

WHEN CHASING BIG YIELDS, USE HALF MEASURES

The value of registered half-rate propiconazole applications at herbicide timing in wheat and barley

By Rob Bahry, Development and Research Manager at ADAMA Canada

Every seed you plant contains the potential to deliver triple-digit yields, but everything that happens between seeding and harvest takes some of that yield potential away.

Growers targeting big yields know the best way to get more bushels in the bin is to anticipate environmental stressors before they happen, apply the right crop protection and minimize stress on the crop. The challenge is determining which crop protection measures give growers the best bang for their buck.

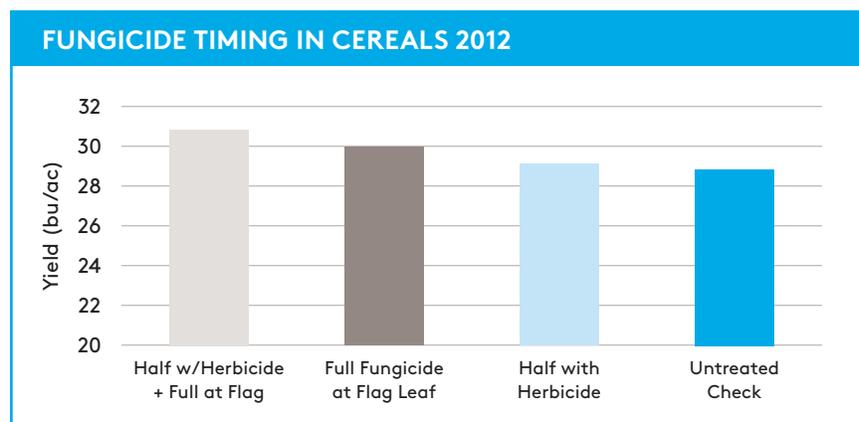
Are registered or labelled half-rate fungicide applications worth it?

ONE SIDE: FEW BENEFITS

In 2015, Ag Canada published a study saying there are few disease management benefits to applying half-rate fungicides at herbicide application timings, and that most disease control activity comes from a full-rate fungicide application at the flag leaf stage.¹

THE OTHER SIDE: YIELD INCREASE

On the other hand, Wheatland Conservation Area Inc. also saw an increase of two bu/ac in yield and an increase in grade when they applied a half-rate of propiconazole with the herbicides at the weed control stage, plus an additional full rate of propiconazole application at flag leaf.²

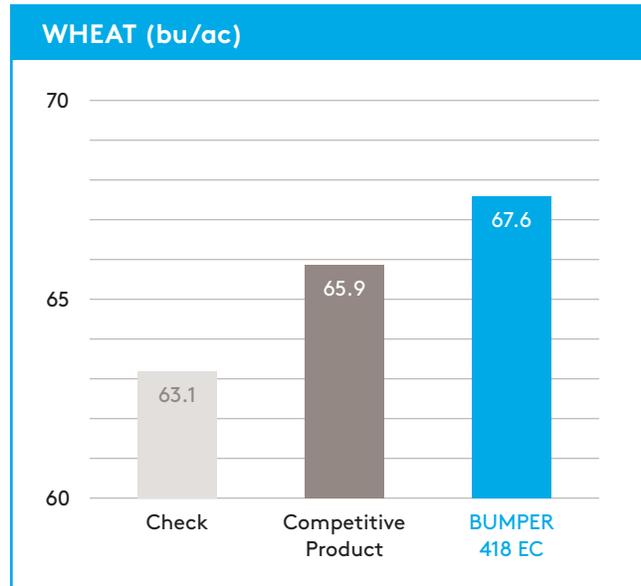


¹ Turkington, T. K. et al. "The impact of fungicide and herbicide timing on foliar disease severity, and barley productivity and quality." *Canadian Journal of Plant Science*. 95(3):150310112638001 – March 2015. Online. Accessed 24 May 2016. <https://www.researchgate.net/publication/273904764>

² "Fungicide Timing in Cereals Demonstration." Wheatland Conservation Area Inc. 2012. Online. Accessed 1 Jun 2016. [http://www.wheatlandconservation.ca/files/Fungicide_Timing_in_Cereals\(1pager\).pdf](http://www.wheatlandconservation.ca/files/Fungicide_Timing_in_Cereals(1pager).pdf)



At ADAMA, we replicated an independent wheat field trial with above average disease pressure. Our data showed that even in low to average disease pressure, a 60 ml/ac application of BUMPER 418 EC (our propiconazole product) at herbicide-timing has yield benefits.



When does it make sense to include fungicide at herbicide timing?

There are no absolutes in agriculture, and growers need to evaluate their goals for their farms. Here are some of the goals and situations I believe warrant a half-rate application of propiconazole at herbicide timing:

- To control early season disease pressure on tight cereal rotations (wheat on wheat stubble, etc.)
- When there was high disease pressure the previous season
- If you have a wet, warm environment conducive to high disease pressure
- When there is a presence of leaf diseases early in the season
- To protect a good crop with high yield potential
- When commodity prices are high, an early application of BUMPER, at the registered half rate, can be viewed as low cost insurance to help achieve a high yielding, high quality crop

[Click here for more information on BUMPER.](#)



About the author

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Rob is the Development and Research Manager at ADAMA Canada, where he studies evolving trends in Canadian agriculture and looks for opportunities to bring innovation to key crop protection products.

He is a registered agronomist and has a Masters degree in Agronomy and Crop Science from the University of Manitoba. Prior to joining ADAMA, Rob worked with a crop nutrition company studying the impact of environmental stress on key field crops. Rob lives in Winnipeg, Manitoba, with his family, his dog and his favourite team – the Winnipeg Jets.

About ADAMA Canada

At ADAMA, we lead an alternative approach in the Canadian agriculture landscape by doing three things better than anyone else:

1. We offer an alternative choice for active ingredients.
2. We champion an alternative approach by simplifying the way we work with customers.
3. We support ag retails and respect the relationships they have with growers.

What this means is, we keep things simple. We bring choice and simplicity to crop protection, allowing farmers and retails to do what they love instead of managing complicated, time-consuming rebate programs or bundling.

We also understand the value of the relationships retails have with their growers, and we respect those relationships. We are here to supply retails with what they need to be successful in their business – quality products with the passionate and experienced team that backs them

To learn more about us, visit ADAMA.com/Canada.