Sponsored Content

Breaking D.O.N.

By BASF

“Fusarium head blight is the most aggressive disease that wheat growers face,” said Ken Deibert, technical field representative for BASF. “It’s not *if* you’ll come in contact with it, but *when*.”

It’s a widespread fight for growers as fusarium head blight, also known as head scab, is the most destructive wheat disease growers face. The fungus that causes head scab also produces vomitoxin, specifically deoxynivalenol or D.O.N. During infection, D.O.N. can accumulate at high levels in the harvested grain and could be detrimental to both the health of livestock and humans if consumed, in addition to being damaging to your pocketbook.

“It’s almost a double-edged sword. You think about how it’s a yield robber but also a quality reducer. That is where a lot of the losses are going to occur, even with complete rejection of some of the grain loads,” said Dr. Andrew Friskop, North Dakota State University Extension plant pathologist and NDSU assistant professor of plant sciences.

Friskop added that just because fields have head scab present does not automatically mean that producers will see D.O.N. issues. “The reverse can also be true too. You may not see scab in your field but still have issues with D.O.N. on the back end,” Friskop explained.

While you can’t predict when and where head scab will occur, periods of wet and humid weather should be alarm bells for wheat growers.

Fortunately, there are tools to effectively manage head scab and reduce D.O.N. levels.

Variety Resistance

There may be no silver bullet for head scab and D.O.N. but variety resistance is critical to managing it. There isn’t one variety completely immune to this disease, but there are several that can significantly reduce the chances of it becoming a problem. Resources like ScabSmart provide growers with variety options in their state as well as best management practices.

Fungicide Efficacy

For in-season management, fungicides can be very effective. Metconazole and prothioconazole tend to be the most successful triazoles on the market. Caramba® fungicide by BASF has been a leader in suppressing D.O.N. for many years. BASF has also been working with North Dakota State University experts to develop a new product for growers working to manage scab that will be released for use in the next growing season.

Application Timing

Application timing is critical for suppressing head scab. Fungicides need to be applied at early flowering and up to seven days later.

Fiskop adds that a fungicide alone will offer up to 50% suppression. “The one-two punch of a tolerant variety paired with an effective fungicide can get you to the 80 percent disease suppression — and that’s where growers need to be.”