

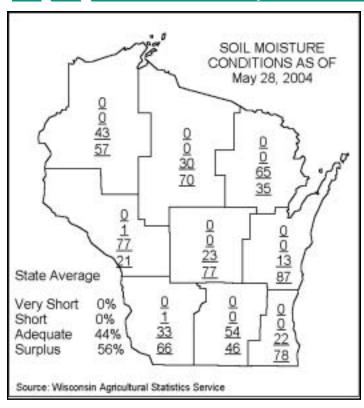
Wisconsin Pest Bulletin

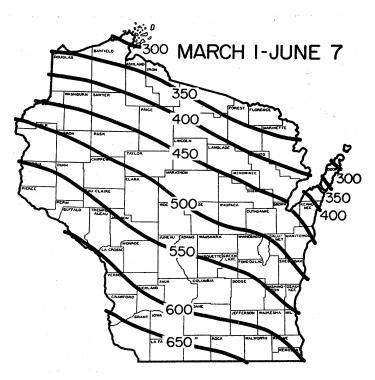
Volume 49, No. 7 June 4, 2004

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

Weather and Pests

The wet, dismal conditions finally eased late in the week, and some farmers took advantage of the sunny weather to harvest alfalfa fields that should have been cut more than a week earlier. In southern Wisconsin, farmers made little progress in fieldwork and crops made little headway in emergence. Crop quality in many regions has declined with each additional day of rain. Numerous acres of corn will need to be replanted as soon as the soil dries up enough for farmers to get into the fields. As June begins, farmers badly need several consecutive days of heat and

Growing degree days from March 1 through June 3 were:

Site		2003	Norm	Base	Base
	GDD*	GDD	GDD	48	40
SOUTHWEST					
Dubuque, IA	633	526	645	666	1204
Lone Rock	574	528	590	598	1121
SOUTHCENTI	RAL				
Beloit	616	509	638	642	1170
Madison	532	482	500	558	1070
Sullivan	561	463	576	584	1100
Juneau	518	439	540	543	1048
SOUTHEAST					
Waukesha	518	402	560	543	1047
Hartford	480	398	445	503	995
Racine	458	340	560	480	958
Milwaukee	432	345	530	450	916
EAST CENTRA	AL				
Appleton	356	409	482	368	803
Green Bay	307	327	360	319	739
CENTRAL					
Big Flats	464	497	510	474	958
Hancock	429	482	435	437	905
Port Edwards	401	455	485	401	852
WEST CENTR	AL				
LaCrosse	571	531	584	584	1117
Eau Claire	431	527	510	432	896
NORTHWEST					
Cumberland	311	461	464	287	691
Bayfield	182	304	290	150	479
NORTH CENT	RAL				
Wausau	332	407	445	320	724
Medford	299	395	396	284	672
NORTHEAST					
Crivitz	254	323	305	251	624
Crandon	274	352	310	253	620
*CDD 1 1	50	1 06 1	1		

*GDD above base 50 with 86 deg. upper limit

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dry weather to restimulate crop development and dry saturated fields.

Alerts

Apple scab – With orchards across the southern third of Wisconsin now 10-14 days beyond the end of the primary infection season period, it's the ideal time to scout for primary scab lesions. Where orchard conditions look clean, growers can consider reducing spray intervals and/or the amount of material used.

Spotted appletree borer -- This rare though endemic pome borer was found in St. Croix Co. See *Forest*, *Shade Tree, Ornamentals and Turf* section for more information.

Sudden Oak Death update — Trace forward surveys continue and the national survey is underway as PPQ determines the distribution of Phytophthora ramorum. The number of confirmed positive facilities from the trace forward, national, and other surveys is 128 in 17 states.

The pathogen has been confirmed in plants traced forward from the initially positive Los Angles County wholesaler. The count remains at 102 facilities in 15 states. The numbers of nurseries or garden centers with positive trace forward samples from the wholesaler by state are California (38), Alabama (3), Arkansas (1), Florida (6), Washington (6), Oregon (9), Texas (6), Colorado (1), Georgia (13), Louisiana (5), Maryland (1), North Carolina (9), New Mexico (1), Tennessee (2), and Virginia (1). The Federal confirmed nursery protocol was implemented at these facilities. —USDA-APHIS-PPQ-PDMP Weekly Notice

Looking Ahead

Potato leafhopper – The usual Memorial Day weekend influx of migratory potato leafhoppers has not occurred yet this season. A high number of migrants were observed in Dane Co. this week, but levels are still relatively low in most areas. No potato leafhoppers have been reported from central or northern Wisconsin fields. Look for more leafhoppers to migrate in on southerly winds and for populations to rise dramatically as soon as weather warms up enough to promote reproduction.

