



EXTENSION

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No Newsletter Next Week, Bring Your Questions to the Haskell Ag Lab

Due to our big public field day next Tuesday, we will not be publishing a newsletter next week. Please join us for our open house from 8:30 to 4:00, with a free prime rib sandwich lunch served at 11:30. All our specialists will be here, so if you want some personal attention bring your questions along.

Whiteflies in Soybeans

We have received numerous reports of whiteflies in eastern Nebraska soybeans. Whiteflies have been observed in Nebraska soybeans before, but they seem to be more numerous this summer.

Although economic loss caused by sweet potato whitefly has been reported in the southern United States (e.g. Florida), we have not seen economic loss in the Midwest. Previous research indicates that the whiteflies we are seeing in Nebraska soybeans are the greenhouse whitefly, although it is possible that other species also may occur.

Whiteflies are sucking insects that feed on plant juices in both the immature and adult stages. The adult stage is about 1/16 inch long, with four whitish wings and a yellowish body. The wings are held roof-like over the body and are more or less parallel to the leaf surface. The adults are easily disturbed and often fly up as you walk through a field. The nymphs feed on the undersides of leaves. They are flattened and look like scale insects.

There are no published economic thresholds for greenhouse whiteflies in soybeans, and from all indications, the soybean aphid is probably the greater concern in Nebraska soybeans.

Soybean Aphid

We have not received many calls about soybean aphids, and our plots at the Haskell Ag Lab are showing low numbers at this time. However, experience tells us that we can not relax, since these insects can reproduce at very high rates. We have experienced economic pressure as late as the last week of August with these pests. Soybean maturity seems to be in our favor as many beans are reaching the R5 stage. The next 10 days will be critical, so keep on scouting and staying on top of soybean aphid populations.

University of Nebraska-Lincoln, cooperating with the counties and the counties and the U.S. Department of Agriculture

Soybean Rust in Southern Oklahoma

Soybean rust was confirmed in southern Oklahoma this week and was reported in northern Texas last week. The spread of soybean rust westward this year was earlier than before and this is the first time we have seen rust this close to us this early in the year. This increases the likelihood that we will see soybean rust in Nebraska this year, but it will most likely be after the time when it could impact production.

As a result of these developments we have increased surveillance activity with the soybean rust sentinel plot program. The sentinel plot program is funded by the soybean checkoff and USDA. All findings with sentinel plots are reported on the national soybean rust Web site and the soybean rust phone hotline at 877-NebRust. While this most likely will not be a problem for production this year, we may get a chance to see it before it becomes a problem in future years.

To keep up with further developments of soybean rust and to track movement, check the national USDA Soybean Rust Web site at sbrusa.net. There is also a link to this site at the University of Nebraska–Lincoln [Targeting Soybean Rust](#) Web site. (Loren J. Giesler)

Corn Rusts in Southern Nebraska

On Friday Aug 3, Tamra Jackson, Plant Pathologist, reported southern rust on corn samples received Thursday in the UNL Plant & Pest Diagnostic Clinic from Phelps, Kearney, and Gage counties. This is the same rust that caused severe losses last year in south central and parts of eastern Nebraska. If we continue to have high humidity and frequent showers (such as we did in August 2006) it could become a problem again, especially in those fields that were planted later. Here in northeast Nebraska we need to be on the lookout and hope that it doesn't appear until the corn has matured beyond the need for spraying.

Pre-harvest intervals (PHI) on the labels for some of the fungicides have been shortened recently, giving us more options for management. Last year, we only had the strobilurin fungicides for our use (Headline and Quadris) when southern rust hit because it was after brown silks developed. Now, the labels for Tilt and Quilt have changed and allow for application of them up to 30 days prior to harvest (instead of the prior PHI that restricted applications after development of brown silks). Timing is important for use of all of these products. Headline and Quadris perform best when applied before infection occurs and have no curative activity but prevent new infections for 14-21 days. Quilt is a mixture of both Quadris and Tilt and has both preventative and curative activity. Despite their curative activity, both Quilt and Tilt will perform best if applied soon after infection. And, the same products and guidelines apply for use against gray leaf spot which is already active in some Nebraska counties.

