Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans, Ames, Iowa, 1999. Owen, Micheal D.K., James F. Lux, and Damian D. Franzenburg. The purpose of this study was to evaluate various herbicide combinations applied PRE, POST or sequentially for soybean phytotoxicity and weed efficacy. The soil was a Canisteo, Nicollet, Clarion Webster clay loams with a pH 6.8 and 4.3% organic matter. The experimental design was a randomized complete block with three replications and plots were 10 by 25 ft. The 1998 crop was corn. Tillage included a fall chisel plow and a spring field cultivation. Crop residue on the soil surface was 25 to 30% at planting.

“Asgrow variety AG 3302 RR/STS” soybeans were planted 1.0 inch deep on June 6, at 138,500 seeds/A in 30 inch rows. June rainfall included: 0.57, 0.67, 0.19, 1.14, 2.22, 0.39, 0.04, 0.01, 0.04, 0.46, 0.76, 0.20, and 0.05 inches on June 1, 4, 8, 9, 10, 13, 15, 16, 19, 22, 23, 27, and 30, respectively. Total rainfall for June was 6.74 inches. July rainfall included: 2.21 inches and 3.54 inches from July 1 through 15 and 16 through 31, respectively. Rainfall total for August was 5.65 inches. Application information is listed below:

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<th>Date</th>
<th>June 7</th>
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<td>0-5 SW</td>
<td>1-3 N</td>
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<td>3-4 trif.</td>
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<tr>
<td>height (inch)</td>
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<td>1-4, 1-3 tillers</td>
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No significant soybean injury was observed on June 30. On July 16, Basagran with Poast Plus and Blazer applied EPOST demonstrated 22% injury. Other observed injury was 0 to 8%. All treatments generally provided excellent weed control. Roundup Ultra treatments provided somewhat diminished control of Pennsylvania smartweed on July 26. (Dept. of Agronomy, Iowa State University, Ames)
**TRIAL # US 057/99/01 001 IA : STS 1**

**DATA MEAN**

**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**CREATED:** 05/13/1999  **REVISED:** 01/10/2000  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE  
**LOCATION:** Ames, IA  
**RESEARCHED BY:** IA State University  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT **WIDE X** 25.00 FT **LONG**  
**REPS:** 03

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<th>DOSAGE RATE</th>
<th>GLXMA UNIT</th>
<th>SETFA PHT %</th>
<th>ABUTH CON %</th>
<th>AMBEL CON %</th>
<th>POLPY CON %</th>
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**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

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**TRIAL # US 057/99/01 001 IA : STS 1**

**DATA MEAN**

**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**CREATED:** 05/13/1999  **REVISED:** 01/10/2000  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE

**LOCATION:** Ames, IA  **RESEARCHED BY:** IA State University

**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN

**PLOT SIZE:** 10.00 FT WIDE X 25.00 FT LONG  **REPS:** 03

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<th>GLXMA PHT % 07/16/99</th>
<th>SETFA CON % 07/16/99</th>
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**STANDARD DEVIATION** 12.18 2.60 0.422 1.38 1.11
### Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**CREATED:** 05/13/1999  **REVISED:** 01/10/2000  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE  **RESEARCHED BY:** IA State University

**LOCATION:** Ames, IA  **REDESIGNED:** RANDOMIZED COMPLETE BLOCK DESIGN

**PLOT SIZE:** 10.00 FT WIDE X 25.00 FT LONG  **REPS:** 03

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**LSD (0.05)** | 5.30 | 1.33 | 5.10 | 2.20 | 6.19
**STANDARD DEVIATION** | 2.62 | 0.657 | 2.52 | 1.09 | 3.06
### DATA MEAN

**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**CREATED:** 05/13/1999  **REVISED:** 01/10/2000  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE  **LOCATION:** Ames, IA  **RESEARCHED BY:** IA State University  **DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN

**PLOT SIZE:** 10.00 FT WIDE X 25.00 FT LONG  **REPS:** 03

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LSD (0.05) 5.49 3.49 5.18 7.19 3.25

**STANDARD DEVIATION**

2.72 1.73 2.56 3.56 1.61
**TRIAL # US 057/99/01 001 IA : STS 1**

**DATA MEAN**

**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**CREATED:** 05/13/1999  **REVISED:** 01/10/2000  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE  **LOCATION:** Ames, IA  **RESEARCHED BY:** IA State University

**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  **PLOT SIZE:** 10.00 FT WIDE X 25.00 FT LONG  **REPS:** 03

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**Title:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

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**LSD (0.05)**: 4.16 6.06 7.62 4.73 4.62

**Standard Deviation**: 2.06 3.00 3.77 2.34 2.28
**TRIAL # US 057/99/01 001 IA : STS 1**

**DATA MEAN**

**TITLE:** Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

**CREATED:** 05/13/1999 **REVISED:** 01/10/2000

**PROJECT TYPE:** HERBICIDE  
**LOCATION:** Ames, IA  
**RESEARCHED BY:** IA State University  
**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN  
**PLOT SIZE:** 10.00 FT WIDE X 20.00 FT LONG  
**REPS:** 03

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TITLE: Evaluation of preemergence and postemergence applied herbicide combinations for weed management in RR/STS soybeans.

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LSD (0.05) 8.14
STANDARD DEVIATION 4.00

» = SUPPLEMENTAL CHEMICAL

* TIMING CODES
00 = UNTRCHR / UNTREATED TIMING (FP)
01 = PREPRE / PRE
02 = EAPWE / EPOST
03 = POSPOS / POST