

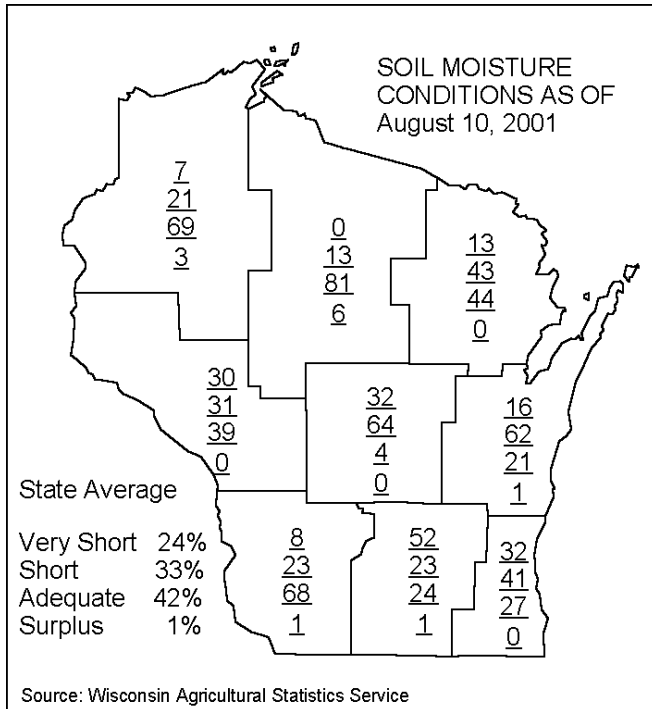


COOPERATIVE PEST SURVEY BULLETIN

State of Wisconsin
Department of Agriculture
Trade & Consumer Protection

Agricultural
Resource
Management

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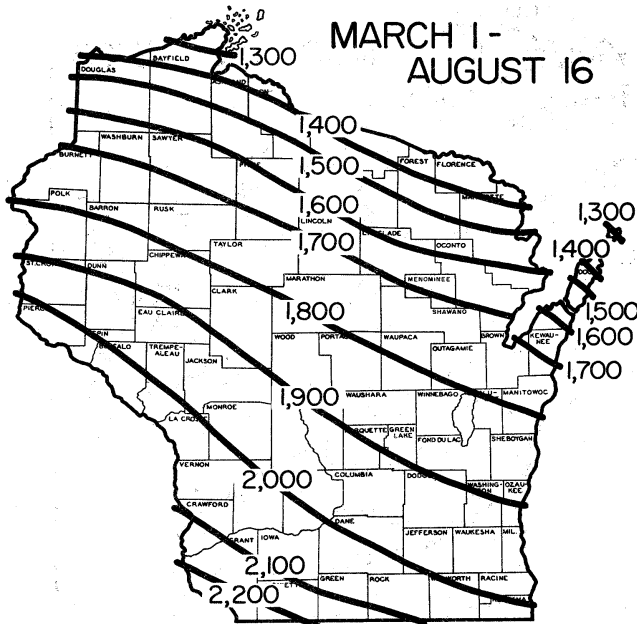
WEATHER AND PESTS

After prolonged hot, humid weather finally a break. Soil moisture is still a factor for some crops like corn and soybeans. **Soybean aphid** numbers are slowing down but there are still some major pockets of activity (see **SOYBEAN** section).

Growing degree days from March 1 through August 15 were:

