

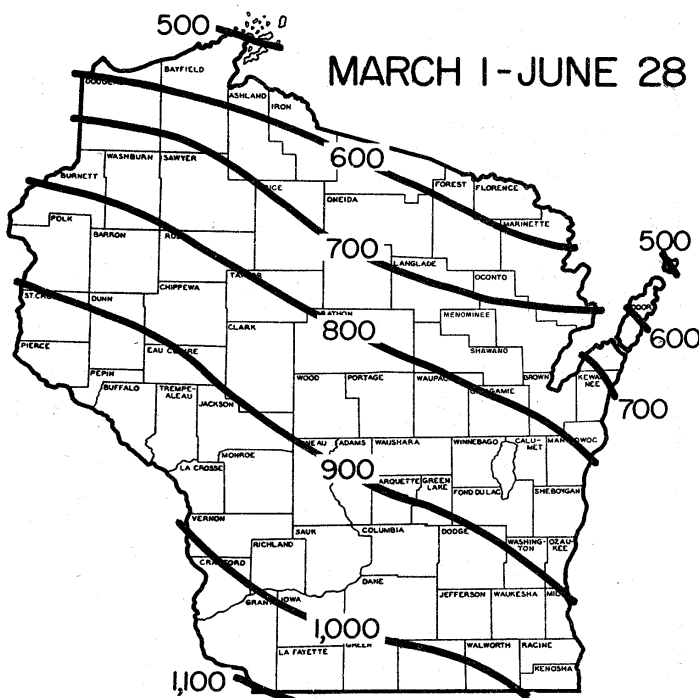
Weather and Pests

In keeping with the weather trends over the last month, the weather this week was highly inconsistent. The week began on a warm, dry note, but severe thunderstorms mid-week drenched fields and brought significantly cooler temperatures. Corn conditions are variable; some fields have developed a healthy, dark green hue, while others remain spotty and chlorotic. Excess moisture is still a problem in many areas and continues to interfere with alfalfa harvest and other field work. While the rains and cooler temperatures have helped to slow insect activity,

Growing degree days from March 1 through June 24:

Site	GDD*	2003 GDD	Normal GDD	Base 48	Base 40
SOUTHWEST					
Dubuque, IA	1017	870	1035	1066	1797
Lone Rock	923	871	944	974	1676
SOUTH CENTRAL					
Beloit	988	843	976	1030	1750
Madison	884	819	943	938	1629
Sullivan	904	777	913	940	1648
Juneau	860	757	857	900	1598
SOUTHEAST					
Waukesha	845	698	899	883	1579
Hartford	804	697	859	842	1526
Racine	767	610	896	814	1474
Milwaukee	735	615	873	779	1426
EAST CENTRAL					
Appleton	645	713	760	694	1297
Green Bay	578	591	723	626	1213
CENTRAL					
Big Flats	771	828	858	804	1466
Hancock	732	811	849	763	1409
Port Edwards	683	768	844	703	1331
WEST CENTRAL					
LaCrosse	914	876	925	942	1667
Eau Claire	737	856	845	761	1405
NORTHWEST					
Cumberland	554	752	794	540	1116
Bayfield	389	525	472	370	852
NORTH CENTRAL					
Wausau	588	694	766	602	1170
Medford	547	670	749	559	1109
NORTHEAST					
Crandon	510	594	652	509	1036
Crivitz	512	617	632	527	1077

*GDD above base 50 with 86 deg. upper limit



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

disease symptoms, namely head scab of wheat and phytophthora root rot, have grown evident in some fields.

Looking Ahead

European corn borer – The first flight of moths continues throughout the state, but declining black light trap catches indicate activity is slowing. Southern districts are entering the period during which control for first generation corn borer larvae is most effective, between 800 and 1100 GDD (base 50°F). This week's surveys found no fields warranting control measures.

Corn rootworm – The first adults of 2004 could begin emerging in the next week or two at some advanced southern sites. The greater part of the population typically begins to appear during the first two weeks of July.

