Acetamide comparison for residual common waterhemp control on bare ground. Urbana, Illinois, 2003.
Maxwell, Douglas J., Christy L. Sprague, and F. William Simmons. The objective of this research was to compare acetamides for residual common waterhemp control on bare ground. The study was established at the Crop Sciences Research and Education Center, Urbana. The soil was a Drummer silty-clay loam with a pH of 6.8 and 5.6% organic matter. Treatments were arranged in randomized complete blocks with three replications of plots 10 by 20 feet. Herbicides were applied with a CO_2 backpack sprayer delivering 20 gpa and equipped with 8003 flat fan nozzles. Application information is listed below:

Date	April 22
Application	pre
Temperature (F)	
Air	68
Soil	65
Soil Moisture	moist
Wind (mph)	3-N
Sky Cover (%)	0
Precip. after application	
Week 1 (inch)	0.72
Week 2 (inch)	1.31
Relative humidity (%)	30

Common waterhemp control was good for all treatments at 30 days after treatment (DAT) except with the 2.0 lb/A atrazine, 0.59 lb/A flufenacet, and 1.43 lb/A metolachlor (as Stalwart C) treatments. At 60 DAT, 1.91 lb/A metolachlor (as Stalwart C) and 0.79 lb/A flufenacet also fell below the 85% control level. KIH-485 at 0.17 lb/A and at 0.22 lb/A controlled common waterhemp at 95% or greater at all evaluations. Encapsulated and non-encapsulated acetochlor products were very effective with greater than 90% common waterhemp control up to 90 DAT, with the exception of 2.37 lb/A acetochlor and MON 4660 (as Harness). Treatments providing intermediate common waterhemp control 90 DAT include S-metolachlor and CGA-154281 at 1.43 lb/A and at 1.91 lb/A, isoxaflutole at 0.07 lb/A and at 0.094 lb/A, flufenacet and metribuzin at 0.078 lb/A and 0.20 lb/A respectively, un-encapsulated acetochlor and dichlormid (as Surpass) at 1.78 lb/A, and un-encapsulated acetochlor and MON 4660 (as Harness) at 2.37 lb/A. (Dept. of Crop Sciences, University of Illinois, Urbana).

Table. Acetamide comparison for common waterhemp control on bare ground. Urbana, Illinois, 2003. (Maxwell, Sprague, and Simmons).

Treatment	Appl Rate	Time	Amata 5-23	Amata 6-23	Amata 7-22
	(lb/A)		-------- % control--------		
Dimethenamid-P	0.74	pre	98	89	73
S-metolachlor&CGA-154281	1.43	pre	94	86	75
KIH-485	0.17	pre	96	95	97
Metolachlor	1.43	pre	84	78	62
Acetochlor&MON4660[1]	1.78	pre	99	98	96
Check	-	-	0	0	0
Acetochlor&MON4660[2]	1.78	pre	97	97	94
Acetochlor&dichlormid[3]	1.78	pre	99	99	93
Acetochlor&dichlormid[4]	1.78	pre	99	99	77
Flufenacet&metribuzin	0.74	pre	96	85	65
Flufenacet	0.59	pre	80	62	53
Isoxaflutole	0.07	pre	97	86	78
Dimethenamid-P	0.98	pre	98	98	91
S-metolachlor&CGA-154281	1.91	pre	95	96	86
KIH-485	0.22	pre	98	95	97
Metolachlor	1.91	pre	90	83	68
Acetochlor&MON4660[1]	2.37	pre	99	98	83
Acetochlor&MON4660[2]	2.37	pre	99	98	98
Acetochlor&dichlormid[3]	2.37	pre	99	99	94
Acetochlor&dichlormid[4]	2.37	pre	99	99	95
Flufenacet&metribuzin	0.98	pre	98	96	87
Flufenacet	0.79	pre	88	75	57
Atrazine	2.0	pre	75	65	45
Isoxaflutole	0.094	pre	98	92	84
LSD (0.05)			6	5	9

[1]Harness [2] Degree [3] Topnotch [4] Surpass