

## **Performance of Continuous Soybean versus a Soybean/Wheat Rotation**

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**A** trial was initiated in 2002 to examine the performance of continuously-grown soybean compared to soybean grown on the previous year's wheat. In 2004, 'RG200RR' soybean was planted at 175,000 pure live seeds/acre on ground with three years of previous soybean history or on 2003 wheat ground. Also, on the continuous soybean ground, yield was compared between inoculated (granular formulation) and non-inoculated seed. Previously, two of three years the soybean seed was inoculated. Soybean on wheat ground yielded 6.5 bushels/acre (21 percent) greater than the continuous soybean (Table 1). The lower yield with the continuous soybean was likely due to increased root disease as visually evaluated on July 27. The non-inoculated soybean yield was similar to inoculated (Table 2).

**Table 1. Performance of four years continuous soybean vs. soybean on wheat ground.**

Trt	Yield bu/A	27-Jul		
		Root Length mm	Lesion Length mm	Root Diseased %
soy	24.2	179	74	40
soy/wht	30.7	176	33	19
mean	27.4	178	54	30
CV%	8	16	38	23
LSD 0.05	4.7	NS	15	5

RG200RR inoculated soybean planted May 27.

Harvest = October 12.

**Table 2. Yield of inoculated vs. non-inoculated 4-yr continuous soybean\*.**

Treatment	Yield bu/A
non-inoc	27.7
inoc	24.2
mean	25.9
CV%	8
LSD 0.05	NS

\*Granular inoculant. Seed inoculated two of three previous years.



**Continuous soybean rotation trial at Carrington, 2004.**