Evaluation of Basis Gold and Accent Gold alone and following preemergence herbicides for weed management in corn, Ames, Iowa, 1998. Owen, Micheal D.K., James F. Lux, Damian D. Franzenburg, and Kevin W. Adam. The purpose of this study was to evaluate several sulfonylurea herbicides applied postemergence alone or following preemergence herbicides for weed efficacy and corn phytotoxicity. The soil was a Canisteo, Clarion Webster, Hayden-Storden loam with a pH 7.05 and 4.0% organic matter. The experimental design was a randomized complete block with three replications and plots were 10 by 25 ft. The 1997 crop was soybeans. Tillage included a spring field cultivation. Fertilization included 127 lb/A actual N applied as urea. Crop residue on the soil surface was 10 to 15% at planting. “Garst hybrid 8539” corn was planted 1.5 inches deep on May 4, at 27,700 seeds/A in 30-inch rows. May rainfall included: 0.16, 0.16, 0.32, 0.10, 0.44, 0.73, 0.03, 0.75, 0.78, and 0.16 inches on May 2, 7, 12, 15, 20, 22, 23, 24, 29, and 30, respectively. Total rainfall for May was 3.63 inches. June rainfall included: 0.09, 0.03, 0.38, 0.15, 0.24, 1.42, 0.26, 0.06, 1.14, 3.02, 0.06, 0.84, 0.55, 0.03, 0.01, 0.01, 0.87, 0.72, and 0.02 inches on June 1, 2, 3, 5, 7, 8, 9, 10, 11, 14, 17, 18, 20, 23, 24, 26, 27, 29, and 30, respectively. Total rainfall for June was 9.9 inches. July rainfall included: 1.89 inches and 0.61 inches from July 1 through 15 and 16 through 31, respectively. Rainfall total for August was 3.79 inches. Application information is listed below:

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<th>Date</th>
<th>May 5</th>
<th>May 27</th>
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<tr>
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<td>0-5 SW</td>
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<tr>
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<td>V3-V4</td>
</tr>
<tr>
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<td>3-5</td>
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<tr>
<td>Giant foxtail</td>
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<tr>
<td>leaf no.</td>
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<tr>
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<td>0.5-4</td>
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<td>cotyl-4</td>
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</table>
Pennsylvania smartweed

| leaf no. | - | cotyl-4 |
| height (inch) | - | 0.25-2.5 |
| infestation (ft²) | - | 0-1 |

Velvetleaf

| leaf no. | - | cotyl-5 |
| height (inch) | - | 0.25-2 |
| infestation (ft²) | - | 2-3 |

There were no apparent differences in corn stand due to herbicide treatments. Treatments with POST applied Basis Gold demonstrated slightly more injury than other treatments. All treatments provided good to excellent control of all weed species evaluated on June 12. When evaluated on July 21, Basis applied PRE followed with Accent Gold POST and Accent Gold POST were not as effective in controlling common waterhemp. Control of common cocklebur on July 21 was no longer effective with Surpass 100 applied PRE and followed with Basis Gold. (Dept. of Agronomy, Iowa State University, Ames)
**TRIAL # US 017/98/01 001 IA : ACC 7**

**DATA MEAN**

**TITLE:** EVALUATION OF BASIS GOLD AND ACCENT GOLD ALONE AND FOLLOWING PREEMERGENCE HERBICIDES FOR WEED MANAGEMENT IN CORN.

**CREATED:** 04/11/98  **REVISED:** 11/20/98  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE

**LOCATION:** AMES, IA  **RESEARCHED BY:** IOWA 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)  2.60  3.80  4.34  1.25  3.91

STANDARD DEVIATION  1.24  1.81  2.06  0.596  1.86
**TRIAL # US 017/98/01 001 IA : ACC 7**

**DATA MEAN**

**TITLE:** EVALUATION OF BASIS GOLD AND ACCENT GOLD ALONE AND FOLLOWING PREEMERGENCE HERBICIDES FOR WEED MANAGEMENT IN CORN.

**CREATED:** 04/11/98 **REVISED:** 11/20/98

**PROJECT TYPE:** HERBICIDE **COMPLETED:** N

**LOCATION:** AMES, IA **PROJECT#1:** RESEARCHED BY: IOWA STATE UNIVERSITY

**DESIGN:** RANDOMIZED COMPLETE BLOCK DESIGN **PROJECT#2:**

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

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LSD (0.05) 7.05 4.00 0.00 1.25 3.68

**STANDARD DEVIATION** 3.36 1.91 0.00 0.596 1.75
### TRIAL # US 017/98/01 001 IA : ACC 7

**DATA MEAN**

**TITLE:** EVALUATION OF BASIS GOLD AND ACCENT GOLD ALONE AND FOLLOWING PREEMERGENCE HERBICIDES FOR

**WEED MANAGEMENT IN CORN.**

**CREATED:** 04/11/98  **REVISED:** 11/20/98  **COMPLETED:** N

**PROJECT TYPE:** HERBICIDE  **PROJECT#1:**

**LOCATION:** AMES, IA  **RESEARCHED BY:** IOWA 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>AMATA CON % 07/21/98</th>
<th>CHEAL CON % 07/21/98</th>
<th>FOLPY CON % 07/21/98</th>
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**LSD (0.05)**: 3.91 10.77 2.82 4.38 10.71

**STANDARD DEVIATION**: 1.86 5.13 1.34 2.09 5.10

**SUPPLEMENTAL CHEMICAL**

**TIMING CODES**

00 = UNTRCH / UNTREATED TIMING

01 = PREPRE / PRE

02 = POSPOS / POST