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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
2811 Agriculture Dr. Madison, WI 53718 • http://pestbulletin.wisconsin.gov

WEATHER & PESTS

Continued wet weather delayed fieldwork again this week. Rainfall persisted throughout much of the state and minimal spring tillage or planting was accomplished. In the northwest, a winter weather advisory was issued in anticipation of 1-4 inches of snow on Tuesday and Wednesday. According to the National Weather Service, temperatures this spring have been the lowest in the past 15 years at several Wisconsin locations. The growing season is now an average of 24 days behind last year and 14 days behind the 30-year normal. After below-normal temperatures and above-normal precipitation this month, seeding of the 2011 oat crop is only 12% complete, compared to 78% complete last year and a 5-year average of 46%. Full-scale corn planting remains another two weeks away. Farmers and gardeners have grown frustrated with the lingering chilly weather and are waiting impatiently for conditions to moderate.

LOOKING AHEAD

BLACK CUTWORM: Migrants were detected in the state three weeks ago. An initial cutting date of May 30 is anticipated based on the first major migration event on April 11. The annual trapping survey, which can forewarn of damaging larval populations, has yielded 457 moths in 30 traps this month. Damp field conditions and abundant winter annual weed growth make the probability of infestations very likely this spring.

ALFALFA WEEVIL: One adult specimen was collected near Barneveld in Iowa County on April 25, the first beetle of the season. Additional beetles have since been found in La Crosse and Richland counties. Surveys for larvae in alfalfa were negative this week.

GYPSY MOTH: Larval emergence from overwintered eggs began on April 26 in Brown County. This event occurred by April 9 last year and April 27 in 2009. Spray dates are set to coincide with the first and second instar stages in the gypsy moth life cycle and could be delayed until the week of May 16-20 this season.

EMERALD ASH BORER: Preventive treatment of ash trees should begin at this time. Optimal timing for soil injections and drenches is mid-April to mid-May to allow 4-6 weeks for uptake and distribution before larvae begin to establish in June. Trunk-injected products should be applied after ash tree foliage has expanded but before egg hatch, generally from mid-May to mid-June. Treatment is recommended only for healthy ash trees within 15 miles of a known infestation.

BROWN MARMORATED STINK BUG: An exterminator in Dane County states that in March 2010 his organization observed “swarms” of brown marmorated stink bugs

(BMSB) on the exterior of an east Madison hotel. This account follows the November confirmation of two specimens, one each from Dane and Manitowoc counties. Both were thought to be hitchhikers transported into Wisconsin in shipping materials. To date, no reproducing populations are known to exist in the state.

All growers and consultants are advised to be alert for BMSB in 2011. This invasive species attacks a broad range of fruit, vegetable, ornamental and agronomic crops, and by most standards, is considered a far worse fall nuisance pest than the multicolored Asian ladybeetle.

BMSB is distinguished from native stink bugs by white banded antennal segments and an alternating light and dark abdominal margin. Suspects can be submitted for identification to DATCP entomologist, Krista Hamilton, at 118 N 6th St., La Crosse, WI 54601.

Brown marmorated stink bug *inaturer flickr.com*

EASTERN TENT CATERPILLAR: Larvae have been active since April 19 and their tents should soon be conspicuous on apple, ornamental crabapple, wild cherry and other host trees. Removal of the small tents by hand or with a tool during the next two weeks will prove most effective in reducing defoliation. Do not attempt to burn the tents and caterpillars. This is a hazardous procedure that will seriously injure the tree.

FORAGES

ALFALFA WEEVIL: Surveys in alfalfa failed to detect any larvae this week. At current temperatures, the first weevil larvae may not appear in sweep net collections until May 16 or later.

DEGREE DAYS JANUARY 1 - APRIL 27

LOCATION	50°F	2010	NORM	48°F	40°F
Dubuque, IA	107	277	—	101	303
Lone Rock	96	269	—	87	276
Beloit	122	302	—	117	329
Madison	83	243	179	79	252
Sullivan	93	263	164	88	268
Juneau	77	231	—	72	229
Waukesha	67	205	—	64	212
Hartford	65	192	—	61	197
Racine	57	171	—	55	188
Milwaukee	56	164	130	53	178
Appleton	48	199	122	41	158
Green Bay	36	151	117	32	137
Big Flats	63	243	—	55	191
Hancock	59	239	169	51	182
Port Edwards	51	233	154	45	164
La Crosse	86	272	187	81	255
Eau Claire	65	248	152	57	194
Cumberland	58	223	129	47	167
Bayfield	43	135	77	33	137
Wausau	40	207	121	34	132
Medford	41	215	97	34	135
Crivitz	35	160	—	27	130
Crandon	35	181	98	27	120

