way into Wisconsin on nursery stock. Frass tubes, protruding from the bark, are characteristic of CBT infestation. (see image below). Larvae overwinter in the tubes while tunneling and feeding on living tissue. Apple growers are more likely to see the frass tubes than the larvae when scouting. Pay close attention to bark splits, branch axils, and graft sites when scouting for frass tubes.

CBT larvae begin to pupate in the frass tubes in late April. Adult flight occurs a few weeks later, and another peak occurs later in the summer when younger larvae pupate. Because the larvae are of various ages, adult flight extends from May through



September. Place traps by early May and expect to catch moths from May through September if CBT is present. Adults moths have a unique marking of three black bands towards the rear of the black and orange wings.

Fruit tree tortrix – Although fruit tree tortrix (FTT) adults are not likely to show up in pheromone traps until early to mid-June, the signs of a FTT infestation could appear as early as late April. When scouting for FTT, look for webbing, rolled leaves and 1 inch long, thin, green larvae hiding under leaves that are rolled and

webbed together. Apple trees are the preferred hosts of FTT. In 2000, an infestation occurred in one county in Washington State. Treatments were apparently



Fruit tree tortrix larva

successful and no further outbreaks have been reported. Nonetheless, detection efforts are warranted to ensure FTT does not occur in Wisconsin. Place traps by mid May and expect to catch adults from mid-June through September if it FTT is present.

Apple tortrix – Like the fruit tree tortrix, apple tortrix (AT) larvae are leafrollers. Webbing and rolled leaves may be indicators of an AT infestation. In late April or early May, greenish larvae with a brownish head will hatch from black, circular, ¼-inch overwintered egg masses. Adults begin to emerge in late May. Many fruit trees can be hosts. AT is well established in Washington State, and also in the Northeastern U.S. Place traps by mid-May and expect to catch moths from mid-June through mid-July if AT is present.

The three tortrix moths have not been found in Wisconsin yet, but could potentially be transported here on imported nursery stock. Because much of the information available for exotic fruit moths comes from the Pacific Northwest, the dates mentioned above for egg hatch, adult flights, and when larvae may be present, are likely to vary somewhat in Wisconsin orchards. Apple growers are encouraged to err on the side of caution and place exotic fruit moth pheromone traps by early to mid-May. Growers should also inspect any imported fruit tree stock carefully.

Spotted tentiform leafminer – In Wisconsin, there are three distinct flights of STLM adults. By monitoring and comparing weekly trap catches, apple cooperators using traps baited with pheromone lures will be able to determine the period of peak activity for each of these three moth flights. Unfortunately, monitoring STLM is not as simple as checking traps once or twice a week. STLM is considered an “indirect pest”, affecting apple foliage rather than the fruit, so it is highly important to monitor all life stages, not just the moths. There are two additional STLM lifestages to watch for: sap-feeders and tissue-feeders. Cooperators will need to learn to scout for the characteristic mines caused by the sap- and tissue-feeding larvae in order to time sprays properly.



Spotted tentiform leaf miner adult

Sap-feeder mines are more difficult to detect as they are visible only on the under surface of leaves, while tissue-feeder mines are more obvious and visible as a speckling on the upper leaf surface. Chemical sprays targeting STLM larvae are only affective against the sap-feeding

stage; therefore it is imperative that orchardists learn to scout for the sap-feeding stage and count leaf mines. Monitor pheromone traps closely and look for leaf mines to appear approximately one week after a peak moth flight.

A word of advice to cooperators: Adult STLM populations often grow very large and it may be necessary to check or change traps more frequently during the peak flight period. Place traps in the week ahead expect adults to begin appearing in traps at 22-70 DD (base 50°F), larvae at 209-231 DD, and the first leafmines at 329-402 DD. For detailed STLM scouting instructions see UW-Extension Publication A3211 *Spotted Tentiform Leafminer: A Pest of Wisconsin Apple Orchards* by D.L Mahr and N.C. Ravdin.

Plum curculio – For the first time, DATCP’s apple insect trapping cooperators will be monitoring plum curculio in 2004. Traps are scheduled to be deployed next week and we expect the first adult capture to occur around 100 DD (base 50°F). Plum curculio activity typically picks up sometime between pink and petal fall, after a few consecutive days of rain and daytime temperatures about 70-75°F. There is one generation per year in Wisconsin. We hope the plum curculio trap counts provided in upcoming issues of the Wisconsin Pest Bulletin will prove useful to Wisconsin orchardists.

Odds -n- Ends

Multicolored Asian ladybeetles (MALB) – The menacing beetles that are beginning to reappear at residences throughout the state are not a new generation of beetles. They are the winter survivors of the very same generation that invaded your home last fall. Unsettling as it may be, the MALB active in early spring have made it through the bitterly cold Wisconsin winter months by nestling in a warm and comfortable place inside your walls. When temperatures rise enough for the beetles to resume activity, homeowners are likely to observe a flurry of action; however, that will likely taper off shortly as the beetles move outdoors to feed and reproduce. Control of MALB during the spring of the

year is strongly discouraged. Residents who experience persistent MALB problems should consider treating the outsides of their homes with a synthetic pyrethroid in fall only. The fall treatment window is narrow and must be applied in mid-October to kill the MALB before they get into homes.

