Wisconsin Pest Bulletin

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Wisconsin Department of Agriculture, Trade & Consumer Protection

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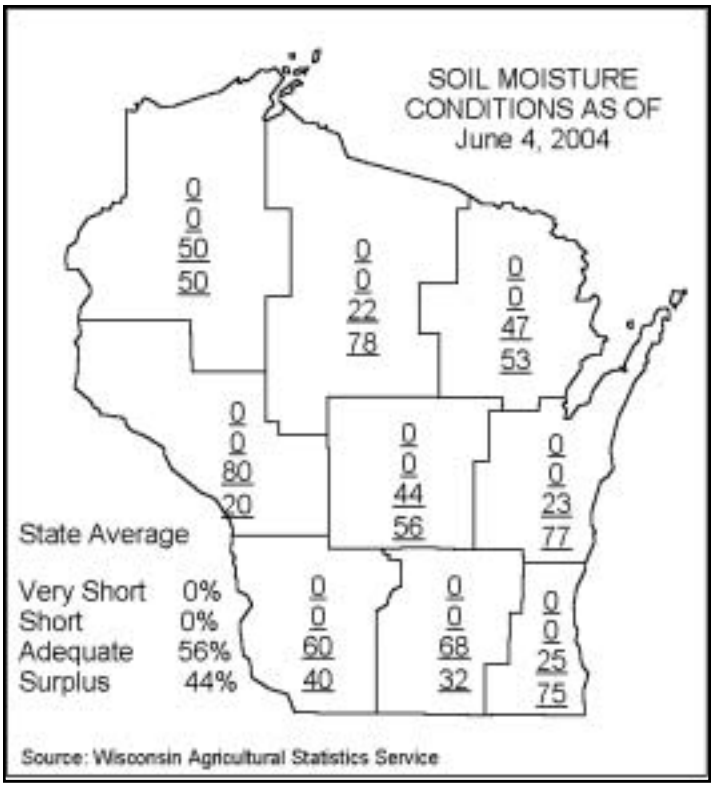

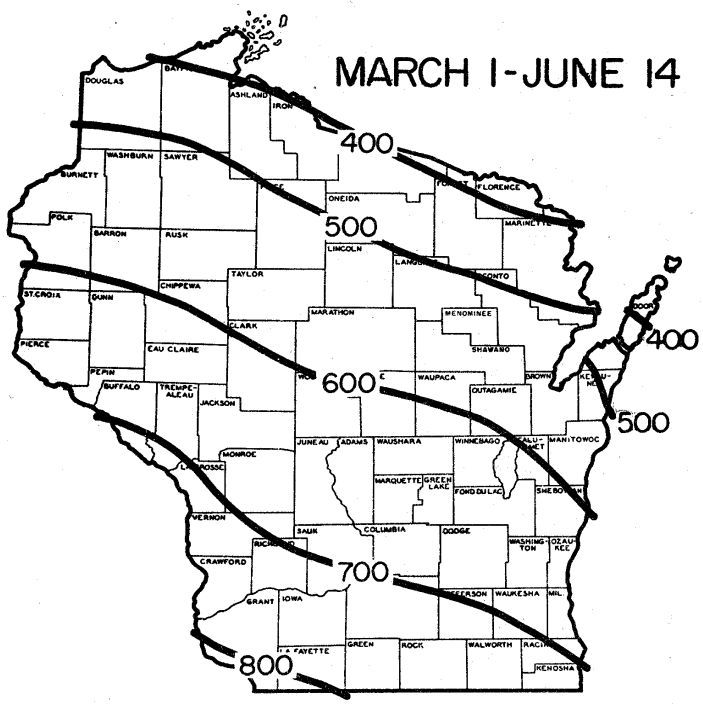

Historical Average Growing Degree-Days Accumulated Since March 1. (Wisconsin Agricultural Statistics Service)

Weather and Pests

The brief period of sunshine and heat over the weekend and during the early part of this week have done wonders for crop development. Haying operations resumed with little insect or disease impact on yield, but apparently there was a loss of quality due to wetness, delayed cutting and prolonged exposure to heavy alfalfa weevil pressure. Corn emergence and soybean planting are nearly complete in the southern districts. More rains and flooding late in the week hampered progress and left fields saturated once again. Insect activity exploded this week, especially

Growing degree days from March 1 through June 10 were:

