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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

Above normal temperatures on Monday and Tuesday cooled to seasonable values Wednesday through the remainder of the week. A low pressure system produced scattered showers and isolated storms mid-week, with light rainfall occurring in most areas of the state. Crops have shown modest improvement in response to the moisture, although conditions are still tenuous and much of Wisconsin remains under a severe to extreme drought. Corn production has been most adversely impacted by the dryness and record heat. An estimated 39% of the soybean crop is in good to excellent condition, while 28% is rated as very poor to poor. Soybeans, which entered the critical reproductive stages later than corn, have largely benefited from the early August rain, but continue to suffer intense spider mite pressure. Informal estimates indicate that perhaps one-quarter of the state's soybean fields have been chemically treated one or more times for mite control this season.

LOOKING AHEAD

SOYBEAN APHID: The first economic infestation of the year was found on August 2 in St. Croix County. Surveys show that populations have increased to moderate levels in a few fields and treatment may be required for these sites in the week ahead. All soybean acreage should be examined in the immediate future to evaluate aphid densities. Final treatments must be applied before the R5.5 growth stage.

WESTERN BEAN CUTWORM: Moth flight has effectively ended in the southern and central counties. Results of the statewide trapping program are being organized for publication in the August 16 issue of the Wisconsin Pest Bulletin. As of August 8, the state cumulative count is 3,269 moths in 129 traps, which compares to 4,895 moths in 175 traps last year. The highest individual count for the eight-week monitoring period was 812 moths near Wautoma in Waushara County. Pheromone traps may be removed at this time.

CORN ROOTWORM: Preliminary results of the beetle survey now under way show population reductions in the south-central and central areas and minor increases in the southeast and northern areas. The average count is 0.9 per plant in the south-central district, 0.9 per plant in the southeast district, 0.5 per plant in the central district, 0.3 in the north-central district and 0.5 in the northwest district. An average of 0.75 or more beetles per plant signals the potential for severe root feeding damage to non-Bt, continuous corn next season.

TWO-SPOTTED SPIDER MITE: Reports indicate that this pest remains a problem in orchards, gardens and nurseries, while surveys have found evidence of mites in

soybeans and corn in nearly all areas of the state. The outbreaks appear to have lessened with the recent rainfall but infestations could persist for another 1-2 weeks. Continued surveillance of soybeans is suggested until plants reach the R5-R5.5 or full pod growth stage.

LATE BLIGHT: Potato fields infected with late blight have now been confirmed in Adams, Barron, Oneida and Portage counties. According to UW-Extension Plant Pathologist Amanda Gevens, the infections are thought to have originated from aerially dispersed spores and a large portion of Wisconsin is currently at risk for the disease. The UW recommends fungicide treatment of all potato fields, including those that have received or are scheduled to soon receive vine kill treatments. Potatoes should not be harvested for 2-3 weeks after vine kill.

Potato late blight lesion *Jean Ristaino NC State University*

FORAGES

POTATO LEAFHOPPER: Alfalfa surveyed in Dane, Dodge and Columbia counties contained variable counts of 0.1-1.9 per sweep. The average was 0.7 per sweep, based on surveys in a limited number of fields. Economic counts of 2.0 or more per sweep were found at about 22% of sites.

PEA APHID: A minor decrease in numbers has been noted since late July. The highest counts were observed in Columbia County, where surveys found only 2-3 per sweep.

ALFALFA CATERPILLAR: The adult stage of this insect is fairly abundant in alfalfa in the southern two-thirds of the state, and an increase in larval numbers is anticipated later this month. Damage is most severe when oviposition occurs in recently cut fields and the resulting larvae defoliate the regrowth.

DEGREE DAYS JANUARY 1 - AUG 8

LOCATION	50°F	2011	NORM	48°F	40°F
Dubuque, IA	2447	2096	1969	2177	3902
Lone Rock	2397	2011	—	2103	3810
Beloit	2526	2122	2000	2178	4001
Madison	2414	1954	1908	2090	3840
Sullivan	2399	1956	1889	2081	3825
Juneau	2324	1880	—	2037	3706
Waukesha	2206	1747	—	1976	3546
Hartford	2184	1739	—	1974	3516
Racine	2182	1671	—	2019	3509
Milwaukee	2142	1657	1797	1980	3462
Appleton	2152	1694	1830	1991	3464
Green Bay	2060	1592	1702	1950	3344
Big Flats	2164	1732	—	1907	3483
Hancock	2183	1752	1850	1902	3522
Port Edwards	2111	1704	1815	1917	3408
La Crosse	2378	1968	2085	2106	3776
Eau Claire	2190	1795	1878	2016	3516
Cumberland	1896	1604	1755	1872	3142
Bayfield	1587	1267	—	1647	2690
Wausau	1912	1562	1718	1826	3136
Medford	1904	1585	1572	1899	3134
Crivitz	1902	1498	—	1851	3129
Crandon	1692	1410	1342	1687	2849

