Late-season vine control in corn. Young, Bryan, G. and Jared S. Webb. This study was designed to evaluate herbicide options for post-directed applications in corn for control of vines. The study was conducted on a Weir silt loam with 2.2% organic matter and pH 6.7 at the Belleville Research Center. Fertilizer applied was 150 and 100 lb/A of N and  $K_2O$ , respectively, to an area that had been cropped to soybean in 2004. Pioneer brand 33P65 RR field corn was planted 1.5 inch deep at 28000 seed/A into a reduced-till seedbed on May 5 2005. Plots consisted of four 30 inch rows, 27 ft long arranged in a randomized complete block design with 3 replications. The herbicides were broadcast applied with a  $CO_2$  pressurized sprayer using 8002 flat fan tips at 40 PSI in 20 GPA water. Monthly rainfall in inches was 2.9, 0.8, 1.6, 4.8 and 3.2 in April, May, June, July and August, respectively. Rainfall in May was sparse; 0.07 inches on the  $9^{th}$ , 0.4 inches on the  $14^{th}$ , and 0.32 inches on the  $20^{th}$ . Weed population per  $0.25m^2$  in the nontreated plots, mid-season, was 3 giant ragweed and 1 ivyleaf morningglory. The application was made at 4 to 8 inch ivyleaf morningglory (4-8"MG). Application information is listed below.

Date Jun-10-05
Treatment 4-8"MG
Air temperature (F) 86
Relative humidity (%) 60
Soil moisture NORMAL

field corn

leaf no. V6 height (inch) 20-22

giant ragweed

leaf no. 4-10 height (inch) 2-12

ivyleaf morningglory

leaf no. 5-7 height (inch) 3-6

Little to no corn injury was observed from any treatment. Control of ivyleaf morningglory was only 52% from glyphosate at 14 DAT but increased to 95% by 28 DAT. Fluroxypyr, 2,4-D, dicamba, and carfentrazone controlled at least 90% of ivyleaf morningglory at both 14 and 28 DAT. (Dept. of Plant, Soil and Agricultural Systems, Southern Illinois University, Carbondale).

Table. Late-season vine control in corn. (Young and Webb)

				Corn			Control, days after treatment			
	Application		-	Injury, DAT <sup>c</sup>		AMBTR		IPOHE		
Treatmenta	Rate	Time <sup>b</sup>	Yield	14	28	14	28	14	28	
	(lb/A)		bu/A	%	%	%	%	%	%	
Nontreated			177	0	0	0	0	0	0	
Fluroxypyr	0.135	4-6"MG	191	1	0	90	94	90	95	
2,4-De	0.237	4-6"MG	207	1	0	94	99	97	99	
Dicamba	0.25	4-6"MG	221	0	0	90	97	92	96	
Carfentrazone + NIS	0.0156+0.25%	4-6"MG	205	0	0	43	70	98	96	
Glyphosate + AMS	0.77+2.0%	4-6"MG	216	0	0	99	99	52	95	
LSD			25.3	0	0	24.2	6.8	14.7	4.3	
Р			0.03	1.0	1.0	0.01	0.01	0.01	0.01	

<sup>&</sup>lt;sup>a</sup>NIS = Activator 90, a nonionic surfactant from Loveland Industries, Inc.

AMS = spray grade ammonium sulfate.

Postemergence application was post-directed.

Blanket preemergence application of acetochlor & atrazine & dichlormid at 1.13 & 0.84 lb/A over entire area.

<sup>&</sup>lt;sup>b</sup>4-6"MG = 4 to 6 inch ivyleaf morningglory.

<sup>°</sup>DAT = Days after treatment.