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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
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WEATHER & PESTS

Below-normal temperatures affected Wisconsin for the second week in a row. Portions of the state experienced snow and frost, especially on May 7-8, and conditions were generally very cool and showery. Elcho in Langlade County received 6 inches of snow, Tomahawk received 4.8 inches, and Wausau reported 3 inches. In Marathon County, the heavy snow collapsed many of the tarps used to protect ginseng from severe weather, causing crop losses of 25% or more and prompting the governor to request a disaster declaration. Widespread frost also occurred across southern Wisconsin, although the cold did not significantly threaten alfalfa, peas or emerging corn. Apples and other fruit crops which had bloomed early were vulnerable to the low temperatures and were being monitored again for signs of potential freeze related impacts. Preliminary reports suggest the damage was not extensive since most apple trees were beyond the bloom stage. Late in the week, temperatures returned to the mid-60s, fieldwork resumed, and corn planting continued at a record-setting pace.

LOOKING AHEAD

EUROPEAN CORN BORER: Contrary to earlier forecasts, the first European corn borer moths did not appear in black light traps this week. Degree day accumulations are appropriate for their emergence near Beloit, Sullivan, La Crosse and other advanced locations, but low temperatures are delaying the start of the spring flight.

ALFALFA WEEVIL: Numbers are increasing in first growth alfalfa. Surveys conducted in the southwest and south-central areas yielded counts ranging from 1-11 larvae per 50 sweeps, with an average of 4 per 50 sweeps. Damage in the form of leaf tip feeding should become more pronounced next week. Close inspection of fields for small larvae and tip feeding is recommended.

BLACK CUTWORM: Larvae produced by the late April-early May migration are now expected to reach the damaging late instar stages by May 29, several days later than last predicted. Regular scouting should begin at corn emergence and continue until the 5-leaf stage.

STRIPED CUCUMBER BEETLE: Seedling and transplanted cucumbers, squash, melons, pumpkins and other cucurbits will be at risk of direct feeding injury and bacterial wilt transmission when these beetles appear in the next two weeks. Biweekly scouting of fields, particularly around the perimeters where they usually convene early in spring, is advised. Numbers should not exceed 4-5 beetles per 50 plants.

TRUE ARMYWORM: The black light trap count at Janesville in Rock County decreased from the week before, but

migrants may be abundant enough to cause localized problems in grasses and small grains. The capture of 181 moths on the nights of May 4-6 should serve as a warning to growers to be on the lookout for these worms later this month.

FORAGES

ALFALFA CATERPILLAR: This yellow butterfly, the adult form of the velvety-green alfalfa caterpillar, has been observed in low numbers over alfalfa in Dane, Iowa and Sauk counties. Larvae are scarce in sweep net collections, except in a few fields where they range from 3-7 per 50 sweeps.

Alfalfa caterpillar adult *Rich Kelly bugguide.net*

PEA APHID: Alfalfa surveyed in the southern areas contained variable populations of 9-53 per 50 sweeps, with an average of 16 per 50 sweeps. Recent cool weather has been favorable for this aphid and many small nymphs are evident. The continuation of such conditions could cause a sharp increase in populations.

MEADOW SPITTLEBUG: Nymphs appeared in alfalfa for the first time this week. Counts were below 2 per 25 stems in all fields checked in the south-central and southwest counties.

CLOVER LEAF WEEVIL: Larvae have been collected in insignificant numbers during the last several weeks. A distinction should be made between this species and the alfalfa weevil since the former rarely causes economic injury. Both larvae are pale green with a white dorsal stripe, but the clover leaf weevil is noticeably larger and has a light brown (not black) head capsule.