Cluster flies – Cluster flies commonly trouble households in late winter and on warm spring days as they emerge from protective overwintering sites inside of homes. Much like multi-colored Asian ladybeetles, clusterflies enter homes in the fall, seeking a warm place to pass the winter months, but do not reproduce in houses during the winter. On warm days flies will aggregate on windows in an attempt to leave the house. When this occurs, homeowners are encouraged to vacuum up the flies rather than using an indoor chemical. Like the MALB, prevention is the key to keeping this cluster flies from getting into homes. Make certain all windows and doors are tight fitting before fall, and cover ventilation openings in attics with fine mesh screening. For additional control information see UW-Extension Publication A2090, *Cluster Flies in the Home* at <http://cecommerce.uwex.edu/pdfs/A2090.PDF>.

Section 18s - EPA FIFRA Section 18 Emergency Exemption Requests allow states to use a pesticide for an unregistered use for a limited time if EPA determines that emergency conditions exist.

Wisconsin DATCP 2004 Section 18 Emergency Exemption requests currently being reviewed by US EPA are:

- Betanex** (desmedipham) for pre-emergent broadleaf weeds in red beets
- Spartan** (sulfentrazone) for groundsel in strawberry
- Api-Life VAR (Thymol) for varroa mite on honey bees
- Checkmite+** (coumaphos) for varroa mite on honey bees
- Outlook** (dimethenamid-p) for pre-emergence weeds in dry bulb onion
- Orbit** (propiconazole) for cottonball in cranberry

Three 2004 Section 18 Emergency Exemption requests currently being prepared by Michigan on behalf of ginseng growers in both Wisconsin and Michigan are:

- Gavel** (zoxamide and mancozeb) for phytophthora cactorum,
- Dithane** (mancozeb) for stem and leaf blight, and
- Bravo** (chlorothalonil) for leaf and flower blight.

For more information, please contact:
 Patricia Kandziora, Chemist/Pesticide Specialist
 Acting Pesticide Registration Coordinator
 Wisconsin Department of Agriculture, Trade and

Consumer Protection
2811 Agriculture Drive
Madison, WI 53708
608-224-4547/ fax - 224-4656
patricia.kandziora@datcp.state.wi.us

Calendar of Events

Wisconsin Berry Growers Association Berry Weed Management School

Friday, April 16, 2004

Hancock Research Station, Hancock Wisconsin

To register, call 920-478-3852

Wisconsin Fresh Market Vegetable Growers Association Spring Field Day

Wednesday, April 21, 2004

UW Research Station Arlington, Wisconsin

See brochure at:

