

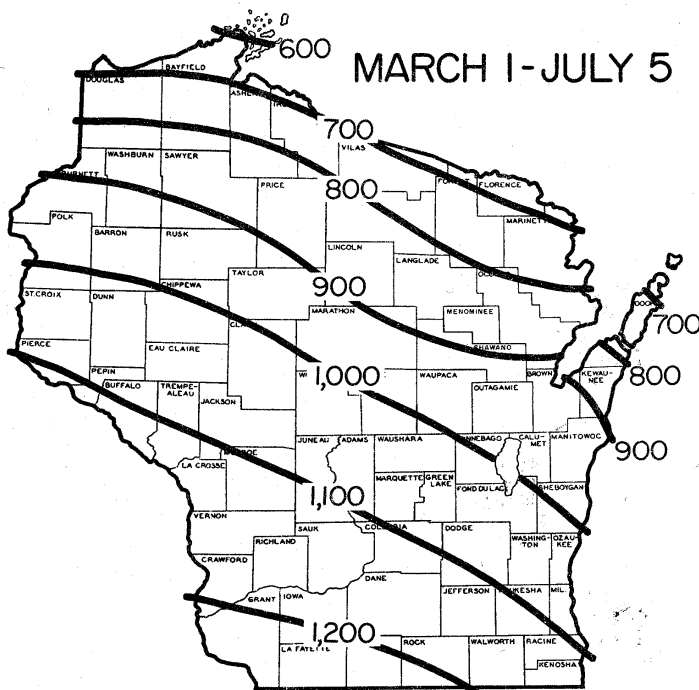
Weather and Pests

Warm temperatures prevailed this week, and many areas of the state received much-needed sunshine and dry weather. Insect development is progressing at a more or less normal rate. Soybean development advanced considerably in recent days and corn is looking improved. Many southern fields are waist high; a few are shoulder high. Insect activity has escalated. Both soybean aphids and apple maggots made an appearance for the first time this season.

Growing degree days from March 1 through July 1 were:

Site	GDD*	2003 GDD	Normal GDD	Base 48	Base 40
SOUTHWEST					
Dubuque, IA	1121	1010	1164	1181	1967
Lone Rock	1024	1006	1068	1086	1843
SOUTHCENTRAL					
Beloit	1091	984	1100	1144	1919
Madison	992	957	1063	1058	1803
Sullivan	1005	916	1029	1053	1816
Juneau	967	893	966	1018	1772
SOUTHEAST					
Waukesha	950	833	1011	1001	1752
Hartford	912	830	964	961	1701
Racine	877	742	1010	937	1652
Milwaukee	844	743	984	900	1602
EAST CENTRAL					
Appleton	744	832	885	803	1461
Green Bay	676	699	825	736	1379
CENTRAL					
Big Flats	873	949	968	914	1628
Hancock	835	931	975	873	1572
Port Edwards	780	877	953	807	1487
WEST CENTRAL					
LaCrosse	1023	1010	1034	1050	1842
Eau Claire	838	978	951	871	1569
NORTHWEST					
Cumberland	636	861	885	626	1253
Bayfield	461	605	552	447	982
NORTH CENTRAL					
Wausau	676	795	864	694	1313
Medford	631	765	847	647	1250
NORTHEAST					
Crandon	590	695	739	593	1171
Crivitz	600	707	720	624	1228

*GDD above base 50 deg. with 86 deg. upper limit



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

Alerts

Soybean aphid – The first aphids of the season were detected this week in a V5-stage Dane Co. soybean field, at the rate of fewer than 10 aphids per plant. Only 6 of the 100 plants examined had aphids. Watch for soybean aphids to grow prevalent in the weeks ahead, and closely monitor the rate of population increase.

Maize common rust is showing up at trace levels in southern tier counties. Sweet corn and seed growers should begin to scout fields for this disease. See “corn” for more information.

