

## Cruiser Insecticide On Winter Wheat

### Purpose:

To evaluate the impact of Cruiser as a seed treatment on winter wheat for the control of soil borne insects.

### Methods:

Cruiser was commercially applied to the seed, with the same seed lot having no Cruiser applied as well. All seed was treated with Dividend to prevent seedling diseases. Field length side by side comparisons were planted in the fall of 2005 and harvested in the summer of 2007. Plant stand counts were assessed where visual differences were observable.

### Results:

Table 1 shows the cumulative results of 25 trials in 2006. Cruiser out yielded the untreated check in 18 of the 25 trials (72%), but on average showed only a 1.6 bu/ac increase. In only 4 of the 25 trials was the yield increase greater than 5 bu/ac (average 7.4, range 5.1 to 9.0), and of these 4, only 2 showed significant difference in plant stand. In both of these cases, European Chafer was the insect causing the reduced plant stand.

These initial results indicate that insecticide seed treatments are not economic on an "every field" basis. However, where growers have a history of white grubs (European Chafer, June Beetle) or heavy wireworm infestations, the addition of an insecticide as a seed treatment can make the difference between having a crop to harvest and having no crop to harvest.

**Table 1: 2006 Cruiser results**

Trials	Cruiser	No Cruiser	Difference
	Yield (bu/ac)		
25	90.1	88.5	1.6
4	74.1	66.7	7.4

**Summary:** Average yield increase to Cruiser insecticide as a seed treatment on winter wheat showed only a 1.6 bu/ac yield increase, which does not give the grower an economic payback. In fields where significant insect pressure existed, stands were improved and yields increased by up to 9 bu/ac. Growers that have a history of soil borne insect pressure should consider planted Cruiser treated seed. However, given the small demand for this specialized seed treatment, growers may have difficulty in acquiring seed treated with Cruiser, and need to make these arrangements well in advance.

## Crop Advances: Field Crop Reports

**Next Steps:** Further simple scouting methods need to be developed to allow growers to determine high risk fields quickly and easily prior to planting. The development of an effective, easily applied drill box treatment would ease the difficulty associated with finding commercially treated seed at planting time.

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**Location of Project Final Report:**

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