

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

Weather and Pests

Tillage and planting had been progressing at a rapid pace in the last week, until mid-week rains and a substantial drop in temperatures put field activities on hold. Inconsistent weather conditions this spring have made for highly variable crops conditions around the state. Southern Wisconsin alfalfa fields are advancing remarkably well and approaching harvest, while many north central fields sustained 50-60% winterkill and had to be reseeded. Corn planting was reported at 59% complete earlier this week; soybeans planting was 29% complete,

Site	GDD*	2004 GDD	Base 48	Base 40
Growing Degree Days from March 1 through May 11				
SOUTHWEST				
Dubuque, IA	351	380	353	686
Lone Rock	327	348	318	635
SOUTH CENTRAL				
Beloit	339	366	329	646
Madison	321	316	317	627
Sullivan	330	334	313	624
Juneau	311	306	301	603
SOUTHEAST				
Waukesha	279	304	263	560
Hartford	270	282	259	550
Racine	219	269	210	485
Milwaukee	216	255	206	482
EAST CENTRAL				
Appleton	243	205	223	492
Green Bay	193	171	179	439
CENTRAL				
Big Flats	299	277	283	581
Hancock	288	254	271	561
Port Edwards	278	236	259	537
WEST CENTRAL				
LaCrosse	339	354	342	658
Eau Claire	308	265	300	592
NORTHWEST				
Cumberland	255	195	242	508
Bayfield	143	97	125	351
NORTH CENTRAL				
Wausau	244	193	221	477
Medford	232	176	219	467
NORTHEAST				
Crandon	215	163	186	433
Crivitz	185	136	162	419

*GDD above modified base 50° F, with no low temperature below 50°F or above 86° F used in calculation.

significantly above last year's average of 12%, and the 5-year average of 11%.

Alerts

Soybean rust update – Survey efforts in Georgia have detected no new sites of rust infection in the last week, and closer examination of the find in Seminole County, GA indicate that the severity of infection remains very low.

Looking Ahead

Bean leaf beetle – Emergence of winter survivors from overwintering sites escalated this week. A surprising number of beetles of all color phases were active in one Green Co. hay field surveyed on Tuesday. Now that overwintered beetles have resumed activity, pest survey specialists will begin the third annual survey for overwintered bean leaf beetle and bean pod mottle virus (BPMV) next week.

Meadow spittlebug – Overwintered eggs began to hatch this week, but the distinctive frothy, white spittle masses are still very tiny and scarcely perceptible. Expect spittle masses to increase in size and grow visible on alfalfa stems next week as the tiny nymphs within begin to mature.

Potato leafhopper – Although early migrants were not detected in alfalfa fields this week, as forecasted in last week's Bulletin, a small number of leafhoppers are certain to arrive in the week ahead.

Alfalfa weevil – Warmer temperatures last weekend gave a boost to alfalfa weevil activity. Numbers of 1st, 2nd and 3rd instar larvae have grown exponentially in just one week's time and low levels of tip feeding are now evident in southern Wisconsin hay fields. Scouting efforts in the week ahead should include an assessment of the percentage of tip feeding injury. Treatment may be warranted when 40% or more of the alfalfa stems show signs of tip feeding.

Black cutworm – Approximately 190 GDD₅₀ have accumulated since the first concentrated capture occurred near Lancaster on April 21, and approximately 200 GDD₅₀ have built up since the first concentrated capture was documented near Newark in Rock Co. on April 28. Once a total of 310 GDD₅₀ are reached at both sites, just 110-120 GDD₅₀ from now, eggs laid by migrant black cutworm moths will begin hatching. See CORN section for details on when damage can be expected.

European corn borer – Pupation is in full swing across southern and central Wisconsin. The first moths of the season could appear in black light traps over the weekend near Beloit, Lone Rock and LaCrosse, where

the accumulation of 347 GDD₅₀ is in sight.