Site	GDD*1	2000 GDD	Normal GDD	Base ¹ 48	Base ¹ 40
SOUTHWEST					
Dubuque, IA	2145	2128	2226	2053	3440
Lone Rock	2014	2012	2045	1911	3294
SOUTHCENTRAL					
Beloit	2177	2011	2091	2010	3519
Madison	2032	1902	2040	1980	3306
Sullivan	2117	1891	1980	1971	3445
Jeanette	2074	1925	1886	1961	3372
SOUTHEAST					
Waukesha	2042	1872	1805	1957	3329
Hartford	2025	1867	1886	1959	3297
Racine	1947	1832	1976	1959	3190
Milwaukee	1911	1769	1953	1891	3140
EAST CENTRAL					
Appleton	1899	1747	1792	1848	3124
Green Bay	1780	1621	1707	1783	2975
CENTRAL					
Big Flats	1927	1789	1917	1809	3147
Hancock	1936	1786	1862	1842	3156
Port Edwards	1829	1706	1868	1801	3001
WEST CENTRAL					
LaCrosse	2077	2172	2032	1859	3347
Eau Claire	1976	1967	1908	1828	3203
NORTHWEST					
Cumberland	1837	1710	1766	1761	3023
Bayfield	1377	1232	1275	1396	2381
NORTH CENTRAL					
Wausau	1694	1601	1743	1683	2824
Medford	1684	1555	1737	1716	2813
NORTHEAST					
Crivitz	1678	1493	1616	1653	2833
Crandon	1627	1428	1556	1589	2712

*Data from Bill Bland et. al., Soil Science, Univ. of Wisconsin-Madison.

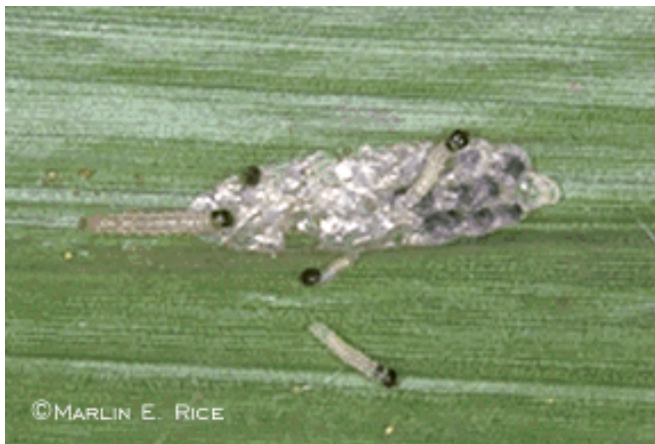


Historical Average Growing Degree-Days Accumulated Since March 1. (Wisconsin Agricultural Statistics Service)

GDD (Growing Degree-Days) are synonymous with degree-days above modified base 50°F, with no low temperature below 50°F or above 86°F used in calculation. See map for Historical Average Growing Degree Days.

CORN

European Corn Borer – The 2nd flight of moths is still active and laying eggs. Levels of infestation have ranged from 20-30% in Dane Co., 24-88% in Green Co., 14-42% in Lafayette Co. and 10-20% in Manitowoc Co. In Lafayette Co., newly-hatched larvae were observed resting on the egg mass (see picture below) in a field where three egg masses were found per 25 plants. In another Lafayette Co. field, 2nd and 3rd instar larvae were observed feeding on kernels and ear tips, and an early 4th instar larva was found inside the stalk, near the base of the same plant. A high percentage of empty pupal cases found in dissected stalks in the southern Cos. surveyed indicates emergence of adults should be nearing completion. The cooler temperatures ahead will likely suppress **European corn borer** moth activity.



<http://www.ipm.iastate.edu/pest/cornborer/ecblifestag.html>

Corn Rootworm – Numbers of beetles in pollinated and maturing corn fields surveyed in the south central Cos. were variable, but in most cases exceeded the economic threshold of 0.75 beetles per plant. The average number of beetles per plant was 1.2 in Dane Co., 2.3 to 4.7 in Green Co., and 1.2 to 5.1 in Lafayette Co. In the most heavily infested fields surveyed, beetles were most often found feeding in the tips of the ears, and silks were clipped almost entirely on an average of 25% of the plants. **Corn rootworm** beetles do not reduce yields once plants have been pollinated and silks are brown; however, scouting now is still important to predict the potential for damage next season.

Corn Earworm – Moth catches in black light and pheromone traps are gradually increasing. Numbers in Chippewa Co. rose to 36, but remain low in Vernon Co.