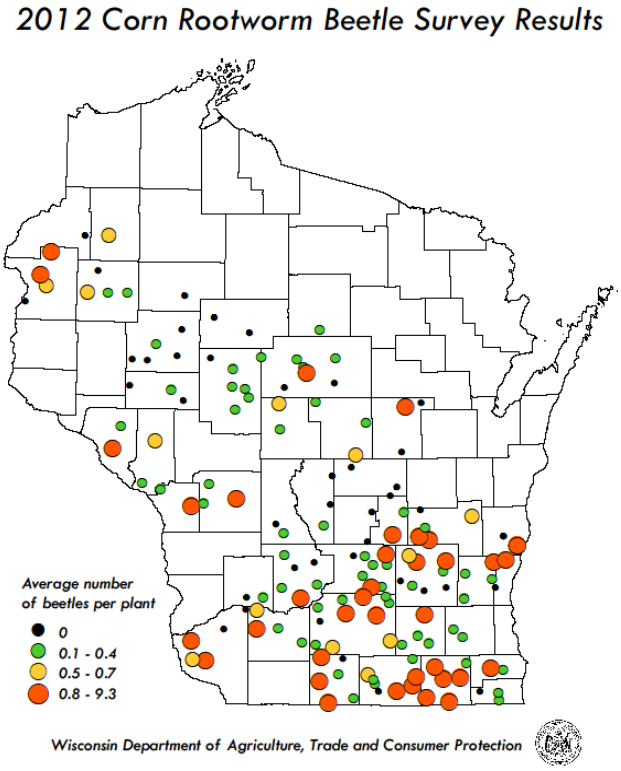
Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2012. NORMALS based on 30-year average daily temps, 1981-2010.

CORN

EUROPEAN CORN BORER: Damage to corn has been infrequent, usually with only 2-28% of plants showing midrib feeding, frass or other evidence of infestation. Treatment is no longer advised now that the degree day accumulation has surpassed 2,100 (base 50°F) in most areas and second generation larvae are boring into corn stalks. Larvae produced by the summer flight of moths are primarily in the third and fourth instars.

CORN ROOTWORM: The annual survey of adult rootworms has been completed in five of the nine crop reporting districts. Examination of 161 fields during the period of July 20-August 8 found the district average count to be 0.9 per plant in the southeast, 0.9 per plant

in the south-central, 0.5 per plant in the central, 0.3 in the north-central and 0.5 in the northwest. Economic populations of 0.75 or more beetle per plant have been noted in 41 of the 161 (25%) fields surveyed as of August 8. Currently the higher counts can be found in later planted corn fields in which the silks have just begun to turn brown. Final survey results will be provided in the August 23 issue of the bulletin.



PICNIC BEETLE: Low to moderate numbers of this group of insects were observed in field corn in the southern and west-central areas. These beetles are found late in the season feeding on ear tips that have been exposed by corn rootworm adult feeding or blackbird damage, and are associated with European corn borer tunnels. The adults observed in the past week had tunneled under the husks and were feeding on silks and kernels of corn. Picnic beetles can be damaging to sweet corn varieties with exposed tips but are usually considered secondary invaders or indirect pests.

SOYBEANS

SOYBEAN APHID: The annual survey is partially complete and results for the period of July 23-August 1 show extremely low populations throughout the state. Only one of the 159 fields examined had an economic density of 260 aphids per plant, two fields had 38-56 per plant and the remaining 156 fields had fewer than five aphids per plant. The state average during the late July portion of the survey was three aphids per plant, the lowest in the history of the survey. A follow-up evaluation is planned for August 13-24 to assess changes in aphid populations and where late-season control may be required. As most fields enter the later reproductive growth stages, it appears that the two-spotted spider mites, and not soybean aphids, have been the primary insect threat to the state's soybean crop this year.

Soybean aphids Krista Hamilton DATCP

JAPANESE BEETLE: This insect is still very common in soybeans in the southern and western parts of the state, where it is contributing to general defoliation levels. Damage has intensified and is now moderate to severe in a few fields. In Buffalo, Chippewa, Columbia, Dane, Eau Claire, Dodge, La Crosse, Monroe and Trempealeau counties, defoliation rates ranged from 5-25% in the past two weeks.

