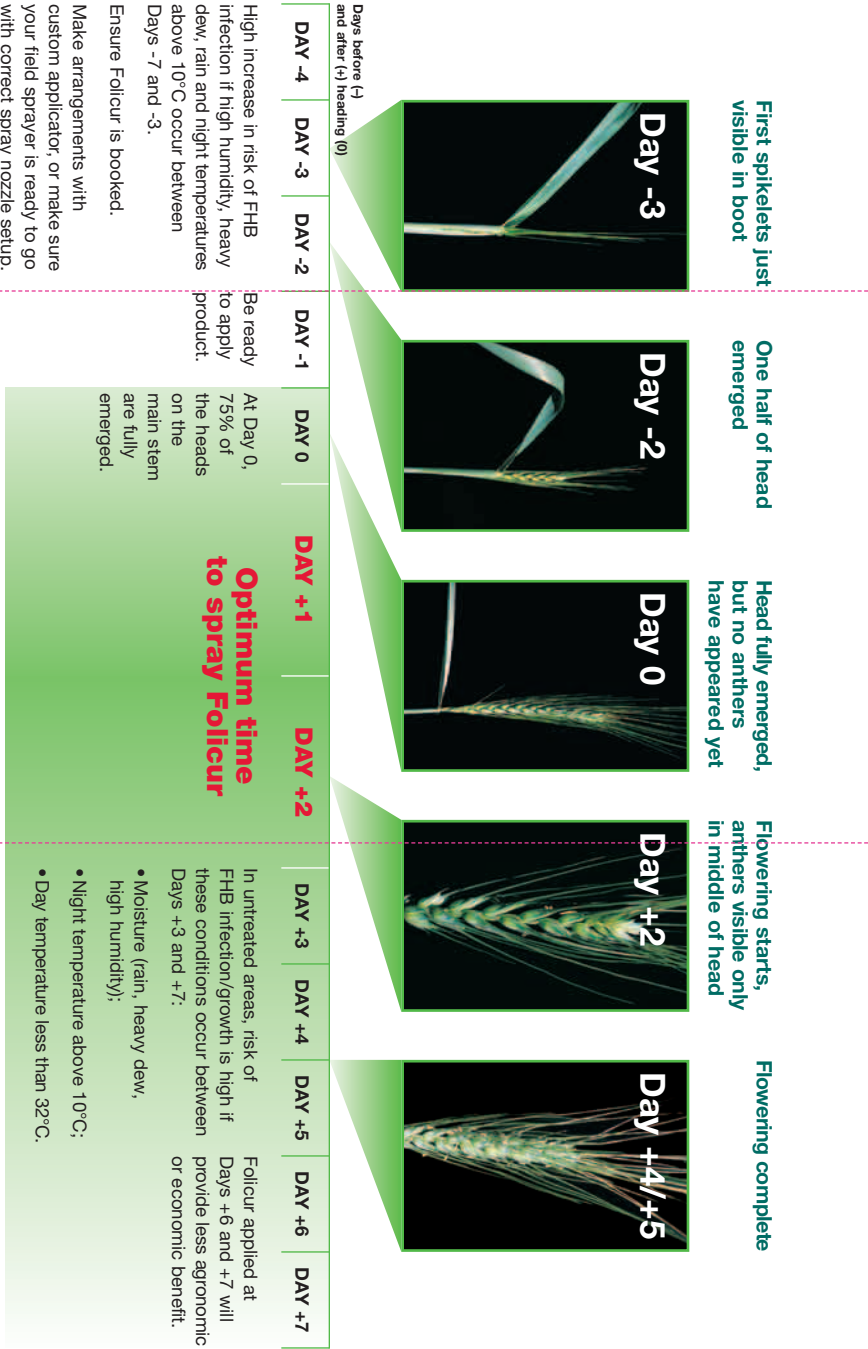


WHEN TO APPLY FOLICUR®

Applying Folicur at the correct crop stage is critical for maximum protection from Fusarium head blight (FHB).

Head emergence and flowering varies, depending on weather conditions, soil conditions and planting date. When in doubt, hedge on the early side. Results are best when Folicur is applied just after heads on the main stem are fully emerged to the early flowering stage.



Additional FHB information sources

The Canadian Grain Commission has developed information on the spread of fusarium in Western Canada. Visit www.grainscanada.gc.ca

For DON forecast maps, visit www.ontarioweathernetwork.com

Always read and follow label directions.
Folicur® is a registered trademark of Bayer. All other products mentioned are trademarks of their respective companies. Folicur is approved for use and sale on wheat in Manitoba, New Brunswick, Ontario, Quebec and Saskatchewan. Emergency registration for this product expires on December 31, 2004. 0504-2060-019

Bayer CropScience, #3, 35 Crawford Cres., Campbellville, ON L0P 1B0
1-888-283-6847 • www.bayercropscience.ca

Fusarium Survival Guide



Fusarium Head Blight

Compare Your Return on Investment

Fusarium head blight (FHB) is a fungal disease that infects wheat heads, reducing the yield, quality, feed value and marketability of the grain. FHB has reduced yield and quality levels in all varieties of spring wheat and durum in almost every grain producing district in Canada. While drier conditions tend to limit the spread of FHB, occurrences of the disease are being reported more often.

