Evaluation of shattercane control with KIH-485. Li, Jianmei, Jimmy D. Wait, and Kevin W. Bradley. The objective of this study was to evaluate crop phytotoxicity and shattercane control with KIH-485 in corn. This study was conducted at the Bradford Research and Extension Center near Columbia, MO. The soil was a Mexico silt loam with a pH of 5.7 and 2.7% organic matter. 'Pioneer 34N42 LL' corn was planted 1.5 inch deep on June 2 in 30 inch rows. Treatments were arranged in a randomized complete block design with four replications of 10 by 35 foot plots. Herbicide applications were made with a CO_2 backpack sprayer equipped with XR8002 flat fan nozzles calibrated to deliver 15 GPA at 24 PSI.

Application data are listed below:

Date	June 3
Treatment	PRE
Temperature (F)	
air	20.6
soil	18.9
Soil moisture	damp
Wind (mph)	2
Cloud cover (%)	40
Relative humidity (%)	70
Precipitation after application	
week 1 (inch)	0.49
week 2 (inch)	0.73

Crop injury was minimal at both 15 and 29 days after application. Shattercane control was similar among all KIH-485, s-metolachlor and acetochlor treatments and ranged from 45 to 60% at 60 days after application. Poor control (<30%) of ivyleaf morningglory occurred with either KIH-485 or s-metolachlor, but the addition of atrazine to these treatments improved ivyleaf morningglory control substantially.

Table. Weed control with KIH-485 (Li, Wait and Bradley).

					Weed control					
		Corn injury			SORVU			IPOHE		
Application	Rate	6-18	7-2	8-2	6-18	7-2	8-2	6-18	7-2	8-2
	(lb/A)	%								
Untreated		0	0	0	0	0	0	0	0	0
KIH-485	0.19	0	0	6	51	28	48	26	0	4
KIH-485	0.22	0	0	4	63	69	59	35	0	29
KIH-485	0.27	3	0	0	63	31	65	45	20	23
s-Metolachlor	1.6	0	0	0	61	36	60	34	8	11
Acetochlor	1.8	0	1	0	64	43	60	45	0	13
KIH-485+ Atrazine	0.19+ 0.75	3	0	0	58	51	45	59	65	61
KIH-485+ Atrazine	0.19+ 1.2	0	0	10	64	73	50	76	93	94
KIH-485+ Atrazine	0.19+ 1.6	3	1	5	51	45	40	89	96	93
Atrazine+ s-metolachlor	1.63+ 1.25	3	0	4	69	66	59	87	95	79
LSD(0.05)		4	1	12	29	19	30	33	14	34