

## **WEATHER & PESTS**

Drier weather returned to Wisconsin, improving conditions for summer crop planting after several weeks of surplus wetness. Much of the state experienced the first four consecutive days without precipitation since late March. Fieldwork progressed rapidly under mostly sunny skies, and a substantial percentage of the state's corn, peas, oats and snap beans were sown. Full-scale planting of soybeans began statewide. Near-record low temperatures on Tuesday night prompted concerns over frost damage to fruit trees and other sensitive plants, but reports indicate most locations remained frost-free. Daytime temperatures gradually moderated into the 70s during the latter part of the week. The weather was very suitable for fieldwork and gardening, as well insect activity and plant development. Both planting prospects and farmers' dispositions have improved measurably with the latest warming trend.

## LOOKING AHEAD

BLACK CUTWORM: The primary damage period is expected to begin by May 26, or 300 degree days after the first significant migration event on April 11. At Janesville in Rock County, 222 degree days (base 50°F) have accumulated since the major flight was documented. The unusually large black cutworm migration this spring

indicates an elevated risk for localized outbreaks. Close observation of all corn fields should begin at emergence and continue until the five-leaf stage (V5).

EUROPEAN CORN BORER: Pupation has begun near Beloit, Lone Rock, Madison, Sullivan and other advanced southern locations. Black light traps could register the first moths of the growing season from May 25-June 1. Preliminary indications are that the spring flight will be extremely small again this year.

ALFALFA WEEVIL: Larvae were collected from alfalfa in Richland, Sauk and Vernon counties on May 17. Field scouting to appraise leaf feeding damage is recommended next week and through first harvest and early regrowth. A defoliation level of 40% or greater in the first crop signals the larval population is high and some form of control would be prudent.

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.

GYPSY MOTH: The first aerial treatment of the year is planned for Monday, May 23 in Grant, Iowa and Lafayette counties. Selected areas in each county, totaling

approximately 6,440 acres, will receive an application of *Bacillus thuringiensis* var. *kurstaki* or Btk. A second application will be made 5-10 days later. Treatment is also planned for next week in Dane, Green and Rock counties. Aerial spraying is weather-dependent and requires calm winds, no precipitation and high humidity.



Gypsy moth aerial treatment in Iowa County

Chris Whitney DATCP

#### **FORAGES**

ALFALFA WEEVIL: Larvae are appearing in alfalfa in the southwest counties. Counts this week were very low (< 2 per 25 sweeps) and no noticeable defoliation was observed. The alfalfa weevil phenology model forecasts the first emergence of larvae for 300 degree days (sine base 48°F), or by May 23 at Madison, June 1 at Eau Claire and June 7 at Wausau.

POTATO LEAFHOPPER: Migrants were collected last week at the rate of 1-2 per 50 sweeps in Grant, Green and Sauk counties. Their absence this week suggests the first major spring migration of 2011 has not yet occurred.

TARNISHED PLANT BUG: Numbers have not changed significantly since the last report, although surveys indicate counts are somewhat higher in the south-central part of the state than elsewhere. All fields checked from May 13-18 had fewer than 6 per 25 sweeps.

PEA APHID: Populations continue to be low in the southern districts. Surveys in Dodge, Jefferson, Richland, Sauk and Waukesha counties yielded an average of 4 per 25 sweeps in 26 fields sampled. The high count for the week was 8 per 25 sweeps in Jefferson County.

### **DEGREE DAYS JANUARY 1 - MAY 18**

LOCATION	50°F	2010	NORM	48°F	40°F				
Dubuque, IA	290	436	_	266	635				
Lone Rock	271	431	_	254	592				
Beloit	302	474	_	279	656				
Madison	241	398	376	239	547				
Sullivan	254	430	360	247	563				
Juneau	217	388		213	503				
Waukesha	186	353	_	182	459				
Hartford	176	334	_	171	437				
Racine	149	306	_	149	411				
Milwaukee	143	295	274	142	394				
Appleton	154	337	295	148	391				
Green Bay	120	271	283	118	346				
Big Flats	195	390	_	183	450				
Hancock	187	390	375	177	438				
Port Edwards	173	374	343	165	411				
La Crosse	244	433	404	233	551				
Eau Claire	196	381	347	188	454				
Cumberland	174	342	314	158	409				
Bayfield	112	223	210	94	318				
Wausau	148	334	294	138	359				
Medford	150	335	252	140	364				
Crivitz	116	280	_	105	332				
Crandon	127	297	255	112	325				
Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2011.									

Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2011. NORMALS based on 30-year average daily temps, 1971-2001.

CLOVER LEAF WEEVIL: Counts of adults in alfalfa range from 1-4 per 25 sweeps. In some instances this beetle outnumbers the adult alfalfa weevil, for which it can be mistaken. The adult clover root curculio is smaller, light gray, and lacks the distinctive V-shaped dorsal marking.

#### CORN

BLACK CUTWORM: Larvae resulting from the April-early May migration are in the early instar stages and signs of their feeding (i.e. small pinholes in the leaves) should be apparent in infested corn fields. At current temperatures, the primary damage period is expected to begin by May 26 in southern Wisconsin and 1-2 weeks later in the central and northern areas. Corn fields that were tilled and planted late this spring, as well as fields that had previous weed problems, are candidates for infestation. Regular scouting is advised from emergence until the five-leaf stage (V5).