There is also another closely related rust disease active in Nebraska corn fields, common rust that has not typically been a serious problem in Nebraska, and can be difficult to differentiate from southern rust. If you are concerned about a disease problem in your field, you can submit a sample to the UNL Plant and Pest Diagnostic Clinic for identification, or you can refer to my NebGuide, Rust Diseases of Corn in Nebraska, at the link below. I recommend close monitoring of your fields, especially the later planted ones that are younger and subsequently more vulnerable if the moist conditions persist.

As of now, the new PHI of Quilt and Tilt have NOT been updated in this publication but will over the next few days. (Tamra Jackson) <http://www.ianrpubs.unl.edu/sendIt/g1680.pdf>

Soybean Cyst Nematode Losses Growing

Four field days in August, conducted by University of Nebraska-Lincoln Extension, will alert growers to the damage caused by soybean cyst nematodes in Nebraska. It will help farmers and agricultural professionals identify and manage SCN to minimize its impact on yields.

If the current yield losses from SCN in Nebraska were being caused by soybean rust, it would be the lead ag story across the state. While soybean rust has received much attention, SCN has earned the title of “The Silent Yield Robber.” It costs Nebraska soybean growers millions of dollars in lost production each year, often without being detected. Yield losses of 20-30 percent have been documented in the state with no above ground symptoms on the plant.

If SCN caused holes, lesions, spots or other plant abnormalities, it would be much easier to convince producers to test for and manage it. However, infested plants usually look healthy. The first indication of a problem is soybean yields that have leveled off or even started to drop while corn or other crop yields in the same field continue to improve.

Originally identified in counties bordering the Missouri River, SCN has been identified in 41 counties in eastern and central Nebraska as far west as Boyd, Valley Buffalo, and Kearney counties. As soybean production has moved across the state, so has the distribution of soybean cyst nematodes.

The 2007 SCN Field Days will be held on:

- ◆ Tuesday, August 21, 3:00 p.m., at the Lindy Koester farm
From Concord: go ½ mile north on Lincoln Street (5775 Avenue); or ½ mile west of Concord Cemetery on 867 Road.
- ◆ Wednesday, August 22, 10:00 a.m., at the Greg Anderson farm
From Newman Grove: go 1 mile north on Highway 45, then ¼ mile east on 824th Road
- ◆ Wednesday, August 22, 6:30 p.m., at the Warren Peterson farm
From Plainview: go 5 miles west on Highway 20 to Highway 13 junction, then 4¾ miles south on 531st Road (Copenhagen Road)
- ◆ Friday, August 31, 9:00 a.m., at the Kerry Knuth farm
From Mead: go 2 miles west on Highway 92 (or 1 mile west of the Highway 77 junction), then 1¼ miles south on County Road 12

At each SCN Field Day site participants will be able to:

- See SCN-resistant and susceptible soybean varieties
- Examine cysts on infested soybean plant's roots
- Learn how to identify and manage SCN infestations
- Receive a kit for one free SCN analysis (\$20 value)
- Get answers to your questions on SCN

At four SCN-infested field day sites in 2006, SCN-resistant varieties out yielded susceptible varieties by an average of 7 bushels. These infested sites had low to moderate levels of infestation. There was no difference in yield between the same susceptible and resistant varieties at a site which was not infested with SCN.

The Soybean Cyst Nematode Field Days are presented by UNL Extension with support from the Nebraska Soybean Board. For more information, contact your local UNL Extension office.

