Evaluation of herbicide prepackage and tank mixture combinations for weed management in corn, Ames, Iowa, 1999. Owen, Micheal D.K., James F. Lux, and Damian D. Franzenburg. The purpose of this study was to evaluate different PRE herbicide combinations for corn 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 soybeans. Tillage included a spring field cultivation. Fertilization included 125 lb/A actual N applied as urea. Crop residue on the soil surface was 10 to 15% at planting. “Garst hybrid 8550” corn was planted 1.5 inches deep on May 26, at 27,700 seeds/A in 30 inch rows. May rainfall included: 0.03, 0.14, 0.34, 0.04, 1.74, 0.57, 0.10, 0.26, 0.56, 0.22, 1.16, 0.07, 0.01, 0.02, 0.01, and 0.01 inches on May 5, 6, 7, 10, 11, 12, 15, 16, 17, 20, 21, 22, 23, 27, 30, and 31, respectively. Total rainfall for May was 5.28 inches. 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>June 16</th>
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Corn populations were not adversely affected by herbicide treatment, although significant differences between treatments were observed. Negligible corn injury was noted on June 25, July 6, and August 8. All treatments provided 90% or better giant foxtail control on July 6, except Balance. Bicep II Magnum achieved marginal control of common waterhemp and Frontier PRE followed by Hornet EPOST provided marginal control of common cocklebur on July 6. All other treatments provided good to excellent control. Velvetleaf and Pennsylvania smartweed control was 87% or better with all treatments evaluated on July 6. (Dept. of Agronomy, Iowa State University, Ames)
**TITLE:** Evaluation of herbicide prepackage and tank mixture combinations for weed management in corn.

**LOCATION:** Ames, IA

**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN

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

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<th>06/25/99</th>
<th>07/06/99</th>
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LSD (0.05) = 2.58  3.85  1.07  4.23  6.57

STANDARD DEVIATION = 1.28  1.90  0.527  2.09  3.25
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LSD (0.05) 8.38 6.00 15.00 1.07 7.50

STANDARD DEVIATION 4.14 3.00 7.42 0.527 3.71
**DATA MEAN**

**TITLE:** Evaluation of herbicide prepackage and tank mixture combinations for weed management in corn.

**CREATED:** 03/17/1999  **REVISED:** 11/29/1999  **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)**

| 10.54 | 3.77 | 7.30 | 18.00 |

**STANDARD DEVIATION**

| 5.21 | 1.87 | 3.61 | 8.90 |

» = SUPPLEMENTAL CHEMICAL

* TIMING CODES

00 = UNTRCHK / UNTREATED TIMING (FP)
## Timing Codes

01 = PREPRE / PRE  
02 = EAPCOR / EPOST  
03 = POSPOS / POST

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## Species Common Name - Cultivar (If Applicable)

## Stage Code

--- = To be selected  
19 = 9 or more leaves unfolded  
24 = 4 side shoots/tillers visible  
25 = 5 tillers detectable