FORAGES

Potato Leafhopper – Last week's survey findings showed reproduction was slowing, but the ratio of nymphs to adults

during this week's survey indicates otherwise. Counts of 5.3, 4.2 and 4.3 **potato leafhoppers** per sweep were recorded in Dane, Green and Lafayette Co. alfalfa fields. The severe hopperburn that typically results from heavy infestations such as these was not yet apparent in any of the fields surveyed. In one field 26% hopperburn was observed, and in the other fields even less was found (5-10%). Counts in 8-10' alfalfa in the same counties were slightly lower, ranging from 0.7 to 2.3 per sweep in Green and Lafayette Cos., and in a 10-12' Manitowoc Co. field, .2 potato leafhoppers were collected per sweep.

VEGETABLES

Downy mildew- This fungus was detected in a cucumber nursery field in Columbia Co. **Downy mildew** is one of the most important diseases of cucurbits. Symptoms are generally confined to the leaves. Initial symptoms are small, slightly chlorotic to bright yellow areas on the upper leaf surface, which later expand as the plant ages. When environmental conditions are favorable for infection and sporulation (i.e. when sufficient leaf wetness periods are provided), the production of the fungal fruiting structure, sporangia, on the lower leaf surface gives the undersides of lesions a downy appearance. The principal control measures for **downy mildew** on cucumber include fungicide application, the use of resistant cultivars, and cultural practices.

Phoma cucurbitacearum - This disease was recovered from cucumber leaf samples obtained from Columbia Co. during an inspection. Symptoms were circular, tan to dark brown spots with fruiting bodies (pycnidia). The use of fungicide seed treatment and a 2-year rotation cycle are options for the control of **Phoma cucurbitacearum**.

Late blight - During the past two weeks, **late blight** has not progressed beyond the occasional infected stem or leaf in isolated fields. Earlier removal or destruction of infected plants and careful fungicide spraying has made **late blight** a non-issue this summer. Back in mid-June when new reports of **late blight** were arriving daily and weather forecasts called for continuing rain, it looked as though this was going to be a very long summer. Fortunately for the industry, heat and dry weather along with good stewardship all helped to insure that most growers will not see **late blight** this summer. Growers still need to give careful attention to thorough vinekill in preparation for harvest, especially if we enter into a prolonged damp period during the next few weeks. Green infected vines can support profuse sporulation by the **late blight** fungus. Harvesting fields with infected green vines can be a recipe for major problems in storage. All vines (stems and leaves) need to be killed for at least two weeks prior to harvest. Spray bills for **late blight** control this summer appear to be substantially lower than the past two years. Hopefully we can move into the harvest and storage periods without **late blight** problems showing up in storage and subsequent disposal problems. One benefit of having no

late blight in storage is to help in breaking the **late blight** cycle next season that begins with overwintering infected tubers in cull piles. (Walt Stevenson, UW-Madison)

free 1-877-SCNTEST.

Current P-Day and Severity Value Accumulations (as of August 13, 2001)

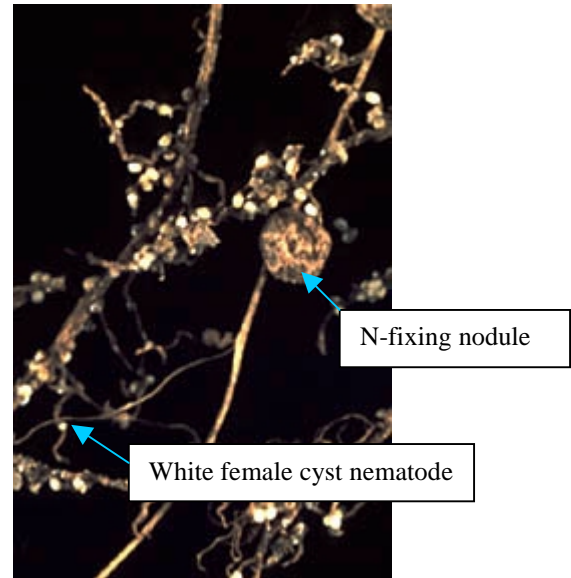
<u>Location</u>	<u>P-Day Total</u>	<u>Severity Value Total</u>
Antigo emerging 5/18	568	120
Antigo emerging 6/01	506	100
Grand Marsh emerging 5/10	591	74
Grand Marsh emerging 5/23	508	70
Hancock emerging 5/10	627	64
Hancock emerging 5/22	545	63
Plover emerging 5/10	637	135
Plover emerging 5/20	572	130
Plover emerging 6/01	509	115

