

# WISCONSIN PEST BULLETIN

Timely crop pest news, forecasts, and growing season conditions for Wisconsin



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

Rainfall diminished from the previous week and milder conditions prevailed. The lingering storm system that produced last week's cold, damp weather finally exited over the weekend, allowing drier and warmer air into the state. Temperatures improved but remained slightly below average until a mid-week warm front brought the first 70- and 80-degree readings since mid-April, along with periods of showers and thunderstorms. The milder weather afforded farmers a larger window for fieldwork activities compared to recent weeks and spring tillage accelerated under mostly sunny skies. Meanwhile, planting of corn, oats, peas and potatoes continued in southern and central fields with adequate soil temperatures. An unusually active weather pattern this spring has caused considerable temperature and moisture variability across the state and most soils in the north are still too cold and wet for corn planting.

## LOOKING AHEAD

**SEEDCORN MAGGOT:** Corn, soybean and vegetable crops planted next week may be at increased risk of seedling injury and stand establishment problems associated with this soil pest. Peak emergence of first generation flies is expected to occur from May 9-16 in locations where 360 degree days (sine base 39°F) are

surpassed. This includes all of southern and portions of central Wisconsin as far north as Hancock in Waushara County. Sites with decaying organic matter near the soil surface, particularly recently plowed or disked cover crops or weeds, or heavily manured fields, will be preferentially selected for egg deposition.

**BLACK CUTWORM:** Migrants arrived this week in high numbers. The first significant capture was registered near Platteville in Grant County on the night of May 1, indicating the start of egg deposition in fields with heavy crop residues or early-season winter annual weed growth. The peak corn cutting window is projected to open by May 29 in Rock County, May 31 in Dane County, June 2 in Portage County, and June 6 in Brown County.

**PLUM CURCULIO:** Migration from hibernation sites into apple orchards could begin at advanced southern sites in the week ahead. A mean daily temperature of 55-60°F for three to four days induces the spring emergence and dispersal of this pome and stone fruit pest.

**ALFALFA WEEVIL:** Adults are appearing in alfalfa in very low numbers and oviposition has started. The first small larvae should be detectable by May 18.

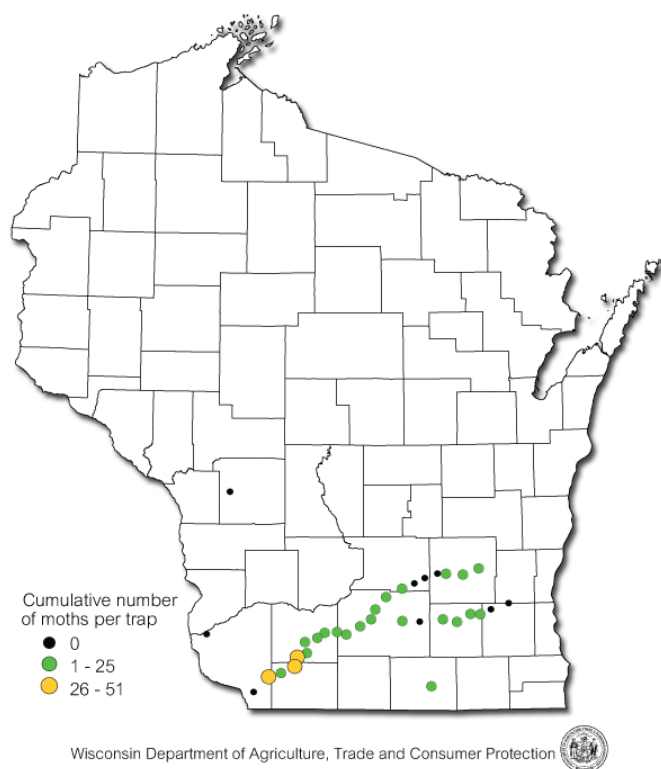
**EUROPEAN CORN BORER:** Pupation is forecast to begin by May 13 in south-central and southwestern Wisconsin. As noted in last week's report, results of 2013 fall popu-

lation survey suggest the overwintered generation of larvae remains historically low and will likely produce an extremely small flight of moths later this month. Black light traps should be installed by May 14 in anticipation of the spring flight.

## CORN

**BLACK CUTWORM:** The annual black cutworm migration has to date yielded 296 moths in 32 traps, with a cumulative high count of 51 moths reported from Platteville in Grant County. Exactly half of the moths (148 of the 296) arrived on the night of May 6. Based on this latest influx, localized problems are a distinct possibility three to four weeks from now, especially considering spring tillage is only 13% complete statewide and less than 3% of the corn crop has been planted. Agricultural fields which have not been tilled or planted at the time of black cutworm arrival provide preferred habitat for egg laying and are at greater risk of infestation. Larvae resulting from the current migration could begin cutting corn seedlings by May 29 in the southern counties and by June 2 in Central Wisconsin.

