

GO

+ BACK TO HOME

+ ABOUT US

+ WEBSITE DESIGN

+ ADVERTISING INFO

+ CONTACT US



**EMAIL US
NEWS TIPS!**

**Vilas & Eileen Lehman
Livestock Hauling**

*Specializing in show
cattle & horses*

**HAULING
ANYWHERE!**

South Dakota Ag News Headlines

Delayed Planting an Option for Winter Wheat Growers Facing Insects

South Dakota Ag Connection - 08/31/2009

Winter wheat growers in areas with high insect numbers can avoid damage to the seedlings by delaying planting, a South Dakota Cooperative Extension Service specialist said.

"Insects that feed on winter wheat seedlings such as grasshoppers and greenbugs are very hard to control with insecticides, but are quite susceptible to freezing temperatures in the fall," South Dakota Cooperative Extension Entomologist Mike Catangui said. "Delayed planting of winter wheat allows producers to use freezing temperatures as a no-cost means of insect control."

Randy Englund, executive director of the South Dakota Wheat Commission, said record numbers of grasshoppers pose a credible threat.

"They can cause extensive damage and have already done so in some wheat crops, so we encourage all growers to get out and scout, and to consider recommendations from Extension," Englund said. "We have had an erratic year for weather, and there's a natural tendency to get antsy about getting out to plant as soon as possible. Waiting may help reduce the number of grasshoppers and other insect threats."

Englund said producers now should evaluate the cost of spraying and other options that would reduce grasshopper impact on winter wheat.

Producers can get historical data about frost dates in different parts of the state by going to the SDSU Climatology Web page at this link: http://climate.sdstate.edu/w_info/frost/frost.shtml.

SDSU Extension State Climatologist Dennis Todey said first fall freeze events, where temperatures go below 28 F most commonly occur between Sept. 21 and Oct. 10 in the northern winter wheat areas and between Sept. 28 and Oct. 21 in southern areas based on data gathered from 1974-2003.

Clair Stymiest, a retired agronomist and consultant with a farming group near Pierre, said that grasshoppers pose the biggest threat to winter wheat crops along river bottoms in counties west of Pierre, but that said the clouds of grasshoppers that he recently has seen in fields are widespread.

"The primary concern is that newly planted wheat could face serious threats based on the numbers of grasshoppers we have seen," Stymiest said. "In some areas, it appears as though there is no wheat present, but careful inspection shows nubs remaining after grasshopper impact."

Louis Hesler, a research entomologist at the North Central Agricultural

JAY-LOR®



**"Putting the 'Total'
into TMR"®**



Research Laboratory, the Brookings-based laboratory of the USDA's Agricultural Research Service, said that delayed planting reduces the threat from barley yellow dwarf virus. Aphids can transmit the virus to wheat, but a later planting date reduces aphid pressure.

Hesler said a three-year study recently completed by researchers at NCARL and SDSU showed that planting after Sept. 20 reduces the risk from aphids, then barley yellow dwarf virus they can carry, and grasshoppers.

South Dakota Cooperative Extension Agronomy Educator Bob Fanning said if the weather cooperates, a delay could benefit winter wheat growers.

"Producers should avoid early planting and instead spend that time scouting to ensure accurate estimates on grasshopper threats," he said. "Good scouting now can lead to a reduction in lost wheat, and a reduced number of affected areas."

Long-term planting date studies conducted near New Underwood and Scenic in Pennington County by Extension agronomists have indicated that winter wheat planted on Oct. 1 will yield the same as winter wheat planted on Sept. 15.

However, yields were significantly lower in winter wheat planted on Oct. 15 and Nov. 1. The studies were conducted from 1997-2000 under no-till conditions.

Winter wheat growers should consult their county Extension agronomy educators to determine how late they could plant winter wheat in the fall and still get an optimum yield the following summer, Catangui said.

While grasshoppers chew on the leaves directly, aphids have syringe-like mouthparts and feed on the sap of plants. Some inject toxins that can cause the wheat seedlings to turn yellow, wither and die.