TRUE ARMYWORM: Migrants have been collected over a wide portion of the state. The black light traps at East Troy, Janesville, Manitowoc, Marshfield and Sparta registered counts of 4-21 moths last week and 1-32 moths this week. True armyworm flights sometimes precede larval outbreaks by 3-4 weeks, so these counts could be an early warning of potential problems.



True armyworm moth

freepages.misc.rootsweb.com

EUROPEAN CORN BORER: Degree day accumulations are appropriate for emergence of the first spring moths by May 25. This would be 11 days later than last year and about average for this pest. Overwintered larvae across southern Wisconsin are entering the pupal stage, which requires 10 days to complete at temperatures of 65°F. Black light trap counts of the European corn borer and nine other nocturnal moths will be listed on the final page of each bulletin issue.

#### **FRUITS**

APPLE SCAB: Reports from orchardists indicate that rainy spring conditions have resulted in 1-4 scab infection periods as of May 18. The primary scab season is expected to continue for another two weeks. It is important for fungicide programs to be maintained during this period.

CODLING MOTH: Contrary to earlier forecasts, the first moths of the season did not appear in pheromone traps this week. Moth emergence can be expected once nightly temperatures exceed 62°F, possibly over the weekend in southern Wisconsin orchards. Although the warm weather predicted for May 21-22 could stimulate emergence, cooler temperatures next week will likely suppress

activity. Apple growers who use moth counts to time the biofix and subsequent sprays are advised to closely monitor traps over the next two weeks.

SPOTTED TENTIFORM LEAFMINER: Counts increased at some sites and decreased at others. The orchards in Fond du Lac, Marinette, Oneida and Pierce counties reported large flights of 500<sup>+</sup> moths, while trap counts in the southern half of the state appear to have peaked last week. Scouting is recommended 10-14 days after the peak flight has been noted. The economic threshold for first brood leafminers is 1 mine per 10 leaves.

REDBANDED LEAFROLLER: Egg hatch should begin next week at most orchards, with the first larvae emerging from 167-228 degree days (base 50F). Redbanded leafroller larvae generally appear around petal fall, and controls applied at petal fall for other target pests usually provide good control of this insect.

#### **SOYBEANS**

BEAN LEAF BEETLE: The first beetles were collected from Green County alfalfa last week. This insect is inconsequential to alfalfa, but its presence and abundance can be an indicator of soybean defoliation potential. Early-planted soybeans are highly attractive to overwintered beetles and should be checked for feeding injury beginning at emergence.



Bean leaf beetle

Steve Scott bugguide.net

## **VEGETABLES**

SEEDCORN MAGGOT: Dr. Al Bussan of the UW-Madison Horticulture Department reminds fresh market growers that applications of compost should be incorporated at least two weeks prior to planting to avoid seed maggot infestations in spring-seeded crops. Any green manure or cover crops should also be plowed down two weeks prior to planting.

COLORADO POTATO BEETLE: Adults are emerging from winter hibernation sites, which suggests oviposition on potatoes, tomatoes, eggplants and other host plants will begin as soon as foliage is available. The orange-yellow eggs are deposited in clusters of 15-30 on the undersides of leaves. Egg hatch occurs in 4-9 days.



Colorado potato beetle eggs

hornfarmgardens.blogspot.com

#### **NURSERY & FOREST**

POWDERY MILDEW: The perennials columbine, coral bells, monarda and phlox at nurseries in Dane and Jefferson counties were infected with this common fungal disease. Powdery mildew is easily diagnosed on most plants by its grayish white powdery dusting on the upper leaves, which later causes foliage to turn yellow and senesce prematurely. Cultural practices that alleviate high humidity and increase air circulation can reduce its occurrence.

CHAPTER NR 40: Nursery inspectors report that the invasive ornamentals *Elaeagnus umbellata* 'Autumn Olive' and *Tanacetum vulgare* 'Isla Gold' were being offered for sale at retailers in Pierce and Washburn counties. Under the new Chapter NR 40 Wisconsin Invasive Species Rule, it is illegal transport, import, transfer, sell, and introduce any species included in the rule's prohibited or restricted categories. It is important for nursery operators and brokers to become familiar with these species

because some may be available from out of state sources. Refer to the following website for a list of Chapter NR 40 invasive species: <a href="http://www.dnr.wi.gov/invasives/classification/">http://www.dnr.wi.gov/invasives/classification/</a>.



Tansy 'Isla Gold', a restricted invasive species

Konnie Jerabek DATCP

HOLLYHOCK RUST: Nursery inspections found this rust disease on several varieties of hollyhock and mallow in Dane County. Symptoms include numerous light yellow spots on the upper leaf surfaces and orange-brown rust pustules on the leaf undersides. Hollyhock rust worsens throughout summer, killing most of the foliage on infected plants by early fall. The disease cycle can be broken by cutting stalks back to ground level in the fall and destroying all infected plant material.