Bean leaf beetle – More defoliation was noted in soybean fields this week. In south central fields 10%-42% of the plants showed light amounts (5%-20%) of defoliation. No more than 4 beetles per foot of row were detected in the fields surveyed.

Soybean aphid – All's quiet on the soybean aphid front. No reports of aphids were received this week. At this time last year aphids were widespread throughout southern Wisconsin and colonies were beginning to form in the central counties. In spite of the current absence of aphids, continue to scout emerging soybean fields.

Corn earworm – Moth flights are on the increase in Illinois. Look for corn earworm moths to appear in black light traps at southern Wisconsin localities by next week.

Soybeans

Bean leaf beetle – As more soybean acreage emerges throughout the state, continue to monitor fields closely for bean leaf beetle activity. Defoliation severity in Iowa and Green Co. fields ranged from 5%-20% this week, and 10%-42% of the plants in the fields surveyed showed signs of defoliation. Bean leaf beetles were observed at the rate of 0-4 per foot of row. While these levels of defoliation and numbers of beetles are not near threshold levels, they do suggest that bean leaf beetle activity could grow to damaging levels later this season. Monitoring first generation beetle activity in the weeks ahead will be the best way to forecast where problems that could arise later in summer, when the second generation beetles may damage plants during pod set and fill. For more information on bean leaf beetle in Wisconsin, please see the following article by John L. Wedberg and Craig Grau, Extension Entomologist and Extension Plant Pathologist, at

<http://www.plantpath.wisc.edu/soyhealth/BLBEETLE.HTM>

Soybean aphid – At this time last year aphids were widespread throughout southern Wisconsin and colonies were beginning to develop as far north as the central counties. This season we have yet to receive any reports of soybean aphid activity in Wisconsin fields. Despite the current absence of aphids, continue to scout emerging soybean fields. Regular monitoring is needed to help determine when aphids first appear and if the population is actively increasing. Soybean aphids are expected to appear in the very near future, and populations could rapidly build to damaging levels if conditions turn favorable. Currently, the Midwest soybean aphid action threshold is set at 250 aphids per plant, when the population is actively increasing and the soybean plant is in the late vegetative through early reproductive (R1-R4) growth stages. Treating beyond R6 (full seed) is not recommended.

Corn

European corn borer – The treatment window for first generation corn borer larvae has opened in southern counties, wherever 800 DD (base 50°F) have accumulated. Treatments in the southern and lower west central districts should be effective at least until July 13 near Madison, as long as first generation larvae are feeding inside the whorls where they are susceptible to insecticides. Once larvae reach the 3rd instar and begin tunneling into the stalks, effective control is difficult to achieve. While sprays can be applied as early as 800 DD, treatment of the first generation is most effective when growing degree days for the season approach 1000-1100 DD (base 50°F). Control beyond 1100 DD (base 50°F) is strongly discouraged.

Surveys this week found no fields with infestations of corn borers high enough to warrant control treatments. In fact, no more than 12% of the plants were affected in any of the Green and Iowa Co. fields surveyed. Both 1st and 2nd instar larvae were present. Unfavorable weather conditions this week could spell trouble for what appear to be an already light first generation of corn borers (that's good news for us); excessive rainfall is a known cause of mortality for larvae feeding in the whorl. While populations appear low at this time, heavy infestations may develop in susceptible fields.

Treatment in field corn is suggested for first generation corn borers when larval feeding is observed on 50% of the plants. The treatment threshold for fresh market sweet corn is necessarily much lower; 1 egg mass per 10 plants is commonly used. An insecticide should be applied when the first black-head or hatched eggs are observed. Once treatments are begun, repeat every 5 days or as needed, as long as 1 unhatched egg mass per

10 plants can be found (treatment recommendations described above are from the Insect Survey Manual for Crops of the North Central States, First Edition-1981).