Black Cutworm Counts 2014



**TRUE ARMYWORM:** Counts in black light and pheromone traps have been very low as of May 7, though

## DEGREE DAYS JANUARY 1 - MAY 7

LOCATION	50°F	2013	NORM	48°F	40°F
Dubuque, IA	187	173	278	174	339
Lone Rock	141	157	—	131	286
Beloit	192	208	285	177	353
Sullivan	90	174	245	79	204
Madison	129	156	266	119	271
Juneau	92	144	—	83	208
Racine	81	127	—	78	206
Waukesha	90	142	—	79	204
Milwaukee	78	119	207	71	190
Hartford	90	130	—	79	204
Appleton	60	118	—	51	159
Green Bay	47	100	197	42	140
Big Flats	100	123	—	85	185
Hancock	100	127	253	85	185
Port Edwards	85	113	249	70	164
La Crosse	139	119	295	123	263
Eau Claire	98	98	250	88	193
Cumberland	64	85	205	54	117
Bayfield	16	54	—	13	33
Wausau	49	104	206	41	110
Medford	47	95	178	41	103
Crivitz	39	90	—	34	93
Crandon	29	94	162	24	62

Method: ModifiedB50; SineB48; ModifiedB40 as of Jan 1, 2014. NORMALS based on 30-year average daily temps, 1981-2010.

higher numbers of armyworms may have arrived along with the black cutworms earlier this week. The first moths of the 2014 season were registered at Janesville on the night of April 21, which was similar to their arrival date last year. Environmental conditions that favor black cutworm outbreaks are also generally conducive for armyworm activity and development. Armyworm outbreaks are usually more common and severe in cool, wet seasons following a drought.

## FORAGES & GRAINS

**ALFALFA WEEVIL:** Adults remain scarce in alfalfa fields. Only three weevils were swept from the 42 fields sampled from April 30-May 7. Weevil counts, and egg deposition in alfalfa stems, are expected to increase noticeably with warmer temperatures in the week ahead.

**PEA APHID:** Egg hatch was observed in Dane, Green, Juneau, Rock and Sauk counties, where nymphs were

collected at the very low rate of 1-4 per 100 sweeps. Alfalfa sampled in La Crosse and Monroe counties this week contained no aphids.

## FRUITS

**BROWN MARMORATED STINK BUG:** A single specimen was found in a Rock County residence last week, marking the second confirmed indoor find of BMSB this year. The first was from a Dane County homeowner in February. This invasive insect is apparently established at low levels in Dane and Jefferson counties, but still has not been found in any agricultural crop or field setting in Wisconsin.



*Brown marmorated stink bug adult*

*clay.ces.ncsu.edu*

**REDBANDED LEAFROLLER:** Low nightly temperatures suppressed moth flights during the April 30-May 7 monitoring period. Weekly counts ranged no higher than 65 moths per trap at 14 reporting apple orchards. The first peak flight of RBLR moths should occur in most southern orchards next week with the accumulation of 160 degree days (base 50°F).

**SPOTTED TENTIFORM LEAFMINER:** Counts of this early-emerging apple pest were also low this week at most sites, with the exception of the Deerfield and Montello orchards which reported 760 and 800 moths, respectively. Moth activity should accelerate sharply in the next few days and peak by mid-May.

## VEGETABLES

**CABBAGE MAGGOT:** Peak emergence of first generation flies can be anticipated in the next two weeks

across parts of southern Wisconsin. This event generally occurs at 300 degree days (base 43°F), as lilacs are in full bloom. Broccoli and cauliflower plantings on light sandy soils are at highest risk of maggot infestation and should be monitored closely later this month for signs of injury. Transplanting cole crops one week before or after peak fly emergence is recommended to avoid the primary damage period.

**ASTER LEAFHOPPER:** Adults were swept in very low numbers from alfalfa fields in Crawford, Richland and Sauk counties, indicating the first distinct immigration has occurred. The infectivity rate of the migrant population has not been determined, but vegetables, perennial ornamentals and other host plants will be at risk of aster yellows disease next month. To spread aster yellows, a leafhopper must first acquire the aster yellows phytoplasma by feeding on an infected plant, and then must incubate the phytoplasmas for about three weeks before infecting new plants. Growers should begin watching for aster yellows in early June and promptly remove symptomatic plants.

**IMPORTED CABBAGEWORM:** The appearance of these yellowish-white butterflies around field plantings and home gardens in spring signals that egg laying is occurring on broccoli, cabbage, kale and other cole crops. Serious early-season infestations are rare, but should they develop, may be controlled with Btk products applied while the larvae are small.



*Imported cabbageworm butterfly* Kim Davis & Mike Strangeland 2005

**COMMON ASPARAGUS BEETLE:** Overwintered adults are appearing in advanced southern areas of the state. Egg laying on emerging asparagus spears will begin next

week in locations where 150-240 degree days (base 50°F) are reached.