Corn

European corn borer – Corn borer development is progressing at a normal rate this spring. Pupation continued in the south and west central districts this week, and began in some parts of central and northwest Wisconsin, where 246 GDD₅₀ were reached. If a warming trend occurs in the days ahead, the first moths of the season could begin appearing in black light traps early next week, once 374 GDD₅₀ have accumulated. The first eggs of the season are soon to follow, around 450 GDD₅₀, and peak activity of the first flight is expected at 631 GDD₅₀.



Black cutworm – If the level of moths captured in pheromone traps since early April is an indicator of the potential for black cutworm problems this season, then 2005 may be an unusually light year for this pest. Since moths began drifting into Wisconsin several weeks ago only three official "concentrated captures" have been noted, one near Lancaster on April 20-21, another near Newark, just west of Beloit, on April 27-28, and one just this week, near Janesville.

Despite the limited moth captures this spring, the few "concentrated captures" recorded may help to forecast when the hatching of eggs will begin. Egg hatch generally gets underway once 310 GDD₅₀ have accumulated after a concentrated capture of moths. Approximately 190-200 GDD₅₀ have accrued near Lancaster and Newark since the first concentrated captures were recorded. Just 110-120 GDD₅₀ from now, egg hatch is expected to begin. At the current rate of degree day accumulation, this event could take place near Lancaster and Newark by May 19.

Corn is most susceptible to black cutworm injury during the 10-14 days following emergence. Holes in leaves, wilted plants, and plants cut at ground level are all indicators of a black cutworm infestation. Expect to see the most damage to fields between 562-640 GDD₅₀,

generally around the last week of May or first week of June. Remember, infestations are more likely to arise in wet, weedy fields. Weed control is an effective way to lessen the risk for black cutworm problems.

Black Cutworm Trap Catches May 5 to May 12			
Site	BCW	Site	BCW
Grant Co.		Green Co.	
Benton	0	Cadiz Springs	0
Hazel Green	1	W Monroe	2
Sinsinawa	0	E Monroe	3
Dickeyville	0	Juda	0
Lancaster	1	Brodhead	0
Lafayette Co.		Rock Co.	
South Wayne	0	Janesville	13
Gratiot	0	Avon	1
West Gratiot	0	Newark	2
Shullsburg	0	West Beloit	0
West Shullsburg	0	East Beloit	0
		Clinton	0

Forages

Alfalfa weevil – Populations of larvae have grown considerably since last week in south central Wisconsin. In fields where only one or two larvae per 25 sweeps turned up last week, averages of 29 larvae per 25 sweeps were detected this week. In addition, tip feeding injury has now grown noticeable in many fields. Levels raging from 15-25% were observed in the small number of Dane and Green Co. fields visited on Tuesday and Thursday. In the week ahead a portion of recently-hatched 1st and 2nd instar larvae will advance to the 3rd and 4th instars, the stages at which they are capable of consuming larger amounts of alfalfa foliage.



Scout for tip feeding injury next week. Management action is warranted when 40% or more of the alfalfa stems show signs of tip feeding. For detailed scouting information and management recommendations, visit Eileen Cullen's (UW-Extension Entomologist) Wisconsin Crop Manager article on alfalfa weevil monitoring at: <http://ipcm.wisc.edu/wcm/pdfs/2005/05-8insect1.html>.

Meadow spittlebug – Tiny spittle masses are just beginning to materialize in southern Wisconsin alfalfa fields. By next week foamy, white masses should be visible along roadsides and in southern and west central hay fields. The sluggish, lime green nymph within the mass remains stationary as it develops, removing plant sap from the stem it feeds upon. Developing nymphs will give rise to adults by mid-June. The adults remain active all summer long, but will not lay eggs until September. There is only one generation of spittlebugs per year in Wisconsin and feeding by adult spittlebugs (a.k.a planthoppers) is inconsequential; however, when densities exceed one nymph per stem growth of alfalfa stems may be reduced. In addition, alfalfa fields fraught with spittle masses dry much more slowly after being harvested. Meadow spittlebugs are seldom problematic after the first crop.