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8/ 8/2007

CROP WATER USE SUMMARY

Ending on 8/ 7/2007

GDD @ Matur.=Acum. GDD at Maturity

--Station--	Crop--	-Emerg mon/da	Accum -GDD-	----Past-----			--Future--			---Stage---	GDD @ Matur
				week	3days	day	3days	week	---Descrip---		
AINSWORTH	Corn	5 5	1817.	0.24	0.27	0.33	0.30	0.28	Dough 7	2600.	
AINSWORTH	Corn	5 19	1629.	0.24	0.27	0.33	0.30	0.28	Blister 6	2600.	
AINSWORTH	Soybean	5 22	1571.	0.24	0.27	0.33	0.30	0.28	Beg Seed	2500.	
AINSWORTH	Soybean	6 5	1419.	0.23	0.27	0.33	0.30	0.28	Full Pod	2500.	
AINSWORTH	Potato	5 15	2161.	0.07	0.07	0.07	0.06	0.05	Senescence	2500.	
AINSWORTH	Potato	5 30	1913.	0.13	0.13	0.15	0.13	0.10	Tuber bulk	2500.	
AINSWORTH	Wheat	4 5	2829.	0.00	0.00	0.00	0.00	0.00	Mature	1800.	
AINSWORTH	Grass	4 5	2829.	0.17	0.19	0.23	0.21	0.19	Full Cover	4000.	
AINSWORTH	Alfalfa	4 5	2829.	0.22	0.25	0.30	0.28	0.25	Full Cov	4000.	
BRUNSWICK	Corn	5 5	1912.	0.21	0.16	0.18	0.21	0.22	Dough 7	2600.	
BRUNSWICK	Corn	5 19	1704.	0.21	0.16	0.18	0.21	0.22	Blister 6	2600.	
BRUNSWICK	Soybean	5 22	1638.	0.21	0.16	0.18	0.21	0.22	Beg Seed	2500.	
BRUNSWICK	Soybean	6 5	1470.	0.21	0.16	0.18	0.21	0.22	Full Pod	2500.	
BRUNSWICK	Potato	5 15	2219.	0.05	0.03	0.03	0.03	0.03	Senescence	2500.	
BRUNSWICK	Potato	5 30	1956.	0.11	0.07	0.07	0.08	0.07	Tuber bulk	2500.	
BRUNSWICK	Wheat	4 5	2964.	0.00	0.00	0.00	0.00	0.00	Mature	1800.	
BRUNSWICK	Grass	4 5	2964.	0.15	0.11	0.12	0.14	0.15	Full Cover	4000.	
BRUNSWICK	Alfalfa	4 5	2964.	0.19	0.15	0.16	0.19	0.20	Full Cov	4000.	
CENTRALCITY	Corn	5 5	1953.	0.19	0.13	0.07	0.13	0.17	Dough 7	2600.	
CENTRALCITY	Corn	5 19	1738.	0.19	0.13	0.07	0.14	0.18	Blister 6	2600.	
CENTRALCITY	Soybean	5 22	1675.	0.19	0.13	0.07	0.13	0.17	Beg Seed	2500.	
CENTRALCITY	Soybean	6 5	1483.	0.18	0.13	0.07	0.14	0.18	Beg Seed	2500.	
CENTRALCITY	Potato	5 15	2241.	0.05	0.03	0.01	0.02	0.02	Senescence	2500.	
CENTRALCITY	Potato	5 30	1958.	0.10	0.06	0.03	0.05	0.05	Tuber bulk	2500.	
CENTRALCITY	Wheat	4 5	3042.	0.00	0.00	0.00	0.00	0.00	Mature	1800.	
