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Sclerotinia stem rot identified; avoid seed from infected fields

Symptoms of Sclerotinia stem rot are appearing in soybeans. An examination of soybean plots at the Agricultural Research and Development Center near Mead detected plants with active Sclerotinia stem rot.

When scouting a field, look for plants with leaves that wilt and turn gray-green. Later these leaves turn brown, curl and die. Since these symptoms can be confused with late season root rot or brown stem rot, it is important to observe stems and pods for white mycelium and sclerotia. Infected stems develop a white, fluffy mycelium during hot, humid periods. Later the dark black sclerotia can be found imbedded in the mycelium on the plant tissue. The pattern in a field can vary from single infected plants to pockets of several infected plants.

Nothing can be done at this time to control the disease, but growers with affected fields can take preventive measures for next year’s crop.

- Note which field(s) has the disease and do not use the seed from that field as seed for next year.

- Crop rotations are important. Do not follow soybeans with sunflowers or dry beans but rather use a small grain, corn or sorghum.

- Select soybean varieties that are less susceptible to Sclerotinia stem rot. The seed companies will have this information.

John E. Watkins
Extension Plant Pathologist

Map weed problems to plan for better control next year

Now is a good time to take a plant inventory of your acres. Throughout the year, plants (weeds) appear in certain areas of the field or pasture and are unknowns to many of us at early stages of growth. By now most annuals and perennials have flowered and are much easier to identify.

Of course we are all excellent weed managers and there are no weeds to be found in most fields, yeah right. Simple walks to various parts of the field where these unknowns have been seen may reveal their identity.

This late season scouting is important for two reasons. First, late season scouting can give producers a good idea of the weed species composition in a field and insight as to how weed species composition has changed throughout the summer. Second, it allows the producer to accurately identify weed problems and densities in specific locations of the field for treatment the next year. In any case, late season weed identification can tell the producer a great deal about what is happening in a field throughout the summer.

Alex Martin
Extension Weed Specialist
Jeff Rawlinson
Extension Assistant Weed Science
Steve Pritchard, Extension Educator in Platte County: Crops in the Platte Valley are on track for record yields. Most corn is in the dent stage or nearing it. There are a few reports of ear tipping in fields. Soybeans are filling pods. Weed pressure is low, although some soybean fields have late comers appearing above the canopy.

Soil moisture profile is excellent for the end of August. General rainfall last week ranged from 1 inch in the southern county to over 5 inches in the northern section.

Ray Weed, Extension educator in Kimball and Banner counties: Confection sunflowers are more valuable per pound, and so growers here are scouting for the red and gray weevils that can become a serious problem. Scouting can be done by brushing the face of the sunflower head vigorously, or by spraying the head with an insect repellent containing "deet." Economic threshold for treatment is two per head for confections.

Guidelines for treatment are available in "High Plains Sunflower Production and IPM" Bulletin 556A from Colorado State University Cooperative Extension—a publication with several regional authors including David Baltensperger, UNL agronomy professor.

We have adequate soil moisture for drilling winter wheat. Our recommended planting date for over 5,000 feet elevation is September 1, so growers will begin planting soon.

Nebraska Agricultural Statistics Service: Mild and generally dry conditions prevailed last week, except in the southwest, where extensive rainfall boosted soil moisture supplies. Producers were active preparing for wheat seeding in the west and many irrigators were nearing their final irrigation for the season. Producers continued moving grain to local elevators and preparing for row crop harvest. Concern over low commodity prices again prompted many to consider marketing versus farm program options.

Corn

Corn condition rated 1% very poor, 2% poor, 19% fair, 55% good, and 23% excellent. Dryland corn rated 77% in good or excellent condition and 78% of the irrigated corn rated in those categories. Acreage reaching the dough stage was at 71%, ahead of 62% last year and 49% average. Corn having reached the dent stage was at 16%, also ahead of 8% last year and 10% average.

Soybean

Soybean condition rated 2% poor, 14% fair, 66% good, and 18% excellent. Podding was occurring on 92% of the acreage, ahead of 86% last year and 72% average. Bean leaf beetles had reached treatable levels in some eastern fields.

Sorghum

Sorghum condition was 1% poor, 15% fair, 67% good, and 17% excellent. Heading had occurred on 91% of the acreage, ahead of 86% last year and 71% average. Sorghum coloring was just starting at 5%, ahead of 1% last year and equal to average.
Planting wheat too early may lead to trouble

...Disease concerns

Planting wheat too early for your area is an open invitation to disease. The virus diseases, wheat streak mosaic, soilborne wheat mosaic, High Plains virus and barley yellow dwarf thrive on early planted wheat.

