

2008

# HEADLINE and LANCE on seed alfalfa technology sheet



## Why HEADLINE® and LANCE® make sense

Common leaf spot and spring black stem are two of the most prevalent and destructive diseases of seed alfalfa. They cause premature leaf drop and reduce yield, seed quality and viability. But with a disease control program based on HEADLINE and LANCE, you can manage this disease and other key diseases of alfalfa, while improving your seed yield.

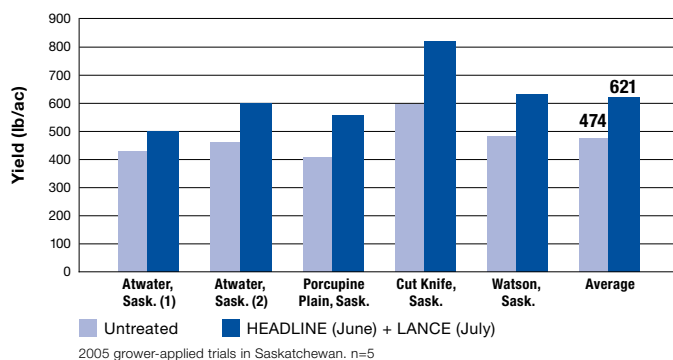
## How to use HEADLINE and LANCE in a disease control program

HEADLINE is the best choice when you're facing common leaf spot, delivering exceptional disease control, while LANCE protects your crop from a broader disease spectrum. LANCE also has a slightly wider and later application window and can be applied multiple times per year. If common leaf spot and spring black stem arise and persist or if cool wet weather prevails, HEADLINE can be followed by LANCE in a complete disease control program, helping you raise the healthiest possible crop.

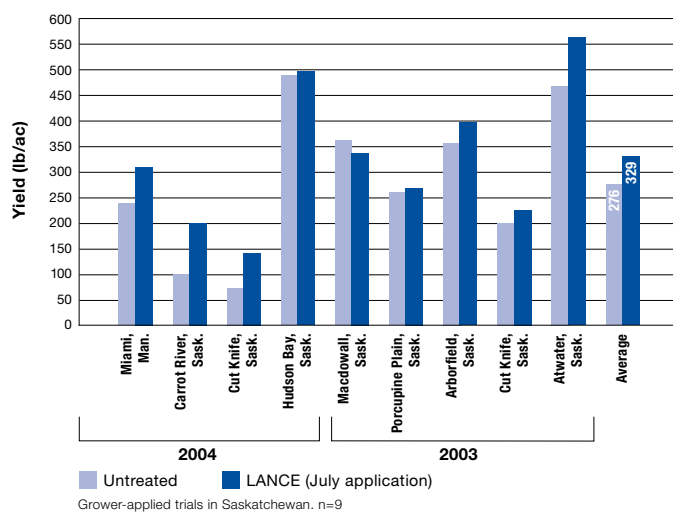
## Diseases controlled

HEADLINE	LANCE
Common leaf spot ( <i>Pseudopeziza medicaginis</i> )	Blossom blight ( <i>Sclerotinia sclerotiorum</i> / <i>Botrytis cinerea</i> )
	Common leaf spot ( <i>Pseudopeziza medicaginis</i> )
	Spring black stem ( <i>Phoma medicaginis</i> )
	Leaf spot ( <i>Leptosphaerulina briosiani</i> )

## HEADLINE and LANCE can help you get significant yield boosts



On average, HEADLINE and LANCE has delivered a 147 lb/ac yield benefit in five grower-applied trials. After you factor in product and application costs, that's a \$97/ac profit with HEADLINE.



On average, LANCE has delivered a 53 lb/ac yield benefit over two years of grower-applied trials. After you factor in product and application costs, that's a \$25/ac profit with LANCE.



**HEADLINE**  
F U N G I C I D E



**LANCE**  
F U N G I C I D E

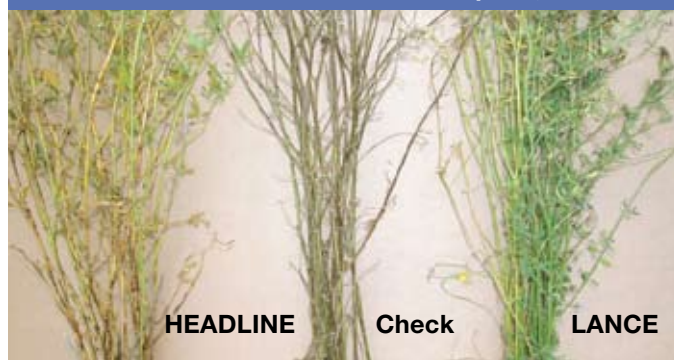
## How these fungicides work

HEADLINE is a Group 11 fungicide, while LANCE belongs to Group 7. Both prevent spore germination by interfering with fungal respiration, effectively cutting off the disease's energy supply. And both are systemic fungicides, travelling quickly across the leaf after application to deliver extended disease control.

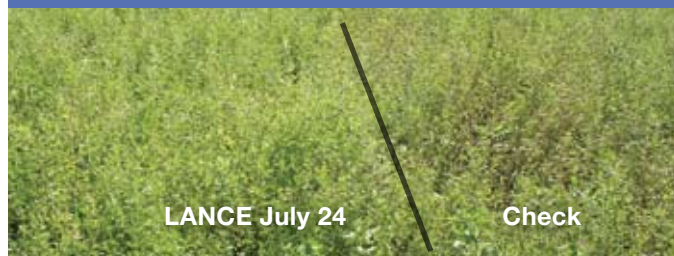
Because these fungicides stop disease before it can start, your crop can commit its energy and resources to growth and yield production, not to fighting off disease.

## Better disease control results in more productive plants

Prince Albert – Guardsman – Sept. 17, 2004



Porcupine Plain – Triple Crown – Sept. 15, 2004



Photos courtesy of Keith Head of the Saskatchewan Alfalfa Seed Producers Development Commission (SASPDC).

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

Always read and follow label directions.

AgSolutions, HEADLINE and LANCE are registered trademarks of BASF. © 2007 BASF Canada Inc.

## How to apply HEADLINE and LANCE

- Apply HEADLINE at the beginning of flowering (10%-30% bloom, typically mid to late June) or at the onset of disease at a rate of 160 mL/ac. (One case of HEADLINE treats 80 acres.)
- Apply LANCE at 20%-50% flowering (typically mid-July) at 170 g/ac. (One case of LANCE treats 33 acres.)
- In a complete disease control program in seed alfalfa, apply HEADLINE first followed by LANCE for broad-spectrum disease control. If conditions conducive to disease arise or persist, second and third applications of LANCE may be made at intervals of 7 to 14 days.

## Application guidelines and tips

- To maximize yield, protect the plants from disease as early as possible in their development.
- Use a water volume of at least 100 L/ha (10 imperial gallons/acre) for maximum disease control.
- LANCE may be applied by air with a minimum application rate of 40 L/ha (4 imperial gallons/acre).
- Do NOT apply HEADLINE more than once per growing season per field.
- Do NOT apply LANCE more than three times per growing season per field.
- Do NOT feed alfalfa treated with HEADLINE or LANCE to livestock.



**HEADLINE**  
F U N G I C I D E



**LANCE**  
F U N G I C I D E