CENTRALCITY	Grass	4 5	3042.	0.13	0.09	0.05	0.09	0.11	Full Cover	4000.	
CENTRALCITY	Alfalfa	4 5	3042.	0.17	0.12	0.06	0.12	0.16	Full Cov	4000.	
ELGIN	Corn	5 5	1891.	0.21	0.17	0.13	0.18	0.22	Dough 7	2600.	
ELGIN	Corn	5 19	1688.	0.21	0.17	0.13	0.18	0.22	Blister 6	2600.	
ELGIN	Soybean	5 22	1626.	0.21	0.17	0.13	0.18	0.22	Beg Seed	2500.	
ELGIN	Soybean	6 5	1465.	0.21	0.17	0.13	0.18	0.22	Full Pod	2500.	
ELGIN	Potato	5 15	2200.	0.06	0.04	0.02	0.03	0.03	Senescence	2500.	
ELGIN	Potato	5 30	1944.	0.11	0.08	0.05	0.07	0.07	Tuber bulk	2500.	
ELGIN	Wheat	4 5	2961.	0.00	0.00	0.00	0.00	0.00	Mature	1800.	
ELGIN	Grass	4 5	2961.	0.14	0.11	0.08	0.12	0.14	Full Cover	4000.	
ELGIN	Alfalfa	4 5	2961.	0.19	0.15	0.11	0.17	0.20	Full Cov	4000.	
MEADAGROFARM	Corn	5 5	2060.	0.22	0.15	0.10	0.15	0.18	beg Dent 8	2600.	
MEADAGROFARM	Corn	5 19	1836.	0.22	0.15	0.10	0.15	0.19	Dough 7	2600.	
MEADAGROFARM	Soybean	5 22	1776.	0.22	0.15	0.10	0.15	0.17	Full Seed	2500.	
MEADAGROFARM	Soybean	6 5	1561.	0.22	0.15	0.10	0.15	0.19	Beg Seed	2500.	
MEADAGROFARM	Potato	5 15	2386.	0.03	0.01	0.01	0.01	0.01	Senescence	2500.	
MEADAGROFARM	Potato	5 30	2092.	0.09	0.05	0.03	0.04	0.04	Tuber bulk	2500.	
MEADAGROFARM	Wheat	4 5	3129.	0.00	0.00	0.00	0.00	0.00	Mature	1800.	
MEADAGROFARM	Grass	4 5	3129.	0.15	0.10	0.06	0.10	0.12	Full Cover	4000.	
MEADAGROFARM	Alfalfa	4 5	3129.	0.20	0.14	0.09	0.14	0.17	Full Cov	4000.	
MONROE	Corn	5 5	2016.	0.20	0.15	0.09	0.15	0.18	Dough 7	2600.	
MONROE	Corn	5 19	1789.	0.20	0.15	0.09	0.15	0.19	Dough 7	2600.	
MONROE	Soybean	5 22	1724.	0.20	0.15	0.09	0.15	0.18	Beg Seed	2500.	
MONROE	Soybean	6 5	1522.	0.20	0.15	0.09	0.15	0.19	Beg Seed	2500.	
MONROE	Potato	5 15	2311.	0.04	0.02	0.01	0.01	0.02	Senescence	2500.	
MONROE	Potato	5 30	2021.	0.09	0.06	0.03	0.05	0.05	Tuber bulk	2500.	
MONROE	Wheat	4 5	3101.	0.00	0.00	0.00	0.00	0.00	Mature	1800.	
MONROE	Grass	4 5	3101.	0.14	0.10	0.06	0.09	0.12	Full Cover	4000.	
MONROE	Alfalfa	4 5	3101.	0.19	0.14	0.08	0.14	0.17	Full Cov	4000.	