Armyworm – Activity has slowed temporarily in southern Wisconsin, and it appears the first flight is winding down. Continue to scout for armyworm damage in the weeks ahead. In Wisconsin, the largest numbers of moths generally appear in July, and these moths may give rise to an abundance of larvae.

UW-Extension recommends the following procedure for scouting for armyworm in corn: Take at least 10 random samples of 20 plants and record the number of damaged plants. Note the number of rows severely damaged, the abundance of worms already in the field, and most importantly, the number of larvae still in the adjacent field or fence row serving as the source of the infestation. If the number of armyworms suggests possible defoliation of more than 3 rows, treat the outer 8 to 10 rows on that side of the field and the area giving rise to the infestation (UW-Extension publication A3327-The Armyworm). For additional information on economic thresholds and control, see UW-Extension publication A1684-Pest Control in Corn.

Corn rootworm – Damage caused by larvae feeding on corn roots should grow visible in the coming weeks. Very few signs of corn rootworm feeding have been noted thus far this season. Cool, wet soil conditions may have helped to reduce numbers of larvae. Nonetheless, there are likely to be scattered problem areas throughout the state this season. Growers who suspect heavy corn rootworm pressure in their fields may want to consider appraising the extent of larval damage in the next 2-3 weeks. Surveying for root damage should be done during the first 2 weeks of July, when injury is expected to be nearing the maximum for the season. The protocol is as follows: pull or dig up 10 widely separated, randomly selected corn plants and examine the root systems. Rate the root systems according to the table below. Growers should not see more than a few roots pruned back to within 2 inches of the plant stem. In addition to larval damage becoming evident in the weeks ahead, growers can also anticipate the appearance of adults during the first or second week of July. As adults begin emerging it will be important to monitor beetle activity and silk feeding. Corn rootworm beetles damage corn by feeding on fresh silks and interfering with the pollination process. After pollination is complete, silk feeding is of little significance.

Stalk borer – Some southern fields are showing signs of increasing stalk borer infestations. Infestations ranging from 5%-19% were detected in Green Co. fields, and some Iowa Co. fields had 4%-13% infestations. Larvae in these counties were predominantly in the 4th instar.

Forages

Potato leafhopper – Relatively little potato leafhopper activity was noted this week. Numbers were low in the south central district, where sweep net counts of fewer than 2 adults/nymphs per sweep were common. Numbers were even lower in central Wisconsin, where counts of 0-0.3 per sweep were observed in Adams and Marquette Co. fields. Heavy rainfall and cooler temperatures this week have likely slowed nymph production for the time being.

Alfalfa weevil – Numbers of larvae in second crop regrowth are declining due to pupation. Varied levels of tip feeding were visible in south central fields this week (generally less than 40%), and populations of late instar larvae in Green and Iowa Cos. did not exceed 3 per sweep. While populations are now mostly low in southern counties, east central and northern fields may still be subject to damaging populations. Continue to check regrowth for larvae and tip feeding injury.

Vegetables

ROOT RATING SCALE

- | | |
|---|---------------------------------------------------------------------|
| 1 | No injury, or only minor scars. |
| 2 | Some feeding scars, but no roots eaten off within 1.5" of the plant |
| 3 | Several roots eaten off to within 1.5" of the plant. |
| 4 | One node of roots (or equivalent) eaten off. |
| 5 | Two nodes of roots eaten off. |
| 6 | Three nodes of roots eaten off. |

From Insect Survey Manual for Crops of the North Central States, First Edition-1981

Cercospora leaf spot on carrot - Carrots are off to a good start in some areas and facing stress in other areas that were affected by rainfall over the past month. The first lesions were identified on a sample from south central Wisconsin, about 3 weeks ahead of last year. Considering weather conditions have been favorable for disease development over the past month, it is not surprising. Initiation of protectant fungicide sprays will help to minimize spread of this disease.

