

Inspire XT Fungicide Provides Michigan Sugarbeet Growers Consistent Cercospora Leaf Spot Control

By

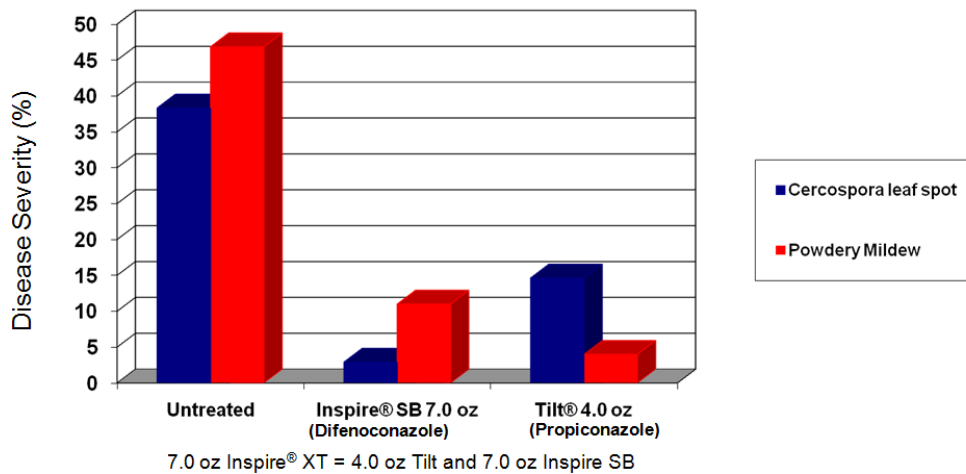
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Inspire® XT fungicide is a relatively new fungicide for the control of Cercospora leaf spot and powdery mildew on sugarbeets in Michigan. The formulation contains 2.08 pounds each of the active ingredients difenoconazole and propiconazole per gallon of product. Both active ingredients are in the triazole chemical class and they both bring their own special benefits to the mix. Difenconazole has excellent activity against Cercospora leaf spot and propiconazole has good activity. Against powdery mildew, propiconazole has excellent activity and difenoconazole shows good activity (Figure 1).

Figure 1. Efficacy of difenoconazole and propiconazole against Cercospora leaf spot and powdery mildew.

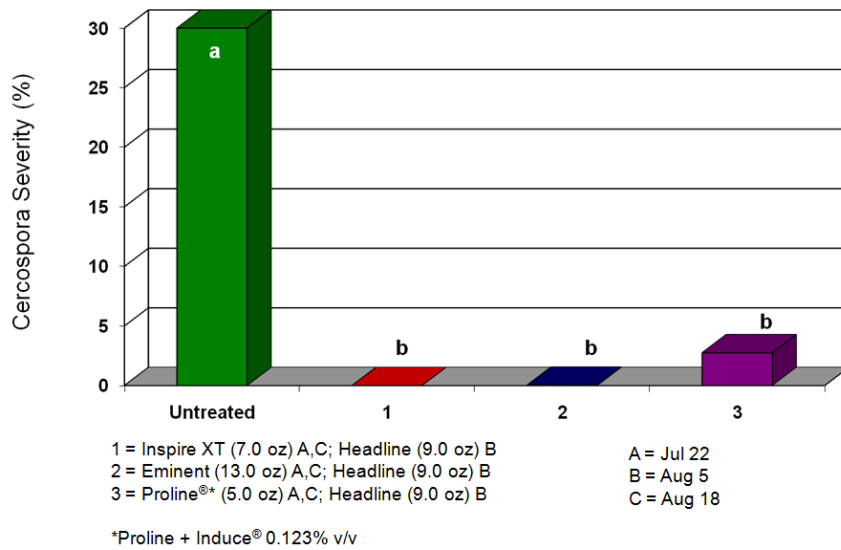


Source: Multi-trial average: 11 for leaf spot; two for powdery mildew

The figure above demonstrates the benefit of this mixture. With the combination of difenoconazole and propiconazole, Inspire XT provides excellent activity against Cercospora leaf spot and powdery mildew, the two most serious sugarbeet diseases in Michigan.

Over the past four years numerous field trials have been conducted in Michigan to evaluate the effectiveness of Inspire XT against Cercospora leaf spot versus other fungicide programs. The results suggest that Inspire XT is an excellent management tool for Cercospora leaf spot control (Figure 2).