Potato leafhopper – Contrary to last week's forecast, the first migrants of 2005 were not detected in alfalfa fields this week. The potential for potato leafhopper outbreaks to develop in Wisconsin during a given season is strongly influenced by weather patterns. In years when strong southerly winds turn in our direction, masses of leafhoppers are often delivered on storm fronts. This season we have had very few days of weather suitable for rapid migration into Wisconsin. Nonetheless, some potato leafhopper migrants are expected to arrive on the latest weather from the south by next week.

Pea aphid – Counts in alfalfa are on the rise, but no substantial populations were observed in fields surveyed this week. In 16-20" Dane and Green Co. alfalfa, sweep net counts averaged 20 per 50 sweeps. Winged adults will likely appear by the end of the month.

Tarnished plant bug – Adults were noted in alfalfa fields again this week, but still no nymphs have been observed. Sweep net counts of adults numbered fewer than nine adults per 50 sweeps.

Spotted alfalfa aphid – In addition to the pea aphid, the spotted alfalfa aphid is another common resident of Wisconsin hay fields. When sampling for alfalfa pests

this season, be sure to closely examine the contents that collect at the bottom; more than one species of aphid may have been netted. Fortunately spotted alfalfa aphid looks nothing like the pea aphid, and the two are easy to distinguish. Pea aphids range from peach to lime green in color; spotted alfalfa aphids are pale yellow with spots. Furthermore, 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.

Stink bugs – In addition to alfalfa weevils, pea aphids and tarnished plant bugs, a stink bug or two are likely to turn up in sweep nets at this time of year. Numbers are usually relatively low and stink bugs are not a significant pest of Wisconsin alfalfa.

Damsel bugs – Twenty-five sweeps taken in any Wisconsin alfalfa field will stir up an assortment of organisms, some good, some bad. Damsel bugs (*Nabis sp.*) are one of the good insects that inhabit agricultural settings, particularly alfalfa fields in this state. The adults and nymphs are effective predators which live on low-growing plants where they capture and eat pea aphids, alfalfa weevil larvae, potato leafhoppers, alfalfa caterpillar eggs, and the range of other tiny pest insects that reside in hay fields. As generalist predators, damsel bugs are also common in soybeans, corn, and garden situations, where they consume the complex of pest



species affecting those crops and garden plants. In Wisconsin most damsel bugs spend the winter months as adults in a protective groundcover or in winter crops such as winter grains and alfalfa. During the spring and summer months, female damsel bugs insert eggs into the stems of low-growing plants and the eggs hatch soon afterward. Nymphs develop through five instars in about 50 days.

Adult damsel bugs are slender, 3/8 to 1/2 inch long, tan-colored bugs, with bodies that taper toward the head and enlarged front legs to capture prey (see image below). Damsel bug nymphs look like small, wingless versions of the adults.

Soybean

Bean leaf beetle – Earlier this week the Wisconsin Crop Weather Report indicated soybean planting at 29% complete, significantly above both last year's average of 12% and the 5-year average of 11%. Increasingly soybeans are being planted earlier than ever before and further north than ever before. In fact, planting was reported as far north as Rusk Co. this week. While planting early may have its advantages, one very distinct disadvantage comes to mind: early planted soybeans are highly susceptible to defoliation by overwintered bean leaf beetles.

Readers may recall a time, when Wisconsin winters were less balmy, blizzards were a regular winter occurrence, and soybean planting was a mid-season event. Back then, bean leaf beetles were not a pest of concern to the state's soybean growers; they were unable to withstand Wisconsin winters. Times have changed and bean leaf beetles are now very capable of surviving the winter months. Earlier planting dates have narrowed the gap between bean leaf beetle emergence and soybean emergence, enabling the survival and reproductive success of overwintered beetles.

It's not clear how bean leaf beetles will fare this season, but at least one element of the triple threat facing soybeans this summer — rust, soybean aphid or bean leaf beetle — is sure to make an impact. Growers with early planted soybean fields should be on high alert in the next two-three weeks for bean leaf beetle defoliation. The threshold recommended for bean leaf beetles feeding on seedling soybeans are 16 beetles per foot of row during the early seedling stage and 39 beetles per foot of row when soybeans are at stage V2+.

