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## JULY 2009

The 2009 sunflower growing season is underway. After a difficult spring of excessive rainfall and below-normal temperatures, reports on plant stands are good to excellent. Here is some field information to help you through this growing season.

### **Sunflower Rust**

Early spore stages of sunflower rust are being reported in North Dakota and Minnesota, showing up in volunteer and wild sunflowers. Field scouting for rust should occur soon after seedlings emerge. Sunflower rust can cause significant economic damage, but is very controllable with timely application of fungicides.

There are currently three fungicides labeled for rust control on sunflower: Headline®, Quadris® and Folicur®. Base your fungicide application on the level of infection as determined by the leaf area covered with rust pustules. Pay special attention to areas of the field that may be adjacent to last year's sunflower fields and/or areas of wild sunflower, as they may be the original source of infection. Consider, too, tank mixing an insecticide for bud moth, thistle caterpillar and other early emerging head/seed damaging insects along with your fungicide application.

The National Sunflower Association Web site, [www.sunflowernsa.com](http://www.sunflowernsa.com), is a great source of information for updates on rust control. Sam Markell, extension plant pathologist at NDSU, is another good resource. Contact him at [samuel.markell@ndsu.edu](mailto:samuel.markell@ndsu.edu).

### **Sunflower Beetles**

Adult beetles will be found on sunflower plants soon. Early treatment of the adult beetle is usually not warranted. Once mating has occurred, egg hatches occur in 7-10 days. The larval or immature stage is usually more damaging to a sunflower than the adults and can last from four to six weeks. The margins of the fields are usually attacked first. The economic thresholds for sunflower beetle control are 1-2 sunflower beetle adults per seedling – 25% to 30% defoliation of the plant; 10-12 larvae per plant up to the 8-12 leaf stage. Cruiser® treated seed should provide control of this pest.

### **Stem Weevils**

To date, we have not received any reports of stem weevil infestations. Be sure to monitor your fields for stem weevil adults, especially if you have a history of problems. The economic threshold is one adult per plant. If needed, treatment should be initiated before appreciable egg-laying has occurred.

### **Downy Mildew**

Due to the wet soil conditions and cold ground temperatures, downy mildew is likely to be present at some level. Symptoms include stunting of plants and yellowing of leaves. Look on the bottom side of the plant leaves for white powdery fungal spores. Downy mildew is often worse in areas with soil compaction.

### **Cutworms**

Cutworm infestations of economic importance have been reported in some areas. Sunflower fields should be monitored at least once, preferably twice, per week until they reach the 4-6 leaf stage.

Early detection and early treatment are very important factors in effective pest control. The pesticides labeled for control are too numerous to mention here. Please contact your local agronomist/ag specialist or applicator for labeled products. A complete labeled pesticide listing can also be found at [www.ag.ndsu.edu/pubs/plantsci/pests/e1143w1.htm](http://www.ag.ndsu.edu/pubs/plantsci/pests/e1143w1.htm) .

Remember Cruiser® seed treatment is **not** labeled for cutworms and will **not** provide adequate control. Consult the label for application rates and please carefully read and follow all label directions.

### **Cultivation**

The seedbeds into which the sunflowers have been planted have become firm, gray in color and sealed up. Cultivation may provide some relief to these issues. Tilling aids in warming the soil and stimulating plant growth. While not scientifically proven, many seasoned production personnel believe cultivation is beneficial.

### **Seed**

Seed invoices must be paid by July 31, 2009, in order to avoid a late-charge assessment. Late charges will be applied at a rate of 1 1/4% per month (15% annum to overdue accounts). And, of course, contact us immediately if you were unable to plant all of your contracted acres. Pick up of seed returns will start soon.

**Please don't hesitate to contact us.** We're here to help you produce the best! And let us know if you would like to receive our Grower Bulletins directly via e-mail.

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