The first **Japanese beetle adults** were seen up in LaCrosse Co. and in Rock Co. (Phil Pelliteri, UWEX)

Looking Ahead

Potato leafhopper – Numbers rose this week in response to warm, humid conditions. Moderate to high counts are now present in southern alfalfa fields. It is possible for damaging numbers to develop in late 2nd growth and early 3rd growth alfalfa, as well as in other crops.

Stalk borer – Based on observations in south central fields, there appears to be some minor problems in the margins of grassy corn fields. Spot or border row treatment may be warranted when 25% of the plants show signs of infestation; however, generally this recommendation applies prior to June, when larvae are still small and susceptible to insecticide. Throughout southern Wisconsin it is too late for effective stalk borer control.

Corn insect problems – Warning! Growers who scout corn fields in the week ahead will likely see injury caused by corn borers, stalk borers and armyworms, especially in the four edge rows. For the European corn borer, which are still quite small, treatment is effective through 1100 DD50. In contrast, insecticide treatment for stalk borer and armyworm larvae, already near maturity, is no longer effective. Larvae have either bored into stalks or will be entering the pupal stage soon, where they are not susceptible to insecticides. The most effective control for the following season for these pests is to eliminate grassy weed habitat prior to August, when moths emerge and lay eggs.

Corn rootworm – In fields infested with corn rootworm larva, damage should grow evident soon, especially in southern Wisconsin counties. Expect the first adults of 2004 to begin emerging next week

Corn

European corn borer – Corn fields are showing light amounts of first generation corn borer feeding. About

14%-21% of the plants in Dane and Columbia Cos. were infested with 1st instar larvae. Based on survey observations, larvae are still primarily in the very early larval instars in south central Wisconsin. Growers should check fields now for “shot hole” feeding injury, 1st generation larvae and egg masses, since we are now in the period (800-1100 DD50) when treatments are most effective in the southern, central and west central counties. In the south central district and near LaCrosse the treatment window for 1st generation larvae will close next week. No fields warranting treatment were observed during surveys this week.



Note to black light trappers – European corn borer moth counts have declined considerably in black light traps in recent weeks. Expect the second flight of moths to begin showing up in traps at 1400 DD50 and to peak around 1733 DD50.

Stalk borer – Severe injury to individual plants was caused by 4th and 5th instar larvae in the margins of Dane and Columbia Co. fields. In one of the fields surveyed, 18% of the plants in the outer four rows were infested. Stalk borer injury was more prevalent than armyworm in the fields surveyed earlier this week.



Armyworm – Fifth and sixth instar larvae were common in Dane and Columbia Cos., and as usual, edge rows were more affected than interior rows. The number of edge row plants affected ranged from 1%-9% this week. Pupation is likely to begin soon.

Corn leaf aphid – A few very light colonies were noted in Dane Co. fields this week. It is likely that high populations of this insect may develop in later-planted fields.

Maize common rust — Trace levels of maize common



rust (*Puccinia sorghi*) were found in six of 15 corn fields surveyed this week. Two fields in Lafayette Co., three fields in Rock Co. and one field in Walworth Co. had very light infection. No rust was detected in fields in Green, Kenosha, or Jefferson Cos, nor in several other fields in Lafayette and Walworth Cos. The disease is favored by moderate temperatures and high relative humidity, and infection requires about six hours of free moisture. Sweet corn and seed production inbreds are much more susceptible to common rust than are field corn hybrids. In recent years, virulence to the Rp1-D gene for resistance (long used in sweet corn) has been widespread. Growers of susceptible corn should begin to scout fields now, as early detection of the disease is critical in establishing effective control. Information on control options is available in *Commercial Vegetable Production in Wisconsin*, UW-Extension Publication A3422, available at <http://cecommerce.uwex.edu/pdfs/A3422.PDF>.