DEGREE DAYS JANUARY 1 - MAY 13

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	391	279	—	393	816
Lone Rock	383	273	—	367	785
Beloit	429	290	—	419	850
Madison	354	255	319	345	746
Sullivan	387	275	302	363	777
Juneau	346	251	—	328	725
Waukesha	319	256	—	303	683
Hartford	298	240	—	290	667
Racine	278	229	—	286	641
Milwaukee	263	221	231	267	620
Appleton	294	200	244	286	662
Green Bay	232	167	234	232	586
Big Flats	343	240	—	311	706
Hancock	343	232	316	314	704
Port Edwards	326	222	288	298	685
La Crosse	378	265	342	365	779
Eau Claire	326	242	290	306	704
Cumberland	286	216	259	252	635
Bayfield	180	128	169	151	475
Wausau	289	180	242	260	631
Medford	286	193	207	259	637
Crivitz	240	162	—	226	587
Crandon	252	151	210	217	574

Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2010. NORMALS based on 30-year average daily temps, 1971-2001.

CORN

BLACK CUTWORM: Development of this insect has slowed in response to below-normal temperatures during the past two weeks. Oviposition in corn is expected to resume with warmer weather over the weekend, and early indicators of cutworm activity should become apparent shortly. Larvae thrive best in reduced tillage and no-tillage fields, especially those with previous winter annual weed infestations, and this is where growers are advised to scout for signs of larval feeding.

SOYBEANS

SOYBEAN APHID: A report issued by the University of Illinois-Extension indicates that soybean aphids are active on buckthorn in Indiana, Ohio and Michigan. Populations are very low at most locations, with the exception of Rome City in northeastern Indiana where

colonies are relatively common. Both winged aphids and alatoid nymphs were observed.

BEAN LEAF BEETLE: Surveys conducted in alfalfa in the south-central and southwest counties found no overwintered beetles this week, although weather conditions were very unfavorable for both sweeping and beetle activity. The first appearance of this insect was noted on May 5 in Green County.

Bean leaf beetle *Lynette Schimming bugguide.net*

FRUITS

CODLING MOTH: Pheromone traps have produced very few specimens since the earliest moths were registered on May 4. The first sustained capture, or biofix, was not documented at any southern Wisconsin apple orchard in the last reporting period.

SAN JOSE SCALE: Dormant forms are visible on the bark of infested scaffold limbs. Scale activity is expected to begin with warmer temperatures predicted for the week ahead. Apple growers concerned about this pest should tape scale-infested branches in the next few days to detect the first mobile crawlers.

FROST INJURY: Several frosty nights earlier in the week caused damage to a wide variety of fruits. Apples, cherries, grapes and strawberries were among the plants injured in various parts of the state. The most serious damage occurred from Jackson County northward.

PLUM CURCULIO: Orchard IPM Consultant John Aue reports that some movement into orchards may have occurred during the heat wave in April. The first oviposition scars were found on crabapples in southern Wisconsin late last week. Significant activity is unlikely to resume until temperatures increase, but growers should be prepared to check orchard perimeters and early blooming varieties for evidence of this pest.

CRANBERRY REPORT: Degree day accumulations as of May 13 remain approximately 30% ahead of last year across the state, but the cool, rainy weather of the past two weeks has slowed fieldwork and growth of cranberry plants. Scouting activities have not turned up any noteworthy insect concerns thus far. With drier weather, growers will begin to concentrate on weed control applications. Bud development continues to progress at a reasonable rate.

OBLIQUEBANDED LEAFROLLER: Late instar larvae (about 1 inch long) were observed last week in Trempealeau County, signaling that the first adults should appear in the near future. Most larvae are in the intermediate instars at this time. Apple pest monitoring network cooperators are advised to examine their traps closely to make an accurate determination of the moths inside. Low numbers of OBLR adults have been reported at some sites in past weeks, but it is still too early for their emergence.

Obliquebanded leafroller moth *Derrick Ditchburn www.dereila.ca*

VEGETABLES

ONION MAGGOT: Fly emergence is well into its second week in the southern and central areas, and controls should have been applied. Adult onion maggot activity generally extends for 3-4 weeks, but may be prolonged by cool, wet weather. It is recommended that growers

closely monitor commercial fields and home gardens this month for wilted seedlings and other indicators of maggot infestation. Sprays directed against the adult stage cannot be relied upon since a single application of short-lived insecticide will contact only a small percentage of the total fly population.