Armyworm – Adults continue to be relatively numerous and larval populations are being detected in corn, alfalfa and some small grains. Scattered reports of light armyworm larvae infestations in corn fields, ranging from 5%-12%, were received this week.

European corn borer – Egg laying has begun in southern and west central regions of the state, wherever 450 DD (Base50°F) have accumulated. Moth activity should peak near Beloit, Lone Rock and LaCrosse next

week, once 631 DD are reached in those areas. Scout for egg masses along the midrib on the undersides of corn leaves, and for tiny, newly hatched larvae in the week ahead.

Imported cabbageworm – Larval feeding is likely to be underway in cole crops in southeastern counties.

Black cutworm – With corn planting, emergence and development delayed by cool, wet weather, black cutworm still poses a threat to developing corn. In Mazomanie (Dane Co.) a moderate infestation warranting control was reported.

Corn rootworm – Egg hatch should soon occur. Expect early instar larvae to begin feeding on susceptible early-planted corn roots in the very near future.

Corn

European corn borer – The first moth flight is in progress throughout southern Wisconsin, and moths have begun to appear in black light traps in the central part of the state. Recent weather conditions have probably slowed corn borer activity somewhat, but expect moth counts to rise in the upcoming week. Eggs laying is likely to occur very soon at advanced southern sites. Anticipate the first moth flight to peak around 631 DD (base 50°F). This could occur this weekend in the Beloit area, by June 12 near Madison, and by June 22 near Hancock.

Armyworm – Moths have consistently shown up in black light traps this season and activity has been observed in alfalfa fields, lawns and in roadside grasses. No substantial infestations have been documented or reported in corn fields thus far, but all signs suggest infestations are probably out there. When armyworms are seen flying around or begin appearing in black light traps, it's time to start scouting. In corn, take a minimum of ten random samples of 20 plants and record the number of damaged plants. Also note the number of rows with severe damage, the abundance of armyworms already present 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 present suggests possible defoliation of more than 3 rows, treat the outer 8-10 rows on that side of the field as well as the area supporting the infestation. For additional recommendations on scouting and control, visit Extension Publication A3327, The Armyworm, on the web at http://cecommerce.uwex.edu/pdfs/a3327.pdf. Also see A1684, Pest Control in Corn, to determine when control is warranted. This publication is revised annually and is available from your county Extension Agent.

Stalk borer – Don't dismiss this pest when scouting corn

fields to determine the cause of defoliation. Stalk borer injury is very common in young corn stands, and is usually confined to field margins, especially in fields with weedy fence rows. Movement into corn fields first occurs at about 600 DD (Base 41°F), and continues until about 900 DD are accumulated. While edge row injury is most typical of stalk borer, under the right conditions, damage is possible further into fields. To scout for stalk borer, examine plants for shot-hole feeding and unfold injured whorl plants to look for larvae. At this time of year larvae are still quite small, probably in the 2nd or 3rd instar. If treatment is warranted, it is often only necessary to spot treat problem areas. For current Wisconsin recommendations on stalk borer control, consult University of Wisconsin-Extension Bulletin A3636, Pest Management in Wisconsin Fields Crops, at http://cf.uwex.edu/ces/pubs/pdf/A3646.PDF.

Black cutworm – Larvae are at the stage of development where they are capable of cutting corn seedlings. Conditions in many wet, weedy fields are still favorable for heavy cutting to take place. Damage grows most noticeable when larvae reach the 4th instar stage, around 562-640 DD (Base 50°F).

Corn rootworm – Current degree day accumulations indicate that much of the state of Illinois should be experiencing corn rootworm hatch. With hatch underway in Illinois, corn rootworm development in Wisconsin can't be far behind. Once 380-426 soil heat units (Bbase 52°F, 4-inch soil profile) have accumulated, approximately 50% of corn rootworm larvae should have hatched.

