

STATE OF WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION PLANT INDUSTRY BUREAU 2811 Agriculture Dr. Madison, WI 53718 • http://pestbulletin.wisconsin.gov

WEATHER & PESTS

Sharply cold weather early in the week was replaced by record warmth as southerly winds and approaching low pressure brought the warmest temperatures of the year to the state on May 14. Several western locations, including La Crosse, New Richmond and Platteville, recorded highs in the lower 90s, while temperatures in the east were in the 70s and 80s due to lighter winds and a lake breeze. Conditions were favorably dry and mild in the days to follow, affording farmers a larger window for fieldwork activities compared to recent weeks. Spring tillage advanced rapidly under mostly sunny skies, and full-scale planting of corn, oats, peas, potatoes and vegetables continued. Despite increased fieldwork, the overall planting rate remained well behind normal after a slow start to the season. As of May 12, corn producers had planted only 14% of this year's crop, 40 percentage points behind last year and 32 points behind the fiveyear average. Another week of dry weather is needed for farmers to make significant planting progress.

LOOKING AHEAD

ALFALFA WEEVIL: Larvae are appearing in southern Wisconsin alfalfa. Counts during the period of May 13-15 varied from 1-19 per 100 sweeps and averaged three per 100 sweeps. Adults have also become increasingly prevalent in the last week, signaling that spring egg deposition has intensified. Surveys to evaluate larval populations and defoliation should begin by May 16 in the south and May 21 in the central counties.

CODLING MOTH: The first moths of the growing season could emerge in orchards next week. Before then, apple growers are advised to closely examine traps for the look-alike, *Proteoteras aesculana*. This species, also referred to as the maple tip borer, appears one week earlier than the codling moth and is slightly smaller.

BLACK CUTWORM: Migrants arrived in the state five weeks ago. An initial cutting date of May 28 is anticipated based on the first significant capture of moths on May 6-7. The annual trapping survey, which can forewarn of damaging larval populations, has yielded 252 moths in 30 traps this month. A comparatively small migration such as this one indicates a low risk for widespread outbreaks, although localized problems remain a possibility. Routine monitoring of susceptible corn fields will be required from emergence until the five-leaf stage (V5).

EUROPEAN CORN BORER: Pupation of overwintered larvae began by May 13 in the south-central area. At current temperatures, the earliest moths could emerge from May 21-24 at advanced southern locations. Black light trapping cooperators concerned about this insect should have their traps in operation by early next week.

FORAGES

ALFALFA WEEVIL: Larvae were observed for the first time this season on May 13 in Grant County. Surveys conducted in Dane, Green, Grant, La Crosse, Lafayette, Monroe and Rock counties found low counts of 1-19 per 100 sweeps, with an average of three per 100 sweeps. Systematic sampling for larvae and leaf tip damage should begin at 300 degree days (sine base 48°F), or by May 16 in southern Wisconsin and one week later in the central counties. Alfalfa weevil degree day accumulations as of May 15 were as follows: Beloit 272, Eau Claire 164, La Crosse 188, Madison 212, Milwaukee 172 and Wausau 151.

TARNISHED PLANT BUG: Surveyed fields in the southwest and south-central areas contained very low counts of 1-5 per 100 sweeps. The average was two per 100 sweeps, the same as in the previous week. Plant bug populations rarely attain economic levels in alfalfa in spring, but their relative abundance can be an indicator of potential problems for apples, strawberries and other fruit and vegetable hosts.



Tarnished plant bug

Oldrich Roucka www.naturfoto.cz

PEA APHID: Nymphs were collected from 34 of the 39 (87%) alfalfa fields sampled in the past week. The high count of 42 per 100 sweeps was found near Janesville in Rock County.

CORN

BLACK CUTWORM: More moths arrived with southerly winds in the past week. The network of 31 pheromone

DEGREE DAYS JANUARY 1 - MAY 16

LOCATION	50°F	2012	NORM	48°F	40°F
Dubuque, IA	247	591	361	243	506
Lone Rock	229	584	_	213	470
Beloit	287	597	371	272	564
Madison	226	551	346	212	466
Sullivan	241	544	322	224	488
Juneau	204	506		208	434
Waukesha	199	442	_	196	420
Hartford	184	430	_	184	396
Racine	179	399	—	180	399
Milwaukee	172	386	272	172	379
Appleton	171	422	286	172	357
Green Bay	146	358	265	146	329
Big Flats	188	500	_	176	376
Hancock	190	486	334	187	374
Port Edwards	177	464	325	173	339
La Crosse	191	536	384	188	395
Eau Claire	167	450	330	164	319
Cumberland	145	372	278	134	270
Bayfield	95	259		83	200
Wausau	159	392	276	151	292
Medford	154	388	241	147	282
Crivitz	131	326	_	125	286
Crandon	142	327	222	129	258

Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2013. NORMALS based on 30-year average daily temps, 1981-2010.

traps distributed in southern Wisconsin registered another 68 migrants, for a cumulative total of 252 as of May 15. Moths began appearing in the state in mid-April this year and egg deposition is now occurring on winter annual weeds such as common chickweed, peppergrass and yellow rocket in no-tillage and reduced tillage fields. Larvae resulting from the spring flight could begin cutting corn seedlings by May 28.