COLORADO POTATO BEETLE: Adults are emerging from winter hibernation sites, which by now means oviposition is taking place on the foliage of potatoes, tomatoes and eggplants. The bright orange-yellow eggs should be apparent on the undersides of leaves in the week ahead. Treatment is usually justifiable for potatoes when defoliation of pre-flowering, 6-8 inch plants surpasses 30%.

Colorado potato beetle zoology.fns.uniba.sk

NURSERY & LANDSCAPE

CROWN RUST: The orange-yellow cluster cups that produce spores capable of infecting oats, rye and other grass hosts are appearing on buckthorn leaves in Dane County. Heavy amounts of rust inoculum on buckthorn may indicate greater rust potential for oats this year if proper conditions for infection should develop.

GYPSY MOTH: Nursery stock and Christmas tree growers in areas affected by the gypsy moth quarantine are reminded to finalize treatment plans in the immediate future. Phenology models and observations indicate that egg hatch is complete in Dane, Rock and Sauk counties and larvae are in the second and early third instars. Treatments are most effective when egg hatch is approximately 80% complete. For growers in the central and northern counties, this event should occur in the next 1-3 weeks. Detailed information on gypsy moth phenology and timing sprays may be obtained at http:// www.soils.wisc.edu/uwex_agwx/thermal_models/gypsy. Select the appropriate county and click 'run model'. To view the model, choose either the 'Color Plot' or 'B & W Plot' under the Moth Development heading.

Gypsy moth larvae www.forestryimages.org

COLUMBINE LEAFMINER: Serpentine mines excavated by the larvae of this insect were noted on columbine in Waukesha County. This aesthetic problem can be reduced by removing and destroying affected leaves.

Columbine leafminer Tim Boyle DATCP

PSEUDOMONAS BLIGHT: This bacterial disease was observed by nursery inspectors on potted lilacs in Waukesha County. Symptoms include yellowish-brown lesions on the leaves, black streaks along the veins and midribs, and dead, black shoots which bend to form a distinctive shepherd's crook. Control consists of pruning out blighted twigs as soon as they occur, thinning plants to increase air circulation, and growing resistant varieties.

Pruning shears should be disinfected between cuts to prevent spread of the disease. Among the lilacs, varieties with white flowers are usually the most susceptible.

Pseudomonas blight on lilac *Tim Boyle DATCP*

FROST INJURY: Nursery trees, shrubs and perennials are showing the effects of the frigid nights earlier this week. The problem is particularly evident in the northwest and north-central areas. A report from St. Croix County states that about 50% of the balsam fir, Colorado blue spruce, Norway spruce, green ash and assorted maple trees in a nursery there were moderately-heavily damaged by frost on May 8. At garden centers in Dunn County, many lilacs, maples, viburnums and yews showed new growth that had wilted and turned brown due to frost.

Frost injury on spruce *Konnie Jerabek DATCP*

FOREST

GYPSY MOTH: The first of two aerial applications of Btk were made in Crawford and Iowa counties on May 5, and in Eau Claire, Green, Jackson, La Crosse, Monroe, Richland, Trempealeau and Vernon counties by May 11. Approximately 26,181 acres were treated. A second application to kill any late hatching larvae is planned for the next several days in southern and most of western Wisconsin. Other counties scheduled to receive treatments in the week ahead are Ashland, Barron, Bayfield, Chippewa, Douglas, Dunn and Taylor.

As of May 13, the DNR Suppression Program has treated 3,737 acres with Btk in Dane, Rock, Sauk, Washington and Waukesha counties, and plans to spray another 324 acres in Racine and Milwaukee counties today.

EASTERN TENT CATERPILLAR: Larvae are now predominantly in the late instars in the south-central and southwest areas. Many small black cherry and wild cherry trees have been completely defoliated, and the caterpillars are migrating to new hosts.

