U.S. Wheat and Barley Scab Initiative

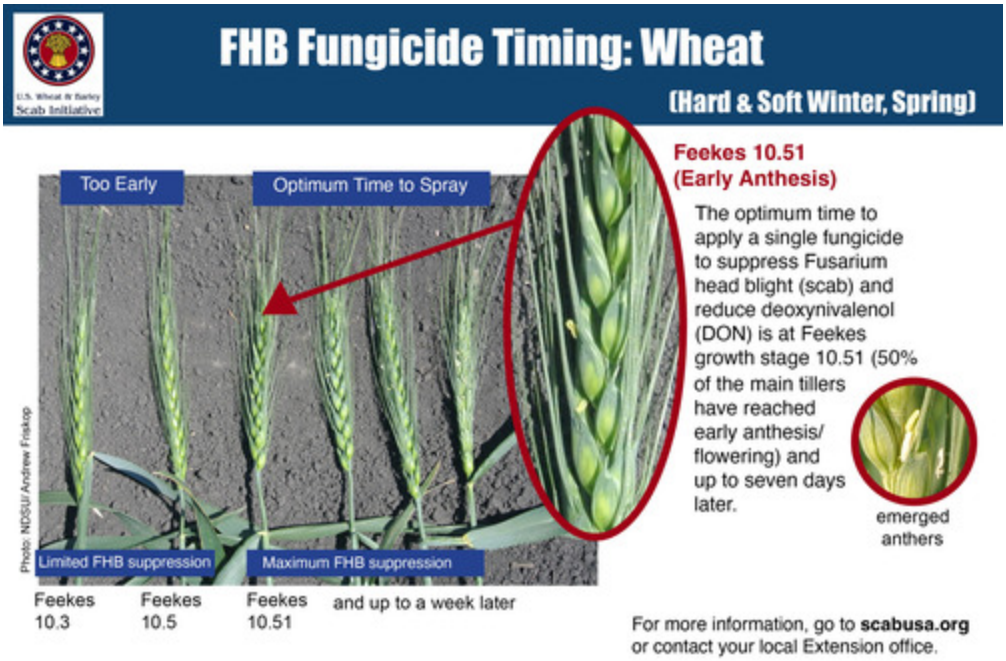
FHB Tool Talk

Dear Extension Specialists, Crop Consultants, and Grower Organizations,

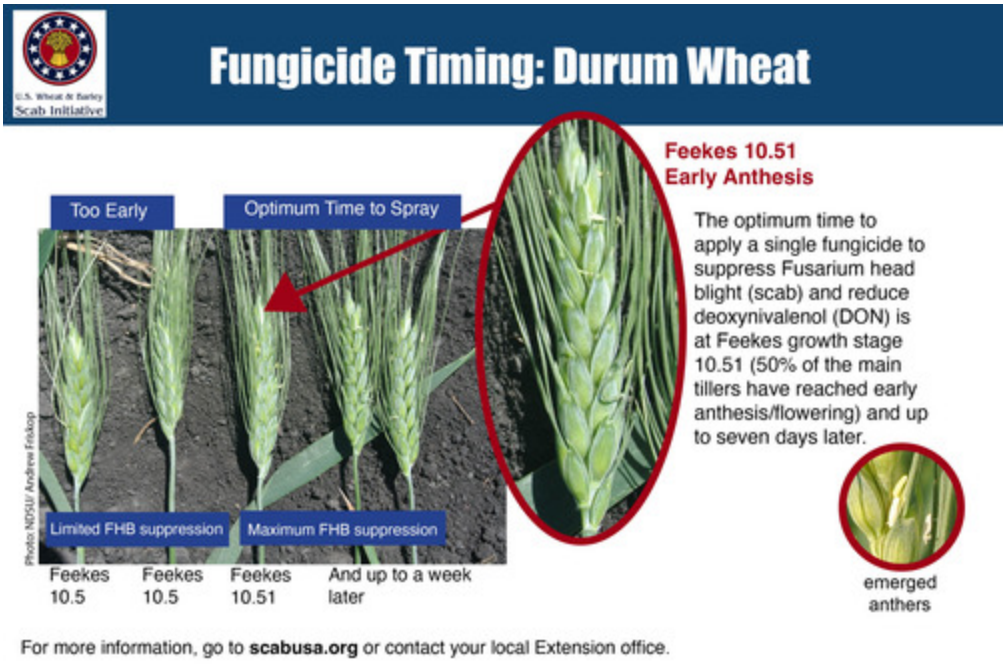
It's time for spring small grain growers to start making plans for fungicide applications to manage Fusarium head blight (FHB) and deoxynivalenol (DON) in wheat, durum, and barley.