Late and early blight of potato - There are still no reports of late blight from WI acreage and to the best of our knowledge, no reports of late blight in the upper Midwest. That's good news and a solid footing for the next phase of the growing season. Weather conditions

continue to be favorable for disease development although the rate of increase in severity values slowed considerably over the last seven days. Based on long range weather projections, the worst of the weather may be over for awhile. Early blight is beginning to show up in scattered fields. Now is a critical time to check petiole nitrate levels and to make midcourse adjustments to keep these levels up for the short term. Remember that foliage that is nitrogen deficient is more susceptible to infection by the early blight fungus than is foliage with adequate nitrogen.

Most growers are into their fourth week of fungicide treatments. We are approaching 300 P-Days in central WI and are suggesting that this is the time to treat with one of the strobilurin fungicides such as Quadris, Amistar, Headline or Tanos for early blight control. We suggest that in the interest of resistance management, the strobilurin materials be tank mixed and alternated with one of the protectant materials such as chlorothalonil, mancozeb or metiram. We strongly recommend no back to back treatments with any of the strobilurin materials. Our data suggest that up to three strobilurin treatments early in the season in alternating treatments beginning at 300 P-Days are enough to give us the control and yield benefits associated with the strobilurin materials. We continue to carefully monitor the strobilurin resistance factor and to collect additional samples of early blight lesions.

If you are having a particularly difficult time in the control of early blight, call 608-262-6291 so that your field can be included in the survey. -Walt Stevenson, UW-Madison Plant Pathologist

Small Grains

Current P-Day and Severity Value Accumulations
<http://www.plantpath.wisc.edu/wivegdis/index.htm>

Location	Calculation Date	P-Day Total	Severity Value Total
Antigo emerging June 4	6/23	137	11
Antigo emerging June 12	6/23	82	4
Grand Marsh emerging 5/12	6/23	285	49
Grand Marsh emerging 5/17	6/23	261	43
Grand Marsh emerging 5/22	6/23	226	39
Hancock emerging 5/12	6/23	282	48
Hancock emerging 5/17	6/23	258	42
Hancock emerging 5/22	6/23	223	38
Plover emerging 5/11	6/23	289	49
Plover emerging 5/25	6/23	207	32

Scab of wheat and barley – Survey observations and reports from a number of County Extension Agents indicate significant levels of scab this year, up to 30% or more of heads showing symptoms in some fields in Rock

and Columbia Cos, and incidence greater than 15% across most of the other counties surveyed or queried. This disease, caused by *Fusarium graminearum* and other *Fusarium* species, was considered a major threat to wheat at the beginning of the 20th century. *F. graminearum* also infects corn and frequently colonizes corn residue saprophytically, leading to enormous spore production potential in systems of reduced tillage and wheat following corn. The disease is also favored by wet weather. Spores infect newly-emerged heads. Wheat is most susceptible at flowering, though infection can occur at later growth stages. Early infection usually kills florets (and often entire heads), producing no seed or a stunted seed. Infection after flowering will allow infected kernels to develop. Wheat heads infected by *Fusarium* often show a characteristic bleached symptom.

In addition to the yield loss caused by the disease, infected grain may contain varying levels of mycotoxins. The most common mycotoxin associated with *Fusarium* infection is deoxynivalenol (DON), aka vomitoxin. Elevated DON levels in feed may cause vomiting or feed refusal in non-ruminant animals. Many elevators routinely test for DON, and blend grain to reach levels below injurious levels.

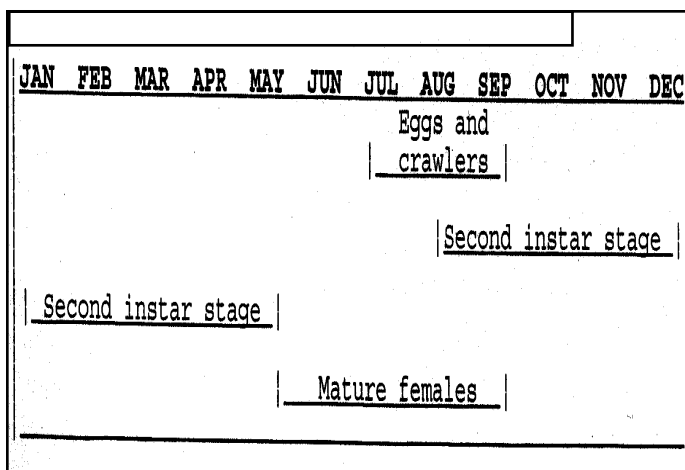
Forest, Shade Trees, Ornamentals and Turf