Vegetables

Swede midge detection survey planned – Swede Midge (*Contarinia nasturtii*), also known as cabbage crown gall fly or cabbage gall midge, is a foreign pest of cole crops. It has been present in North America for nearly a decade,

but has never been found in Wisconsin. Since 1996 Swede midge has caused serious losses in Ontario, Canada. Damage was mistaken for nutrient deficiency until 2000 when the presence of Swede midge was confirmed on broccoli. Last September, two Swede midge specimens from Niagara County, New York, were trapped in experimental pheromone traps. How this species arrived in North America is unknown, but movement of transplants is the most likely pathway, since females are weak flyers. Swede midge is a common pest in Europe and southwestern Asia.

Swede midge larval feeding can distort growing tips resulting in multiple heads or no heads, swollen young leaves, and crinkled stems with brown scarring. Fully grown larvae are 3-4 mm in length and become bright yellow. Adults look mosquito-like, and it is difficult to distinguish the Swede midge from other midges.

With the cooperation of several Wisconsin vegetable growers, the detection survey will include five sites this year, one site per county in Dane, Iowa, Waushara, Racine, and Ozaukee Cos., and possibly a sixth site in Outagamie Co. The survey was made possible through the USDA-CAPS (Cooperative Agricultural Pest Survey) program which supplied pheromone lures to several states. The traps being deployed to detect Swede midge are delta traps, Jackson type, and will be suspended from stakes 30 cm above the ground. Any suspects caught in traps will be sent to Cornell University for confirmation. DATCP thanks the Wisconsin vegetable growers who agreed to participate in this survey.

Diamondback moth – Fifteen diamondback moths were caught in the black light trap at Wausau, and a single moth was caught at the Lancaster site in the last week. Black light trap catches signal that diamondback have emerged from protected sites, and are beginning to mate and lay eggs on planted crops or cruciferous weeds.

Growers of susceptible crops are encouraged to examine plants weekly for larvae. Larvae are 3/8 inch long, green with pointed ends, and wiggle when disturbed. For fresh market cole crops, see the table for thresholds.

Caterpillar complex (diamondback, cabbage looper, and cabbageworm) thresholds for major cole crops		
	Growth Stage	Threshold (% infestation)
Cabbage	Seed bed	10%
	Transplant to cupping	30%
	Cupping to early head	20%
	Mature head	10%
Broccoli	Seed bed	10%
	Transplant to first flower	50%
	Flower bud to harvest	10%
Cauliflower	Seed bed	10%
	Transplant to first curd	50%
	Curd present	10%

Processing cabbage (sauerkraut) can withstand up to 75% infestation.



The Vegetable Insect Management manual by Foster and Flood cautions growers to avoid using broad-spectrum insecticides early in the season, when diamondback moth larvae (and imported cabbageworms) are present only in low numbers and crops can tolerate moderate damage. This simple measure helps to preserve beneficial parasitoids that may suppress caterpillar populations later in the season.

Cabbage maggot – Full bloom of the common lilac throughout southern Wisconsin is an event that indicates first generation cabbage maggot eggs are being laid. Lilacs are expected to reach full bloom in southern Wisconsin early next week. Bear in mind that cool wet springs promote conditions that favor the development of heavy cabbage maggot infestations. Fields of cruciferous vegetables should be scouted closely for signs of cabbage maggot activity following egg hatch. For more information on the cabbage maggot, see the feature article on Maggots in the April 15 issue of the Wisconsin Pest Bulletin.

Onion maggot – Peak emergence of first generation flies occurs once 680 GDD₄₀ have accumulated. Some portions of southern Wisconsin will reach 680 GDD₄₀ in the next week if temperatures warm up. Onions should be transplanted one week (that's now!) before flies are expected to emerge. Monitor peak fly emergence by placing yellow dishpans filled with soapy water around field edges. See the feature article on Maggots in the April 15 issue of the Bulletin for additional information.