Soybeans

Soybean aphid – Illinois entomologists/aphid experts Dave Voegtlin and Bob O'Neil, have been on the lookout for overwintered soybean aphids on buckthorn (the

004	Black Cutwo	orm Trap Counts thro	ough 6-3-04
Site	County	City	BCW Count
	Rock	Beloit	0
2	Rock	Newark	0
<u>.</u>	Rock	Avon	0
1	Green	Juda	2
i	Green	Monroe	0
<u>, </u>	Green	Cadiz Springs	1
,	Lafayette	Gratiot	0
}	Lafayette	Shullsburg	0
)	Lafayette	Lead Mine	0
0	Grant	Hazel Green	0
1	Grant	Sinsinawa	0
4	Grant	Lancaster	2

alternate host species) since early May and have yet to locate a single aphid. The two returned to wooded localities where soybean aphids were detected on common buckthorn last fall, but found no signs of this soybean pest. Forecasters predict lighter populations this season compared to last, but keep in mind that "lighter" is relative. Last year's aphid populations were the highest on record since the aphid was first detected in Wisconsin in 2000. We'll continue to watch reports from Illinois, where soybean aphids will likely appear first, and pass that information on to Bulletin readers. Wisconsin growers aren't likely to see the first aphids of 2004 until mid-late June; populations won't grow conspicuous until mid-July.

Bean leaf beetle – Overwintered beetles continue to wait in alfalfa fields for the emergence of soybeans. The earliest emerging soybeans are sure to be the hardest hit as beetles move from forage crops to soybean fields in the weeks ahead. One positive effect of recent rains and delayed planting is that the later soybeans are planted, the smaller the likelihood that economic infestations will develop; it is the early emerging fields that attract the highest numbers of ravenous, overwintered beetles.

DATCP's spring survey for overwintered bean leaf beetles is scheduled to wrap up late next week. Pest survey staff continued to find beetles in all but two of the eight Dane and Iowa Co. fields surveyed this week. Counts ranged from 0-4 per 200 sweeps. No beetles were found in the Crawford Co. alfalfa fields surveyed. Thus far, beetles have been found in all but one of the counties in the southern two tiers of the state. Compared to last year, staff are finding a higher number of beetles at each site and more bean leaf beetle-positive sites in general. Soybean growers should anticipate early bean leaf beetle activity this season, and scout for early signs of injury to young soybean plants, including feeding scars on cotyledons and shot holes in the leaves.

Forages

Alfalfa weevil – Numbers of larvae are substantially higher this season than in recent years. Tip feeding in many uncut fields far exceeds the threshold of 40%, and counts of larvae in Dane, Iowa and Crawford Co. fields ranged from 1-10 per sweep this week. While the worst may be over for first crop hay (though it will be critical to get first crop hay off the fields as soon as possible after cutting to prevent further larval injury), second crop regrowth is still very susceptible to injury, especially if cool conditions continue to retard plant growth. Delayed growth, combined with intense larval feeding, may result in a second crop that is very low in quality. Once fields are cut, watch plants closely for alfalfa weevil activity. If plants do not green up in a timely manner and a high number of larvae are still present, consider treating fields.

Potato leafhopper – Reproduction of nymphs is not yet underway and adult populations are still generally low.

Recent weather conditions probably have the greatest influence on this delay in population growth. While potato leafhopper is off to a slow start this season, adults are prevalent in southern alfalfa fields, and populations almost always grow exponentially once temperatures reach the 70's-80's for a few days in a row. Scout for adults and nymphs in second crop hay. Injury remains a distinct possibility.

Spotted alfalfa aphid – This aphid species is present in low numbers in some southern alfalfa fields. Spotted alfalfa aphids are sometimes difficult to pick out of sweep net accumulations if scouts fail to look very carefully through the usual cluster of pea aphids. Aphid feeding can result in stunting, yellowing, and leaf curling. Further, spotted alfalfa aphids inject toxins into plants that can result in yellowing of the leaf veins, and like other aphids, they secrete a substance called honeydew, which presents an ideal substrate for sooty mold. While pea aphids prefer cool, dry conditions and are generally a concern in the first cutting, spotted alfalfa aphids prefer hot, dry conditions and generally are a problem on later cuttings and late summer seedlings. These aphids often feed on the underside of leaves and will move up and down in the canopy, depending on humidity. Because each aphid species has a different potential for damaging alfalfa, it is essential to determine which aphids are present in a field. This information, combined with the crop height and stage of development can help determine the need for control.

Meadow spittlebug – Currently nymphs are nearly full grown. Look for adults to appear in hay fields next week.