Obscure scale – An infestation of obscure scale was found at a nursery in Fond du Lac Co. Many limbs were dead or dying and encrusted with these small scales. Obscure scale, *Aspidiotus obscura*, is widely distributed in the United States but is most often a problem on the east coast and in the south. Its main hosts are oak, chestnut and hickory. It has been reported on other hosts but these reports are questionable. There is one generation per year; the males and females overwinter as second instar nymphs. In early May the scales begin to mature into adults and by July egg laying begins. The height of crawler activity is in July and August but females will continue to lay eggs into September. Adult scales are about 3 mm in diameter and blend in to the bark of the tree making identification difficult. Three factors make this insect difficult to control. First, eggs are laid over an extended period of time requiring repetitive insecticide applications. Second, the scales tend to settle close together on twigs and branches making insecticide penetration difficult and third, the crawlers often settle under their mother's scale covering or under other dead scale covers. The good news, there are many parasites and predators of this scale and rates of parasitism can be 50% in some instances.

Dogwood twig borer – Light amounts of damage were observed on highbush cranberry viburnum at a nursery in Fond du Lac Co. Contrary to its name, this borer's host range includes, in addition to dogwood, viburnum, elm,

sourwood, blueberry, rhododendron, laurel, poplar, willow and mulberry. Occasionally it attacks *Malus* and *Prunus* spp. Its distribution corresponds to that of flowering dogwood but has been found as far north and west as North Dakota. Adults emerge from late May to early August and egg laying peaks in June and early July. Eggs are laid 7 to 15 cm below shoot tips. The young larvae first bore towards the shoot tip and then bore down the stem again expelling frass through round holes chewed to the bark surface. Strands of frass the size of matchsticks can be seen clinging to the holes. This insect has a one year life cycle over much of its range but requires a two-year life cycle in Minnesota. Parasitism can be as high as 80% and woodpeckers also enjoy these scrumptious morsels. Chemical control is rarely warranted.

Viburnum crown borer – Heavy amounts of damage by this borer were noted on highbush cranberry viburnum at a nursery in Fond du Lac Co. This insect occurs over the



entire eastern United states and is found as far west as Illinois, Iowa and Wisconsin. The larvae bore into the crown and branches of various viburnum species. Larvae overwinter in tunnels carved out under the bark. They resume feeding in the spring and pupate as early as mid-May and continue through August. Adults emerge in June and can be active into September. Eggs are laid on the bark of the host plant near the crown. There is one generation a year. Left unchecked it can destroy vast amounts of viburnums in just a few years. Evidence of viburnum crown borer attack includes piles of frass at the base of viburnum plants, dead branches that crack off easily at the base and, most importantly, early fall coloration. Late leaf emergence in the spring may also be an indicator of infestation. This insect is difficult to control and there are no pheromones commercially available to monitor its activity. However, its adult flight period corresponds quite closely to the greater peach tree borer, which is attracted to the ash/lilac borer pheromone. Insecticide applications are timed for the adult flight period and applications should be made when

Spirea vanhouttei is at the very end of its blooming period (500-600 DD base 50).

Spruce needle drop – Moderate amounts of injury were noticed on Colorado spruce at a Fond du lac Co. nursery.

Honeylocust plant bug – At a nursery in Fond du Lac Co. moderate numbers of plant bugs were causing some leaf drop throughout their fields.

Thrips – Light to moderate amounts of thrips were seen on various apple varieties at nursery dealers in Douglas and Eau Claire Cos.