Site		2003	Norm	Base	Base
	GDD*	GDD	GDD	48	40
SOUTHWEST					
Dubuque, IA	785	605	748	808	1427
Lone Rock	707	612	691	734	1325
SOUTHCENTRAL					
Beloit	757	589	714	772	1380
Madison	665	564	685	692	1271
Sullivan	691	538	662	701	1297
Juneau	646	514	615	659	1245
SOUTHEAST					
Waukesha	641	472	642	653	1238
Hartford	602	469	612	614	1186
Racine	574	403	634	594	1142
Milwaukee	547	407	601	564	1099
EAST CENTRAL					
Appleton	465	484	535	489	980
Green Bay	408	388	494	431	906
CENTRAL					
Big Flats	580	577	584	592	1143
Hancock	542	560	579	551	1087
Port Edwards	506	527	590	508	1025
WEST CENTRAL					
LaCrosse	701	613	671	705	1318
Eau Claire	545	604	592	547	1080
NORTHWEST					
Cumberland	407	528	558	384	855
Bayfield	260	349	328	233	613
NORTH CENTRAL					
Wausau	430	470	528	427	887
Medford	394	456	517	390	833
NORTHEAST					
Crivitz	352	386	445	345	784
Crandon	367	304	424	353	773

*GDD above base 50 with 86 deg. upper limit

European corn borers, potato leafhoppers, and mosquitoes.

Alerts

Soybean aphid – The first confirmation of soybean aphids in 2004 came from Columbia, Missouri, where aphids were detected during the third week of May on common buckthorn (Rhamnus cathartica). The first sighting of aphids in soybean fields was reported in Iowa, near the Iowa State University campus, earlier this week. These reports suggest soybean aphids will begin appearing in Wisconsin soybean fields either next week or the following week.

Apple maggot – Considering that much of the state has received a surplus of moisture this season, apple growers (and especially DATCP insect trapping cooperators) should place apple maggot traps (red balls and yellow sticky boards) next week to catch the earliest emerging flies.

Agriculture Losses – The Wisconsin Farm Service Agency has submitted a request for federal assistance for 19 counties. The Farm Loan Program would provide emergency physical loss loans to farmers impacted by the record rainfall and severe weather. The counties named in the request are Brown, Buffalo, Calumet, Crawford, Fond du Lac, Grant, Kenosha, Lafayette, Manitowoc, Marquette, Monroe, Outagamie, Ozaukee, Racine, Shawano, Sheboygan, Trempealeau, Washington and Winnebago. (Wisconsin Emergency Management Situation Report, June 10, 2004)

Looking Ahead

European corn borer – Moths continue to appear over the southern and central districts and egg laying is well in progress. Two egg masses were detected in fields surveyed this week, one in a V6-V7 western Dane Co. field and the other in a V7 Sauk Co. field, near the intersection of Hwy 12 and Cty PF.

Potato leafhopper – Sweep net counts have risen considerably in the last week, thanks to high temperatures over the weekend and during the initial part of this week. As expected, nymph production has begun. The first sighting of nymphs of 2004 was reported on June 5, in Dane Co.

Bean leaf beetle – With soybean emergence in full swing in southern counties, it is very important to monitor early vegetative-stage plants for bean leaf beetle defoliation and other signs of beetle activity. University of Illinois research indicates that densities of 16 adults per foot of row in the early seedling stage are required before economic injury from direct feeding will occur.

Alfalfa weevil – Surveys continue to show above-economic threshold levels in some south central and east central fields.

Mosquitoes – Pest survey staff, returning to the office late this week laden with bites and bumps, confirmed that activity and biting was intense. Mosquito pressure is unlikely to decrease for the immediate future, as much of the state is still waterlogged and providing suitable habitat for reproduction.

Corn

European corn borer – Corn growers are urged to pay close attention to the first moth flight occurring over the next few weeks. This is the time to determine the success of the first-generation corn borers. While we are anticipating a light first flight of moths this June, it is still critical to monitor corn borer activity in young corn stands to gauge the size and potential impact of the second generation.

Moth flight has continued to increase over the southern part of the state, and peak flight has either occurred or is rapidly approaching in parts of the south. According to the degree day model, the first flight of moths peaked in the LaCrosse and Lone Rock areas over the weekend, in the Madison area on Wednesday, and is expected to occur in southeastern Wisconsin today. Central Wisconsin growers near Hancock can anticipate peak flight around June 13, near Appleton by June 22, and in the Wausau area by June 24. With adult activity escalating, egg laying is also expected to pick up. Two egg masses were detected in separate fields this week, one near Mazomanie and the other near Prairie du Sac, on June 10. In the next week growers should scout for egg masses and pinhole feeding on older leaves of corn plants, caused by tiny first instar larvae.

Black cutworm – Some corn fields are still not in the clear, especially those that were replanted due to flooding. Continue to scout for obvious signs of black cutworm activity, i.e. cut plants, in the week ahead.

Corn rootworm – Larval hatch is expected to begin in southern Wisconsin counties during the upcoming week.