Damage to kernels

When infected, part or all of the wheat head appears prematurely ripened and bleached, often with pinkish discolorations on the infected portion. Infected wheat kernels can be shrivelled, lighter in weight and whitish in colour. The kernels will have a tombstone or scabby appearance.

The Canadian Grain Commission reports an increased number of wheat samples showing fusarium damaged kernels (FDK). For example, in 1997 FDK showed up in only 5% of samples from southeastern Saskatchewan and in 35% of samples from Manitoba. By 2002, FDK appeared in 44% of samples from southeastern Saskatchewan and 74% of samples from Manitoba.

Economic impact

Year	FHB Effect	\$ Impact
1996	Province-wide survey finds most wheat samples have DON levels above guidelines.	Provincial yield reduced by approx. 20%, for a direct loss of \$34.5 million.
1997	40% of MB wheat crop infected with FHB.	Estimated \$39 million loss to producers.

Folicur passes the test of increasing farmers’ net return per bushel when the cost of a fungicide is added. When estimating potential Return on Investment (ROI), growers often take into account only yield and rebates, ignoring possible grade and marketability issues due to late-season infections.

Only Folicur, applied at early heading, can increase yield and TKW by effectively providing protection against FHB, which can cause FDK and DON.

To help you estimate the potential ROI in your operation, we’ve summarized three years of Bayer research. Costs are typical and may vary in your operation.

We encourage you to work out your own potential ROI using your costs and growing experience in your area. You’ll be able to see the difference Folicur brings to your bottom line and how it can bring a profitable return on your investment.

Bayer Research Shows Folicur’s Superiority Pays Off

Average yield increase (Folicur-treated vs. untreated)	6%
Revenue increase per acre with Folicur	\$29.00
Minus cost of Folicur and application	\$21.33*
Net profit increase per acre	\$7.67*

Average of 18 Ontario Bayer CropScience trials 2002. Results may vary.
*Based on August 22, 2002 closing cash price of \$4.98/bu.

Folicur – a wise investment

Research results and on-farm experiences have proven that Folicur can often provide an increase in yield, improved marketability and proven protection against FHB. It all adds up to a wise investment for you and your farm.

Folicur is the only effective fungicide registered to protect wheat from FHB. FHB is a fungal disease that inhibits kernel development in cereal crops, wheat being the most susceptible. Only Folicur can provide the maximum protection against FHB which causes yield loss and reduces the marketability and utility of the grain.

Protect your crop

- Folicur application must take place prior to infection.
- Scouting must focus on determining when the crop is at the correct stage for Folicur application.
- High humidity, heavy dew and rain increase the risk of infection during the days preceding emergence of wheat heads and during the flowering stage.
- By the time symptoms of FHB appear, it's already too late to protect your crop. When infected, part or all of the grain head appears prematurely ripened and bleached, with pinkish discolorations on the infected portion. Infected kernels can be shrivelled, lighter in weight and whitish in colour (tombstone or scabby appearance).

Getting optimum results from Folicur

Timing of application is critical. For optimum suppression of Fusarium head blight, apply Folicur only within the time period when at least 75% of the wheat heads on the main stem are fully emerged to when 50% of the heads are in flower.

Spray coverage is essential. Thorough application coverage of the entire head is essential to provide complete protection. It is important that the majority of heads have emerged before spraying.

Use the correct spray volume. The Folicur label recommends a minimum of 100 litres of spray solution per hectare (40 L/ac.) by ground sprayer. Use 47 litres of spray solution per hectare (19 L/ac.) by air.

Use a non-ionic surfactant. Use Folicur with the lowest labelled rate of any registered non-ionic surfactant, such as Agral® 90 or AgSurt®.

Use varieties with higher FHB resistance. Research has shown that wheat varieties with higher natural FHB resistance also show better response to Folicur treatment – check your local seed guide and the provincial Web sites for a list of varieties and FHB tolerance.

Use the labelled rate. The labelled rate of Folicur is 292 mL/ha (118 mL/ac.). At that rate, one 9.46 L jug treats 80 acres.

Protect Against FHB

Maintaining good, sound agronomic practices is the best way to protect against FHB. The first step is to rotate out of susceptible crops such as wheat, durum, barley and corn. Field preparation to bury and destroy disease bodies is helpful. There are some wheat and barley varieties that are more resistant than others so growers are encouraged to refer to provincial seed guides to choose a variety that suits their operation. A seed treatment such as Raxil® 250 FL is good insurance to protect against seed rot and seedling blight caused by fusarium.

Another critical step is protecting the crop during the crucial flowering period. Contact fungicides applied at flag leaf don't have the systemic, in-plant protection provided by Folicur. That's because only Folicur, sprayed at heading, can protect the wheat head from FHB.