Forest and Landscape

Spruce needle drop – This malady, associated with the fungus *Setomelanomma holmii*, has been found at a number of nursery dealers throughout the state. Affected needles become mottled and brown (see picture on next page). Often small, black specks are visible on the twigs



of affected trees. These specks are the fruiting bodies of the fungus that produce the spores for future infections. Currently, there is little information regarding the fungus and the disease, but researchers continue to work to find solutions to the problem.



Weir's cushion rust – Inspectors continue to find this one-host rust on Colorado spruce at nursery dealers across the state. There has been one instance of this rust possibly affecting white spruce but this has not been confirmed. This disease affects Colorado, Englemann, white, red, black, and Sitka spruces. The pathogen is native to the forests of the western U.S. where it occasionally causes significant, but rarely lethal, defoliation.

The infection cycle begins at budbreak and continues over a span of about 2-3 weeks. During this time, spores become wind-borne from infected spruce to the newly emerging needles of surrounding spruce. Peak periods of spore dispersal and levels of infection have been found to be directly correlated to rainfall during this period. The first symptoms of infection become apparent as early as July and are expressed as yellow bands on new growth. Infected needles are retained through the winter



and into spring when, just before budbreak, the reddish-orange pustules break through the needle epidermis in the banded areas and discharge spores. Spores are then carried by the wind completing the one-year disease cycle. Following spore discharge, the needles brown and fall off by late summer. Damage is usually heaviest on the lower portion of trees but may involve entire trees. Severely infected trees may lose a complete complement of needles, leaving only the current year's growth.

For control, the first application of a registered fungicide should be made when 10% of the trees have broken some buds; applications should then be made at weekly intervals until needles are mature; this is usually 3 sprays, but in years where budbreak is slow and the weather is cool and wet, up to 5 sprays may be necessary to control this rust.



Eastern tent caterpillar – The larvae maturing within tents have now reached the 3rd and 4th instars in southern Wisconsin. For the past few weeks these larvae have been growing rapidly, consuming two to three times their body weight in food a day. Tents are just beginning to appear in roadside wild cherry trees in St. Croix and Pierce Cos..

While it can be disconcerting to see large numbers of tents in roadside trees, eastern tent caterpillars rarely reach large populations in ornamental trees. Control of this pest can be achieved by pruning out tents, a measure that is much easier to do when tents are still relatively small. After removing the tents make sure that all larvae inside have been destroyed. Do not attempt to burn the tents. This is unnecessary and may actually injure the tree.

Eastern Tent Caterpillars will feed for another two weeks in southern Wisconsin, and possibly five to six more weeks in the north. Adults can be anticipated at 725 GDD₅₀.

Pine needle scale – First generation crawlers are active now (200-350 GDD₅₀); the most effective treatment window will be closing in the next few days. Control can only be accomplished if the crawler stage is targeted. After this stage, pine needle scales develop a waxy covering which makes them invulnerable to insecticides. In most cases pine needle scale infestations weaken pines, making them more susceptible to attack by other insects and diseases; however, prolonged, heavy infestations may eventually kill entire trees or at least individual branches. Dormant oils or other insecticides are can be used to control this pest.



Elm leaf beetle – Larvae of the elm leaf beetle, a major skeletonizer of elm trees in urban settings, can be expected in southern Wisconsin either next week or the following (400-500 GDD₅₀). The larvae feed on the undersides of elm leaves and pupate at the base of trees. Effective control of elm leaf beetles is accomplished by targeting the larvae or adults while they are still on the tree. Insecticidal soaps and light horticultural oils are just two of the many products that may be used to control this pest. Treat when new larvae are appearing and leaf skeletonizing is first observed on fully expanded leaves (around late May). A second spray may be needed in July for second generation larvae. Only the trunk of the tree needs to be sprayed when larvae are near the tree base, just prior to pupation. There are two generations per year in Wisconsin.

Oystershell scale (brown race) – First generation crawlers are active now 275-500 GDD₅₀. Effective control of this pest can only be achieved during this 225 GDD window which will come to a close in southern Wisconsin in the next 10-15 days.