Eyespot — Corn fields in Lafayette, Walworth, Racine and Jefferson Cos. showed light symptoms of eyespot, caused by *Kabatiella zae*. As is typical with eyespot, all four fields where the disease was found were corn on corn. *K. zae* overwinters in corn debris. Conidia produced on the debris are disseminated to nearby seedlings. Lesions are small, translucent circular spots



with yellow haloes. In several fields, lesions were distributed in a band across leaves, indicating infection that had occurred in the whorl and become apparent as the leaves expanded. Crop rotation will delay the appearance of eyespot.

Soybeans

Soybean aphid – The first aphids of the season were detected this week in a V5 stage Dane Co. field. Out of a total of 100 plants, fewer than 10 aphids per plant were found on only 6 of the 100 plants examined. No aphids were detected in any other Dane or Columbia Co. fields. Although populations are very light at this time, under the right conditions colonies will develop rapidly. Pay close attention to soybean aphid levels in the next few weeks and scout for the first aphids of the season in your fields. Check new growth and the undersides of leaves carefully.



Bean leaf beetle – Light amounts of defoliation and relatively few beetles per foot of row were encountered in fields this week. The incidence of defoliation in Dane and Columbia Cos. ranged from 7.5%-21%, while severity in all fields was less than 5%. Fewer than one beetle per foot of row were observed in the same fields. While no noteworthy populations were observed this week, continue to monitor bean leaf beetle activity closely. Levels of beetles now may be indicative of levels later in the season. Bean leaf beetle defoliation was recorded in every field surveyed; it appears adults are widespread in southern Wisconsin.

Forages

Potato leafhopper – A moderate increase in populations in second crop alfalfa has occurred during the past week in south central counties. In the Columbus area, counts ranging from 0.9 to 1.9 adults and nymphs per sweep were found in 16"-23" fields. An average of 1.1 leafhoppers per sweep was found in Dane Co. fields, a moderate population level. Locally produced nymphs are now starting to mature.

Alfalfa weevil – Adults were present in Dane and Columbia Co fields this week, larval counts were very low, and rates of tip feeding in south central counties were not significant. Despite these observations, some southern fields are still experiencing heavy populations. While activity in some portions of southern Wisconsin has slowed, northern fields may be vulnerable to heavy rates of tip feeding as larvae develop and increase in size. Northern regrowth should be checked for the presence of larval tip feeding damage. Continue to monitor populations in southern fields as well.

Tarnished plant bug – Populations ranging from 0.8 to 3.2 per sweep were observed in south central alfalfa fields. All life stages, newly-hatched nymphs to adults, were present in the fields surveyed. Populations will become more noticeable in the week ahead as nymphs mature.

Green cloverworm – Small larvae were fairly common in some south central alfalfa fields. Populations were fewer than two per 10 sweeps.

Vegetables

Imported cabbageworm – Second generation imported cabbageworm (ICW) butterflies were observed in vegetable crops in southwest Wisconsin this week. The imported cabbageworm overwinters in Wisconsin as a chrysalis. A chrysalis refers to a pupa made by a butterfly (vs a moth). These familiar 1¾ inch butterflies are white, with one or two black dots on the forewings. The larvae, which can grow to about an inch in length, are velvety green with light yellow stripes down the



back. ICW larvae feed on the first-formed outer leaves of their hosts, which include turnips, radishes, mustard, and nasturtiums in addition to the more common cole crops. Infested leaves become riddled with irregularly-shaped holes. As the caterpillars mature, they move to the center of the plant to feed. Most damage is caused by the 2nd generation larvae, which growers can anticipate around mid-July.