2004 Black Cutworm Trap Counts Through 6-10-04

County	City	BCW Count
Rock	Beloit	0
Rock	Newark	0
Rock	Avon	1
Green	Juda	7
Green	Monroe	3
Green	Cadiz Springs	2
Lafayette	Gratiot	0
Lafayette	Shullsburg	1
Lafayette	Lead Mine	1
Grant	Hazel Green	0
Grant	Sinsinawa	0
Grant	Lancaster	1

This is the final week of BCW trapping

It will be interesting to see how wet conditions and flooded fields may impact this year's population.

Soybeans

Bean leaf beetle – DATCP's survey for overwintered beetles in alfalfa came to an end this week, with beetles being detected in Fond du Lac, Ozaukee, Washington and Vernon Cos. In contrast, no beetles were found in the Adams, Green Lake, Juneau, LaCrosse, Marquette, Monroe or Sheboygan Co. alfalfa fields surveyed. Bean leaf beetles were present at 64 of the 101 sites surveyed this season, and absent from 37 of the sites. It is important to note that 19 of the 37 negative sites were located in the 4th tier of counties (LaCrosse-Sheboygan), which appears to be just beyond the northernmost range of bean leaf beetle in Wisconsin. When the 4th tier of sites are subtracted, beetles are present at 83 of the sites, and absent from 18. Last year 107 sites were surveyed in the same counties; bean leaf beetles were found at 40 of the sites.

In sum, it seems that overwintered bean leaf beetles were present in a relatively high number of alfalfa fields surveyed this spring, suggesting soybean growers may encounter bean leaf beetle problems this season. At the minimum, survey findings suggest growers need to be alert to early-season bean leaf beetle activity in soybeans. The beetles collected during the course of the survey will be tested next week for the presence of bean pod mottle virus (BPMV). Results may indicate whether growers need to be concerned with virus transmission this season. For more bean leaf beetle information see: Bean Leaf Beetle Activity, by Field Crop Entomologist Eileen Cullen, in the May 27, Vol. 11, No. 12, 2004 edition of the Wisconsin Crop Manager, online at: http://ipcm.wisc.edu/wcm/pdfs/2004/CullenMay27.pdf.

Soybean aphid – The first soybean aphids of the season have been found in Iowa soybean field research plots, located near the Iowa State University campus. On June 8, an entomologist with Iowa State University (ISU), reported the discovery of 7 aphids (1 winged and 6 wingless) after careful examination of 1,080 soybean plants. Additionally, limited numbers of soybean aphids on soybean plants have been observed near Decorah, in northeastern Iowa and larger densities have been reported in at least one soybean field in southeastern Iowa. To date, we have not confirmed any soybean aphid infestations in Wisconsin, however, we anticipate this will follow shortly. In Wisconsin the first soybean aphids of the season are generally spotted by mid-June in Rock or Walworth Cos. (Information in this aricle came from University of Illinois Extesnion: The Bulletin, No. 11 Article 4/June 4, 2004 & No. 12 Article 6/June 11, 2004, by Mike Gray).

Forages

Potato leafhopper – Nymph production is in progress, as sweep net counts of adults continue to rise. The first sighting of nymphs was reported on June 5 by a DeForest resident (Dane Co.) who observed a single individual on the underside of a leaf, performing the "side-step" movement characteristic of potato leafhopper nymphs. For readers who may be unfamiliar with the potato leafhopper, the nymphs move in a side-to-side pattern when disturbed, rather than moving forward or backward like most other insects. This observable trait makes the tiny, bright green potato leafhopper nymphs discernible from the myriad of other similar looking tiny, green organisms caught in sweep nets.

Potato leafhopper nymphs were not observed in the Columbia, Dodge, Fond du Lac and Sheboygan Co. fields surveyed; it is more than likely, however, that production is in full swing in southern Wisconsin counties. Review economic thresholds and monitor potato leafhopper activity closely in the weeks ahead. Potato leafhopper injury to second crop regrowth is not an uncommon event in Wisconsin.

Alfalfa weevil – Populations remain high in unharvested fields in the southern half of the state. Tip feeding in Columbia, Dodge, Washington and Ozaukee Co. fields averaged 80%. Surveys in Fond du Lac and Sheboygan counties showed several scattered problem areas, where tip feeding levels averaged 65%. Counts of 7-18 larvae per sweep were detected in the counties listed above. Adults appear to be declining in number, but as of this week, are still present in all of the fields surveyed. According to a few recent reports, growers in the northern districts are not experiencing the same heavy weevil pressure as growers in southern Wisconsin, and levels of tip feeding are mostly low. While this is an encouraging report, growers, even those in northern and central part of the state, are urged to continue to closely monitor regrowth to ensure progress isn't delayed by heavy weevil feeding.