Cottony maple scale – Autumn blaze maples at a nursery in Fond du Lac Co. had moderate amounts of this insect infesting the branches. This scale overwinters as a partially grown female on the twigs and branches. In spring it produces hundreds of eggs under its scale covering which becomes enveloped in cottony white threads of waxy material. Eggs hatch in early summer and crawlers migrate to leaves. After mating in late summer the females return to twigs and branches to spend the winter. Production of copious amounts of honeydew can be a nuisance especially when outdoor items are beneath infested trees. Sooty mold can also grow on the honeydew making articles appear gray to black. Control of newly hatched crawlers should be timed when *Hydrangea arborescens* ‘Grandiflora’ is in full bloom (900-1200 DD base 50) and two weeks later.

Host virus X – Insepectors continue to find hosta infected with this virus at nursery dealers in the state. All of the plants originated from the Netherlands. The plants typically come into the country bareroot with no leaves : therefore no symptoms are observable at that time. This week 22 ‘Golden Tiara’ hosta were ordered removed and destroyed at a nursery dealer in Eau Claire Co.

Fireblight – Moderate to severe damage was found on flowering plum and mountain ash at a nursery in Fond du Lac Co. Sanitation and cultural practices are very important in reducing the incidence of this disease. See Extension Publication <http://www.uwex.edu/ces/wihort/gardenfacts/XHT1090.doc> for more information. Also see publications A1616, A3565, A2072 available from your extension office.

State/Federal Programs

Gypsy moth program - As of June 23, trappers have set 23,435 (73%) of the expected total number of traps. Thirty-three counties have been completed: Adams, Brown, Calumet, Columbia, Dodge, Eau Claire, Florence, Fond du Lac, Forest, Green Lake, Jefferson, Kenosha, Kewaunee, Lafayette, Manitowoc, Marquette, Milwaukee, Oneida, Outagamie, Ozaukee, Pepin, Portage, Racine, Rock, Shawano, Sheboygan, Walworth, Washington, Waukesha, Waupaca, Waushara,

Winnebago, and Wood. Trap setting will continue for one more week and most traps should be up by July 4th. There may be a few far northern traps to be set the week after July 4th. Trappers will start spot-checking traps in the southern part of the state after July 4th to help determine when the actual moth flight has begun. According to our computer model, adult gypsy moths will start appearing around July 19th in the southern and southwestern part of the state. The cooler weather has slowed down the development a bit but it will go quickly once warmer weather finally arrives.

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/>

Burlap bands - Gypsy moth caterpillars are growing rapidly and have become a nuisance in areas of eastern and central Wisconsin. Homeowners and park managers can employ a number of control techniques to help keep their trees alive and healthy. Last week we discussed sticky or barrier bands, and this week we'll discuss burlap banding.

Burlap bands are used to collect older, larger caterpillars. In June and July, gypsy moth caterpillars crawl down the tree trunk during the day to hide from predators. If you put up a burlap band, they will hide under that and you can collect and kill them easily. To create a burlap band for gypsy moth, cut a strip of burlap or other cloth material 12-18 inches wide and long enough to circle the tree trunk. Wrap the burlap around the tree at chest height. Tie a string around the burlap 6" from the top edge. Let the top 6 inches flop over and form a two-tiered skirt. Check the bands every day from mid-afternoon to dinnertime. Use a knife or scissors to cut the caterpillars in half, or flick them into a bucket of soapy water and keep them there until they die. Handle the caterpillars as little as possible as they can cause a rash. Make sure you check the burlap bands and remove the caterpillars daily, otherwise you're just providing the gypsy moth caterpillars with a safe place to hide from predators!

Remember, even if your property was treated with an insecticide, it is still important to use burlap bands and other control methods to keep your trees alive and healthy. For more information, see the website www.gypsymoth.wi.gov or call 1-800-642-MOTH.