Eastern tent caterpillars *J.R. Carmichael wikimedia.org*

TRAPPING NETWORKS

BLACK LIGHT TRAPS: Nocturnal moth counts remained very low at all monitoring locations during the period of May 6-13. A few black cutworms, true armyworms and variegated cutworms were registered, but no major flights occurred. Network cooperators are urged to install their traps this weekend and begin reporting weekly trap counts by Thursday, May 20.

APPLE INSECT & BLACK LIGHT TRAP COUNTS MAY 6 - 13

COUNTY	DATE	SITE	STLM[1]	RBLR[2]	CM[3]	OBLR[4]	OBLR[5]	AM RED[6]	AM YELLOW[7]
Bayfield	5/06-5/13	Keystone	—	—	—				
Bayfield	5/06-5/13	Bayfield	—	—	—				
Bayfield	5/03-5/10	Orienta	6	0					
Brown	5/06-5/13	Oneida	—	—	—				
Chippewa	5/06-5/12	Chippewa Falls 1	50	4	0				
Chippewa	5/06-5/13	Chippewa Falls 2	—	—	—				
Dane	5/06-5/12	Deerfield	157	0	0				
Dane	5/06-5/13	McFarland	0	5	?				
Dane	5/06-5/12	Stoughton	6	3	0				
Dane	5/06-5/13	West Madison	27	2	0				
Dodge	5/06-5/13	Brownsville	8	6	0				
Fond du Lac	5/06-5/13	Campbellsport	12	0	0				
Fond du Lac	5/06-5/13	Malone	12	2	0				
Fond du Lac	5/06-5/13	Rosendale	—	—	—				
Grant	5/06-5/13	Sinsinawa	—	—	—				
Green	5/06-5/13	Brodhead	6	1	2				
Iowa	5/06-5/13	Dodgeville	160	39	0				
Iowa	5/06-5/13	Mineral Point	0	4	0				
Jackson	5/07-5/13	Hixton	18	1	0				
Kenosha	5/06-5/13	Burlington	25	1	0				
Marinette	5/06-5/13	Niagara	51	0	0				
Marquette	5/03-5/10	Montello	120	21	0				
Ozaukee	5/06-5/12	Mequon	0	0	0				
Pierce	5/06-5/13	Beldenville	—	—	—				
Pierce	5/06-5/13	Spring Valley	72	7	0				
Racine	5/06-5/13	Raymond	—	—	—				
Racine	5/06-5/13	Rochester	110	2	0				
Richland	5/04-5/10	Hillpoint	41	7	2				
Sheboygan	5/06-5/13	Plymouth	30	0	0				
Walworth	5/06-5/13	East Troy	0	2	0				
Walworth	5/06-5/13	Elkhorn	5	10	0				
Waukesha	5/06-5/13	New Berlin	—	—	—				

[1]Spotted tentiform leafminer; [2]Redbanded leafroller; [3]Codling moth; [4]Obliquebanded leafroller EASTERN; [5]Oblique-banded leafroller WESTERN; [6]Apple maggot red ball; *Unbaited red ball; **Baited red ball; [7]Apple maggot yellow board.

COUNTY	DATE	SITE	ECB[1]	TA[2]	BCW[3]	SCW[4]	DCW[5]	CE[6]	CEL[7]	WBC[8]	FORL[9]	VCW[10]
Chippewa	5/06-5/13	Chipp Falls										
Columbia	5/06-5/13	Arlington										
Dane	5/06-5/13	Mazomanie										
Grant	5/06-5/13	Lancaster										
Manitowoc	5/06-5/13	Manitowoc										
Marathon	5/06-5/13	Wausau										
Monroe	5/06-5/13	Sparta										
Rock	5/06-5/13	Janesville	0	12	0	0	0	0	0	0	0	0
Walworth	5/06-5/13	East Troy	0	5	0	0	0	0	0	0	0	0
Wood	5/06-5/13	Marshfield	0	4	1	0	0	0	0	0	0	1

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