Protection from FHB is why Folicur has received Emergency Use Registration in fusarium-affected areas since 1999. For Emergency Use Registration to be granted, the Pest Management Regulatory Agency requires that certain criteria be met:

- The disease is expected to cause significant economic, environmental and health problems;
- No other products are registered or are effective for control; and,
- There is no alternative method of control.

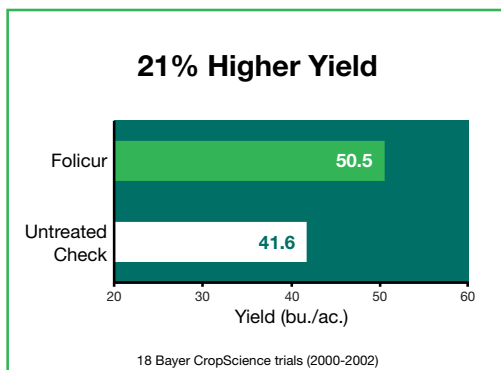
Folicur is the only product that meets these criteria for protection against FHB.

Folicur Research Results

Folicur protects against yield loss

Folicur is the best product on the market for protecting wheat against yield loss.

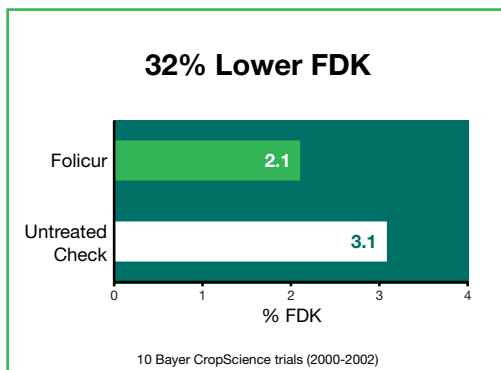
Other fungicides that are sprayed at flag leaf are only intended for leaf disease protection and do not protect against all the effects of FHB. By interrupting infection at flowering, Folicur reduces development of the mycotoxin deoxynivalenol (DON) and fusarium damaged kernels (FDK), both of which can severely decrease yield, grain quality and marketability.



Folicur reduces FDK

FDK show up as shrunken, shrivelled and bleached kernels that cause grade and price reductions. As well, there may be additional costs incurred of up to \$1.00 per bushel for cleanup of FDK.

Folicur is the only product that effectively reduces FDK levels in wheat.



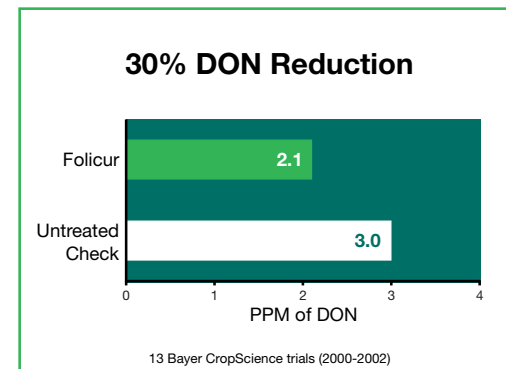
Folicur reduces DON levels

The impact DON can have on food and feed safety cannot be underestimated. DON belongs to a group of more than 50 naturally-occurring trichothecene mycotoxins that can have severe health effects.

Since most of the wheat grown in Canada is destined for human consumption, these effects are a definite health concern. FHB's wide-spread occurrence in Manitoba has resulted in provincial wheat prices automatically including a discount for DON. Some end users will not accept grain with any amount of DON.

The loss of food markets means that the grain is marketed for feed. But DON levels also make it increasingly difficult for producers to sell their feed wheat to hog and cattle feeding operations.

Folicur is the only product that effectively reduces DON levels.

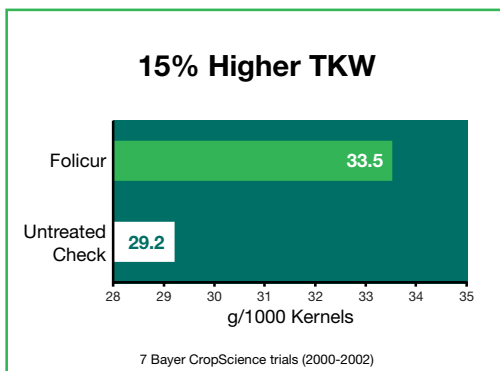


Quality is an issue and we saw a cleaner, better quality sample when we used Folicur. With an estimated 5-8 bu./ac. yield increase, it pays to use Folicur.

Les Nichols, Formosa, ON

Folicur improves thousand kernel weight (TKW)

Reduced FDK means fewer shriveled kernels. That means higher weight per bushel and greater tonnage of saleable grain. Folicur protects kernel size which increases TKW.



We tested Folicur for three years now and it has always paid for itself. We do about 350 acres of our own wheat and also do some custom application. We have seen an increase of 7-8 bushels on white wheat and reduced fusarium damaged kernels. We just automatically plan to use Folicur each year because it's insurance to help fight fusarium.

Tim DeBlock, Bornholm, ON