Height of Alfalfa (inches)	Ave. # PLH per Sweep (adults & nymphs)
<3	0.2
3-6	0.5
6-12	1
12-14	2

Plant bug – The nymphs of several species of plant bug were observed in fields this week. Among those present were the rapid plant bug, the alfalfa plant bug, and an abundance of the tarnished plant bug individuals. Counts ranged from 3-8 adults/nymphs per sweep, averaging 3.9 per sweep.

Meadow spittlebug – A few adults and many nearly mature nymphs were swept in southeastern fields this

week, indicating that the population in southern Wisconsin is reaching adulthood. Nymphs in east central district are not far behind in development; adults should be visible sometime next week. There is only one generation of meadow spittlebugs per year in Wisconsin and only the nymphs are considered to be economically important. While adults will hang around for the remainder of the summer, they do not feed and will not cause additional problems for growers.

Pea aphids – Populations in east central Wisconsin were moderate to high, ranging from 16-43 adults and nymphs per sweep in Columbia, Dodge, Fond du Lac, and Sheboygan Co. alfalfa fields.

Vegetables

Potatoes -- The potato crop appears to be off to a good start with minimal problems from **seedpiece decay** and **Rhizoctonia stem canker**. The biggest disease concern at the present is the rapid accumulation of severity values at most monitoring stations. At the moment, **no late blight** has been reported anywhere in Wisconsin, in spite of having ideal weather conditions for infection and spread. Let's hope that we did not introduce the late blight pathogen into the state at planting. Once again, make sure that all cull piles are buried or at a minimum not sprouting to produce green tissue. This goes for potatoes being removed from storage and for remnants from the cutting operations. For those potatoes being spread, crushing or chopping the potatoes will encourage decay and hasten the decomposition of the tuber material. The last thing growers need is large numbers of non sprayed volunteer potatoes that can serve as infection sites for the late blight pathogen later in the summer.

Two weeks ago we began seeing the rapid accumulation of severity values and suggested that commercial acreage should be treated with a protectant fungicide at the lower label rates. This recommendation continues until either late blight appears or we reach 300 P-Days when we become more interested in early blight management.

Current P-Day and Severity Value Accumulations for 2003

(http://www.plantpath.wisc.edu/wivegdis/index.htm)

Location	Calculation Date	P-Day Total	Severity Value Total
Antigo emerging June 4	8-Jun	22	0
Grand Marsh emerging 5/12	8-Jun	165	26
Grand Marsh emerging 5/17	8-Jun	141	20
Grand Marsh emerging 5/22	8-Jun	106	16
Hancock emerging 5/12	8-Jun	163	23
Hancock emerging 5/17	8-Jun	140	17
Hancock emerging 5/22	8-Jun	105	13
Plover emerging 5/11	8-Jun	171	23
Plover emerging 5/25	8-Jun	89	6

Snap Beans -- Since 2000, a high incidence of virus related diseases has plagued the processing bean industry in the Midwest. While the initial problems in 2000 were more or less confined to eastern WI and the Cambria area, virus problems were observed throughout southern and eastern WI during 2003. The primary vector of viruses such as cucumber mosaic virus (CMV), alfalfa mosaic virus (AMV) and clover yellow vein mosaic (CYVM) appears to be the soybean aphid that first appeared in WI in 2000. While other aphids are capable of transmitting these viruses in WI, it is the high number of the soybean aphid that implicates this aphid in the virus problems observed on snap beans. The symptoms of virus related diseases on snap beans are observed each year since 2000 about 2-3 weeks after the soybean aphids take flight and begin moving through the countryside feeding and probing the various plants, some of which are hosts for the viruses listed above. Given the high populations of the soybean aphid during 2003, increased attention is being paid to aphid numbers on soybeans in states to our west and south as well as in Wisconsin. Already this year, there are reports from Iowa that the soybean aphid has reached treatment threshold on soybeans that are only a few inches tall. While I can't predict the virus or aphid intensity this coming summer, this information from Iowa should give us pause for considering the timing and location of plantings for the most susceptible snap beans. (Walt Stevenson, UWEX)

Onion thrips (*Thrips tabaci*) – This species of thrips is an important pest of onions and onion relatives, as well as several other crops, in most parts of the world. In Wisconsin, onion thrips attack cabbage, cauliflower, snap beans, cucumbers, melons and tomatoes. Thrips are among the tiniest of insects, growing no more than 2 mm long. The nymphs are white or yellow, and the winged adults are either yellow or brown in color. Thrips damage plants by piercing the tissue and releasing a pre-digesting substance. The thrips then suck up the digested plant part. Damage to onions appears as silvery patches and streaks, and increases the chance of disease and water loss.

