

Recently discovered race of rust now confirmed on dry beans in North Dakota



Proactive application of Headline® fungicide effective in disease control

RESEARCH TRIANGLE PARK, NC, July 28, 2009 – BASF is alerting growers to the emergence of a recently discovered race of dry bean rust in fields in Traill County, North Dakota. Plant pathologists at North Dakota State University confirmed this new race of rust based on field observations made late in the 2008 growing season and subsequent laboratory analysis.

“With favorable environmental conditions, this pathogen can infect, sporulate and spread very quickly,” said Amber Shirley, Ph.D., Technical Marketing Manager at BASF. “While this pest was initially spotted in Traill County, rust spores can travel many miles in windy conditions.”

“Our best advice for managing this pathogen is a proactive application of **Headline** before the onset of disease if the disease has been detected or is expected to infest your area and to scout your fields early and often,” said Dr. Shirley. “Once plant tissue is damaged, it will not recover, and it will provide entry sites for other fungal and bacterial pathogens. Growers affected by the devastating effects of dry bean rust need not lose any more of their crop or risk the health of the rest of the field unnecessarily.”

About Dry Bean Rust

Dry bean rust is a potentially devastating pathogen that affects all classes of dry beans. Most classes of dry beans currently grown in North Dakota and Minnesota have a resistance gene — known as Ur3 — that provides resistance to all types of rust known to affect dry beans in the region. However, the Ur3 gene does not protect the crop from the effects of this new race of rust.

If left untreated, dry bean rust is capable of overwintering in the region on crop residue. Conditions that favor dry bean rust development include moderate temperatures (65 to 80 degrees Fahrenheit) and available free moisture, such as rain, dew or relative humidity of 95 percent or greater. Waiting for this potentially devastating pest to appear can result in dramatic yield reductions versus stopping infection before it has a chance to begin.

About Headline Fungicide

A proactive application of **Headline** fungicide at 10 percent bloom or prior to disease onset can help provide excellent protection from dry bean rust. **Headline** is the most researched fungicide on the market, with more than 6,000 farm trials conducted on well over 500,000 acres in the past seven years. In addition to disease control, the Plant Health benefits of **Headline** have been shown to increase dry bean yields by an average of 150 to 200 pounds per acre, even in a low-disease environment. This amounts to a \$38/acre return on investment based on a \$0.25/lb. dry bean price. (Source: data from 71 on-farm trials from North Dakota, South Dakota and Minnesota in 2004-2008)

Click here to read the **Headline** Dry Bean Rust Technical Information Bulletin.

For more information about BASF agricultural products for crop protection, or to find contact information for your local BASF business representative, visit www.agproducts.basf.us.

About the Crop Protection Division

With sales of € 3.4 billion in 2008, BASF's Crop Protection division is a leader in crop protection and a strong partner to the farming industry providing well-established and innovative fungicides, insecticides and herbicides. Farmers use these products and services to improve crop yields and crop quality. Other uses include public health, structural/urban pest control, turf and ornamental plants, vegetation management and forestry. BASF aims to turn knowledge rapidly into market success. The vision of BASF's Crop Protection division is to be the world's leading innovator, optimizing agricultural production, improving nutrition and thus enhancing the quality of life for a growing world population. Further information can be found on the Web at www.agro.basf.com.

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