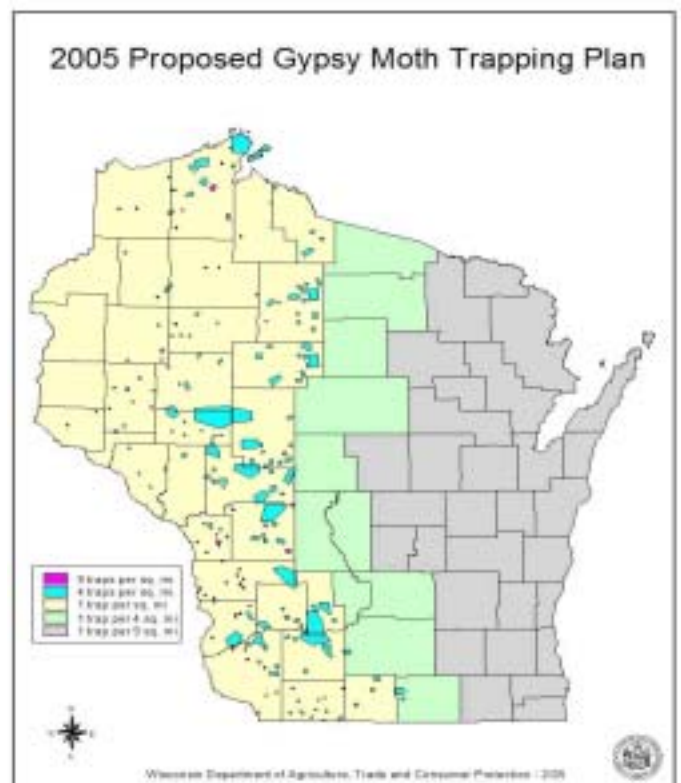
Gypsy Moth

Gypsy moth program – Trapper training is scheduled to take place during the week of May 16, in Hayward, Black River Falls and Madison. Training sessions address safety issues, gypsy moth biology and identification, the use of plat maps, trap setting protocols, land owner contacts, and using GPS units to mark trap locations. Once the training session is complete, trappers spend one day of training in the field with a regional trapping crew, followed by a day of individual field training with an assigned lead worker. The fluorescent orange triangular traps or bright green milk carton traps will begin noticeable along roadsides and near wooded areas after May 16th.

Seasonal gypsy moth trappers wear either an orange or green vest and carry a photo I.D. card and vehicle identification placards to identify themselves as participants in the Gypsy Moth Program. Trappers are instructed to contact landowners before setting a trap on private property. In the event that the landowner is unavailable, a note is left at the residence describing the trapping program and the location of the trap. Landowners who wish to have the trap moved or taken down should call the 800-number provided below. Landowner cooperation in allowing gypsy moth trappers to set traps on private property is sincerely appreciated.

Questions about the GYPSY MOTH PROGRAM? Please call the hotline at 1-800-642-MOTH or visit our website at:

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



Fruit

***Proteoteras aesculana* Riley** – Southeastern Wisconsin apple growers have been perplexed this season by a codling moth look-a-like which has made a regular appearance in pheromone traps since mid-April. This species very closely resembles the codling moth, but differs in being slightly smaller (8 mm), and in having distinctive bumps on the wings. The revealing indicator that the species in question was not the actual codling moth, was that its flight period began much earlier than that of the codling moth. *P. aesculana* began showing up in Racine Co. traps between April 14-21, when fewer than 150 GDD₅₀ had accumulated in southeastern Wisconsin. Codling moth flight doesn't begin until 201-340 GDD₅₀ have been reached. *P. aesculana* is not a pest of apples.

Plum curculio – For the second consecutive season, six apple insect trapping cooperators have graciously volunteered to monitor pyramid traps to track the spring migration of plum curculio adults into their orchards. Determining when weevils become active is an essential step toward accurately timing the first insecticide application to control this pest.

According to the degree day model for plum curculio, adult activity begins around 250 GDD₅₀ and spans approximately six weeks. Much of Wisconsin has now surpassed that point. The first reported capture of two weevils came from an orchard located near Montello



earlier this week, indicating that adults are active in central Wisconsin. The specific number of weevils caught per trap does not, however, help to predict of the potential for fruit damage. In addition to trapping, growers must also scout for fruit damage to assess the need for control.