Growers are encouraged to begin scouting cole crops weekly for eggs and larva and continue through September. Females lay hundreds of single yellow-orange, oblong, and deeply ridged length-wise eggs on early cole crops or cruciferous weeds such as wild

mustard, wild radish, yellow rocket, or shepherd's-purse. Larvae feed between the veins of the host. ICW rarely reaches economically important levels if controls for the



other cole crop pests (diamondback moth and cabbage looper) are being applied, and/or if beneficial predators and parasites are present. Scout for ICW by examining 25-50 plants. A plant is considered infested if one or more eggs or larvae are present on the plant. For example, if 3 of 50 plants have 1 or more egg, the infestation is 6%. For cabbage, treatment is recommended when 20% of the plants are infested in the growth stage of cupping to early head. Treatment is recommended for broccoli if 10% of the plants are infested during the growth stage from flower bud to harvest, and for cauliflower if 50% of the plants are infested before first curd, and if 10% are infested when the curd is present. Crushing eggs on the underside of the leaves or hand picking can reduce populations of feeding larvae. *Bacillus thuringiensis* (BT) and various other labeled insecticides can be used for control as well. Consult UW-Extension publication A-3422, *Commercial Vegetable Production in Wisconsin*, available at <http://cecommerce.uwex.edu/pdfs/A3422.PDF>.

Cabbage Looper – The new DATCP Cabbage Looper Cooperator Network will soon be up and running. The purpose of the network is to determine cabbage looper arrival in Wisconsin, identify flight peaks, and assist in determining when to scout for caterpillars. Migratory cabbage looper adults typically arrive in Wisconsin around mid-July. Look in this section in future Bulletins for cabbage looper information and trap counts from Vernon, Waushara, Marquette, Columbia, Walworth and Racine counties. We thank the cabbage growers who



volunteered to be cooperators for this survey.

Peas and Processing Beans--The steady rainfall for the past month contributed to severe **root rot in many pea fields**. As pea fields approach maturity, affected vines are yellowing and dying, making harvest of uniformly maturing peas difficult. Excess moisture during the emergence and early growth stages of both peas and beans favored infection by soilborne root rot pathogens. Now that we are returning to a more normal rainfall pattern, we can expect to see reduced severity of root rot on later plantings.

Pea pods in some fields are exhibiting symptoms of bacterial spotting (large water-soaked brown lesions) and tiny black spots (*Alternaria tenuis*). Both are related to the amount of rainfall received in the past month. As we move out of the rainy period and into later plantings, both problems should mitigate. (Walt Stevenson, UW-Madison)

Carrots --Growers should be watching fields for symptoms of both **Cercospora** and **Alternaria** leaf blights, especially plantings of susceptible cultivars. Appearance of both diseases is earlier than normal, as a wet June has encouraged the development of both diseases. Treatment with protectant fungicides such as chlorothalonil or alternating sprays with azoxystrobin or pyraclostrobin and chlorothalonil will help to keep both diseases in check. Disease progress is much slower on tolerant cultivars such as Bolero or Enterprise. (Walt Stevenson, UW-Madison)

Potato leafhopper – Nymphs were observed in Portage, Waushara, and Adams Co. **snap beans** this week. Because this insect achieves high populations in late June to early August, snap beans usually prove to be an attractive host. Monitor nymph populations by looking at undersides of leaves. Carefully turn over 10 leaves per sample site and count nymphs as they scurry sideways for cover. Use at least 10 sample sites per field.

Economic thresholds for potato leafhopper on snap beans:

Seedling stage (two true leaves)

Adults: 0.5 per sweep or 2 per row foot

Nymphs: Nymphs are usually not present at seedling stage

Third trifoliolate to bud stage

Adults: 1 per sweep or 5 per row foot

Nymphs: 1 per leaflet (10/10 leaflets)

Corn earworm – Moths are on the way. While none have been reported in Wisconsin so far, they have been found in southeastern Minnesota and Illinois. Corn earworm adults are $\frac{3}{4}$ inch long and buff colored with



dark spots or lines near the tip of the wing. Once adults arrive, mating and egg laying will soon follow. Female CEW moths deposit a single egg per ear on corn silks, as CEW larvae are cannibalistic. After the egg hatches, the larva crawls down the silk and into the ear to feed. First generation larva generally only cause damage in very early sweet corn. The more damaging second generation appears in late August. In addition to corn, CEW also feeds on tomatoes, lettuce, peppers, and snap beans. CEW are best monitored using pheromone traps, but black lights are also useful. Pheromone trap catches of 5-10 moths per night may warrant treatment in silking fields. Treatment timing on sweet corn is critical since larvae quickly develop and move into the ear where they are no longer susceptible to insecticides. For more treatment information see UW-Extension bulletin A2655: *The Corn Earworm*.

