

Steele County **Ag Alert**



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Dates of Upcoming Events:

- September 4th - Energy Beet plot tour west of Colgate on HWY 38 at 9:00 am
- September 5th – Grand Forks County Soil Salinity Plot tour
- September 10th – 12th – Big Iron at Red River Valley Fair Grounds in West Fargo
- September 18th – Steele County Corn and Soybean Plot Tour

REVIEW OF DRY BEAN AND SUNFLOWER RUSTS

By: Sam Markell, NDSU Extension Plant Pathologist

Dry Bean Rust

A new race of the dry bean rust pathogen was identified several years ago, and dry bean rust has been found in low levels each year since. Consequently, *all varieties grown in ND should be considered susceptible to dry bean rust*. I have not heard of any dry bean rust reports yet, but given our dewy mornings, I would encourage growers to scout for dry bean rust. *The pathogen that causes bean rust only occurs on dry beans.*

Infected dry beans will have small pustules filled with cinnamon-brown spores that are easily rubbed off with a thumb or finger (Figure 1). Rust pustules often have a yellow halo and are easier to see on the undersides of leaves (Figures 2 and 3). If rust is found before about R7, a fungicide application may be recommended to protect yield. Triazoles (FRAC 3: Folicur and generics, Proline, etc.) and strobilurins (FRAC 11: Headline, Quadris, Aproach, etc...) have performed well in NDSU trials. Other fungicides (Topsin and generics, Endura, etc.) have some efficacy, but are not as effective against rust. More information about dry bean rust can be found in the NDSU Extension Dry Edible Bean Rust Publication 1601:

<http://www.ag.ndsu.edu/pubs/plantsci/pests/pp1601.pdf>



Figure 1. Dry bean rust



Figure 2. Upper side of dry bean leaf with rust, note yellow halos



Figure 3. Underside of the same dry bean leaf with rust

Sunflower Rust

Sunflower rust has been identified in several areas of the state, and I would encourage all sunflower growers to check their fields for rust. Sunflower rust has caused yield loss in the past, and with a favorable environmental (dewy mornings) the pathogen can cause an epidemic relatively quickly on susceptible hybrids; this is particularly true in confections.

Signs and symptoms of sunflower rust include small pustules with dusty cinnamon-brown spores (Figure 4). Pustules can occur on any above-ground plant part. If sunflower rust severity on the upper four leaves is approaching 1% severity at or before bloom, a fungicide application should be considered. Applications after bloom is complete (R6) have had limit effect on rust in our trials. Headline, Quadris, and Folicur generics are labeled on sunflower, and all are effective. More information, including rust severity diagrams, can be found in the NDSU Extension Sunflower Rust Publication PP1557:

<http://www.ag.ndsu.edu/pubs/plantsci/rowcrops/pp1557.pdf>. A link to additional information can be found on the home page of the National Sunflower Association website: <http://www.sunflowerusa.com/>.



Figure 4. Sunflower rust

SHARPEN DESICCATION ON DRY BEANS

By: Rich Zollinger, NDSU Extension Weed Specialist

BASF currently has an approved label for Sharpen herbicide as a harvest-aid application to dry beans, however, the MRL's (Maximum Residue Levels) have not been cleared for all countries. The MRL's for Sharpen herbicide are currently approved for the US, Mexico, Canada, Japan, and Taiwan. However, Sharpen herbicide does not yet have MRL's approved for Korea and the EU (EU27). BASF expects these countries to approve the MRLs by late 2013, however, it may not be in time for the 2013 application season.

Below is a chart with the current MRL status for Sharpen as a Desiccant/ Harvest aid for the major export countries.

	Soybean	Drybean	Field Pea	Lentil	Chickpea	Canola	Safflower	Sunflower
USA	✓	✓	✓	✓	✓	✓	✓	✓
Mexico	✓	✓	✓	✓	✓	✓	✓	✓
Japan	✓	✓	✓	✓	✓	✓	✓	✓
Canada	✓	✓	✓	✓	✓	x	x	✓
Codex	✓	✓	✓	x	x	x	x	✓
Korea	x	x	x	x	x	✓	x	✓
EU	x	x	x	x	x	x	x	x

✓ = MRL established

X = MRL not established.

Very important - All pesticide labels and registrations, including those referred to in this article must be approved by the North Dakota Department of Agriculture before they can be used in the state. To determine if these labels have been approved for use please refer to the North Dakota Department of Agriculture registered pesticide database: www.kellysolutions.com/nd. This site is also listed on the back of the North Dakota weed control guide.

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EXTENSION SERVICE
STEELE COUNTY

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