SOYBEANS

Grasshoppers – High populations and heavy defoliation, up to 80%, were encountered throughout the south and west central regions. The most significant numbers of grasshoppers and severe defoliation was observed in several Buffalo and Trempealeau Co. soybean fields. Adults were active both in the fields, while more nymphs were found in the grassy margins bordering the fields. In extreme cases, control in fields margins may be warranted

Soybean Aphid – Reproduction appears to be slowing and population densities are lessening; however, some severe infestations are prevalent throughout the south, especially in Dane, Green and Lafayette Cos., where counts exceeded 100 aphids per plant in all fields surveyed. Counts were lower, ranging from 26-99 aphids per plant in fields surveyed in the West Central regions of the state. Aggregations of adults and nymphs were more commonly observed on the older, lower leaflets.

Soybean cyst nematode (SCN) - The UW Plant Pathology nematologist, Dr. Ann MacGuidwin reported a new find of **SCN** in Dodge Co. In Wisconsin, established populations of **SCN** have now reached 26 counties since 1980. The west central and southeastern regions of the state have the most fields infested with **SCN**. The **SCN** can be disseminated by wind, water, soil peds in uncleaned seed, and machinery. Virtually anything that can move soil can disseminate this nematode. Potential hot spots for **SCN** are along fence lines, previously flooded areas, field entryways, consistently low-yielding areas and low spots. To obtain **SCN** testing and management information, please call toll-

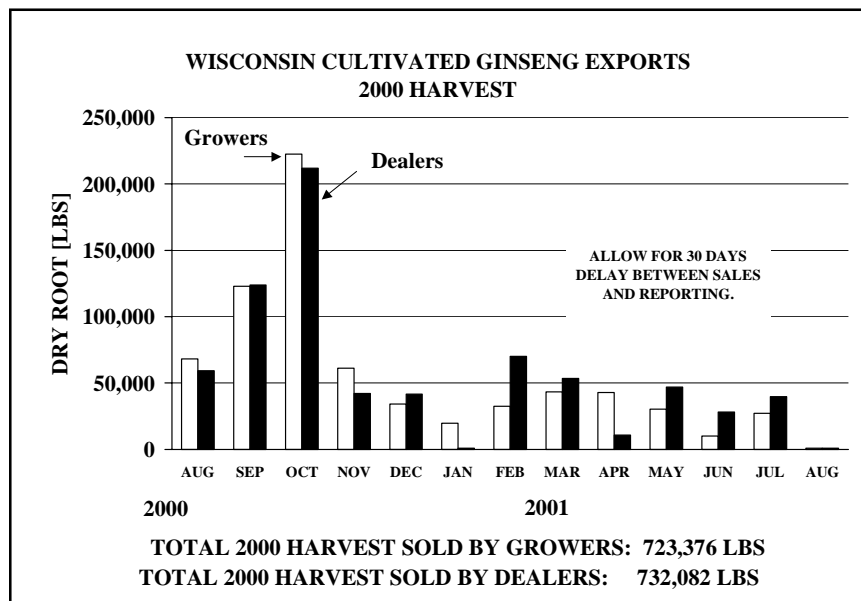


Courtesy of UW Soybean Plant Health web site- <http://www.plantpath.wisc.edu/soyhealth/index.htm>

GINSENG

UW Ginseng field day at the research garden is set for Wednesday, August 29, 2001, from 1 to 3 PM at the Rib Falls Research Garden on 21st Street in Marathon Co.

Dr. Michael Drilias will be discussing **Product and Registration updates**, as well as **Weed Control** and **Alternaria Leaf & Stem Blight Control Studies**.



Directions: From Wausau take Hwy 29 west to Hwy S. Go north on Hwy S through Rib Falls. Take 21st Street east for 0.4 miles. The gardens are on the north side (left) of the road.