Potatoes

Late blight and early blight -- There are still *no reports of late blight anywhere in WI*. Now that we are getting into the hotter and dryer weather of July, the late blight risk normally drops. At the moment growers should be focusing their attention on **early blight** since this disease is increasing in both incidence and severity. Fungicide sprays applied protectively are maintaining control in Hancock trials. Growers should also be checking their petiole nitrate levels and making supplemental N applications since we are still within 60 days after emergence. Remember that N deficient foliage is more susceptible to infection by the early blight pathogen than is well nourished foliage. We are beginning to surpass 300 P-Days and anticipate a significant increase in airborne inoculum of *Alternaria solani* in coming weeks. Maintaining good coverage with a protectant fungicide will help to reduce early blight losses later in the season.

UW continues to stress that for resistance management, the strobilurin materials should 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. Use of 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 previously associated with the

strobilurin materials. Watch your fields carefully for faster than expected early blight spread. If you observe any unusual spread of early blight in your fields this summer, please contact Walt Stevenson at wrs@plantpath.wisc.edu or 608-262-6291.

Current P-Day and Severity Value Accumulations for 2004
<http://www.plantpath.wisc.edu/wivegdis/index.htm>

Location	Calculation Date	P-Day Total	Severity Value
Antigo emerging June 4	6/30	176	11
Antigo emerging June 12	6/30	122	4
Antigo emerging June 24	6/30	33	0
Grand Marsh emerging 5/12	6/30	330	57
Grand Marsh emerging 5/17	6/30	307	51
Grand Marsh emerging 5/22	6/30	271	47
Hancock emerging 5/12	6/30	331	50
Hancock emerging 5/17	6/30	307	44
Hancock emerging 5/22	6/30	272	40
Plover emerging 5/11	6/30	334	50
Plover emerging 5/25	6/30	252	33
Plover emerging 6/20	6/30	66	1

Forest, Shade Trees, Ornamentals and Turf

Sudden Oak Death (SOD) – The nursery survey for SOD is well under way and so far no positives have been found. At least 25 nurseries/garden centers are slated for inventory and sampling. Samples are screened with an ELISA test at the Plant Industry Lab and any inconclusive samples are plated out for further analysis.

Trace forward surveys continue and the national survey is underway as PPQ determines the distribution of *Phytophthora ramorum*. The number of confirmed positive locations from the trace forward, national, and other surveys remains at 140 in 19 states.

PPQ confirmed the presence of *Phytophthora ramorum* in Nassau County, NY. A joint PPQ, US Forest Service, NY Department of Agriculture team collected samples in the county after PPQ received information from a member of the public. The team collected the positive sample from a mature red oak tree located in a 192 acre forested county park. Further surveys are underway to identify other possible infected plants and infested sites. PPQ is currently working on determining the most appropriate regulatory response to the find.

Emerald ash borer – A landscaping firm in Waukesha Co. found what they thought was an adult emerald ash borer that landed on an employee while they were removing dead ash trees from a commercial site. Inspectors from DATCP and USDA were quickly dispatched to the site and picked up the suspect beetle. Fortunately it turned out to be another native flat-headed borer, *Chrysobothris sexsignata*. This beetle attacks dead or dying trees of primarily ash, red maple, walnut,

hickory, beech, yellow birch, white oak, hemlock, cypress and pitch pine. To date, no emerald ash borer has been found in Wisconsin.

Leafhoppers – Although not much damage is visible yet, large numbers of leafhoppers were observed on various tree species at a nursery in Kenosha Co. Chemicals in the saliva of the leafhopper cause a toxic response from many trees. On maples, newly emerged leaves will cup, turn black and eventually fall off. Internode length is severely shortened making the tree aesthetically unpleasing. Watch when alfalfa fields are being cut as the leafhoppers will migrate from the alfalfa to nearby nursery stock.