EUROPEAN CORN BORER: Larvae are pupating in Grant, Lafayette and Rock counties and in other warm southern locations. These advanced corn borers are expected to spend the next 7-10 days in the pupal stage before emerging as moths late next week or the following week. Elsewhere in the state pupation has not yet started and the first moths are unlikely to emerge before early June.

WIREWORM: This soil pest has been noted during surveys in the last two weeks, and like the black cutworm, could injure emerging corn later this month. Corn planted

into fields formerly in alfalfa or pasture is at an increased risk of damage, which is especially important to consider this spring as numerous acres of winterkilled alfalfa are converted to corn. Problems should become evident later this month as corn emerges from the soil. In severe situations, or if wireworms have been a serious problem in the past, treatment may be necessary.

SMALL GRAINS

WHEAT DISEASE: Surveys in winter wheat fields in Dane, Dodge and Fond du Lac counties found very low levels of disease. Powdery mildew was present in seven of 12 fields and Septoria was noted in five fields; both diseases occurred at only trace levels. Most fields were in the Feekes 4-5 range and no rust was observed.

Reports from the national Cereal Rust Survey indicate significant stripe rust infection throughout the southern states, including cases within the last week from Champaign and White counties in southern Illinois. These reports, coupled with warmer weather, suggest that growers should remain alert for fungus development in their wheat.



Stripe rust on wheat

University of Kentucky graincrops.blogspot.com

FRUITS

CODLING MOTH: Apple growers are advised to place pheromone traps now to detect the first moths. Spring moth emergence could begin this weekend in locations where nightly temperatures exceed 62°F. Daily monitoring over the next two weeks will be required to document the "biofix" or sustained capture of moths. OBLIQUEBANDED LEAFROLLER: Larvae have resumed activity after overwintering under the bark of scaffold limbs and twigs. The ¼-inch, yellowish-green caterpillars with black head capsules are expected to feed for 2-3 weeks before pupating within leaf tubes. Scouting is recommended at this time.



Obliquebanded leafroller larva

Utah State University

REDBANDED LEAFROLLER: The first flight has accelerated and egg deposition is under way. Small larvae should begin emerging next week. A recommended sampling method for this insect is to start monitoring for earlyinstar larvae on foliage and watersprouts 10-12 days after the first moth is registered. Late-instar larvae and pupae can be found by searching for folded leaves. An important diagnostic feature of RBLR is its uniform coloration (both the body and head are yellowish-green). Other leafrollers have black or darkened heads.

SPOTTTED TENTIFORM LEAFMINER: First brood adults have been active for three or more weeks, and peak emergence has already occurred at some orchard locations. The optimal sample period for first generation sapfeeder larvae is 10-14 days after a peak capture is registered. Pheromone trap counts during the last week ranged widely from 0-630 moths, with the high reported from New Berlin in Waukesha County.

PEAR THRIPS: An apple orchardist near Malone in Fond du Lac County has reported a recurrence of this insect in orchard blocks where problems were noted in past years. Similar to last season, the heaviest populations are concentrated in trees adjacent to wooded lots. No controls have been implemented as of May 15. A count of three or more thrips per fruit bud can cause abnormal leaf formation, leaf tatter, flower injury and reduced fruit set and is considered an economic population.

VEGETABLES

ONION MAGGOT: Flies of the first and most damaging generation will begin emerging next week in southern Wisconsin. Cultural controls, including removal of onion cull piles and crop rotation, are increasingly important now that the onion maggot has developed resistance to many of the insecticides used as granular furrow treatments at seeding. Good sanitation is the best preventative measure.

ASTER LEAFHOPPER: Migrants have been detected at low levels in alfalfa across the southern half of the state, indicating that vegetables and other susceptible hosts may be at risk of aster yellows disease next month. The aster yellows organism must be retained by the leafhopper for three weeks after being acquired before it can be transmitted to another host. Growers are advised to begin watching for symptomatic plants early in June.