A publication from North Carolina Extension reports that a generation of thrips can develop in 191 DD (base 53°F), which may accumulate in a period of 14-30 days, depending on temperatures. In Wisconsin, most areas have probably had several generations by now. Populations are currently being kept under control by the wet, cool weather. Rain may also have helped to wash the insects from the plants, thereby further reducing populations. Nonetheless, a few hot dry days could

increase activity considerably. Chemical control of this pest is difficult. Cleaning plant debris from fields now could help prevent an outbreak in the future. Adults can be monitored by the use of yellow or white sticky traps. Also see UW-Extension and NC-Extension publications below for more control information.

Small Grains

Septoria on wheat — Survey efforts in a dozen wheat fields from Green Co. to Calumet Co. show a crop with no **loose smut**, very little **leaf rust** (traces in two fields, one in Waushara Co. and one in Dane Co.), three fields with **powdery mildew** (Lafayette, Manitowoc and Walworth Cos, with heavy disease only in Manitowoc) and widespread infection with **Septoria leaf blotch**, ranging from 60-100% incidence and severities from three to 10 percent.

Armyworm – Conspicuous infestations of armyworm activity in wheat have not been documented in Wisconsin so far this season, but Illinois growers are reporting several scattered problem areas, where armyworm infestations in wheat fields ranged from 2-8 larvae per foot of row (University of Illinois Extension, The Bulletin: No. 11 Article 1/June 4, 2004 by Mike Gray). When Illinois talks about pests, we should listen, primarily because these pests may be heading our way. In another area of Illinois, 95% of the flag leaves in corn fields have reportedly been devoured, and 10-12 armyworm larvae per foot of row were detected. Finally, in Wisconsin black light trap catches of armyworm moths have been consistent this season, and numbers of larvae are on the rise in alfalfa fields, suggesting that localized infestations could occur. Continue to be on the alert for armyworms and their feeding in wheat. Univeristy of Illinois Extension recommends considering a rescue treatment when armyworms reach densities of 6 or more nonparasitized armyworms (3/4 to 1-1/4 inches long) per linear foot of row.

Forest, Shade Trees, Ornamentals and Turf

Hosta virus X (HVX) – This is apparently a commonly occurring virus of hostas (Hosta spp.) in the U.S. It was found on 'Golden Tiara', 'Blue Edger' and 'Montana' at a nursery dealer in St. Croix Co. The susceptibility of varieties varies but from a search on Google it appears that Gold Standard varieties are hardest hit. This virus may be mechanically transmitted as well as spread through divisions of infected plants. No insect transmission has been found so far. Management of HVX includes eliminating HVX-infected susceptible cultivars and using planting distances that minimize the possibility of mechanical spread of HVX. An abstract of a paper on HVX can be found at http://www.actahort.org/books/568/568_8.htm Typing "hosta virus x" at Google will bring up a wealth of information.

Euonymus caterpillar – Half-inch caterpillars were found on burning bush at a nursery grower in Green Lake Co. The euonymus caterpillar spends the winter as a newly hatched caterpillar under its eggshell. In the spring the caterpillars begin to feed gregariously on the new foliage making a web around the foliage. As the caterpillars grow they expand their web to eventually encompass whole branches. Full grown caterpillars are about ¾ of an inch long. Cocoon formation occurs in late June. The adults emerge in late June to early July. There is one generation per year.

Balsam twig aphid – Moderate damage from these insects was throughout a field of balsam fir at a Christmas tree grower in Lincoln Co. See last week's Wisconsin Pest Bulletin for more information.

Four-lined plant bug – Localized but moderate amounts of damage were observed on wiegela at a nursery grower in Green Lake Co.

Fletcher scale – Moderate numbers of scales were found on 'Tauton' yews at a nursery dealer in St. Croix Co.

Thrips – Trace numbers of thrips were found on phlox and marigolds at a nursery dealer in Jackson Co. Moderate numbers were seen on various apple varieties at a nursery dealer in Eau Claire Co.

Septoria leaf spot – Light to moderate amounts of leaf spotting by this fungus were found on variegated dogwood and pagoda dogwood at nursery dealers and growers in Green Lake, Racine and Waukesha Cos.

Apple scab – This fungal pathogen is coming on strong now. Defoliating is starting to occur on susceptible crabapple varieties in the Madison area. It was observed at levels ranging from light to heavy on apple and crabapple varieties at nursery dealers in Barron, Green Lake, Monroe, Price, Racine and Waukesha Cos. see Extension Publication http://www.uwex.edu/ces/wihort/gardenfacts/X1007.pdf for more information on control.