Hollyhock rust

Liz Meils DATCP

BLACK ROOT ROT: This root rot disease (caused by the fungus *Thielaviopsis*) was laboratory diagnosed on columbine 'Swan Violet & White' from a Jefferson County retailer. Cool, rainy weather has favored its development

this spring. Symptoms include lightly mottled, chlorotic leaves and roots with dark, sunken black lesions. Many annuals and perennials are susceptible; among the most common are calibrachoa, gaillardia, geranium, gerbera daisy, lupine and petunia. Home gardeners can avoid introducing this disease into their plantings by selecting healthy, symptom-free plants from reputable dealers.



Petunias infected with black root rot

T.Burnes UMN Plant Pathology

WHITE PINE BLISTER RUST: Yellow-orange blisters (aecia) have begun to rupture the infected bark of eastern white pines. This event corresponds phenologically with leaf expansion of the alternate hosts gooseberries and currants. Pruning infected branches and eradicating susceptible Ribes plants from within 900 feet of white pines will decrease its spread since the alternate host is required for perpetuation of the fungus.



White pine blister rust

www.extension.umn.edu

GYPSY MOTH: The annual trapping survey began this week. More than 26,000 traps will be set in 48 western

and central Wisconsin counties to monitor gypsy moth spread and population growth. The program's goal is to set all traps by early July in preparation for moth flight.

#### **WEEDS**

WEEDS IN CORN: Farmers and agronomists are reminded that the critical period of weed control in corn extends for approximately 34 days after planting, or until the V3-V8 stage. Corn must be kept weed-free during this period to avoid yield reductions. Beyond the 8-leaf stage, corn plants have a competitive advantage and pressure from late-emerging weeds seldom results in yield loss. Timing of weed control is especially difficult for giant ragweed, waterhemp and other problem species with long emergence periods and rapid growth rates. Sequential herbicide applications or repeated tillage are the only effective measures for fields with persistent ragweed problems.



Giant ragweed

Clarissa Hammond DATCP

# APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 12 - 18

COUNTY	SITE	STLM <sup>1</sup>	RBLR <sup>2</sup>	CM <sup>3</sup>	OBLR <sup>4</sup>	OBLR <sup>5</sup>	AM RED <sup>6</sup>	YELLOW <sup>7</sup>	GDD 50°F
Bayfield	Keystone	20	15	0					
Bayfield	Orienta	0	0	0					
Brown	Oneida	650	66	0					
Chippewa	Chippewa Falls	60	39	0					148
Columbia	Rio	_	_	_					
Dane	Deerfield	362	87	0					
Dane	Mt. Horeb	75	88	0					
Dane	Stoughton	27	85	0					119
Dane	West Madison	_							
Dodge	Brownsville								
Fond du Lac	Campbellsport	40	75	0					
Fond du Lac	Malone	800	26	0					
Fond du Lac	Rosendale	136	73	0					
Grant	Sinsinawa	0	0	0					
Green	Brodhead	7	30	0					
lowa	Dodgeville	_							
lowa	Mineral Point	115	117	0					145
Jackson	Hixton	68	26	0					
Kenosha	Burlington	54	83	0					
Marinette	Niagara	650	9	0					83
Marquette	Montello	59	12	0					
Ozaukee	Mequon	15	14	0					126
Pierce	Beldenville	810	824	0					
Pierce	Spring Valley	25	93	0					
Polk	Turtle Lake	0	13	0					
Racine	Raymond	141	33	0					
Racine	Rochester	120	116	0					
Richland	Hillpoint	152	107	0					
Sheboygan	Plymouth	92	80	122					
Walworth	East Troy	30	5	0					
Walworth	Elkhorn	40	10	0					
Waukesha	New Berlin	86	17	0					

<sup>&</sup>lt;sup>1</sup>Spotted tentiform leafminer; <sup>2</sup>Redbanded leafroller; <sup>3</sup>Codling moth; <sup>4</sup>Obliquebanded leafroller EASTERN; <sup>5</sup>Obliquebanded leafroller WESTERN; <sup>6</sup>Apple maggot red ball; \*Unbaited AM trap; \*\*Baited AM trap; <sup>7</sup>Apple maggot yellow board.

COUNTY	SITE	ECB <sup>1</sup>	TA <sup>2</sup>	BCW <sup>3</sup>	SCW <sup>4</sup>	DCW <sup>5</sup>	CE6	CEL <sup>7</sup>	WBC8	FORL <sup>9</sup>	VCW <sup>10</sup>
Chippewa	Chippewa Falls								_		
Dane	Mazomanie	0	0	0	0	0	0	0	0	0	0
Grant	Prairie du Chien	0	0	0	0	0	0	0	0	4	0
Manitowoc	Manitowoc	0	32	8	0	0	0	0	0	0	0
Marathon	Wausau										_
Monroe	Sparta	0	1	0	0	0	0	0	0	4	1
Rock	Janesville	0	12	0	0	0	0	2	0	1	0
Walworth	East Troy	0	0	0	0	0	0	1	0	1	0
Wood	Marshfield	0	4	2	0	0	0	1	0	0	0
Vernon	Coon Valley										_

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