Fruit

Apple maggot – Cooperators have reported no apple maggot adults yet, but these may be anticipated in the next 2 weeks. Some southern parts of the state have surpassed 900 DD (base 50°F), the point at which apple

maggot fly emergence is expected to begin. Growers should place red ball and yellow sticky boards over the weekend, if they have not already done so. The frequent rains and soil moisture conditions this season could prove beneficial to this pest. Research has demonstrated that soil moisture of 20% is most favorable for the emergence of apple maggot flies.

Identification of apple maggot flies can be difficult because other common fruit fly species are frequently attracted to the same traps used to lure apple maggot flies. The figure above shows the different wing banding patterns of the two flies. The cherry fruit fly has an eyespot at the end of each wing.

Redbanded leafroller – The second flight of moths is underway where 780 DD (base 50°F) have accumulated. Look for pheromone trap counts to increase soon.

Codling Moth – Based on the degree day model available for codling moth, egg hatch is in progress throughout southern Wisconsin. The larvae emerging from these eggs will mature in July, pupate, and produce a mid-summer flight of moths. Generally 1000 DD are needed to complete each generation. In Wisconsin there are two generations of codling moth and sometimes a partial third during warm years. The larvae of the latter generations cause the most significant damage. Codling moth control in the weeks ahead should be carefully timed to target larvae hatching from eggs. Once larvae tunnel into fruit, insecticide applications are ineffective. For control recommendations see the 2002 Commercial Tree Fruit Spray Guide (UW-Madison Cooperative Extension Service Publication A3314).

European red mite – Heavy mite activity was reported from a Jackson Co. orchard earlier this week, and a few additional reports have come in today. While mites may be reaching potentially injurious levels in some orchards, population growth could be temporarily slowed by the cooler temperatures this week. Growers can expect the most serious injury to occur in early summer, when trees are producing fruit buds for the following season. In apples, heavy mite feeding results in a characteristic brown or bronzed foliage. Left unchecked, mite feeding can also affect fruit color and cause premature fruit drop. Cooperators are encouraged to scout for mite activity in the week ahead.

Spotted tentiform leafminer – The second flight of moths began well over a week ago in most areas, once 610 DD had been reached. Peak second flight is near in portions of southern Wisconsin, where an accumulation of 1150 DD (base 50°F) could be reached by the first or second week of July. At the present rate of degree day accumulation, peak flight will occur in the Madison area by July 18.

Calendar of Events

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 dwgc@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

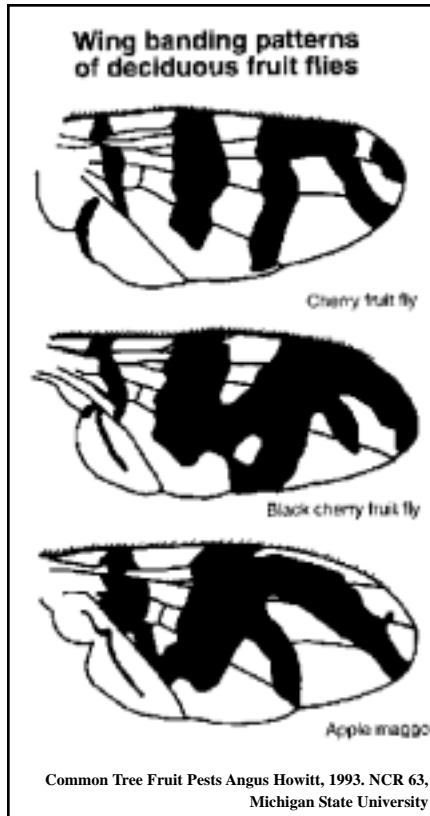
Agricultural Research Station 10:00 a.m.-3:30 p.m. \$30 (includes lunch). For more information or to register, contact Dan Heider at 608 262-6491 or via email at djheider@wisc.edu. (Repeat of Aug. 5 workshop.)