GREEN CLOVERWORM: Larvae of various sizes are causing light defoliation of soybeans in the southern and western counties. Damage is common, but not especially severe. Circumstances thus far have not justified treatment.

WHITEFLY: Infestations have been observed in fields from Dane to Dunn County. This common pest of greenhouse plants and commercial vegetables is remarkable for its high reproductive potential and capacity to develop resistance to insecticides. Although yield reductions resulting from sap removal, sooty mold and incomplete pod filling have not been documented in Midwestern

soybeans, economic damage has been reported from the southeastern United States.

Whiteflies on underside of soybean leaf *Joe Spencer Illinois NHS*

FRUITS

SPOTTED TENTIFORM LEAFMINER: Pheromone trap counts as high as 1,287 moths during the last reporting period signal that the third flight has likely peaked in some southern orchards. Central and northern locations can expect the peak to occur in 1-2 weeks.

JAPANESE BEETLE: Spot treatment of individual trees should be considered for those orchards that continue to experience high numbers of beetles. This pest is still very active and abundant as far north as Chippewa County.

CODLING MOTH: Counts remain comparatively high in Wisconsin apple orchards. Economic counts of five or more moths per trap were reported this week from 10 of 20 sites, with a high count of 19 per trap registered at Chippewa Falls. The second flight, which began during the first week of July, has generally been smaller than the first.

VEGETABLES

CORN EARWORM: Locally heavy flights were registered in Dane, Fond du Lac and Jefferson counties from August 2-8. Larvae have been observed in silking corn fields as far north as Polk County, and treatments are under way. The action threshold for this late-season pest is based on the number of moths per trap per night, and a count of 5-10 moths in three consecutive nights indicates the need for protective treatment of susceptible fields. Counts this week were: Aztalan 115, Bloomington 0, Chippewa Falls 12, Columbus 19, Coon Valley 18, Janesville 8, Manitowoc 7, Marshfield 1, Oregon 24, Ripon[a] 271, Ripon[b] 503, Sun Prairie 56, Wausau 0 and Westport 93.

COLORADO POTATO BEETLE: Emergence of second generation adults was delayed by as much as two weeks due to the extreme heat of late July, but has accelerated in the past week. Egg deposition is expected to be heavy at this time. Although feeding by summer potato beetles may result in severe defoliation and damage when potato tubers are bulking, controls targeting the resulting larvae are seldom required.

Colorado potato beetle *Krista Hamilton DATCP*

JAPANESE BEETLE: Reports from Dane and Iowa counties indicate continuing problems in home gardens. The beetles are damaging basil, as well as the leaves of beans, eggplants and peppers. The simplest natural control is to remove them from plants and submerge them in a bucket of soapy water. Gardeners are also advised to cull and dispose of overripe and rotting produce, which can attract large numbers of beetles.

WEEDS

JIMSONWEED: This summer annual, with large, prickly seed capsules and conspicuous whitish-purple, trumpet-shaped flowers, was noted in an Iowa County field on August 6. Jimsonweed is toxic to both animals and humans when ingested, and although cattle generally avoid it in pasture settings, their selectivity decreases with the shortage of suitable food resources in drought

years. The risk of consumption also increases as weedy, less desirable fields are harvested to meet increased demand for hay. Livestock poisoning can occur when less than 5% of the feed is composed of jimsonweed. Further information on avoiding this and other poisonous weeds when purchasing supplemental hay is available in the July 26 issue of the Wisconsin Crop Manager.

Jimsonweed *Clarissa Hammond DATCP*

WILD PARSNIP: Seeds are rapidly maturing on plants throughout the state and mowing as a form of control is no longer recommended. This invasive species is now one of the most prevalent weeds in roadside ditches in the southern two-thirds of the state.

TEASEL: Plants in southern Wisconsin are predominantly in the flowering and seed development stages. Control of this restricted invasive weed is best achieved by herbicides directed against the rosette stage in spring or fall, or by physically removing the plant and taproot. Any control measure must be repeated for several years in a row to eradicate the plants. Mowing is also an option early in the season, but should be avoided at this time of year when mature seeds are present.

NURSERY & FOREST

SUNFLOWER MOTH: This destructive, migratory sunflower pest was reported by a DATCP nursery inspector on Echinacea 'Magnus' and 'Purpurea' in Pepin, St. Croix and Vernon counties. The larvae initially feed on the florets and later burrow into individual seeds, creating ideal entry sites for the Rhizopus head rot fungus. An indicator of infestation is the presence of tangled mats of webbing on the flower surface. Control consists of an insecticide application made shortly after the flowers open, with subsequent treatments as needed. Removal of infested flower heads is also advised.