<http://www.wisconsinfreshproduce.org/Veg%20SFD.pdf>

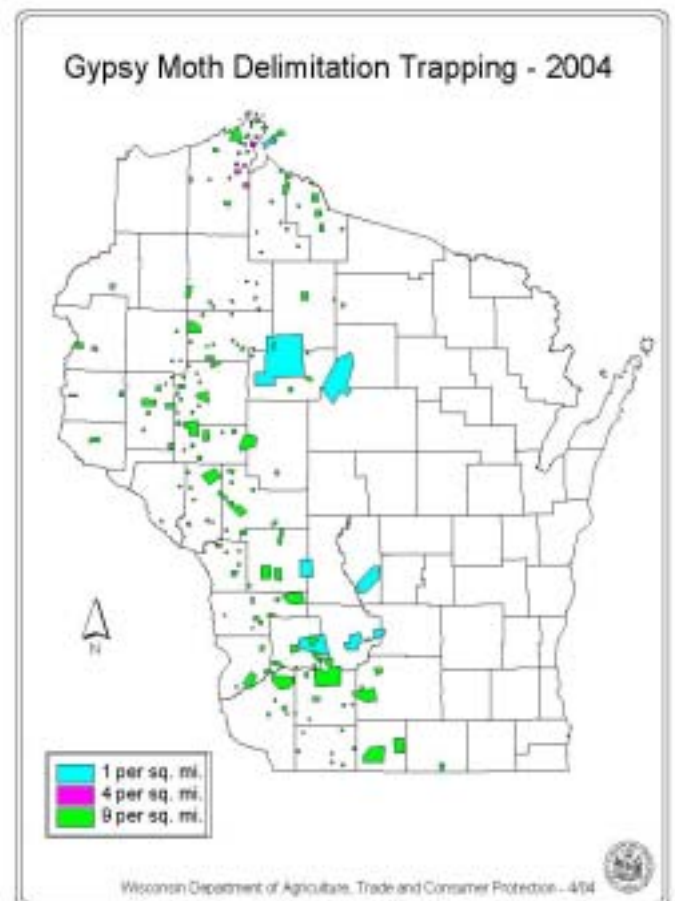
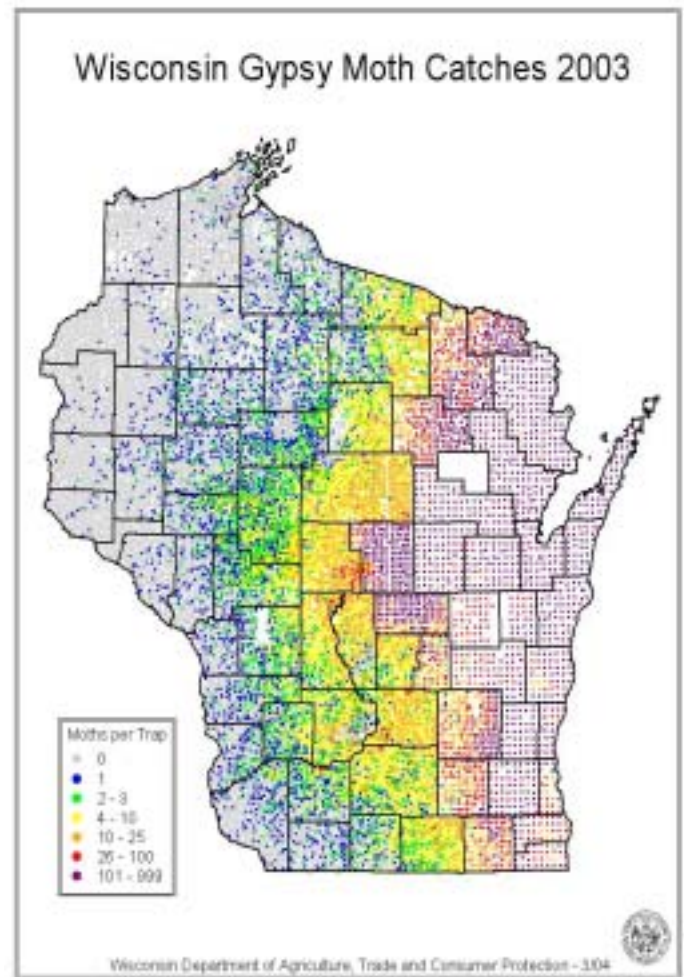
Wisconsin Berry Growers Association Strawberry Festival

Saturday & Sunday, June 26 – 27th, 2004

8am - 3pm both days, (farm opens for U-Pick at 7am)

FREE ADMISSION

Have an item you'd like us to list in the calendar? Email event particulars to bulletin@datcp.state.wi.us





Department of Agriculture,
Trade & Consumer Protection
Division of Agricultural Resources Management
PO Box 8911
Madison WI 53708-8911

Web Site of the Week

DNR Managed Lands Site

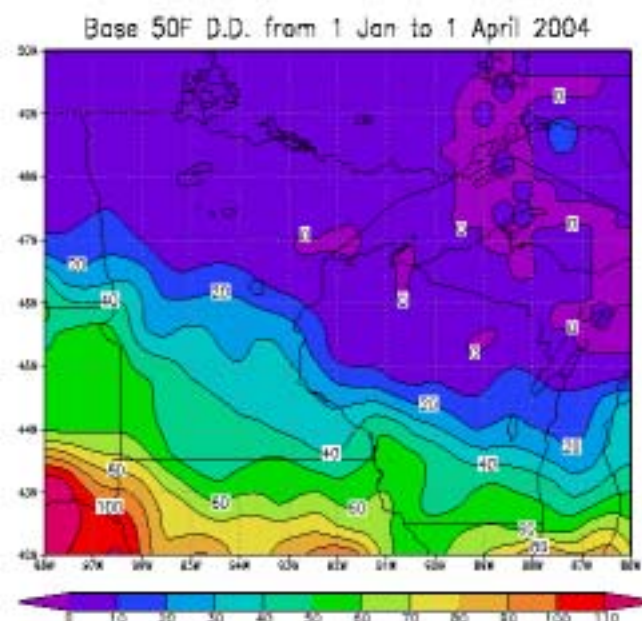
www.dnr.wi.gov/org/land/facilities/dnr_lands_mapping.html

Aerial photos and GIS layers for all 1.4 million acres of public lands in the state, with layers for public land boundaries, municipalities, townships, streams and rivers, county roads and more. Provides links to relevant DNR information such as management plans, ecology, and recreational activities. (The photos and maps actually cover the entire state, and the resolution is very good—go look at your house from the air.) An exceptional way to provide public access to public information.

Quote of the Week

Every year, back comes Spring, with nasty little birds yapping their fool heads off and the ground all mucked up with plants.

Dorothy Parker (1893-1967)



<http://www.soils.wisc.edu/wimnext/tree/arbor.html>