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



European red mite susceptibility

Susceptibility	Variety
High	Haralson
Medium	Red Cort
	Connell Red
	Jersey Mac
	Regent
	Red Chief
	Spartan
	Honeycrisp
	Red Delicious
Low	Gala

from IPM Manual for MN Apple

Black Light Trapping Results

Trap Site	Date	European corn borer	Armyworm	Black Cutworm	Variegated Cutworm	Spotted Cutworm	Celery Looper	Forage Looper	Cabbage Looper
Southwest									
Rochelle, IL	6/18-6/24	6	15						
	6/11-6/18	18							
South Central									
W Arlington	6/19-6/25	3	13			3			
	6/11-6/18	26	7	1		3			
Arlington Station	6/16-6/23	29	11	2	1	1			3
W Madison	6/17-6/24	15	12	3		2	11	7	
Mazomanie	6/17-6/23	17	12	1	0	2	1	0	
Central									
Marshfield	6/17-6/24	1	74	0	0	8		15	
Plover	6/18-6/25	25							
Plainfield	6/18-6/25	2							
West Central									
Sparta	6/21-6/23	4							3
West Central									
Manitowoc	6/18-6/25		6						
Northwest									
Chippewa Falls	6/18-6/24	2	2						
New Richmond	6/17-6/24	0							
Cameron	6/17-6/24	6							

Apple Insect Trapping Results

	Date	STLM	RBLR	CM	OBLR	AM (red)	AM (yellow)	PC
Lafayette Co.								
Cuba City	6/17-6/24	100	34	14	6			
Crawford Co.								
Gays Mills-E2	6/17-6/24	290	2	11	4	0	0	
Gays Mills-W2	6/14-6/21	100	6	0	1	0	0	
Iowa Co.								
Dodgeville	6/17-6/24	360	0	13	0	0	0	
Richland Co.								
Hill Point	6/16-6/21	108	0	2	2			
Richland Center -W	6/17-6/24	210	40	7	16	0	0	
Richland Center-E	6/17-6/24	465	22	4	3	0	0	
Sauk Co.								
Baraboo	6/17-6/24	160	3	3	0	0	0	
Dane Co.								
Deerfield	6/15-6/22	660	0	3	5			
Dodge Co.								
Brownsville	6/18-6/25	4	0	0	2	0		
Green Co.								
Brodhead	6/16-6/23	0	0	0	3			
Ozaukee Co.								
Mequon	6/15-6/23	380	0	2.2	3.3			1
Racine Co.								
Raymond	6/18-6/24	400	2	0	0			
Rochester	6/17-6/24	414	6	5.2	22	0	0	
Kenosha Co.								
Burlington	6/16-6/25	350	5	11.5	22	0	0	
Waukesha Co.								
New Berlin	6/18-6/24	350	1	0	0			
Pierce Co.								
Beldenville	6/12-6/19	6	0	0	0			
Spring Valley	6/18-6/25	65	0	0	2	0	0	
Jackson Co.								
Hixton	6/15-6/22	180	0	2	3	0		0
Marquette Co								
Montello	6/13-6/20	901	0	6	0	0		0
Brown Co.								
Oneida	6/14-6/20	180	0	1	0	0		0
Sheboygan Co.								
Plymouth	6/18-6/24	153	0	1	7			
	6/11-6/17	9	0	8	3			
Fond du Lac Co.								
Campbellsport	6/17-6/23	62	0	12	2			
	6/10-6/17	1	2	2	2			
Malone	6/17-6/24	3	0	1	1			
Marinette Co.								
Wausaukee	6/18-6/25	2	0	0	0			

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



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Web Site of the Week

USDA Cereal Disease Laboratory

<http://www.cdl.umn.edu/index.htm>

Perhaps best recognized as the Laboratory Formerly Known As The Cereal Rust Lab, the USDA Cereal Disease Lab has expanded its focus to include other significant cereal diseases, including an excellent section on Scab of Wheat (see article inside).

Quote of the Week

For what were all these country patriots born?
To hunt, and vote, and raise the price of corn?

The Age of Bronze, Lord Byron (1788-1824)

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