

Soybean Response To Priaxor Fungicide

Lambton County Major Grant

Purpose:

Our objective was to determine whether Priaxor (a new fungicide) or Priaxor plus KP Plus (foliar fertilizer) will provide any yield benefit to soybeans. Previous studies have shown that there are some scenarios that seem to lead to a more consistent soybean response to fungicides. Cold wet soils, crusting, heavy rains, and compaction all lead to a seedling being more susceptible to disease. Poor crop rotation also plays a major role in the amount of disease inoculant present to infect the new crop. In Lambton County many suffered a poor rotation from winter killed wheat and a wet spring that lead to a reduction of corn acres.

Methods:

Our group used Table 1 as our layout to create the replicated trials. The treatments are listed below

- I. No Fungicide
- II. Priaxor
- III. Priaxor + KP Plus

Table 1. Field Plot Layout

Check (No Fungicide)	Priaxor	Priaxor + KP+	Priaxor	Check (No Fungicide)	Priaxor + KP+
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Results:

Lambton County Soil and Crop were able to obtain data from 3 fully replicated plots that had a rotation of beans after beans (see Table 2) and 1 fully replicated plot that had a rotation of beans after corn (see Table 3).

On beans/beans rotation there was a 4.9 bu/ac response over the check when using Priaxor. The response was slightly less when adding the KP+ to the Priaxor.

On the beans/corn rotation there was a 3.5 bu/ac response over the check when using Priaxor. The response was very small compared to the check when KP+ was added with Priaxor over the check.

Table 2. Yield Response in Beans/Beans Rotation

Check (No Fungicide)	Priaxor	Priaxor + KP Plus
44.3 bu/ac	49.2 bu/ac	48.7 bu/ac

Table 3. Yield Response in Corn/Bean Rotation

Check (No Fungicide)	Priaxor	Priaxor + KP Plus
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53.7 bu/ac	57.2 bu/ac	54.7 bu/ac
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Summary:

Spray timing seems to be a very critical piece in order to obtain a consistent yield boost. Many labels suggest spraying when the first pods are beginning to form on the bottom of the plant (R3-R4). However Richard Anderson (BASF) has had very good success and more consistency spraying slightly earlier than originally thought. Spraying at the R2 stage (there is an open flower at one of the two uppermost nodes) was the focus of our co-operator plots. After examining all 8 replications (6 reps in Beans/Beans rotation and 2 reps in the Corn/Soy rotation) targeted at the R2 stage it was determined that in every rep there was a yield response. When examining the 6 replications from the Beans/Beans rotation it was determined that 66% of the time there was a yield response greater than 5 bu/ac.

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Project Contacts:

Kirk VanWill, Maizex, kirk@maizex.com