Spider mites – Light to moderate numbers of two-spotted spider mite were showing up on phlox, daylily, verbena and impatiens at nursery dealers in Clark, Eau Claire and Fond du Lac Cos.

Pear slug – Purpleleaf plum had moderate amounts of damage at a nursery grower in Dane Co.

Winged euonymus scale – A small number of dwarf burning bush at a nursery dealer in Clark Co. had this difficult-to-detect insect. See the May 28th Wisconsin Pest Bulletin for more information.

Gall rust – Moderate numbers of galls were found on Scotch pine at a nursery field in Jackson Co.

Spruce needle miner – Colorado spruce at a nursery dealer in St. Croix Co. had moderate amounts of damage from this caterpillar. There are several species of needle miners attacking spruces but the most common one is *Endothenia alboliniata*. The adult is a small, brown moth that is present in late spring to early summer. Mature larvae are greenish with a light brown head. Egg laying occurs in summer and larvae are active until cold weather sets in. Larvae overwinter inside needles and begin feeding again in the spring. Young larvae in the fall are easier to control than the larger larvae in the spring.

Anthracnose – Various shade trees at nurseries in Dane,



Eau Claire and Kenosha Cos. had symptoms of this malady. Plants affected included birch, willow, swamp white oak, amur maple and autumn blaze maple. On the perennial side, hostas and daylilies at nurseries in

Crawford Co. had light amounts of anthracnose.

Guignardia leaf blotch – Light to moderate amounts of leaf blotching was observed on horsechestnut at a nursery in Kenosha Co.

Entomosporium leaf spot – Serviceberry at a nursery in Kenosha had moderate amounts of leaf spotting due to this fungus. See June 4th Wisconsin Pest Bulletin for more information.

Elm black spot – This disease was found in moderate amounts on elms at a nursery in Kenosha Co. It is generally of minor importance in mature trees in the landscape but may have an impact on elm trees during nursery production. As leaves unfold in the spring the fungal spores infect the succulent new growth. Small spots are yellow at first, then turn black as the fungus matures. Repeated infections in early summer can lead to premature defoliation. Repeated years of twig infection may lead to witches' brooming. Spores overwinter in dead leaves and dormant buds. Removing leaf debris can reduce the amount of inoculum. Elms vary in their susceptibility to this disease. If this disease is a perennial problem fungicides can be used for preventive control. Fungicide applications should begin at budbreak and continue until leaves are fully developed.

Hollyhock rust – Heavy amounts of rust were reported on hollyhocks at a nursery grower in Dane Co.

Red spot – Peonies at a nursery grower in Crawford had moderate amounts of leaf spotting due to this disease.

Jack Pine Budworm in Jackson County are in the pupal stage and moths are starting to emerge. (T. Lanigan, DNR)

State/Federal Programs

Gypsy Moth Spray Program – Pheromone flake applications for mating disruption are underway in west central counties.

Starting about 7 a.m., on Wednesday, July 7, weather permitting, yellow spray planes will begin the work. It may take 2-4 days to complete these applications. The flakes are about 1/8 by 1/16 inches, smaller than a grain of rice. The flakes are mixed with a sticking agent that is similar to white school glue so the flakes adhere to the tree leaves.

Maps of the spray sites are available on the department's gypsy moth Web site at <http://www.datcp.state.wi.us>, keyword gypsy moth.

Fruit

Apple maggot – The first apple maggot flies of the season were trapped on red balls in orchards near Dodgeville (Iowa Co.), Rochester (Racine Co.) and Plymouth (Sheboygan Co.) this week. An increase in emergence could occur next week if rain falls over the weekend. A rise in soil moisture should help to accelerate emergence throughout the state, as 20% soil moisture is most favorable for the emergence of apple maggot flies. Lesser amounts of moisture generally cause desiccation of pupae. Insecticide applications for apple maggots should target flies before females have the opportunity to deposit eggs, and are warranted when five apple maggot flies are trapped per red ball.