Phenology – Scattered ginseng plants in two- and three year old gardens are starting to senesce. Leaf margins are turning light green, which can be confused with symptoms of beginning **Phytophthora Root Rot**.

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Columbine sawfly - Columbine at a residence in Dane Co. had moderate defoliation from this insect. Larvae were nearly full grown.

Pear slug - Light amounts of feeding injury were found on peking cotoneaster and purple leaf plum at a nursery in Iowa Co.

Fall webworm - Small numbers of tents were found on various shade trees at a nursery in Manitowoc Co.

Thrips - Damage was moderate on Anthony Waterer spirea at a nursery in Iowa Co.

Linden borer - Heavy amounts of damage were noticed on greenspire linden at a nursery in Washington Co.

Pine needle scale - Scotch pine at a nursery in Washington Co. had moderate to heavy amounts of scale infesting the needles.

Elm sawfly - Larvae were observed defoliating weeping willow at a nursery in Sauk Co.

Tar spot - Silver maple at an Iowa Co. nursery had light amounts of **tar spot** while autumn blaze had light amounts in a Washington Co. nursery. Light to heavy amounts were found on Norway maple at a nursery in Manitowoc Co.

Phomopsis blight - Moderate amounts of injury were found on upright junipers at a nursery in Washington Co.

Aster yellows - Several purple conflower plants were found infected with this phytoplasma at a nursery in Eau Claire Co.

Cedar-quince rust - Light amounts of rust were on crimson cloud hawthorn at a nursery in Iowa Co.

Septoria leaf spot - Light to moderate amounts of leaf spots were found on red twig and variegated dogwood at nurseries in Iowa and Washington Cos.

Guignardia leaf blotch - Heavy infections were found on horsechestnut at a nursery in Washington Co.

Asteroma leaf spot - American linden at a nursery in

Washington Co. had light to moderate amounts of this foliar fungal pathogen.

Rhizosphaera needle cast - Moderate amounts of needle cast were found on Colorado blue spruce at nurseries in Dunn and Washington Cos.

Anthracnose - River birch at a nursery in Washington Co. had light to moderate amounts of **anthracnose**. **Spot anthracnose**, caused by *Spaceloma viburni*, was found in moderate amounts on nannyberry viburnum at a nursery in Dane Co.

Dothiora taxicola-like disease - Black hills spruce at a nursery in Ozaukee Co. exhibited symptoms which were confirmed to be *Dothiora taxicola*-like. In Rock Co. white spruce from a nursery was diagnosed with this same disease.

STATE/FEDERAL PROGRAMS

Gypsy moth program - Trappers have started to take down traps south of Highway 10 while trappers north of Highway 10 will start next week. As of 8/15/01, trappers have caught 90,871 male gypsy moths. Counties with the highest totals are: Brown (5,618), Door (9,233), Kenosha (1,452), Kewaunee (2,343), Manitowoc (2,864), Marinette (46,177), Oconto (2,151), Outagamie (2,288), Portage (1,400), Waukesha (5,739), and Waupaca (4,109). See map for all county totals. Trap takedown should last approximately 4-5 weeks with all traps being down by the end of September.

Please note that these totals do not include cooperator totals and that counties in the eastern part of the state with zero catches have not been checked or taken down.

For more information on the GYPSY MOTH PROGRAM, please call our hotline at 1-800-642-MOTH or visit our website at <http://datcp.state.wi.us/gypsymoth/>

FRUIT

Cooperator Comments- Still occasional blocks in orchards across the southern tier of counties are experiencing **codling moth** or **apple maggot** flights over threshold. The main concerns are a possible resurgence of **scab** with the moisture and cooler weather (as nearly everyone has at least a few primary lesions on leaves or fruit) and **obliquebanded leafroller** larvae. I began finding 1st instar, second generation larvae this week. Growers need to check fruit, particularly where there are doubles or triples, examining the area covered by a leaf or where two apples make contact, for the two to three very tiny holes the larvae make when they enter under the skin. Holes are less than 0.5 mm across but can be seen with a 16X handlens. Threshold is usually 1% of the fruit (**Consultant**).

