Evaluation of Liberty, Dual II Magnum, Accent, and Surpass for woolly cupgrass control in Liberty Link corn, Lewis, Iowa, 1998. Owen, Micheal D.K., James F. Lux, Damian D. Franzenburg, and Kevin W. Adam. The purpose of this study was to evaluate Liberty in combination with residual herbicides for woolly cupgrass efficacy and phytotoxicity to a glufosinate resistant corn hybrid. The soil was a Marshall, Exira, silty clay loam with a pH 6.5 and 3.5% 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 two pass tandem disking. Fertilization included 140 lb/A actual N, applied as anhydrous ammonia. Crop residue on the soil surface was 19% at planting. “Pioneer hybrid 34T14” corn was planted 1.5 inches deep on May 5, at 28,000 seeds/A in 30-inch rows. May rainfall included: 0.07, 0.40, 0.15, 1.06, 0.81, 0.05, 0.83, 0.17, 0.01, 0.73, and 0.67 inches on May 2, 6, 11, 15, 20, 21, 22, 23, 24, 25, and 29, respectively. Total rainfall for May was 4.95 inches. June rainfall included: 0.05, 0.76, 0.03, 0.04, 2.01, 0.01, 0.06, 0.55, 0.36, 7.29, 0.41, 0.01, 0.15, 0.01, and 0.05 inches on June 1, 3, 4, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 23, and 25, respectively. Total rainfall for June was 11.79 inches. July rainfall included: 3.51 inches and 2.35 inches from July 1 through 15 and 16 through 31, respectively. Rainfall total for August was 3.16 inches. Application information is listed below:

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Slight injury was observed for nearly all the treatments when evaluated in June and July. There were no apparent reductions in corn stand due to herbicide treatment. Woolly cupgrass control was marginal with Dual II Magnum PRE plus Marksman EPOST. All other treatments provided excellent woolly cupgrass control. Velvetleaf control was good or excellent for all treatments with the exception of Surpass PRE followed by Liberty plus Atrazine EPOST, which demonstrated reduced control in July. (Dept. of Agronomy, Iowa State University, Ames)
TRIAL # US 072/98/01 001 IA : LCL 1

DATA MEAN

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LSD (0.05) 9.87 19.42
STANDARD DEVIATION 4.80 9.45

= SUPPLEMENTAL CHEMICAL

* TIMING CODES
00 = UNTRECHK / UNTREATED TIMING
DATA MEAN

* TIMING CODES
01 = PREPRE / PRE
02 = EAPONE / EPOST
03 = POSPOS / POST

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* STAGE CODE
13  - 3 LEAVES UNFOLDED
15  - 5 LEAVES UNFOLDED
18  - 0TH TRUE LEAVES/LEAF PAIRS/WHORLS UNFOLDED
23  - 3 TILLERS DETECTABLE
69  - END OF FLOWERING: STIGMATA COMPLETELY DRY