

2007

HEADLINE on dry beans technology sheet



Anthracnose can be devastating to dry bean yields

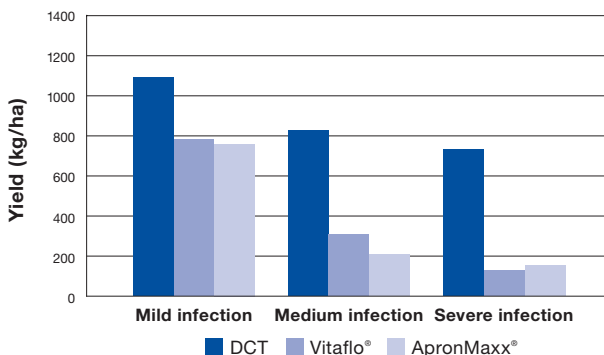
As a seed-borne fungal disease, anthracnose drastically reduces seed yield and quality. And it's getting worse every year. It can be spread through your fields by machinery, animals and wind-driven rain, causing serious losses in your dry beans. Even certified seed that has been tested and verified as disease-free can still carry low levels of anthracnose infection. That's why you need HEADLINE® as part of your anthracnose management strategy.

Manage anthracnose with HEADLINE

Due to the severity and seed-borne nature of anthracnose, a two-pronged approach is the most effective way to manage the disease.

1. Treat the seed

Start with a certified seed and apply a DCT seed treatment. As the chart below indicates, DCT is the most effective way to treat seed, compared to two leading commercial seed treatments.

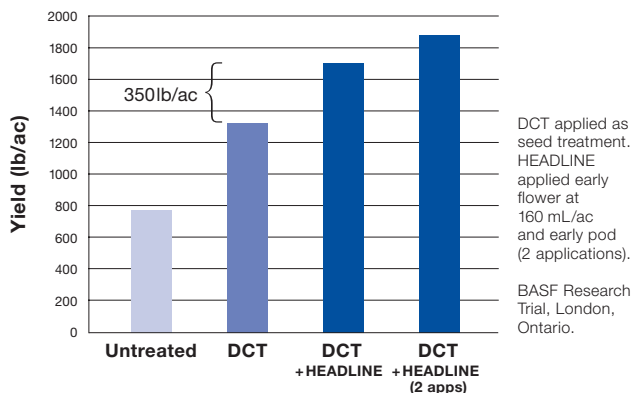


Chris Gillard, University of Guelph, Ridgetown College, Elora, Ontario, 2003.

2. Ensure control with HEADLINE

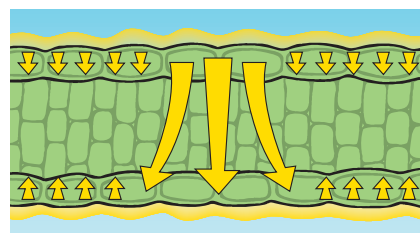
While treating seed is a critical first step to managing anthracnose, it isn't enough. A foliar application of HEADLINE delivers additional protection from the disease.

Using anthracnose-infected navy bean seed – 2004



How HEADLINE works

HEADLINE is rainfast within one hour of application. The formulation of HEADLINE in the leaf allows it to bind tightly to the waxy cuticle when applied to the leaf's upper surface. The systemic activity also allows HEADLINE to move through the leaf and bind itself to the leaf's lower surface. The unique activity enables HEADLINE to protect both sides of the leaf regardless of the side it is applied to, delivering dual-sided protection.



Unique activity
HEADLINE provides systemic movement within the leaf.

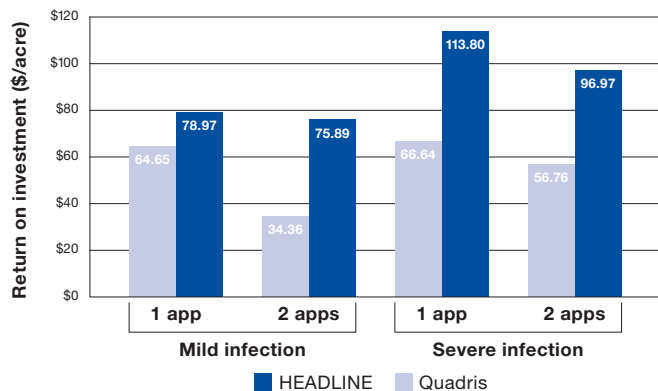


HEADLINE®
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Why HEADLINE

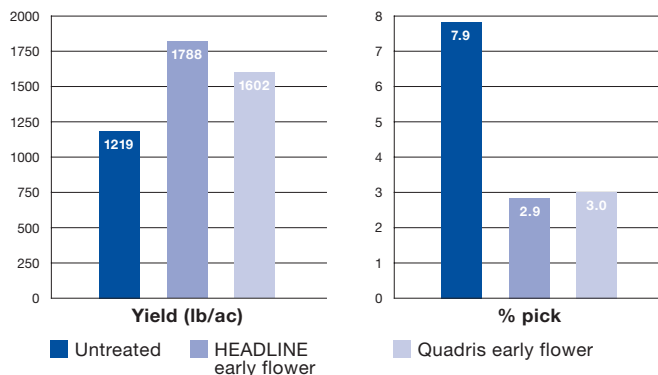
HEADLINE provides a higher level of anthracnose control than any other registered product. The following charts detail the results of HEADLINE versus Quadris® for return on investment and control of anthracnose.

RCAT, University of Guelph Anthracnose research trials 2005



ROI was calculated by taking the increase in marketable yield (yield – dockage + pick) from the treatment compared to the untreated and subtracting the cost of the fungicide and application. Bean price used was \$0.21/lb, HEADLINE \$16.57/acre, Quadris \$20.37/acre and application \$8/acre.

HEADLINE performance BASF Canada trials – 2003



For more information about HEADLINE, call **AgSolutions®** by BASF at 1-877-371-BASF (2273) or visit our website at www.agsolutions.ca

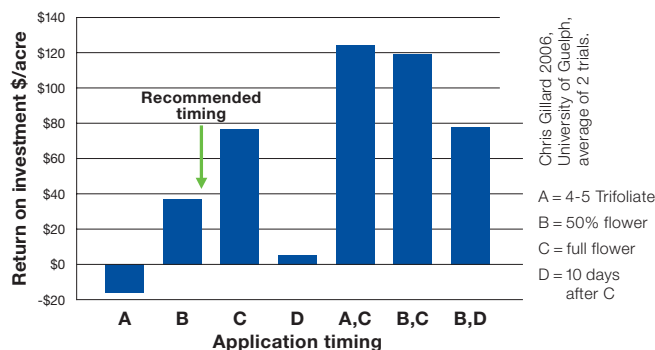
Always read and follow label directions.

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When to apply HEADLINE

If anthracnose is detected in the crop prior to flowering, make an application of HEADLINE immediately. In all other cases, apply HEADLINE at early flower (20%-50% bloom) to give the best seed pod protection and highest yields. Apply HEADLINE a second time 10-14 days later if disease persists or weather conditions are favourable for disease development.

HEADLINE anthracnose trials



How much to apply

Each 6.5 L jug of HEADLINE contains enough fungicide to treat approximately 40 acres per jug.

Application tips

- Apply HEADLINE at a rate of 0.4 L/ha (160 mL/ac).
- Apply HEADLINE with a minimum of 10 imperial gallons of water per acre (100 L/ha) by ground or 5 imperial gallons of water per acre (50 L/ha) by air.
- Research has shown that increasing water volume to 20 imperial gallons/acre (200 L/ha) increases coverage, improving disease control.
- Do not apply HEADLINE more than twice in a growing season.



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