Vegetables

Asparagus beetles - Both the common asparagus beetle, *Crioceris asparagi*, and the spotted asparagus beetle, *Crioceris duodecimpunctata*, were active in northeastern Dane Co. this week. Adults were viewed on the few recent warm sunny days, laying dozens of eggs on asparagus spears. Both asparagus beetle species are pests of asparagus, but distinguishing between the two is important because the common asparagus beetle is more prevalent and causes more damage.

Scout asparagus plants in the afternoon, when beetles are most active. Consider protecting your plants if one out of 10 plants have either species of adult asparagus beetles (10% or more), if 50%-75% of the plants have common asparagus beetle larvae, or if you see two out of 10 spears with dark brown, oval-shaped eggs. No control is necessary for larvae of the spotted asparagus beetle since they feed on the berries and occur later in the season. Handpicking, especially in small gardens, can be the most effective method of control. Drop adults

and larvae in a pail filled with soapy water, and don't forget to remove the dark brown eggs from the spears.

Treatment guidelines for aphids on alfalfa

Spotted alfalfa aphid: 5-20 aphids per stem with considerable honeydew. Reduce to 1 aphid per stem on seedlings.

Pea aphid: 10 aphids/stem at 2 weeks before cuttings.

Be sure to check your garden regularly as new adult beetles can fly in from neighboring areas.

Cabbage maggot – A grower in southeast Wisconsin reported little first generation cabbage maggot damage, only delays due to flooding. According to the cabbage maggot degree day model, we can expect the second generation of flies to emerge at 1476 GDD (base 43°F). The southern half of the state has not reached this point yet, but can expect to in 2-3 weeks. Avoid planting or replanting cabbage at peak emergence of the second generation. Transplants should be set one week before peak fly emergence, and seedlings should be sown at least 3 weeks before, or one week after, peak fly emergence. Monitor cabbage maggot population growth by placing yellow dishpans, filled with soapy water, at 100 ft intervals along the field edge. Count and record the number of flies caught every 5 days to determine if the population is increasing or decreasing. Flies are ash gray, bristly and have black stripes on their thorax.

Forest, Shade Trees, Ornamentals and Turf

Spotted appletree borer – Adults were emerging in the Plant Industry Lab this week from crabapple samples submitted a week ago from a nursery grower in St. Croix Co. This longhorned beetle, Saperda cretata, primarily attacks apple and crabapple but is found occasionally in hawthorn and serviceberry. It occurs from the northeastern United States west to Iowa and Wisconsin and south to Texas. The adult ranges in length from 10 to 20 mm with the antennae nearly as long as the body. It is cinnamon brown in color with two irregular white dots on each wing cover. Adult emergence begins in late May in the Midwest and can continue through mid-August. Adults feed on leaves and bark of new twigs before mating and egg laying starts. The larvae bore under the bark of large limbs and the trunk creating winding galleries. As the larvae get bigger they bore into the wood, usually with the grain. Their life cycle requires at least two years to complete. The burrowing of the larvae disrupts the flow of water and nutrients to larger limbs of the tree. Infested limbs eventually die from the injury. Repeatedly attacked branches become scarred with openings and gall-like swellings. These openings often have yellowish to reddish frass spilling

out. No predators or parasites have been reported but woodpeckers may feed extensively on damaged trees. This borer is similar to the roundheaded appletree borer and chemical control options to control this pest should work for the spotted appletree borer.

Balsam twig aphid – High numbers of balsam twig aphids were observed on Christmas trees in some Lincoln Co. fields. Lady beetles were observed feeding on the aphids. Newly hatched nymphs feed on needles of last years' growth before new buds open. After budbreak, aphids feed on the newly emerged needles and begin producing offspring. The aphids produce a woolly wax and copious amounts of honeydew that may attract ants and bees. Controlling the newly hatched aphids in the spring will prevent the buildup of further generations. This stage is also more susceptible to insecticide applications as they are less protected. To monitor early in the spring beat the outer 10 inches of midcrown foliage over a black cloth (an embroidery ring works

Cabbage Maggot Event	Degree Days(base 43)				
1st generation flies	300				
2nd generation flies	1476				
3rd generation flies	2652				
Location	GDD base 43(Mar 1-Jun 3)				
Racine	707				
La Crosse	847				
Portage	694				
Madison	831				
Appleton	501				

well). Do this sampling on at least two sides of 15 or more trees that are similar in location, age and variety. If a majority of trees have more than two aphids, and damage was observed last year, insecticide treatments may be necessary. For more information see the online Christmas Tree Pest Manual at http://www.na.fs.fed.us/spfo/pubs/misc/xmastree/index.ht m

Aphids – Numbers of aphids were light to moderate on a number of annuals and perennials including columbine, verbena, mums, sedum, pepper and spirea in Jefferson and Portage Cos. The recent heavy rains have probably kept numbers down.