By planting wheat early, you provide a longer window for infection in the fall as well as a longer time for the disease to develop before winter. Both of these factors increase the incidence and severity of the disease. Also, the risk of multiple infection by more than one virus is greater. Dual infection by two viruses such as wheat streak mosaic and High Plains or wheat streak mosaic and barley yellow dwarf can significantly reduce yields.

Other diseases impacted by planting dates are crown and root rot and Cephalosporium stripe. Early planting combined with a loose seedbed often leads to severe crown and root rot and winter kill. Because early seeded plants have more roots, the threat from infection by Cephalosporium is greater. Although this disease is sporadic in Nebraska, it can be damaging in certain years.

Other fall cultural practices to help get the crop off to a healthy start include using good quality seed, treating seed with a seed treatment fungicide and planting into a firm, mellow seedbed.

John E. Watkins
Extension Plant Pathologist

...Hessian flies

Nebraska wheat producers need to consider the potential impact of Hessian fly infestations when planning to plant.

Late summer is the best and perhaps only time to battle the Hessian fly. Generally, chemical controls are not a practical solution so cultural practices are the only means to prevent serious losses. To reduce Hessian fly fall infestations:

1) control volunteer wheat before planting;
2) plant Hessian fly resistant or tolerant wheat varieties; and
3) plant after the fly-safe date (see map).

It is important that growers not rely solely on following the fly-safe planting dates, but rather incorporate two or all three practices into their management program.

The Hessian fly spends the summer in the flaxseed stage on wheat stubble. In the fall, adults emerge to deposit eggs on early seeded or volunteer wheat. Plowing will bury many flax seeds deep enough to prevent adults from reaching the surface, but may promote erosion. Planting after the fly-safe date allows seedlings to emerge after most adult flies have died. Fly-safe dates are averages based on several years of observations. A hot, dry September can delay fly emergence. Moist, cool weather may cause average emergence dates to be earlier than

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Don’t take anhydrous safety for granted; take precautions

Anhydrous ammonia is so familiar that it’s easy for agricultural producers to take it for granted, said. Anhydrous ammonia should always be handled with utmost caution.

Anhydrous safety means preventing contact between the chemical and the person handling it, Grisso said. Always work upwind of machinery, hoses, valves, couplers and applicator tubes. Don’t step in front of fittings or valves. Wear insulated gloves and non-vented goggles.

Never fill an anhydrous tank more than 85 percent full.

Keep a lot of water available. All anhydrous tanks should have a five-gallon water reservoir in or on them. Fill or replace the water daily. Keep a squirt bottle in the tractor cab.

Every field applicator and nurse tank should be equipped with an emergency breakaway valve. Keep hoses level so liquid anhydrous won’t collect in low spots. Any anhydrous left in the hoses after disconnect could spill onto the person disconnecting the equipment.

Following are a few more safety guides:

- Inspect all tanks before moving them.
- Don’t travel faster than 20 miles per hour because anhydrous tank tires are only rated for 25 miles per hour.
- Always use a safety chain when transporting a tank and make sure all hitch pins have keys.
- Don’t haul more than one tank at a time.
- Don’t de-activate the excess flow valve and be sure it has been tested recently.
- Use only metal snap couplers.
- Keep backup safety goggles, gloves, clean flushing water and a cartridge respirator in the tractor cab.

Robert Grisso
Extension Engineer

Information, soil kits offered to counter soybean cyst nematodes

Soybean producers seeking information about soybean cyst nematode management or a soil test kit can call the SCN Coalition Information Hotline at its toll-free number, 877-726-8378.

“Our purpose is to arm growers with the necessary information about soybean cyst nematode to motivate them to conduct soil testing for this devastating pest,” said Gregg Fujan of Weston, a director on the Nebraska Soybean Board and a member of the North Central Soybean Research Program Committee. “Since you can’t tell how significantly SCN may be impacting a producer’s bottom line by just looking at their crop, soil testing remains the best method of determining the presence and severity of it.”

“We’re now seeing it spread into areas — especially in the North Central grain belt — which have never seen this pest.”

The toll-free line is just one of many tools the SCN Coalition plans to employ to urge growers to “Take the Test and Beat the Pest.” The SCN Coalition originated from funding provided by the North Central Soybean Research Program, a 10-state alliance of state soybean checkoff boards that funds soybean research projects.

Nebraska Soybean Board

Plant and Pest Diagnostic Clinic update

Corn diseases diagnosed in the clinic during the last two weeks included maize chlorotic mottle virus, Physoderma brown spot, Goss’s bacterial blight, common rust, Helminthosporium leaf spot, root rot, bacterial stalk rot and anthracnose stalk rot. Gray leaf spot is abundant in many fields.

Soybean diseases identified in the clinic were Phytophthora and Rhizoctonia root rot, and bean pod mottle virus. Also identified was common bunt on wheat.