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

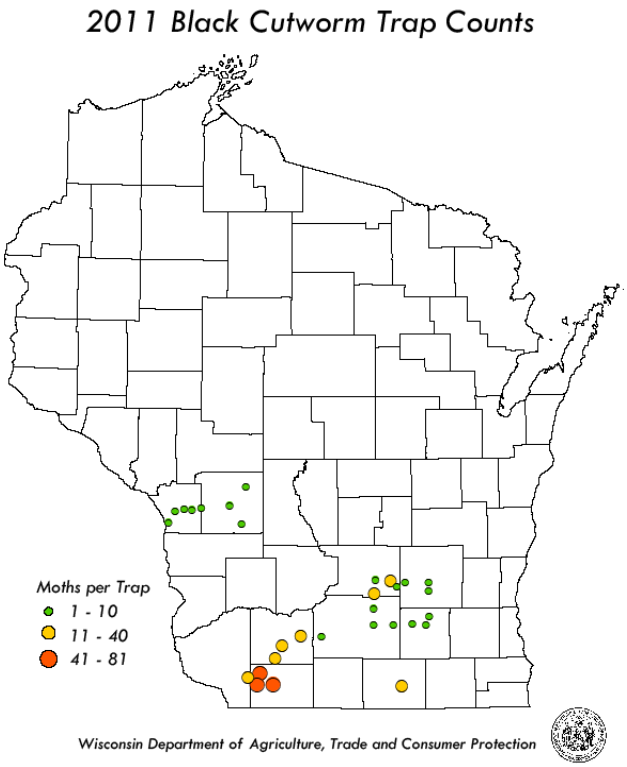
PEA APHID: Alfalfa surveyed in Dane, Iowa, La Crosse, Lafayette and Richland counties showed extremely low counts of 1-2 aphids per 50 sweeps.

TARNISHED PLANT BUG: Adults can be found in most alfalfa fields in the southern 1/3 of the state. The average count this week was 1 per 50 sweeps.

CORN

BLACK CUTWORM: A major migration that began three weeks ago has thus far yielded 457 moths in 30 traps. The moths originated in the southern U.S. and were blown into Wisconsin on storm fronts beginning April 10. Large-scale, early migrations such as this one can be precursors to damaging cutworm populations in May and June, particularly when corn planting and weed control are delayed by wet field conditions. A cutting period starting May 30 is anticipated based on the biofix date of

April 11. The accompanying map summarizes moth counts for the period of April 6-27.



CORN ROOTWORM: Beetle counts last August were historically low, averaging only 0.3 per plant. In ten previous years, the state average count was 0.8 per plant compared to an economic threshold of 0.75. Significant for 2011 is the fact that no district showed an average count above 0.4 beetle per plant, indicating a low potential for root damage to continuous corn in June and July.

FRUITS

SPOTTED TENTIFORM LEAFMINER: The first of three flights expected this season began by April 20 in southern Wisconsin. The apple orchard near Deerfield in Dane County reported 325 moths this week, but elsewhere counts were very low. Peak emergence of first brood adults could occur at advanced sites next week if degree day accumulations surpass 150 (base 50°F).

SPOTTED WING DROSOPHILA: This insect was found for the first time in the state on October 2, 2010. Two adult male flies were collected on a yellow sticky trap near Sturtevant in Racine County. Additional flies were trapped at two other Racine County sites later in the month. In response, DATCP will be working closely with fruit growers in 2011 to survey for this exotic vinegar fly.

Since its introduction from Asia into the U.S. three years ago, spotted wing drosophila (SWD) has been found in California, Florida, Michigan, North Carolina, South Carolina, Oregon, Utah and Washington. Yield loss estimates vary widely, but SWD is reported to have caused $500 million in berry crop losses the first year it was observed in California, an indication of the potential damage to small fruit crops in Wisconsin.

Spotted wing drosophila male and female www.growingproduce.com

REDBANDED LEAFROLLER: Moths are appearing in pheromone traps as far north as Chippewa County. Counts have been low and no significant flight has been noted yet.

WEEDS

HERBICIDE RESISTANCE: Eleven herbicide-resistant weed biotypes now occur in the state and more than 6,300 sites and 562,100 acres may be infested, according to UW-Madison weed scientists. The most widespread of the resistant weeds is common lambsquarters.

Although glyphosate resistance (GR) has not been confirmed in Wisconsin, a recent study by Dave Stoltenberg indicates that two GR giant ragweed populations could be present in Grant and Rock counties. Glyphosate resistance has been reported in Iowa, Illinois, Michigan and Minnesota, where 21 new resistant weed biotypes have been identified since 2005.