Spider mites – Widespread but light numbers of mites were causing some damage to daylilies at a nursery dealer in Portage Co.

Eastern spruce gall adelgid – Norway spruce at a nursery dealer in Walworth Co. had moderate amounts of galls festooning the twigs. At this point it is too late for chemical treatment. If galls are not too numerous, the infested twigs can be pruned off and destroyed. Prune out galls before they open; once they open the adults emerge, disperse and reproduce. If galls are numerous

consider treating the trees in the fall for the overwintering females (2800-3000 DD base 50°F).

Shot hole disease – Light to moderate amounts of damage were observed on Canada red chokecherry, sand cherry and flowering plum at a nursery dealer in Jefferson Co. See last week's Wisconsin Pest Bulletin for more information.

Apple scab – Small numbers of lesions were observed on 'Pink Spire' and 'Centurion' crabapples at nursery dealers in Portage and Waukesha Cos. See Extension Publication

http://www.uwex.edu/ces/wihort/gardenfacts/X1007.pdf for more information on control. See Extension Publication

http://www.uwex.edu/ces/wihort/gardenfacts/X1012.pdf for help in choosing crabapple varieties for Wisconsin.

Verticillium wilt – Localized but heavy damage was noticed on red maples at a nursery dealer in Walworth Co. See Extension Publication

http://www.uwex.edu/ces/wihort/gardenfacts/X1008.pdf for information on how to deal with this disease.

Rust – Hollyhocks at a nursery dealer in Portage Co. had widespread and heavy amounts of rust. See the May 7, 2004 Wisconsin Pest Bulletin for more information.

Entomosporium leaf spot – This fungal disease was found in light to moderate amounts on 'Peking' cotoneaster at a nursery dealer in Portage Co. Symptoms first occur on leaves of the lower part of the plant. With favorable weather the spots will progress up the entire plant. Small reddish brown spots start on the upper and lower surfaces of the leaves. As the disease progresses the spots will coalesce and leaf yellowing or defoliation will occur. The fungus overwinters on dead, fallen leaves and on young twigs. In the spring, infections occur when spores are splashed onto the newly developing foliage. Prolonged cool, wet weather favors disease development. Sanitation and cultural practices are very important in managing this disease. Overhead irrigation should be avoided or done early in the morning to prevent prolonged leaf wetness. Crowded plantings with poor air circulation aid in development of the disease — give your plants space. Remove and destroy diseased leaf litter in the spring and fall. If this disease is an annual problem, fungicides may be needed. Applications should begin at budbreak and continue as long as conditions are favorable.

State/Federal Programs

Gypsy moth program - As of June 2, trappers have set 6,507 (20%) of the expected total number of traps. Five counties have been completed: Dodge, Kenosha, Portage, Racine, and Winnebago. Trap setting will continue for

the next four weeks and most traps should be up by July 4th. Once all traps are set, trappers will be on a short break before they start spot-checking traps for the beginning of moth flight. Moth flight usually begins around mid-July in Wisconsin.

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/gy psy-moth/

Fruit

Codling moth – Adults are still flying in isolated areas throughout southern third of the state. In most cases infestations are not orchard-wide, but spotty. This week's pheromone trap counts are the lowest in weeks, indicating that egg hatch is occurring. The first flight of moths can be expected to peak once 500 DD (Base 50°F) are reached, and eggs should be hatching wherever 491DD have accumulated.

Spotted tentiform leafminer – Pheromone trap counts are very low for now, as STLM populations are currently in the larval stages, and the second flight of moths should begin in regions where 539-750 DD (Base 50°F) have accumulated. Expect peak second STLM flight, and maximum pheromone trap catches, to occur around 1150 DD.

Plum curculio – Adults may still be moving into orchards, so perimeter scouting will definitely pay off in instances where no controls are required for CM or other apple pest insects. Growers who haven't sprayed recently are urged to check orchard edges closely for plum curculio activity.

Apple scab – Orchards across the southern third of Wisconsin should be 10-14 days past the end of the primary infection season period, and now is the ideal time for apple growers to scout for primary scab lesions. If things look clean, growers can consider reducing spray intervals and/or the amount of material used.