NURSERY & FOREST

VIRUSES: Recent inspections of greenhouses and garden centers have found relatively few insect and disease problems, with the exception of plant viruses. Symptoms of tobacco rattle virus (TRV) were observed on several plants, including clematis 'Ramona', 'Jackmanii' and 'Bee's Jubilee', delphinium 'Guinevere', dicentra 'Alba', epimedium 'Rubrum', phlox 'Eva Cullum' and 'Junior Dance' and pachysandra 'Green Carpet'. Cucumber mosaic virus (CMV) was noted on aconitum 'Azure Monkshood', lobelia 'Ruby Slippers' and mandevilla 'Sun Parasol'. Both CMV and TRV are spread mechanically by contaminated pruning tools and have become very common viral diseases in the nursery trade. Virusinfected nursery stock must be removed from sale and destroyed.

HONEYLOCUST PLANT BUG: Nursery inspectors report that nymphs are emerging in Columbia, Dane and Milwaukee counties and feeding on honeylocust leaves. Early-season feeding by these immature plant bugs causes leaf distortion, discoloration and stunting, and is usually more severe than damage by the adults later in June and July. The optimal window for treatment of this most damaging life stage is 7-10 days after budbreak. Yellow-leaved cultivars, such as 'Sunburst', are more susceptible to injury than some of the green-leaved strains like 'Sunset' or 'Shademaster'.



Honeylocust plant bug damage

Liz Meils DATCP

APHIDS: Low to moderate populations of aphids were found on a variety of annuals and perennials at retailers in southeastern Wisconsin. These insects can directly damage nursery stock hosts when densities are high, but in most instances aphids are an aesthetic problem. Of larger concern is the secondary growth of sooty mold which results from their honeydew production. Insecticidal control is usually not required as there are many natural enemies that regulate populations.

GYPSY MOTH: The first aerial treatments of the year are tentatively planned for Friday, May 24 in Green, Iowa and Rock counties. Selected areas in each county, totaling approximately 1,774 acres, will receive an application of *Bacillus thuringiensis* var. *kurstaki*, or Btk. Treatment is scheduled for the following week in Grant and Lafayette counties. Aerial spraying is weather-dependent. Conditions such as high winds, rain predicted within four hours, fog, or high humidity can cause delay or cancellation of spray schedules.

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 9 - 15

COUNTY	SITE	STLM ¹	RBLR ²	CM ³	OBLR⁴	AM RED⁵	YELLOW ⁶
Bayfield	Keystone	0	0				
Brown	Oneida	100	33				
Columbia	Rio	16	28				
Crawford	Gays Mills	163	65				
Dane	Deerfield	177	11				
Dane	McFarland	0	0	0			
Dane	Mt. Horeb	43	30				
Dane	Stoughton	21	23				
Dane	West Madison	27	19	0			
Fond du Lac	Campbellsport	7	24	0			
Fond du Lac	Malone	3	12	0			
Fond du Lac	Rosendale	78	33	0			
Grant	Sinsinawa	0	5	0			
Green	Brodhead	4	12	0			
lowa	Mineral Point	113	49				
Jackson	Hixton						
Kenosha	Burlington	85	9				
Marathon	Edgar	3	22				
Marinette	Niagara	0	0				
Marquette	Montello	380	43				
Ozaukee	Mequon	0	4	0			
Pierce	Beldenville	0	0	0			
Pierce	Spring Valley	0	7				
Polk	Turtle Lake	0	0	0			
Racine	Raymond	197	18	0			
Racine	Rochester	390	23				
Richland	Hillpoint	360	8	0			
Sheboygan	Plymouth	38	32				
Walworth	East Troy	6	3				
Walworth	Elkhorn	20	10				
Waukesha	New Berlin	630	0	0			

¹Spotted tentiform leafminer; ²Redbanded leafroller; ³Codling moth; ⁴Obliquebanded leafroller; ⁵Apple maggot red ball; *Unbaited AM trap; **Baited AM trap; ⁶Apple maggot yellow board.

COUNTY	SITE	ECB ¹	TA ²	BC₩ ³	SCW⁴	DCW⁵	CE ⁶	CEL ⁷	WBC ⁸	FORL ⁹	VCW ¹⁰
Chippewa	Chippewa Falls										
Columbia	Arlington										
Crawford	Prairie du Chien										
Dane	Mazomanie										
Fond du Lac	Ripon										
Manitowoc	Manitowoc										
Marathon	Wausau										
Monroe	Sparta										
Portage	Plover										
Rock	Janesville	0	3	0	0	0	0	2	0	1	0
Walworth	East Troy										
Wood	Marshfield	0	4	3	0	0	0	0	0	0	0

¹European corn borer; ²True armyworm; ³Black cutworm; ⁴Spotted cutworm; ⁵Dingy cutworm; ⁶Corn earworm; ⁷Celery looper; ⁸Western bean cutworm; ⁹Forage looper; ¹⁰Variegated cutworm.