



U.S. Wheat and Barley Scab Initiative

FHB Tool Talk

Dear Extension Specialists, Crop Consultants, and Grower Organizations,

Controlling FHB and DON in winter wheat and barley organically can be difficult. The USWBSI asked **Darcy Telenko**, an associate professor of botany and plant pathology at Purdue University whose program focuses on promoting sustainable and economically sound disease management practices in Indiana field crops, for some recommendations. Here's what she had to say.

Organic grain production is a growing sector in the U.S., particularly in the Midwest and Northeast. In 2021, over 17,000 farms managed 4.9 million acres under organic production, with 811,676 acres dedicated to organic grain and oilseed valued at an estimated \$737 million. In order to support this fraction of the market and improve yield, quality, and sustainability, targeted research on disease management in organic grain systems is critical.

Just as with conventional grain production, disease management for organic grain production requires the deployment of a diverse disease management program that includes: host resistance, cultural practices, scouting and forecasting tools, as well as biological and chemical control (if needed) through the use of Organic Materials Review Institute (OMRI) - listed products.

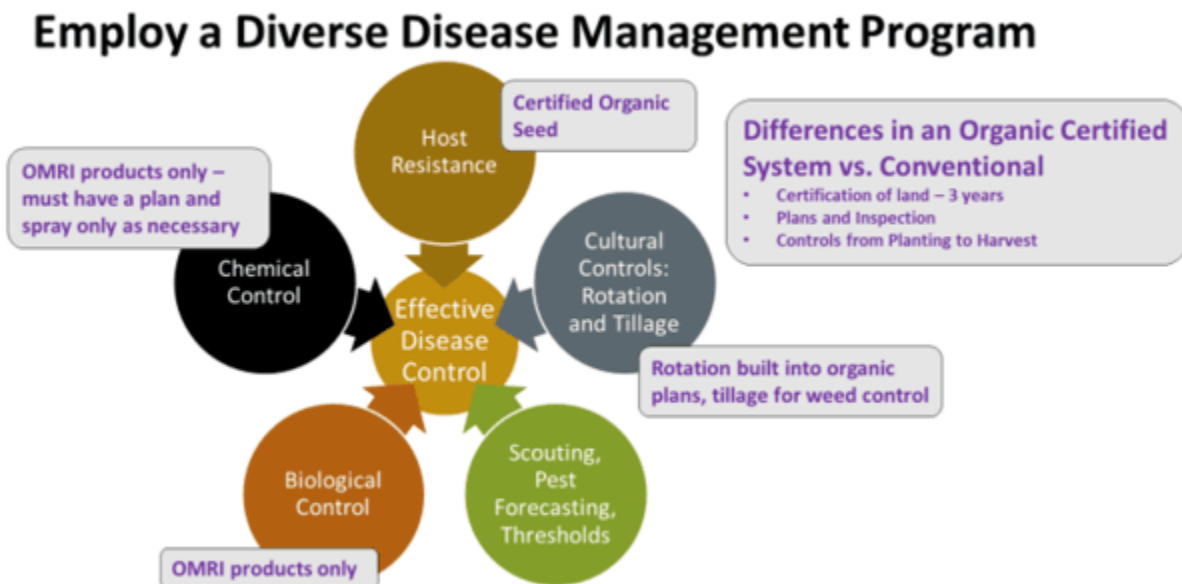


Figure 1. A diagram of good disease control requires the use of diverse disease management tools that include: host resistance, cultural practices, scouting and forecasting tools, and biological and chemical control options as needed. There are a few differences on what can be deployed in an organic certified system vs. conventional.

A recent multi-year study conducted in Indiana and Wisconsin showed that using a moderately resistant cultivar could significantly reduce FHB index, severity, and DON levels compared to a susceptible cultivar. In addition:

- at both locations, none of the OMRI products reduced FHB index, severity, and DON.
- In Indiana, Pacesetter, a biological product containing an extract from *Reynoutria sachalinensis*, significantly reduced FHB incidence in the susceptible wheat cultivar Kaskaskia (Figure 2).