Spotted tentiform leafminer – Empty tissue feeder mines were observed on foliage in a Kenosha Co. orchard this week, where peak 2nd flight has already occurred. The second flight is expected to peak in portions of southern Wisconsin once an accumulation of 1150 DD (base 50°F) is reached. While the treatment window for second generation sap feeder larvae has passed in parts of southern Wisconsin, northern apple orchards can anticipate peak 2nd flight, egg laying, and the appearance of sap feeder mines one week after the second flight peaks later this month. For 2nd generation STLM the threshold is one mine per leaf. Be sure to scout the undersides of leaves for sap feeder larvae and count only active mines.

Spotted tentiform leafminer threshold	
Generation	Treatment threshold
First	0.1 mine per leaf
Second	1 mine per leaf
Third	5 mines per leaf

Odds -n- Ends

Mosquito Control Requirements for Pesticide Businesses – a 5.0 (Aquatics and Mosquito) pesticide certification activity.

With all the recent rain in Wisconsin, mosquitoes seem to be on the minds of residents everywhere. By all

indications, commercial pesticide applicator businesses can expect an increase in requests for mosquito control.

This is a good time for a reminder of the requirements for pesticide use in controlling mosquitoes and some preventive measures people can take to reduce the chance for mosquito bites.

Certification

Mosquito control contracting, whether terrestrial or aquatic, must be conducted under the 5.0 "Aquatic and Mosquito Pest Control" applicator category.

Licensing

The company must have a current pesticide business license from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP).

Landscape Applications

Applicators hired by a homeowner or other non-governmental entity, to control adult mosquitoes in a landscape, are required to comply with the landscape rule (Chp ATCP 29.56, Wis. Adm Code):

- Post landscape warning signs.
- Notify neighbors who are listed on the Landscape Pesticide Advance Notification Registry.
- Provide information to the customer, both before and after a pesticide application.
- Maintain records of pesticides applied and the application dates.

Applicators hired by a municipality or government agency to control mosquitoes for public health purposes are exempt from landscape rule requirements only for these applications.

Pesticides applied to waters of the state have special requirements

- Before pesticides may legally be applied to waters of the state, a DNR permit is required.
- Waters of the state means nearly any water body in the state including private lakes and ponds, public lakes, ponds and rivers, streams, marshes and wetlands.

This is an overview of the pesticide rules. For the full set of requirements, consult Chp ATCP 29, Wis. Adm Code, or call the Department at 608-224-4547.

Section 18 Label For Table Beets: --WDATCP has recently approved a crisis exemption for use of Betanex (desmedipham) on red beets for the control of broadleaf weeds. Wet field conditions prevented the use of cultivation or Pyramin for broadleaf weed control in red beets and the crisis exemption was issued as a method for providing some management options for broadleaf weeds (specifically chickweed) in beets.

For more information or labels, contact Patricia Kandziora of the DATCP Agricultural Resource Management Division at (608) 224-4547.