Apple Insect Trapping Results

County

City	Date	STLM	RBLR	CM	OBLR	AM board	AM sphere
Crawford Co.							
Gays Mills-	8/1-8/7	300	10	2	3	0	0
Kickapoo	8/8-8/15	104	31	8	6		6
Iowa Co.							
Dodgeville*	8/9-8/16	635	68	38	16	0	0
Richland Co.							
Rich. Ctr-E	8/8-8/15	224	18	9	4		0
Rich.Ctr-W	8/8-8/15	368	2	7	5		0
Dane Co.							
Deerfield	8/6-8/13	370	3	4	0	0	2
Waunakee	8/8-8/14		24	0	1		1
Juneau Co.							
Mauston	8/6-8/13	117	1	0		0	2
Jackson Co.							
Hixton	8/7-8/13	38	2				1
Trempealeau Co.							
Galesville	8/6-8/13	36	0	1	1	0	0
Dunn Co.							
Menomoni	8/7-8/13	36	0	0	0	0	1
Pierce Co.							
Beldenville	8/6-8/13	120	0	0	0	0	0
Spring Valle	8/7-8/14	314	8	0	0	0	0
Fond du Lac Co.							
Rosendale	7/31-8/7	12	3	1	1	1	2
Malone	8/6-8/13		2	3	2	0	0
Marquette Co.							
Montello*	8/5-8/12	386	71	0	5	0	2
Ozaukee Co.							
Mequon	8/7-8/14	25	1.5	0.2	1	0.25	1.8
Racine Co.							
Rochester*	8/9-8/15	254	19	7	3	0	2
Brown Co.							
Oneida	7/30-8/12	87	17	6	5	0	0

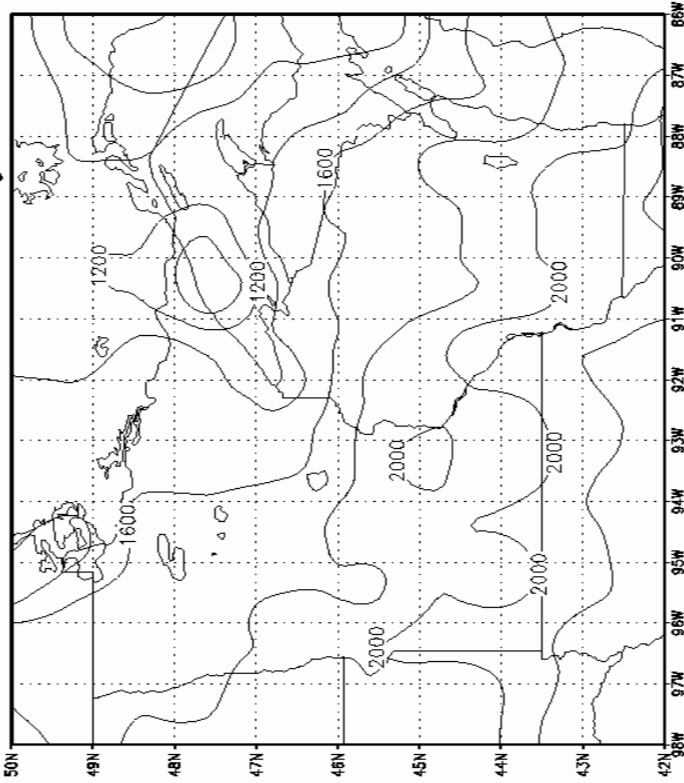
* indicates NEW COOPERATOR!

BLACKLIGHTTRAPPINGRESULTS

For the week ending Aug 16

Site	Euro. Corn Borer	Army-Worm	Black Cutw.	Vari. Cutw.	Spot. Cutw.	Corn Earw.	Pheromone Corn Earw.
South							
Janesville	93	99	22	0	0	3	
South Central							
Mazomanie	89	17	21	0	0	22	
Reedsburg	20						7
Southwest							
Lancaster	19	7					
West Central							
Coon Valley							4
Northwest							
Chippewa	2						36

Base 50F D.D. from 1 Jan to 15 August 2001



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