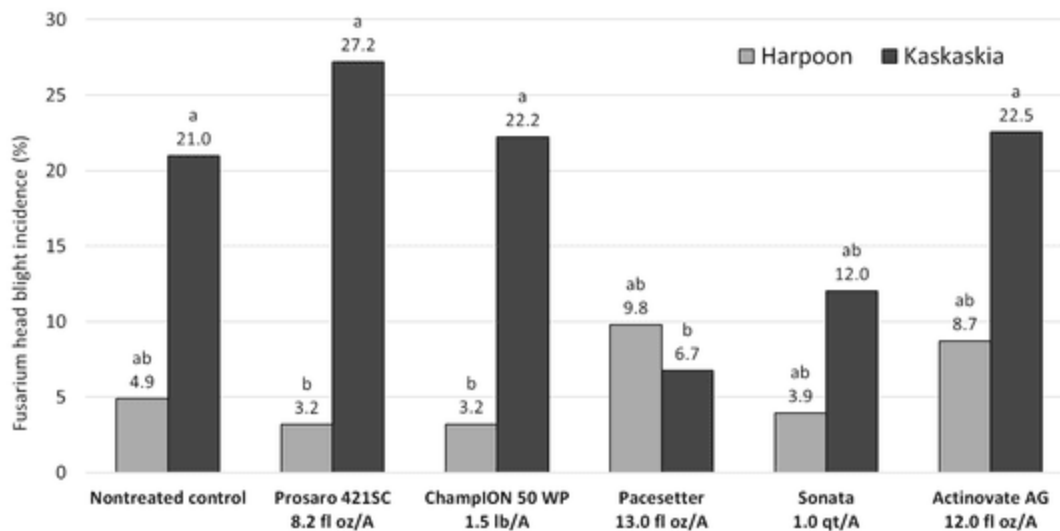


Figure 2. Fusarium head blight (FHB) incidence (%) from multiyear field trials (2021–2023) in Indiana comparing fungicide programs across two organic cultivars, Harpoon and Kaskaskia. Source: Debbink, K., et al. 2025. Integrated Management of Fusarium Head Blight of Wheat Including Organically-Allowed Fungicides in the Midwest United States. Plant Health Progress 26:524-532. <https://doi.org/10.1094/PHP-02-25-0051-RS>

Many of the OMRI-listed products provide inconsistent results demonstrating the difficulty in identifying successful OMRI products for FHB management and also lack standardized application guidelines for timing and rate, further complicating cross-study comparisons and on-farm application. Biological product performance can be further affected by formulation, shelf life, and environmental factors, introducing variability in efficacy. Cultural practices, which are central to organic systems, also influence disease dynamics, and trials that fail to incorporate these elements may yield misleading results. Moreover, cost and labor constraints limit the feasibility of large, replicated, multi-state trials on many organic farms, slowing the pace of evidence generation.

Darcy Telenko’s lab at Purdue University continues to try and evaluate these biological options to identify products with the highest potential for FHB control in organic grain systems. Through continued collaboration with plant breeders, agronomists, plant pathologists, and organic producers, more effective tools and strategies for FHB disease management will hopefully be made available.

For more information on fungicide timing of winter wheat and barley and conventional fungicide efficacy, visit our [previous e-newsletter](#).

Thank you for reading!

If this email was forwarded to you and you would like to receive FHB Tool Talk e-newsletters, [subscribe today](#).

*In order to target a wide range of grain classes and production regions, you may have received this message sooner than you needed. Please bookmark this email and refer back to it when the timing is correct for your region/grain class.



More FHB Resources for [Extension, Crop Consultants, and Grower Organizations](#).

Copyright © 2026 U.S. Wheat and Barley Scab Initiative. All rights reserved.

*U.S. Wheat and Barley Scab Initiative
495 Borlaug Hall
1991 Upper Buford Circle
St. Paul, MN 55108
nfo@scabusa.org*

Want to change how you receive these emails?

[Update subscription preferences](#).

To unsubscribe from this list email fhbtooltalk_unsubscribe@scabusa.org with the word unsubscribe.