Step 1: **Time it right for maximum control.** Use the USWBSI's fungicide timing postcards to identify the best time for making an application.

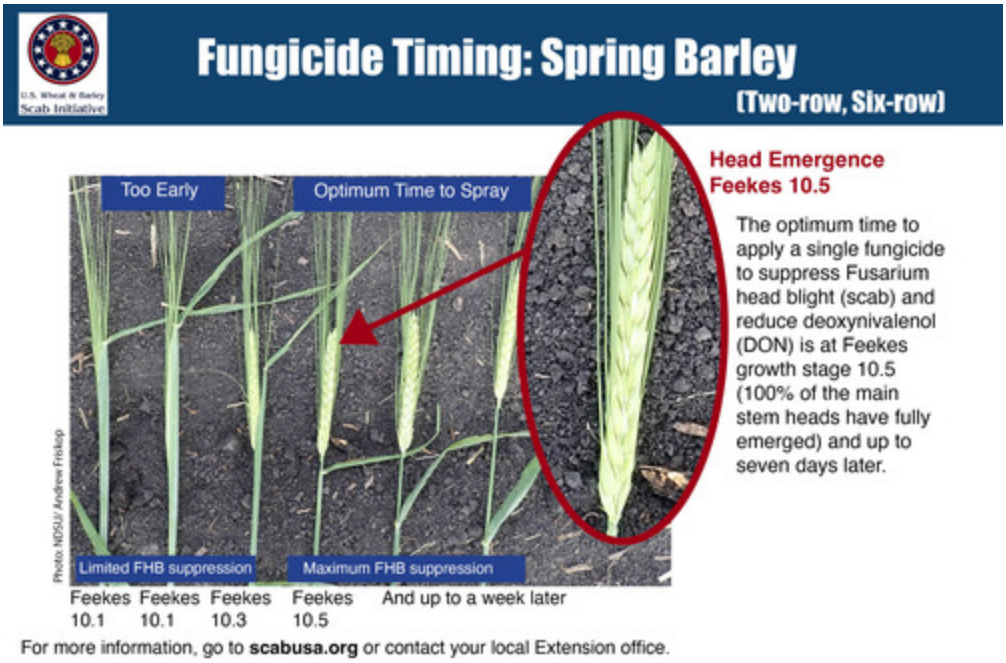
In spring wheat, the best time to apply a fungicide for FHB and DON management is at Feekes growth stage 10.5.1, which is when **50% of the main tillers have reached early anthesis (flowering) and up to seven days later**. In addition, USWBSI-supported research has shown that fungicide applications made up to 7 days after Feekes growth stage 10.5.1 may provide similar management of FHB and DON. Be sure to read and follow the fungicide product label to ensure that applications after Feekes growth stage 10.5.1 are permitted.



In durum, the optimal time for applying a single fungicide application for FHB and DON management is at Feekes growth stage 10.5.1, which is when **50% of the main tillers have reached early anthesis (flowering) and up to seven days later**. Be sure to read and follow the fungicide product label to ensure that applications after Feekes growth stage 10.5.1 are permitted.



For spring barley, the best time for a single fungicide application for FHB and DON management is when **100% of the main stem heads have fully emerged (Feekes growth stage 10.5) and up to seven days later**. Be sure to read and follow the fungicide product label to ensure that applications after Feekes growth stage 10.5 are permitted.



Step 2: **Determine if an application is warranted.** Consult the FHB Risk Tool and/or the regional NDSU Small Grains Forecasting Model to determine if the risk is high in your region.

- The FHB Risk Tool is now active for the 2026 growing season!