Broom rust – Small numbers of brooms were observed on balsam fir at a Christmas tree grower in Lincoln Co. This rust fungus can infect balsam, fraser and white fir. Its alternate host is chickweed. Begin scouting for this disease in June. Look for short, thick, upright shoots that have stunted, thickened, pale green needles. In July and August rust pustules form on the underside of the broom needles. In the spring, rust spores on chickweed are blown onto the buds, which subsequently infect the branch. A year later the stunted, thickened shoots appear. Shoots within the broom will continue to produce needles each year and those needles will produce spores

each year. Cut brooms off of infected trees. As the foliage dries out the fungus will die, therefore there is no need to burn the brooms. There are no fungicides specifically labeled for broom rust.

Entomosporium leaf spot – Black chokeberry at a Waukesha nursery dealer had moderate amounts of this fungal pathogen. See last week's Wisconsin Pest Bulletin for more details on this disease.

Sclerotinia blight (*Sclerotinia sclerotiorum*) – This disease was diagnosed by the Plant Industry Lab on wave petunias from a nursery dealer in Marathon Co. It was found in moderate amounts in localized areas throughout the greenhouse on petunia leaves.

Venturia shoot blight – Potted aspen trees at a nursery grower in Green Lake Co. had moderate amount of shoot death due to this fungus. Several fungi may cause similar symptoms but the biology is the same. Primary infections are often caused spores from stems infected the year before. Infection can also be caused by spores from previously infected leaves on the ground. Only the young shoots and leaves are susceptible to infection. Densely crowded trees are more likely to be infected with this fungus.

Bacterial leaf spot and blight – Moderate amounts of leaf spotting were occurring on lilacs in Ashland Co. and on hydrangea in Green Lake Co.

State/Federal Programs

Gypsy Moth Trapping Program -- Trappers are continuing to set traps statewide despite the wet weather. As of June 9, trappers have set over 12,000 traps or 40% of the expected total. Many counties have been completed and more will be finished each week. All traps should be up by July 4th. Wet roads have restricted access to some trap sites in the state. Trappers will wait as long as they can to try to get access to these wet sites. If they cannot gain access, those traps will be omitted from the database.

For more information on the GYPSY MOTH TRAPPING PROGRAM, please call our hotline at 1-800-642-MOTH or visit the Department of Agriculture, Trade and Consumer Protection website and do a search for Gypsy Moth.

Gypsy Moth Tree Banding- Since their hatch a few weeks ago, gypsy moth caterpillars have been busy munching on their favorite tree species and growing rapidly. Gypsy moth prefers to eat the following species: oak, basswood, aspen, birch, crabapple and apple, willow, tamarack, hawthorn, witch hazel and alder. When populations get high enough, however, almost anything green can become dinner. Homeowners and park managers will benefit from using sticky barrier bands to help protect the trees near their homes or recreation areas.

Many caterpillars fall out of their tree during dispersal and you can prevent them from getting back up there to do damage. Sticky or barrier bands entangle small caterpillars as they head up into the trees to feed. To make a sticky band, wrap duct tape around the trunk of your trees to create a band at least 6 inches wide. Smear Tanglefoot or other pest barrier over the duct tape. These products can be purchased at local garden centers or hardware stores. Small caterpillars are caught in the sticky substance, and larger caterpillars will be unable to reach the branches to feed.

To watch a short video clip on how to make a sticky barrier band, see http://www.uwex.edu/ces/gypsymoth/barrierband.cfm.

Remember, even if your property was treated with an insecticide, it is still important to use sticky bands and other control methods to keep your trees alive and healthy.

If you'd like to learn more about gypsy moth, see the website gypsymoth.wi.gov or call 1-800-642-MOTH.

Fruit

Codling moth – Timing effective spray applications to achieve control of this pest has proven to be a challenge for growers this season. The combination of frequent and heavy rains combined with the artificial rise in pheromone trap counts during the first flight of moths has made it difficult to determine precisely when to apply sprays. Further, the rainfall has rendered spray applications and mating disruption technology ineffective in various orchards. Some apple growers have found it necessary to make two or three applications to achieve a normal amount of control. As we continue to get rain in the days ahead, growers should note that most protection from sprays will be lost and another application may be needed in regions where three or more inches of rain have fallen in a week's time.

Additionally, apple growers who observed a conspicuous decline in codling moth trap counts, followed by a low, but consistent resurgence in numbers, should be aware that these moths are still technically from the "first flight". The second flight of moths is not expected to begin until 873-1296 DD have been reached.

Last, growers using some of the newly available products (Calypso, Assail, etc.) as an alternative to organophosphates should contact their chemical sales representative for recommendations on how to best use these products given the current weather conditions. Some of these products cannot be used back to back, and must be rotated with an organophosphate.

According to the growing degree day model available for codling moth, the first flight of moths has peaked throughout southern Wisconsin and as far north as Port Edwards in Wood Co., wherever 500 DD (base 50°F) have accumulated. Egg hatch has reach 50% completion near Beloit and Lone Rock, and should occur in the Madison area over the weekend (once 713 DD have accumulated). The second flight of moths is not expected to begin until 873-1296 DD have been reached. This event could occur in Racine about June 27, in Madison by June 22 and in Eau Claire by July 1.