Developing fruit is most susceptible to curculio injury after petal fall. Growers with a history of plum curculio damage should apply the first spray at petal fall; additional sprays may be required to prevent injury to developing fruit during the egg laying period. According to a model developed at Cornell University, sprays or residuals to prevent plum curculio egg laying only need to be maintained until 40% of egg laying is complete. Cornell researchers estimate that 40% of plum curculio egg laying is over once 340 GDD₅₀ have accumulated after petal fall.

Summary of Plum Curculio egg-laying model (Cornell University)

- Treat the entire orchard at petal fall using a broad-spectrum insecticide
- Begin calculating GDD₅₀ after petal fall treatment
- No additional sprays are necessary if 340 GDD₅₀ accumulate within 14 days of a petal fall treatment.

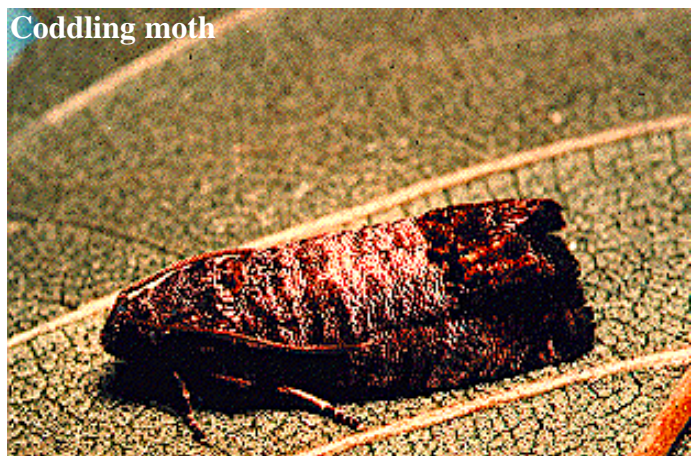
Spotted tentiform leafminer – Surprisingly STLM trap counts escalated substantially this week, rather than decreasing as expected. Where 329 GDD₅₀ have accumulated, such as in Dubuque, Lone Rock, Beloit, Sullivan, Madison and LaCrosse, the first leaf mines of the season should now be visible in orchards. Growers in these areas should begin scouting the undersides of leaves for sap-feeder mines NOW, and continue through 403 GDD₅₀. Insecticides used to control STLM are only effective against the 1st-3rd instar sap-feeder larvae. For scouting management recommendations, see the May 6 issue of the Wisconsin Pest Bulletin.

Spotted Tentiform Leafminer Thresholds

Generation	Treatment Threshold
First	0.1 mine per leaf
Second	1 mine per leaf
Third	5 mines per leaf

Note: thresholds apply to sapfeeder leafmine only.

Codling moth – The first flight of moths in progress throughout southern Wisconsin, and along with the moth flight comes mating and egg laying. Codling moth egg hatch is anticipated to begin around 491 GDD₅₀. This event could begin by June 9 near Racine, by May 23 near Madison and by May 25 near LaCrosse. The first flight of moths isn't expected to peak for another two weeks, once 500 GDD₅₀ have been reached.