Calendar of Events

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 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

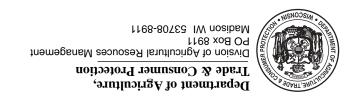
August 22-27 11th International Cereal Rust and Powdery Mildew Conference Norwich, England. Information at http://www.jic.bbsrc.ac.uk/events/RustAndMildew/

Apple Insect Trapping Results through June 3, 2004

County						\mathbf{AM}	AM
City	Date	STLM	RBLR	CM	OBLR	red ball	sticky
Crawford Co.							
Gays Mills-E2	5/28-6/3	55	8	3	0		
Gays Mills-W2	5/27-5/31	5	0	0	0		
Iowa Co.							
Dodgeville	5/27-6/3	0	2	0	4		
Richland Co.							
Hill Point	5/27-6/2	22	3	0	2		
Richland Center -W	5/28-6/3	30	7	1	0		
Richland Center-E	5/28-6/3	60	13	5	0		
Sauk Co.							
Baraboo	5/28-6/3	37	8	3	0		
Dane Co.							
Madison	5/28-6/4	1	0	4	4		
Dodge Co.							
Brownsville	5/28-6/3	27	9	0	0		
Green Co.							
Brodhead	5/27-6/2	0	0	0	0		
Kenosha Co.							
Burlington	5/28-6/3	2	0	0	0		
Ozaukee Co.							
Mequon	5/25-6/2	0	0	1.5	0	0	
Racine Co.							
Rochester	5/28-6/4	0	0	0.8	0		
Waukesha Co.							
Waukesha	5/22-5/28			4			
Jackson Co.							
Hixton	5/26-6/1	15	0	1	2		
Pierce Co.							
Beldenville	5/23-5/30	0	6	0	15		
	5/16-5/22	24	8	0	3		
Spring Valley	5/28-6/4	38	8	0	0	0	
Marquette Co.							
Montello	5/23-6/1	9	0	2	1	0	
Brown Co.							
Oneida	5/24-5/31	7	1	0	0		
Fond du Lac Co.							
Campbellsport	5/27-6/3	10	0	2	2		
Rosendale	5/26-6/2	226	54	1	0		
Marinette Co.	-: ~ ~, -			_	~		
Wausaukee	05/28-6/4	12	2	0	1	0	
	00,20 0,1		=	~	1	Ŭ	

 $STLM\text{--}Spotted\ tentiform\ leaf\ miner;}\ RBLR\text{--}Redbanded\ leaf\ roller;} CM\text{--}Codling\ moth;} OBLR\text{--}Oblique\ banded\ leaf\ roller}$ $AM\text{--}Apple\ maggot$

through June	3								
		European	Armyworm	Black	Variegated	Spotted	Celery	Corn	Forage
Trap Site	Date	Corn borer		Cutworm	Cutworm	Cutworm	Looper	Earworm	Looper
South Central									
W Arlington	5/18-5/21	0	36	0					
_	5/22-5/28	0	10	0					
Central									
Plainfield	5/27-6/3	2							
Plover	5/27-6/3	0							
Marshfield		0	2	0	0	0	0	0	
Hanock	5/27-6/3	0							



Web Site of the Week

National Weather Service (Central Region)

http://www.crh.noaa.gov/

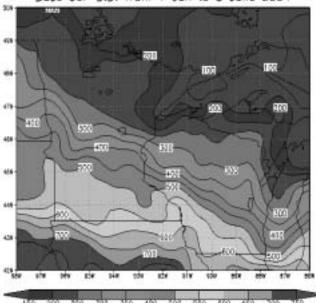
Those of us who turn on the NOAA weather radio before we tune in the morning news will delight in this web site from the National Weather Service. While offering the usual services like timely reports of hazards, current conditions nationwide and local and regional radar, the site also offers several novel features. Best of these may be the "point forecast" (click on the map to get a forecast for your specific site, or close) and an hourly weather forecast graph of predicted temperature, humidity, wind, etc. for the next 48 hours. Weather reporting and forecasting are inherently information-intensive; it's wonderful to see the NWS make their data accessible in such Web-smart ways.

Quote of the Week

Consider well the proportion of things. It is better to be a young June-bug than an old bird of paradise.

Mark Twain [Samuel Langhorne Clemens] (1835–1910)





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

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