Step 3: **Choose a fungicide with care.** Not all fungicides registered on small grain crops are effective in managing FHB. See the Fungicide Efficacy Guide for Control of Wheat Diseases on the Crop Protection Network to help pick the best fungicide options for managing FHB.

a. **See figure below** for an efficacy comparison among fungicides obtained from multi-state research funded by the USWBSI. The results include data from over 20 trials conducted in 24 states over two years. Data were compiled, analyzed, and summarized by Dr. Pierce Paul's lab, The Ohio State University.

i. **Fungicide rates.**

Prosaro	6.5 fl oz/A
Miravis Ace	13.7 fl oz/A
Prosaro Pro	10.3 fl oz/A
Sphaerex	7.3 fl oz/A
Miravis Ace followed by Prosaro Pro	13.7 fl oz/A l 10.3 fl oz/A
Miravis Ace followed by Sphaerex	13.7 fl oz/A l 7.3 fl oz/A
Miravis Ace followed by Tebuconazole	13.7 fl oz/A l 4.0 fl oz/A

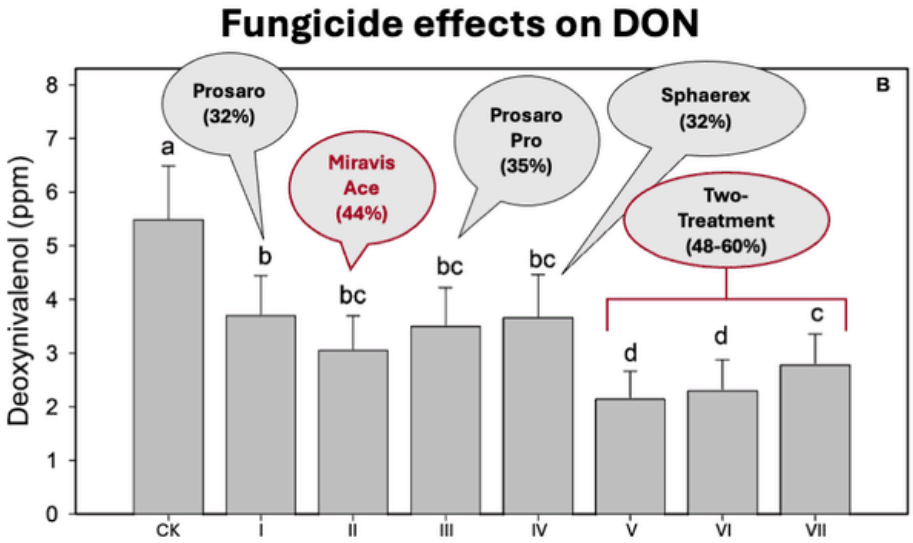


Fig.1: Reduction of DON (ppm) as a result of fungicide treatments relative to the untreated check. Values above bars indicate percent reduction relative to the non-treated control.

Step 4: **Make application.**

- **Configure your ground sprayer to optimize spray coverage.** This includes using a spray volume of 10-20 gallons per acre, utilizing fine to medium size droplets, positioning nozzles 8-10 inches above the heads, and positioning nozzles forward and backward at 30 to 45 degrees down from horizontal. See "Optimizing Fungicide Use for Fusarium Head Blight (Scab) and Associated Mycotoxins" on the Crop Protection Network and "Ground Application of Fungicides for Fusarium Head Blight Management" by North Dakota State University for more information.
- **If conditions are too wet for ground application aerial applications may be considered.** See "Aerial Application of Fungicides for the Suppression of Fusarium Head Blight in Small Grains" by North Dakota State University for more information on the use of application by plane. Experts caution against using drones to apply fungicides to manage

FHB, as the effectiveness of this application technology to manage FHB has yet to be proven.

- **Applying a fungicide twice for FHB management?** Results from field research trials funded by the USWBSI have shown that additional reduction in FHB and DON can occur with two treatment programs. More research is needed to better understand the circumstances in which this practice would be economical. Also, it is important to be mindful of product label restrictions that might not allow a two-treatment application in some instances.

Thank you for reading!

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More FHB Resources for Extension, Crop Consultants, and Grower Organizations.

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