Loren J. Giesler, Plant and Pest Diagnostic Clinic Coordinator

Hessian flies

(Continued from page 185)

the averages indicated on the map. Fly-safe dates have not been developed for western Nebraska, however, growers should not plant before the recommended date for their elevation. This delayed planting also will reduce potential problems from several other insects and diseases.

Producers wanting to plant early should strongly consider planting resistant varieties. Varietal resistance to the Hessian fly does not guarantee immunity, but should reduce the probability of severe infestations. Among the Hessian fly resistant varieties available are:

Resistant: 2137, 2163, Brule, Dawn, Ike, Redland, Vista.

Moderately resistant: Alliance, Arapahoe, Buckskin, Dominator, Quantum 566, Larned

Be careful when choosing wheat varieties because many popular varieties are susceptible to the Hessian fly.

Keith Jarvi, Extension Assistant
Integrated Pest Management
It is not uncommon for many acres to be seeded to alfalfa this time of year. With these new seedings comes a renewed interest in weed control in alfalfa. Understanding how weed cycles change late in the summer will allow producers to optimize their weed control in alfalfa stands.

In spring seedings, managers are concerned with a host of summer annual broadleaf weeds and grasses. Controlling weeds when seeding alfalfa in late summer is slightly different due to the different weed species present. Summer annuals including lambsquarters and pigweed are less of a problem in late summer seedings, but winter annuals including field pennycress, mustards, downy brome and sheperds purse are more of a problem. These weeds rapidly compete with seedling alfalfa, causing stand reduction. It is often this weed competition which causes many to replant in the spring after a late summer seeding. Alfalfa seeded in August is not cut until the next spring, allowing late blooming annual weeds to weaken alfalfa stands going into winter dormancy.

There are only a few herbicides labeled for postemergence applications in seedling alfalfa. Butyrac (2,4-DB) is a growth regulator herbicide which is converted to 2,4-D through an enzymatic process contained within most broadleaf plants. Alfalfa does not contain this enzyme and is not affected by labeled applications. Producers should be careful when applying Butyrac in late summer because warm temperatures may cause increased plant injury. Butyrac controls many summer annual broadleaf weeds but effectiveness on pennycress and tansy mustard is intermediate. Pursuit provides a broad range of weed control in alfalfa, with excellent control of pigweed. Pursuit has good crop safety, but should not be applied until seedling alfalfa has reached the second trifoliate stage. Buctril also will provide good broadleaf control of both summer and winter annuals. Buctril should be applied when most of the stand has at least four trifoliate leaves. Poast will provide very good summer annual grass control with good control of winter annual grasses such as downy brome at the higher 2 pint rate.

A herbicide treatment in the absence of good cultural practices will seldom give the desired results. Good management in alfalfa is crucial to the development and maintenance of high quality stands. Any amount of weed competition in new late-seeded alfalfa stands can severely limit stand productivity the following year.

Alex Martin
Extension Weed Specialist
Jeff Rawlinson
Extension Assistant Weed Science

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**Seminars address prairie restoration**

Prairie restoration is the theme for the fourth annual fall seminar series sponsored by the Center for Grassland Studies at the University of Nebraska in Lincoln. The public seminars will begin at 3:30 p.m. Mondays at the East Campus Union. Seminars continue through Nov. 30. For more information, please contact the Center for Grassland Studies, 222 Keim Hall, PO Box 830953, University of Nebraska, Lincoln, NE.; phone (402) 472-4101 or fax, (402) 472-4104. Upcoming topics include:

Sept. 14 — “Prairie Restoration Checklist”
Sept. 21 — “Ecology and Restoration of Sandhill Blowouts”
Sept. 28 — “True Grassland Restoration — Is It Possible?”
On Oct. 6-8 The Nebraska Corn Board will host its 1998 Corn Harvest Tour through 23 counties.

The tour will include random and scheduled stops to gauge the potential quality and yield of corn along the route and sessions with local corn growers, Extension educators, and others to assess crop conditions and marketing plans.

Nebraska farmers planted 8.8 million acres of corn, the second highest total of corn planted in Nebraska since 1944. Of this 80% is irrigated. Nebraska is the third largest corn production state in the nation, supplying approximately 13% of the U.S. corn crop.

To participate in the tour, contact the Nebraska Corn Board state office as soon as possible. The phone number is (402) 471-2676, fax is (402) 471-3345, and Email is jnelson@ncdec.nrcs.state.ne.us. Participants may join for all or part of the tour.

The Nebraska Corn Board

### GDD and Crop Water Use Data (through 8/25)

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Growing degree days required for Type 3 maturity class for the following crops: corn, 2750; soybeans, 2450; and sorghum, 2369.