Spotted tentiform leafminer – The second flight of moths is beginning near Hancock and as far north as Eau Claire, wherever 539-750 DD (base 50°F) have accumulated. Expect the peak of the second flight to occur once 1150 DD have been reached.

Plum curculio – Continue to watch for adult in orchards. The 5-7 week window in which plum curculio emergence is expected to occur has not yet passed entirely.

Obliquebanded leafroller – The first OBLR have been caught this week. Growers in southern Wisconsin will want to begin scouting for larval hatch next week. The growing points of terminals are the best place to look. Terminal infestation of 5% is the recommended action control threshold (Information from John Aue, Orchard IPM Specialist).

Apple maggot – Considering that much of the state has received a surplus of moisture this season, apple insect trapping cooperators should place apple maggot traps (red balls and yellow sticky boards) next week to catch the earliest emerging flies. Place traps at eye level and in a highly visible place; traps only work when apple maggot flies are able to make visual contact.

Odds -n- Ends

New **Golden Nematode (GN)**, *Globodera rostochiensis*, Detection in New York -- There has been a new detection of Golden Nematode (GN), *Globodera rostochiensis*, that was confirmed by Dr. Zafar Handoo, USDA-ARS Nematologist in Beltsville, Maryland. The detection was on a 114.7 acre potato field located in Cayuga County, New York, near the town of Port Byron, one half mile outside the existing GN quarantine area.

The detection was made on a field operated by a grower who has multiple potato production fields located both within and outside the GN quarantine area. The land farmed within the GN quarantine is managed in accordance with the regulations. Since the new GN detection is in a field located outside the existing quarantined area, APHIS is taking necessary steps to add this field to the regulated area.

GN was first discovered in the United States in 1941 when it was found to be responsible for serious crop damage in a potato field on Long Island, New York. Because of an effective State-Federal quarantine which has been in existence for over 50 years, GN remains confined to portions of nine counties within the State of New York. (North American Plant Protection Organization)

Mosquitoes – The abundance of sodden fields and waterlogged landscapes this season is providing ample amounts of suitable habitat for breeding mosquitoes. Problems are being reported statewide, particularly in areas near major waterways and wetlands. Mosquito pressure may increase in the immediate future as mosquitoes disperse from breeding sites to residential areas.

Calendar of Events

June 15 North East Wisconsin Potato Educational Meeting Knights of Columbus Hall, Antigo, WI Information on handling potatoes coming out of storage to minimize late blight risks and more. Contact Ken Williams at 715-627-6236 or email ken.williams@ces.uwex.edu

June 23 Forage Field Day Arlington Agricultural Research Station. For more information call 888-698-3326.

June 23 MOSES Organic Basics Training. "Organic Apple Production". Keith Kozub Farm, River Falls, WI. 10 am- 3 pm. $15 fee (includes lunch and materials). For more information and to register, contact Deirdre Birmingham at deirdreb@mindspring.com or 608-873-8224.

June 26 – 27th, 2004 Wisconsin Berry Growers Association Strawberry Festival
8am - 3pm both days, (farm opens for U-Pick at 7am)
FREE ADMISSION
Kirschbaum's Strawberry Acres, N5802 Hwy 151, Beaver Dam, Wisconsin

June 30 Summer Field Day Marshfield Agricultural Research Station "South Farm"
8396 Yellowstone Drive, Marshfield
Call 715-387-2523 for more information

July 1 Soybean Aphid Management Field Day
Lancaster Agricultural Research Station. Contact (608) 723-2580

July 12 MOSES Organic Basics Training. "Organic Vegetable and Flower Production". East Troy, WI at the Michael Fields Agricultural Institute. 9am-2:30 pm. $10 fee for noon meal. For more information and to register, contact Jody at jody@mosesorganic.org or 715-

667-3203.

July 13 Potato Field Day, Hancock Agricultural Research Station. For more info, call (715) 249-5961.

July 15 CSA Vegetables Field Day. North Creek Community Farm, Prairie Farm, WI. Contact Karen Stettler, 507/523-3366 stettler@landstewardshipproject.org

July 15 Field Crop Pest Management Field Day Arlington Agricultural Research Station. Contact 888 698-3326 for more information.

July 15 Wisconsin Arborists Association Summer Workshop. Janesville, WI at Rotary Gardens. Contact Dave Graham (608)756-5561 or email dwgco@tcon.net

August 5 Crop and Pest Management Workshop Arlington Agricultural Research Station 10:00 a.m.-3:30 p.m.$30 (includes lunch). For more information or to register, contact Dan Heider at (608) 262–6491 or via email at djheider@wisc.edu.