The rapid increase in herbicide resistant weeds illustrates the importance of a diversified weed management

program. Management systems that rely heavily on glyphosate are at greater risk of GR biotypes becoming established. Below is a table of confirmed herbicide-resistant weed biotypes in Wisconsin.

Confirmed herbicide-resistant weed biotypes in Wisconsin

ALS-Resistant	ACCase-Resistant	Photosystem II
eastern nightshade	giant foxtail	lambsquarters
giant foxtail	large crabgrass	kochia
green foxtail		smooth pigweed
kochia		velvetleaf
waterhemp		

VEGETABLES

LATE BLIGHT: The UW-Madison Department of Plant Pathology reports that late blight has been detected in seed potato from one Langlade County grower. Positive confirmation was made on April 12, 2011. The detection levels were described as "weakly positive", indicating low level of infection of the pathogen in the seed sample.

The potential risk of late blight in the 2011 crop is not known. It is recommended that potato growers cull seed tubers that show symptoms of soft rot prior to planting and scout at emergence for field symptoms such as poor stand or delayed emergence. Further description and fungicide recommendations can be found at http://www.plantpath.wisc.edu/wivegdis/ pdf/2011/.

NURSERY & FOREST

PINE NEEDLE SCALE: Heavy infestations remain dormant on Scotch pine in La Crosse County. Their emergence begins when lilacs bloom, usually by early to mid-May. Controls applied against the crawler stage shortly after egg hatch are most effective. The proper timing of insecticidal treatments should be determined by monitoring infested pines for newly emerged crawlers.

WHITE PINE WEEVIL: Adults of this insect were observed laying eggs on Norway spruce in northern Eau Claire County on April 26. The presence of adults as well as oviposition holes indicates that egg hatch could begin soon and treatments should be initiated promptly.

JAPANESE BEETLE: Soil inspections for Japanese beetle larvae or "white grubs" have begun at Wisconsin nurseries preparing to ship regulated host plants. The inspections are mandated by the U.S. Domestic Japanese Beetle Harmonization Plan, a federal regulatory strategy to prevent the export of Japanese beetle from quarantined states such as Wisconsin to uninfested destination states (*i.e.* states west of Minnesota).

At this time of year, the overwintered grubs are 4-6 inches below the soil surface and can be transported with containerized, balled and burlapped, and other rooted nursery stock. Once soil temperatures exceed 50°F, the larvae will resume activity and move into the root zone of ornamentals and turf to feed for another 3-5 weeks. The beetles are not expected to emerge until 950 degree days (base 50°F) have been reached, or by mid-June.

Nursery operators or brokers who intend to ship Japanese beetle host commodities out of Wisconsin this spring should contact a DATCP Nursery Inspector well in advance of June 30 to arrange an inspection: http://datcp.wi.gov/uploads/Plants/pdf/Inspector_map_2010.pdf.

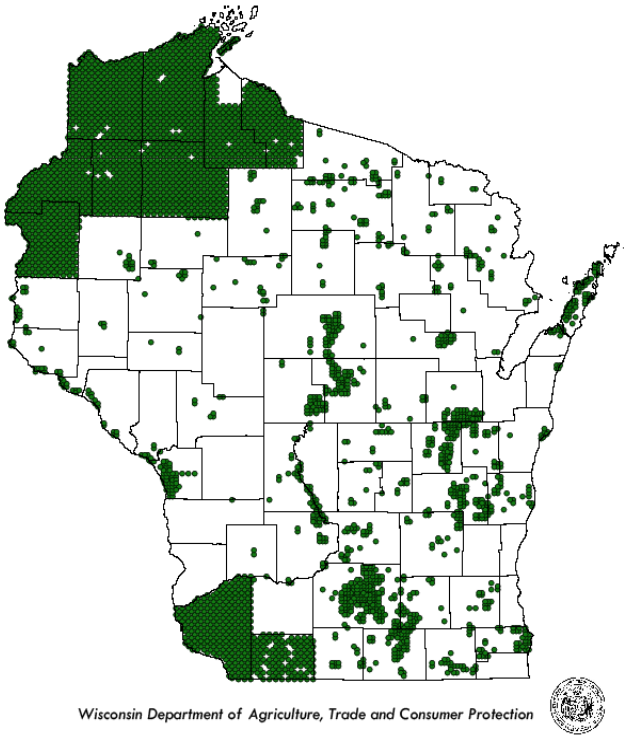
Japanese beetle larvae *Jim Donnelly bulletin.ipm.illinois.edu*

NURSERY PESTS: Nursery inspectors report fungus gnats, shoreflies and thrips as the pests encountered most frequently during recent greenhouse inspections in Brown, Chippewa, Eau Claire, Kewaunee, Outagamie and Sawyer counties. Tobacco rattle virus (TRV), an increasingly common viral disease of herbaceous ornamentals and vegetables, was diagnosed on dicentra 'Alba', and Hosta 'Christmas Tree', Hosta 'Regal Splendor', Hosta 'Spectabilis', and Hosta 'True Blue'. Other diseases noted were Hosta Virus X (HVX) on Hosta 'Gold Standard', powdery mildew on Lupine 'Northside' and root rot on assorted hosts.