Other symptoms of aphid infestation include curled leaves, stunted growth, and purplish or white streaks on the leaves. Greenbugs and the bird cherry-oat aphid are the species common in South Dakota wheat.

Another insect that sporadically has reappeared on winter wheat is the Hessian fly. In the larval or maggot stage, Hessian flies feed on the sap of wheat and can cause stunted growth and winter kill.

Catangui said that it is unclear whether or not the Hessian fly infests winter wheat in South Dakota in the fall or in the spring, when the plants resume their growth. It also is not known whether certain insecticides applied at planting can be serve as a cost-effective tactic against this insect.

Catangui said that if late planting is not possible, several insecticides are available for use at-planting or as foliar sprays once the seedlings emerge from the ground can be effective.

A granular insecticide that may be applied at planting to control grasshoppers, aphids, and Hessian flies is Di-Syston 15G (1.67 ounces per 1,000 feet). An appropriate metering device that can accurately dispense the granules with the planting implement is needed.

Another insecticide that may be considered at planting would be Furadan 4F (0.25-0.50 fluid ounce per 1,000 feet). Application is made using microtubes or it could be mixed with liquid fertilizer. At-planting Furadan 4F is labeled for use against both grasshoppers and aphids.

Seed treatments that are labeled for use against aphids and Hessian fly, but not labeled for grasshoppers, are Gaucho 600 (0.80-2.40 fluid ounces per 100 pounds seed) and Cruiser 5FS (0.75-1.33 fluid ounces per 100 pounds seed). These chemicals must be coated onto the seeds before planting using equipment and procedures specified by their manufacturers.

A drawback of at-planting or seed-coated treatments is the fact that investment on this control tactic is made early, but the target insects may or may not be around when the seedlings emerge.

A more flexible control tactic is to scout the fields at emergence, then spray the field if necessary. Grasshopper populations of 15 or more per square yard in the wheat field, or 41 or more grasshoppers per square yard along the field margins, are the economic thresholds.

Insecticide sprays labeled for use against grasshoppers on winter wheat are beta-cyfluthrin (Baythroid XL), carbaryl (Sevin XLR Plus), chlorpyrifos (Lorsban 4E, Nufos 4E), chlorpyrifos + gamma-cyhalothrin (Cobalt), dimethoate (Dimethoate, Dimate), gamma-cyhalothrin (Proaxis), lambda-cyhalothrin (Warrior, Silencer), malathion (Fyfanon, Malathion 5EC), methyl parathion (Cheminova Methyl 4EC, PennCap-M), and zeta-cypermethrin (Mustang MAX EC, Respect).

For greenbugs and other aphids, insecticide treatments may be justified if an average of 10-15 aphids per tiller were observed on the field.

Insecticides labeled for use as a foliar spray against aphids on winter wheat are beta-cyfluthrin (Baythroid XL), chlorpyrifos (Lorsban 4E, Nufos 4E), chlorpyrifos + gamma-cyhalothrin (Cobalt), dimethoate (Dimethoate, Dimate), disulfoton (Di-Syston 8), gamma-cyhalothrin (Proaxis), lambda-cyhalothrin (Warrior, Silencer), malathion (Fyfanon, Malathion 5EC), methyl parathion (Cheminova Methyl 4EC, PennCap-M), and zeta-cypermethrin (Mustang MAX EC, Respect).

Daytime air temperatures will influence the performance of certain insecticides, so growers must read and follow label directions carefully. Utmost care must be taken when applying insecticides, as these chemicals also are toxic to humans. Only licensed applicators may apply insecticides on fields in South Dakota.

Copyright © 2009 - USAgNet.com. All Rights Reserved.

[Winter wheat Herbicide](#)

Learn From Other Growers About Winter Wheat Weed Control

PrepareForTheSeason.com

[Local Exterminators](#)

Enter Your Zip Code & Connect To Local Pest Control Services Today!

www.ServiceMagic.com

[Pest Control](#)

Find Special Deals from Five-Star Rated Local Pest Control Pros!

www.1800Contractor.com

Ads by Google