August 5-7 WI Christmas Tree Convention Central Wisconsin Evergreens, Merrill WI For more information, call WCTPA at 608-742-8663

August 10 Crop and Pest Management Workshop Marshfield Agricultural Research Station 10:00 a.m.-3:30 p.m.$30 (includes lunch). For more information or to register, contact Dan Heider at (608) 262–6491 or via email at djheider@wisc.edu. (Repeat of Aug. 5 workshop.)

August 11 Crop and Pest Management Workshop Chippewa Falls 10:00 a.m.-3:30 p.m.$30 (includes lunch). For more information or to register, contact Dan Heider at (608) 262–6491 or via email at djheider@wisc.edu. (Repeat of Aug. 5 workshop.)

August 18 Vegetable/Horticulture Tour Spooner Agricultural Research Station. For more information, contact (715) 635-3735

August 19 Vegetable/Horticulture Tour Marshfield Agricultural Research Station. For more information, call 715 387-1723

August 22-27 11th International Cereal Rust and Powdery Mildew Conference Norwich, England. Information at http://www.jic.bbsrc.ac.uk/events/RustAndMildew/

Apple Insect Trapping Results (through June 10)

	Date	STLM	RBLR	CM	OBLR	PC
Grant Co.						
Cuba City	6/3-6/10				2	
Sinsinawa	6/4-6/11	32				
Crawford Co.						
Gays Mills-E2	6/3-6/10	23	3	14	1	
Gays Mills-W2	6/1-6/8	5	0	1	0	
Iowa Co.						
Dodgeville	6/4-6/10	33	0	0	0	
Richland Co.						
Hill Point	6/3-6/7	4	0	4	12	
Richland Center -W	6/3-6/10	87	7	2	6	
Richland Center-E	6/3-6/10	30	11	7	4	
Sauk Co.						
Baraboo	6/3-6/10	14	2	1	0	
Dane Co.						
W. Madison	6/3-6/10			1		
Deerfield	5/26-6/8	9	0	10	1	
Green Co.						
Brodhead	6/2-6/9	0	0	1	0	
Kenosha Co.						
Burlington	6/3-6/10	7	0	1.5	0	
Racine Co.						
Rochester	6/4-6/11	41	0	19.6	27.5	
Waukesha Co.						
Waukesha	5/29-6/4			2		
Pierce Co.						
Beldenville	5/30-6/5	3	0	0	0	
Spring Valley	6/4-6/11	3	5.5	1	0	0
Marquette Co						
Montello	5/30-6/6	3	39	0	0	0
Fond du Lac Co.						
Malone	6/3-6/10	0	0	3	0	
Rosendale	6/3-6/8	43	6	2	1	
Sheboygan Co.						
Plymouth	5/28-6/3	2	0	16	0	
Marinette Co.						
Wausaukee	6/4-6/11	11	0	2	0	0

STLM--Spotted tentiform leaf miner; RBLR--Redbanded leaf roller;CM--Codling moth;OBLR--Oblique banded leaf roller; AM--Apple maggot

Black Light Trapping Results

through June 10

Trap Site	Date	European corn borer	Armyworm	Black Cutworm	Variegated Cutworm	Spotted Cutworm	Celery Looper	Corn Earworm	Forage Looper
Southwest									
Rochele, IL	6/4-6/11	14 *							
Lancaster	6/3-6/10	46	22	2		10	4		
South Central									
W Arlington	6/5-6/10	45	4		13	4			
W Arlington	5/29-6/4	2	3		6	3			
W Madison	6/3-6/10	NA	12			2			
Mazomanie	6/3-6/10	53		2		3	2		
Central									
Marshfield	6/3-6/10	1	7	0	0	1		0	9
Plover	6/3-6/10	27							
Plainfield	6/3-6/10	4							

* flight began 6/7

Department of Agriculture,
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Division of Agricultural Resources Management
PO Box 8911
Madison WI 53708-8911

Web Site of the Week

http://www.msue.msu.edu/fruit/michfrt.htm

Michigan State University Fruit Web Sites

The portal to the extensive MSU fruit web sites, including access to the outstanding Fruit Crop Advisory Team Alert newsletter.

Quote of the Week

"There is a concatenation of all events in the best of possible worlds; for, in short, had you not been kicked out of a fine castle for the love of Miss Cunegund; had you not been put into the Inquisition; had you not traveled over America on foot; had you not run the Baron through the body; and had you not lost all your sheep, which you brought from the good country of El Dorado, you would not have been here to eat preserved citrons and pistachio nuts."

"Excellently observed," answered Candide; "but let us cultivate our garden."

Voltaire (1694 - 1778), "Candide"

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