Impact for weed control corn at Waseca, MN in 2005. Hoverstad, Thomas R. The objective of this trial was to evaluate Impact for weed control in corn. Impact (active ingredient: topramezone) is a new broadleaf herbicide available for corn. This research site had an especially high population of common cocklebur. The site was a Webster clay loam soil containing 7% organic matter, pH = 7.6 and soil test P and K levels of 42 and 168 ppm, respectively. The previous crop was corn that had been chisel plowed in the fall. The area was fertilized in the spring with 150 lb N/A as anhydrous ammonia and field cultivated once to a depth of 3 inches prior to planting to prepare a seedbed. Dekalb 'DKC 4710' was planted on May 22, 2005 in 30-inch rows. All treatments were applied with a tractor-mounted sprayer delivering 20 gpa at 40 psi using 8002 flat-fan nozzle tips. Visual estimates of weed control were taken on August 23, 2005. Application dates, environmental conditions, crop and weed stages are listed below.

Date	June 9	June 15
Treatment	Post I	Post II
air temp °F	78	72
soil temp (4-inch) °F	70	66
Relative humidity (%)	30	56
Wind	E 6	N 8
Soil moisture	Moist	Moist
Corn		
Stage	V2	V4
height (inch)	4	6
Giant foxtail		
leaf no.	1	3
height (inch)	1	3
Common cocklebur		
leaf no.	3	4
height (inch)	3	5
Common lambsquarters		
leaf no.	3	4
height (inch)	2	3
Velvetleaf		
leaf no.	2	3
height (inch)	1	2
Redroot pigweed		
leaf no.	2	3
height (inch)	1	2
Rainfall after application (inch)		
Week 1	0.55	1.00
Week 2	0.99	1.67
Week 3	2.55	1.15

Impact and atrazine tank mixed with Steadfast provided much better control of common cocklebur than Steadfast applied alone. Impact provided control of common cocklebur and other broadleaf weeds in a very similar manner to Callisto. There was a trend toward better control of common cocklebur with the 2 to 4-inch weed applications as compared to the 1 to 2-inch weed applications. Yield levels however were similar for either herbicide timing. (University of Minnesota, Southern Research and Outreach Center, Waseca, MN and Dept of Agronomy and Plant Genetics, University of Minnesota, St Paul).

Table. Impact for weed control corn at Waseca, MN in 2005 (Hoverstad).

Treatment	Rate	Giant foxtail	Common cocklebur	Velvetleaf	Common lambsquarters	Redroot pigweed	Yield
	(product/A)			-------(% control)-------			Bu/A[a]
POST I (2-4 inch weeds)							
Steadfast+MSO+28%N	0.75oz+1.6pt+4pt	98	71	94	99	94	140
Impact+Steadfast+atrazine+MSO+28%N	0.5oz+0.75oz+16oz+1.6pt+4pt	97	94	98	99	99	182
Impact+Steadfast+atrazine +MSO+28%N	0.75oz+0.75oz+16oz+1.6pt+4pt	99	92	98	99	99	190
Callisto+Steadfast+atrazine+MSO+28%N	3oz+0.75oz+8oz+1.6pt+4p	99	95	99	99	99	186
Impact+Accent+atrazine+MSO+28%N	0.75oz+0.67oz+16oz+1.6pt+4pt	99	94	97	99	99	190
Impact+Option+atrazine+MSO+28%N	0.75oz+1.5oz+16oz+1.6pt+4pt	99	95	99	99	99	192
Option+Distinct+MSO+28%N	1.5oz+4oz+1.6pt+4pt	99	97	95	99	99	187
POST I (1-2 inch weeds)							
Outlook+Impact+atrazine+COC+28%N	16oz+0.75oz+32oz+1.6pt+4pt	99	92	92	99	99	189
Prowl+Impact+atrazine+COC+28%N	32oz+0.75oz+32oz+1.6pt+4pt	99	89	99	99	99	191
Lumax+Steadfast+NIS	2.5pt+0.75oz+0.25%	99	84	99	99	99	185
Checks							
Weedy	-	0	0	0	0	0	140
Hand-Weeded	-	100	100	100	100	100	186
	LSD (0.10)	2	7	5	1	3	6

[a] Yield adjusted to 15.5% moisture.