NEWPORT	Corn	5	5	1873.	0.25	0.26	0.32	0.30	0.28	Dough	7	2600.
NEWPORT	Corn	5	19	1668.	0.25	0.26	0.32	0.30	0.28	Blister	6	2600.
NEWPORT	Soybean	5	22	1609.	0.25	0.26	0.32	0.30	0.28	Beg Seed		2500.
NEWPORT	Soybean	6	5	1445.	0.25	0.26	0.32	0.30	0.28	Full Pod		2500.
NEWPORT	Potato	5	15	2194.	0.07	0.06	0.06	0.05	0.04	Senescence		2500.
NEWPORT	Potato	5	30	1937.	0.13	0.12	0.14	0.12	0.10	Tuber bulk		2500.
NEWPORT	Wheat	4	5	2903.	0.00	0.00	0.00	0.00	0.00	Mature		1800.
NEWPORT	Grass	4	5	2903.	0.18	0.18	0.22	0.20	0.19	Full Cover		4000.
NEWPORT	Alfalfa	4	5	2903.	0.23	0.24	0.29	0.28	0.25	Full Cov		4000.
CONCORD (NE)	Corn	5	5	1906.	0.18	0.09	0.06	0.14	0.18	Dough	7	2600.
CONCORD (NE)	Corn	5	19	1689.	0.18	0.09	0.06	0.14	0.18	Blister	6	2600.
CONCORD (NE)	Soybean	5	22	1624.	0.18	0.09	0.06	0.14	0.18	Beg Seed		2500.
CONCORD (NE)	Soybean	6	5	1443.	0.18	0.09	0.06	0.14	0.18	Full Pod		2500.
CONCORD (NE)	Potato	5	15	2189.	0.05	0.02	0.01	0.02	0.02	Senescence		2500.
CONCORD (NE)	Potato	5	30	1911.	0.10	0.05	0.03	0.06	0.06	Tuber bulk		2500.
CONCORD (NE)	Wheat	4	5	2966.	0.00	0.00	0.00	0.00	0.00	Mature		1800.
CONCORD (NE)	Grass	4	5	2966.	0.12	0.06	0.04	0.09	0.12	Full Cover		4000.
CONCORD (NE)	Alfalfa	4	5	2966.	0.16	0.09	0.06	0.13	0.17	Full Cov		4000.
ONEILL	Corn	5	5	1854.	0.23	0.21	0.28	0.28	0.26	Dough	7	2600.
ONEILL	Corn	5	19	1651.	0.23	0.21	0.28	0.28	0.26	Blister	6	2600.
ONEILL	Soybean	5	22	1590.	0.23	0.21	0.28	0.28	0.26	Beg Seed		2500.
ONEILL	Soybean	6	5	1434.	0.23	0.21	0.28	0.28	0.26	Full Pod		2500.
ONEILL	Potato	5	15	2174.	0.07	0.05	0.06	0.05	0.04	Senescence		2500.
ONEILL	Potato	5	30	1923.	0.12	0.10	0.12	0.12	0.10	Tuber bulk		2500.
ONEILL	Wheat	4	5	2890.	0.00	0.00	0.00	0.00	0.00	Mature		1800.
ONEILL	Grass	4	5	2890.	0.16	0.15	0.19	0.19	0.18	Full Cover		4000.
ONEILL	Alfalfa	4	5	2890.	0.21	0.19	0.25	0.25	0.24	Full Cov		4000.
ORD	Corn	5	5	1896.	0.20	0.22	0.25	0.24	0.24	Dough	7	2600.
ORD	Corn	5	19	1690.	0.20	0.22	0.25	0.24	0.24	Blister	6	2600.
ORD	Soybean	5	22	1631.	0.20	0.22	0.25	0.24	0.23	Beg Seed		2500.
ORD	Soybean	6	5	1459.	0.20	0.22	0.25	0.24	0.24	Full Pod		2500.
ORD	Potato	5	15	2215.	0.05	0.04	0.04	0.04	0.03	Senescence		2500.
ORD	Potato	5	30	1952.	0.10	0.10	0.10	0.10	0.08	Tuber bulk		2500.
ORD	Wheat	4	5	2939.	0.00	0.00	0.00	0.00	0.00	Mature		1800.
ORD	Grass	4	5	2939.	0.14	0.15	0.17	0.16	0.15	Full Cover		4000.
ORD	Alfalfa	4	5	2939.	0.18	0.20	0.23	0.22	0.21	Full Cov		4000.
WESTPOINT	Corn	5	5	1963.	0.18	0.11	0.08	0.15	0.18	Dough	7	2600.
WESTPOINT	Corn	5	19	1745.	0.18	0.11	0.08	0.15	0.18	Blister	6	2600.
WESTPOINT	Soybean	5	22	1681.	0.18	0.11	0.08	0.15	0.18	Beg Seed		2500.
WESTPOINT	Soybean	6	5	1479.	0.18	0.11	0.08	0.15	0.18	Beg Seed		2500.
WESTPOINT	Potato	5	15	2249.	0.04	0.02	0.01	0.02	0.02	Senescence		2500.
WESTPOINT	Potato	5	30	1958.	0.09	0.05	0.03	0.05	0.06	Tuber bulk		2500.
WESTPOINT	Wheat	4	5	3036.	0.00	0.00	0.00	0.00	0.00	Mature		1800.
WESTPOINT	Grass	4	5	3036.	0.12	0.07	0.05	0.09	0.12	Full Cover		4000.
WESTPOINT	Alfalfa	4	5	3036.	0.16	0.10	0.07	0.13	0.17	Full Cov		4000.
YORK	Corn	5	5	1987.	0.20	0.15	0.09	0.15	0.19	Dough	7	2600.
YORK	Corn	5	19	1772.	0.20	0.15	0.09	0.15	0.19	Dough	7	2600.
YORK	Soybean	5	22	1714.	0.20	0.15	0.09	0.15	0.18	Beg Seed		2500.
YORK	Soybean	6	5	1509.	0.20	0.15	0.09	0.15	0.19	Beg Seed		2500.
YORK	Potato	5	15	2299.	0.04	0.02	0.01	0.02	0.02	Senescence		2500.
YORK	Potato	5	30	2010.	0.09	0.06	0.03	0.05	0.05	Tuber bulk		2500.
YORK	Wheat	4	5	3070.	0.00	0.00	0.00	0.00	0.00	Mature		1800.
YORK	Grass	4	5	3070.	0.13	0.10	0.06	0.10	0.12	Full Cover		4000.
YORK	Alfalfa	4	5	3070.	0.18	0.13	0.08	0.14	0.17	Full Cov		4000.