Calendar of Events

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

Apple Insect Trapping Results through July 2, 2004

	Date	STLM	RBLR	CM	OBLR	AM (red)	AM (yellow)	PC
Iowa Co.								
Dodgeville	6/24-7/1	375	19	56	7	1	1	
Richland Co.								
Hill Point	6/22-6/30	310	10	1	0			
Dane Co.								
Deerfield	6/22-6/29	310		1	0	0	0	
Dodge Co.								
Brownsville	6/26-7/1	39	0	1	2	0	0	
Green Co.								
Brodhead	6/23-6/30	91	36	0	5	0	0	
Ozaukee Co.								
Mequon	6/24-7/1	450	0	4.8	4			0
Racine Co.								
Raymond	6/24-7/1	100	19	0	2			
Rochester	6/24-6/30	600	9	3.2	7.5	0.4	0.2	
Kenosha Co.								
Burlington	6/24-7/1	300+	19	4		0	0	
Waukesha Co.								
New Berlin	6/24-7/1	190	0	2	2			
Waukesha	6/19-7/1			6				
Pierce Co.								
Beldenville	6/20-6/28	192	0	3	2			
Spring Valley	6/25-7/2	351	1	0	2	0	0	0
Marquette Co								
Montello	6/20-6/27	60	0	0	1	0	0	
Brown Co.								
Oneida	6/17-6/24	625	0	5	5	0	0	
Sheboygan Co.								
Plymouth	6/25-7/2	926	0	3	5	1	0	
Fond du Lac Co.								
Campbellsport	6/24-7/1	80	0	12	2			
Rosendale	6/14-6/28	12	0	2	2	0	0	
Malone	6/24-7/1	25	1	2	4	0	0	
Marinette Co.								
Wausaukee	6/25-7/2	4	0	0	3	0	0	

Black Light Trapping Results through July 2

	Date	ECB	Armyworm	Black Variegated cutworm	Spotted cutworm	Dingy cutworm	Celery looper	Corn Forage looper	Cabbage looper
Lancaster	6/24-6/29	0	3		0			0	2
W Arlington	6/25-7/2	0	1	0	0	3			
Arlington Research	6/24-6/30	4	13	1	0	1	0	0	
W Madison	6/24-6/29	0			2			1	4
Mazomanie	6/24-7/2	9	13	1	0	1	4	2	0
Sparta	6/24-7/1	3			2	6			
Marshfield	6/24-7/1	6	10	0	0	4		0	7
Plover	6/24-7/1	16							
Plainfield	6/24-7/1	4							
Manitowoc	6/25-7/2	3	7		4		5		
Chippewa Falls	6/25-7/1	4		2					
New Richmond	6/24-7/1	6				10			
Cameron	6/24-7/1	0		1		10			



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

Web Site of the Week

Farm and Garden, a Sustainable Agriculture and Rural Living Resource

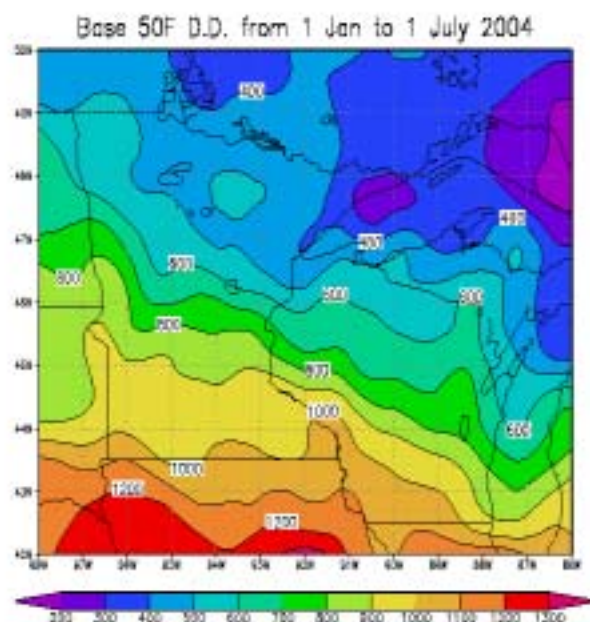
<http://www.farm-garden.com/index.php>

What we like best about this web site is not the information on draft horses or the articles on growing garden plants, but the daily (except weekends) “Food Bytes” section, featuring a roundup of worldwide agriculture-related articles from the world press. There are not many other places where you can learn about sugar smuggling in Indonesia and the decline of South Korea’s self-sufficiency in rice (to pick a couple of articles from the July 1 Food Byte) at one stop.

Quote of the Week

He had been eight years upon a project for extracting sunbeams out of cucumbers, which were to be put into phials hermetically sealed, and let out to warm the air in raw inclement summers.

Jonathan Swift (1667-1745), *Gulliver’s Travels*



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