EMERALD ASH BORER: The green symbols in the map below represent the 5,935 sites being trapped systematically by DATCP forestry technicians this season. Grid based trapping will be conducted in Ashland, Bayfield, Burnett, Douglas, Grant, Iron, Lafayette, Polk, Sawyer and Washburn counties to determine the leading edge of the infestation. Risk-based trapping will occur at high-risk sites such as campgrounds, nurseries, recreation areas and sawmills to detect new populations outside the known infested areas. Placement of the purple panel traps began on April 27.

Emerald ash borer currently infests portions of Brown, Crawford, Kenosha, Milwaukee, Ozaukee, Vernon and Washington counties. The state quarantine includes these seven counties and the contiguous counties of Fond du Lac, Racine, Sheboygan and Waukesha.

2011 Emerald Ash Borer Trapping Survey



Wisconsin Department of Agriculture, Trade and Consumer Protection

WINTER BURN: Several Colorado blue spruce, Fraser fir, and white pine trees in a Pierce County nursery were affected by winter burn this year. This physiological disorder can develop whenever soil freezes and winter winds draw moisture from plants, resulting browning and needle loss. In this instance, the symptoms were limited to the top 1/3 of the trees, but in extreme cases, whole plants may be damaged. According to the nursery inspector, the foliage loss did not appear to be permanent.

Colorado blue spruce with winterburn *Konnie Jerabek DATCP*

FOREST TENT CATERPILLAR: Defoliation is anticipated in the area east of Devil's Lake in Sauk County which had been heavily infested last June. On March 8, 2011, a DNR survey for egg mass collars on aspen trees found counts of 6-15 egg masses per infested tree, indicating the possibility of light to moderate defoliation this spring. In addition to Sauk County, defoliation is expected in portions of Bayfield and Douglas counties, particularly in the Lake Nebagamon area of Bayfield County.

Forest tent caterpillars *duskie78 flickr.com*

APPLE INSECT & BLACK LIGHT TRAP COUNTS APRIL 21 - 27

COUNTY	SITE	STLM[1]	RBLR[2]	CM[3]	OBLR[4]	OBLR[5]	AM RED[6]	YELLOW[7]	GDD 50°F
Bayfield	Keystone	0	0						
Bayfield	Orienta	—	—						
Brown	Oneida	3	0						
Chippewa	Chippewa Falls	0	4						
Dane	Deerfield	325	15						
Dane	McFarland	—	—						
Dane	Mt. Horeb	—	—						
Dane	Stoughton	—	—						
Dane	West Madison	25	7						
Dodge	Brownsville	0	0						
Fond du Lac	Campbellsport	0	1						
Fond du Lac	Malone	1	3						
Fond du Lac	Rosendale	—	—						
Grant	Sinsinawa	5	43						
Green	Brodhead	0	24						
Iowa	Dodgeville	—	—						
Iowa	Mineral Point	4	30						25.5
Jackson	Hixton	—	—						
Kenosha	Burlington	0	0						31.0
Marinette	Niagara	0	0						
Marquette	Montello	0	0						
Ozaukee	Mequon	0	1						49.1
Pierce	Beldenville	—	—						
Pierce	Spring Valley	0	0						
Polk	Turtle Lake	0	0						
Racine	Raymond	0	0						
Racine	Rochester	0	26						50.4
Richland	Hillpoint	0	6						
Sheboygan	Plymouth	—	—						
Walworth	East Troy	0	0						
Walworth	Elkhorn	0	0						
Waukesha	New Berlin	0	0						

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

COUNTY	SITE	ECB[1]	TA[2]	BCW[3]	SCW[4]	DCW[5]	CE[6]	CEL[7]	WBC[8]	FORL[9]	VCW[10]
Chippewa	Chippewa Falls										
Columbia	Arlington										
Grant	Lancaster										
Manitowoc	Manitowoc										
Marathon	Wausau										
Monroe	Sparta										
Rock	Janesville	0	7	0	0	0	0	0	0	0	0
Walworth	East Troy										
Wood	Marshfield										
Vernon	Coon Valley										

[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.