## NURSERY & FOREST

**WHITE PINE WEEVIL:** The vibrant yellow blooms of the forsythia shrub are a phenological indicator of white pine weevil emergence and can be used to time scouting and control measures. Soon after the distinctive yellow flowers appear in spring, the adult white pine weevil resumes feeding and laying eggs on the terminal shoots of pines and spruce. The presence of weevils and oviposition holes suggests egg hatch is imminent and treatments should be initiated promptly. Since insecticides are most effective prior to egg hatch (before larvae tunnel into the shoots), growers are urged to closely inspect their trees in the next two weeks for signs of activity. In areas where the treatment interval has passed, removal of wilted leaders should be planned for June or July. Adult white pine weevils are one of the earliest pests to resume activity each spring, requiring just 7-58 degree days (base 50°F) before emerging from overwintering sites.



Yellow forsythia in bloom

flowerpicturegallery.com

**BIRCH LEAFMINER:** Expanding birch leaves should be closely examined in the near future for the translucent blotch mines indicative of leafminer attack. Timely chemical control is critical to suppressing damage. Birch trees with recurrent problems should be treated early in spring, before any leaf discolorations appear. After the mines are apparent, damage may be reduced by treating young larvae during their initial feeding stages.

**COOLEY SPRUCE GALL ADELGID:** Overwintered immature females are active and should be noticeable on the

undersides of Colorado blue spruce branches near the base of new swelling buds. The females develop rapidly in early spring, producing eggs that soon hatch into nymphs. Their feeding stimulates new shoots to elongate into the characteristic pinecone-shaped galls that encompass the entire shoot.

Control must occur before the females develop their white waxy coverings. The preferred treatment window is in early spring before new growth starts. The next treatment opportunity will be in fall, after the last generation of nymphs has settled onto the foliage of Douglas fir or into bark crevices of Colorado blue spruce.

**NR40 INVASIVE SPECIES RULE:** Many aquatic and terrestrial plants commonly used in the nursery industry will be listed as prohibited or restricted once proposed revisions to the DNR's Chapter NR 40 Invasive Species Rule take effect next fall. A few well-known species are the woodland and aquatic forget-me-not, *Myosotis scorpiodes* and *M. sylvatica*, and wisteria, *Wisteria floribunda* and *W. sinensis*. The addition of 42 new prohibited plant species and 29 new restricted plants has been proposed. The revisions provide a phase-out period of 3-5 years for plants listed as restricted, though plants on the prohibited list will not have a phase-out option.

It is important for nursery operators and brokers to become familiar with the invasive plants regulated by Chapter NR40. Refer to the following website for a list of regulated, non-regulated and proposed species:  
<http://dnr.wi.gov/topic/Invasives/speciesNR40.asp?filterBy=Category&filterVal=Plants&addFilter=Classification>



Woodland forget-me-not

Konnie Jerabek DATCP

## APPLE INSECT & BLACK LIGHT TRAP COUNTS APRIL 30 - MAY 7

COUNTY	SITE	STLM <sup>1</sup>	RBLR <sup>2</sup>	CM <sup>3</sup>	OBLR <sup>4</sup>	AM RED <sup>5</sup>	YELLOW <sup>6</sup>
Bayfield	Keystone						
Bayfield	Oriente						
Brown	Oneida						
Columbia	Rio	90	0				
Dane	Deerfield	800	8				
Dane	McFarland	96	12				
Dane	Mt. Horeb	0	18				
Dane	Stoughton	24	5				
Fond du Lac	Campbellsport	0	0				
Fond du Lac	Malone	0	3				
Fond du Lac	Rosendale	16	2				
Grant	Sinsinawa	0	2				
Green	Brodhead	0	14				
Iowa	Mineral Point	233	65				
Jackson	Hixton	8	4				
Kenosha	Burlington	15	47				
Marathon	Edgar						
Marinette	Niagara						
Marquette	Montello	760	8				
Ozaukee	Mequon	0	0				
Pierce	Beldenville						
Pierce	Spring Valley						
Racine	Raymond						
Racine	Rochester	61	16				
Richland	Hillpoint						
Sheboygan	Plymouth	36	6				
Walworth	East Troy						
Walworth	Elkhorn						
Waukesha	New Berlin						

<sup>1</sup>Spotted tentiform leafminer; <sup>2</sup>Redbanded leafroller; <sup>3</sup>Codling moth; <sup>4</sup>Obliquebanded leafroller; <sup>5</sup>Apple maggot red ball; <sup>6</sup>Unbaited AM trap; <sup>\*\*</sup>Baited AM trap; <sup>6</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>	CE <sup>6</sup>	CEL <sup>7</sup>	WBC <sup>8</sup>	FORL <sup>9</sup>	VCW <sup>10</sup>
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	4	0	0	0	0	0	0	0	0
Vernon	Coon Valley										
Walworth	East Troy										
Wood	Marshfield										

<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.