Figure 2. Efficacy of fungicide programs for control of Cercospora leaf spot of Michigan sugarbeets.



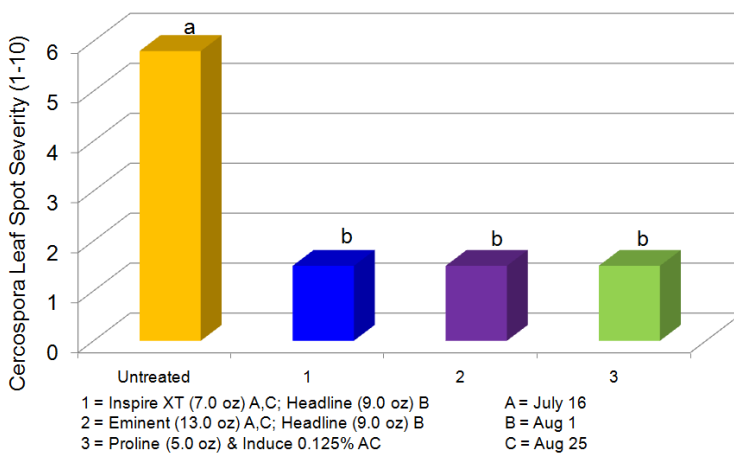
Source: USNLOF0052008 Syngenta trial, Ven Lengkeek, Mich. 2008

Note: Values (bars) are means from replicate samples. Values with the same letter are not significantly different (P = 0.05).

Alternating programs of Inspire XT (7 fl oz/A) with Headline® (9 fl oz/A) or Eminent® (13 fl oz/A) with Headline (9 fl oz/A) provided complete control of Cercospora leaf spot in this trial (Figure 2).

In another trial conducted in 2008, Dr. William Kirk and colleagues demonstrated that an Inspire XT alternation program with Headline provided excellent control of Cercospora leaf spot and equivalent control compared to other fungicide programs (Figure 3).

Figure 3. Efficacy of fungicide programs for control of Cercospora leaf spot of sugarbeets.



Plant Disease Management Reports 4:FC009Dr. W.W. Kirk, R.L. Schafer and P. Tumbalam. Michigan State University. 2008.

Note: Values (bars) are means from replicate samples. Values with the same letter are not significantly different (P = 0.05).

A unique benefit of this fungicide mixture is that both active ingredients have curative activity. That means that they both have the ability to shut down infections that began prior to application. Therefore, if infections occurred before the grower had the opportunity to apply the fungicide, Inspire XT would shut down those early infections and prevent further spread of the fungus. Although Inspire XT has curative and eradicated properties, it is best to begin applications prior to the onset of disease. The first application should be preventive or based on a forecast system. For resistance management purposes, Inspire XT must be used in alternation with any non-triazole fungicide (non-Group 3 fungicide) that is registered to control Cercospora leaf spot and powdery mildew on sugarbeets.

The key attributes of Inspire XT for sugarbeets include the following:

- Unique triazole mixture (difenoconazole and propiconazole)
- Inhibits mycelial growth
- High intrinsic activity
- Very safe on a wide range of crops
- Excellent rainfastness due to rapid uptake
- Combination of translaminar and xylem systemic movement
- Top leaf spot and powdery mildew triazole mixture
- Excellent protective, curative and eradicated properties
- Long-lasting protection
- Excellent Integrated Pest Management fit due to low use rates, application flexibility and low risk to beneficial

Best Use Guidelines for Cercospora Leaf Spot and Powdery Mildew Control

- Apply Inspire XT at a rate of 7 oz/A.
- Apply Inspire XT on a 10- to 21-day schedule.
- Apply no more than 21 oz/A/season.
- Alternate Inspire XT with a non-triazole fungicide that is registered for use on sugarbeets.
- Make no more than two consecutive applications of Inspire XT before alternating to a fungicide with a different mode of action.
- Use shorter intervals when disease pressure is high.

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Important: Always read and follow label instructions before buying or using Syngenta products. The instructions contain important conditions of sale, including limitations of warranty and remedy. Inspire XT is not currently registered for sale or use in all states. Please check with your state or local extension service before buying or using this product.

Difenoconazole (the active ingredient in Inspire XT) is not acutely toxic to bees.

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