<http://www.tfrec.wsu.edu/InsectRef/CodlingMoth/CodlingMothAdult2.GIF>

APPLE INSECT TRAPPING RESULTS

	Date	STLM	RBLR	CM	OBLR	PC
Crawford Co.						
Gays Mills 1	5/1-5/7	200	33	2		
Gays Mills-E2	5/5-5/12	25	14	3		
Iowa Co.						
Dodgeville	5/5-5/12	35	16	0	22	
Richland Co.						
Hill Point	5/4-5/10	186	8	0	0	
Richland Center -W	5/5-5/12	70	17	0		
Richland Center-E	5/5-5/12	135	42	4		
Sauk Co.						
Baraboo	5/5-5/12	30	5	0	0	
Dane Co.						
Deerfield	5/4-5/11	162	78	3	13	
W Madison	5/7-5/11	13	34	0		
	4/28-5/6	12	27	0		
Dodge Co.						
Brownsville	5/5-5/12	14	23	0	1	
Green Co.						
Brodhead	5/5-5/12	2	13	0		
Racine Co.						
Raymond	5/6-5/13	378	55	4	15	
Rochester	5/5-5/12	1007	46	0.25		1
Kenosha Co.						
Burlington	5/6-5/13	NA	8	4	0	
Ozaukee Co.						
Mequon	5/6-5/12	375	26	0		
Waukesha Co.						
New Berlin	5/6-5/13	136	22	0	4	
Pierce Co.						
Spring Valley	5/6-5/13	252	61	2	3	0
Jackson Co.						
Hixton	5/3-5/10	82	36	0	1	
Trempealeau Co.						
Galesville	5/6-5/12	350	58	0	0	
Marquette Co						
Montello	5/1-5/8	318	14	0	0	2
Brown Co.						
Oneida	5/3-5/10	500	30	4	0	
Sheboygan Co.						
Plymouth	5/6-5/13	>700	56	5	19	
Fond du Lac Co.						
Malone	5/5-5/12	50	25	0		
Rosendale	4/19-5/9	0	0	2		
Marinette Co.						
Wausaukee	5/6-5/13	42	13	0	0	

Black Light Trapping Results

Trap Site	Date	ECB	True AWF	Fall AW	BCW	DCW	SCW	VCW	WBCW	CabL	CeL	CEW
Southwest												
Lancaster	5/5-5/12	0	33	1	0	0	0	0	0	0	10	0
South Central												
W Arlington	5/6-5/13	0	15	0	1	0	0	0	0	0	0	0
Mazomanie	5/5-5/12	0	9	0	1	0	0	0	0	0	1	0
West Madison	5/5-5/12	0	32	0	1	0	0	0	0	0	6	0
Southeast												
Janesville	5/7-5/13		39								12	
North Central												
Wausau	5/6-5/13	0	0	0	0	0	0	0	0	0	0	0
East Central												
Manitowoc	5/6-5/13	0	12	0	0	0	0	0	0	0	0	0

ECB, European corn borer; AW, armyworm; BCW, black cutworm; DCW, dingy cutworm; SCW, spotted cutworm; VCW, variegated cutworm; WBCW, western bean cutworm; Cab L, cabbage looper; CeL, celery looper; CEW, corn ear worm



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

Web Site of the Week

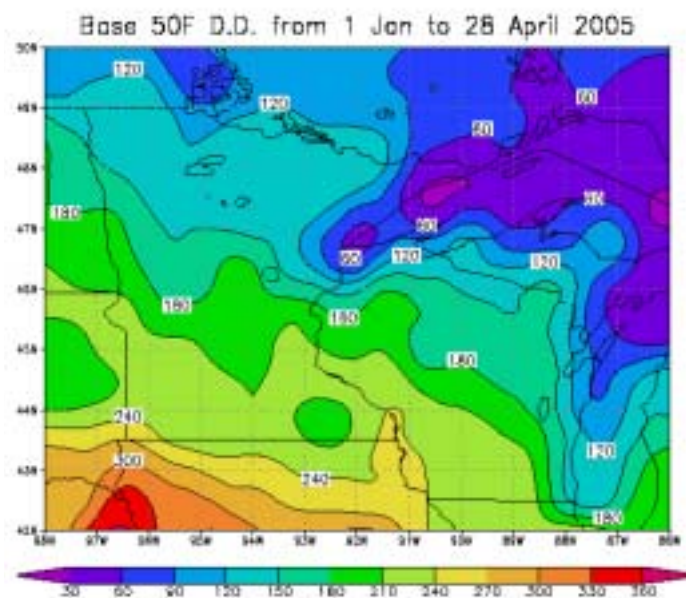
World Economic Plants from the USDA-ARS Germplasm Resources Information Network

<http://www.ars-grin.gov/cgi-bin/npgs/html/taxecon.pl>

Quote of the Week

“What do I know of man’s destiny? I could tell you more about radishes.”

Samuel Beckett (1906-1989), Irish playwright



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