GENISTA BROOM MOTH: Larvae of this typically southern species have been defoliating baptisia (false indigo) across Wisconsin this summer. Reports of damage were received from Columbia, Dane, Dunn and Iowa counties last month and inspectors noted the caterpillars in Racine, Vernon and Waukesha counties earlier in the week. Outbreaks are apparently occurring in several other Midwestern and Eastern states. The distinctive green or orange larvae, with rows of clustered white hairs surrounded by black bands, are voracious feeders that warrant control. Small infestations should be removed by hand, while larger infestations may require the use of Bt, (*Bacillus thuringiensis*). Another option is to cut the baptisia back to a few inches, properly disposing of the cuttings and caterpillars.

Genista broom moth caterpillar on baptisia *Marcia Wensing DATCP*

CEDAR-HAWTHORN AND CEDAR-QUINCE RUST: Symptoms of cedar-hawthorn and cedar-quince rust are appearing on hawthorns throughout the state. In the case of cedar-hawthorn rust, bright orange leaf spots are evident on the leaves, while cedar-quince rust is infecting the fruits and twigs. Both rust diseases require two hosts to complete their life cycles, a rosaceous host such as hawthorn and a juniper host. Selecting resistant hawthorn cultivars and thorough sanitation (removing as much of the infected twigs, fruit and leaves as possible) are the recommended controls. Fungicide treatments applied as new growth appears and flower buds start to open may be justified for severe cases. Control on the juniper host is usually not necessary.

APPLE INSECT & BLACK LIGHT TRAP COUNTS AUGUST 2 - 8

COUNTY	SITE	STLM[1]	RBLR[2]	CM[3]	OBLR[4]	OBLR[5]	AM RED[6]	YELLOW[7]	GDD 50°F
Bayfield	Keystone	—	—	—	—		—	—	
Bayfield	Orienta	53	0	0	0		0	0	
Brown	Oneida	—	—	—	—		—	—	
Chippewa	Chippewa Falls	—	35	19	5		3	—	
Crawford	Gays Mills	198	33	6	—		17	0	
Dane	Deerfield	—	—	—	—		—	—	
Dane	Mt. Horeb	21	37	10	3		0	0	
Dane	Stoughton	15	4	1	5		0	2	
Dane	West Madison	—	6	6	1		0	—	
Dodge	Brownsville	—	—	2	—		0	0	
Fond du Lac	Campbellsport	80	12	0	20		0	0	
Fond du Lac	Rosendale	135	15	4	3		2	3	
Grant	Sinsinawa	—	12	8	—		0	0	
Green	Brodhead	—	—	—	—		—	—	
Iowa	Mineral Point	130	36	16	3		*1	0	
Jackson	Hixton	21	1	3	4		0	2	
Kenosha	Burlington	290	2	1	0		*3	—	
Marathon	Edgar	762	13	8	2		7	16	
Marinette	Niagara	55	0	0	3		0	0	
Marquette	Montello	1287	28	0	3		*1	0	
Ozaukee	Mequon	10	6	2	0		4	—	
Pierce	Beldenville	—	—	—	—		—	—	
Pierce	Spring Valley	72	41	3	5		5	*0	
Polk	Turtle Lake	261	0	16	8		**0	—	
Racine	Raymond	630	11	2	0		0	0	
Racine	Rochester	960	44	17	0		*2	0	
Richland	Hillpoint	1025	26	8	5		4	**0	
Sheboygan	Plymouth	—	—	—	—		—	—	
Walworth	East Troy	—	—	—	—		—	—	
Walworth	Elkhorn	—	—	—	—		—	—	
Waukesha	New Berlin	640	2	18	4		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]AM 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	16	0	0	0	0	0	0	0	0	0
Columbia	Arlington	0	1	0	0	0	0	0	0	1	0
Crawford	Prairie du Chien	0	0	0	0	0	0	0	0	0	0
Dane	Mazomanie	1	0	1	0	1	1	0	0	0	0
Fond du Lac	Ripon	8	0	0	0	0	0	0	3	0	0
Manitowoc	Manitowoc	0	0	1	0	17	0	1	0	8	0
Marathon	Wausau	0	1	3	1	34	0	1	1	2	0
Monroe	Sparta	3	0	0	0	2	2	0	0	1	0
Rock	Janesville	1	1	0	0	0	0	0	0	3	0
Vernon	Coon Valley	2	0	0	0	9	0	0	0	7	0
Wood	Marshfield	4	1	0	0	9	4	0	1	4	0

[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.