

2009 Huskie in grain sorghum (L0951).

A field study was initiated near Lincoln, Nebraska to measure crop response and weed control efficacy of Huskie in grain sorghum. The experimental design was a randomized complete block with four replications. Plots were 10 feet wide by 30 feet long and located on a Sharpesburg silty clay loam soil with an organic matter of 3.1 % and a pH of 6.6. Dekalb 'DK54' sorghum was planted on May 15. Soybeans emerged on May 29. Preemergent herbicides were applied on May 15, early post herbicides on June 11, and late post herbicides on June 24. Herbicides were applied with a tractor mounted sprayer calibrated to deliver 15 gallons per acre at 40 psi with Teejet 110015 AIXR nozzles. The environmental conditions at the time of spraying are given in Table 1. Rainfall received May 5 – July 4 is listed in Table 2.

Major weeds consisted of velvetleaf (*Abutilon theophrasti*), palmer amaranth (*Amaranthus palmeri*), sunflower (*Helianthus annuus*), and green foxtail (*Setaria viridis*) species at average densities of 5, 4, 10, and 1 plants/ft². Weed densities were taken at the time of spraying in the center of the plot, two ft² samples were taken. Plots were evaluated using visual ratings. The preemergence application of Dual II Magnum suppressed Palmer amaranth and green foxtail growth 60-70%, but had little effect on velvetleaf or sunflower. There was more visible crop injury (bleaching and chlorosis) following the B application timing than the C application timing. However, injury was slight and the plants quickly grew out. Control of velvetleaf, palmer amaranth and common sunflower was comparable when treated with Huskie+Atrazine at both the B and C timings. The addition of 2,4-D and Banvel did not increase control of these species. Control of the three species above, from Huskie+Atrazine was greater than from Buctril+Atrazine. Control with Huskie alone at the B timing was equal to that of Huskie+Atrazine on the species evaluated in this study. Huskie alone at the C timing was not as effective, especially on sunflower.

Table 1. Environmental conditions at the Time of Herbicide Application.

Date	Air Temperature (F)	Soil Temperature At 4 in (F)	Humidity	Wind Speed & direction (mph)	Time of Day	Application Timing	Weed Heights (inches)			
							ABUTH	AMAPA	HELAN	SETVI
May 15	64	64	93	5 SE	12:30 pm	PRE	0	0	0	0
June 11	64	71	68	5 NNE	9:30 am	EPOST	3	2	6	2
June 24	78	83	65	4 SSE	9:00 am	LPOST	12	10	18	6

Table 2. Rainfall received May 5 – July 4.

Date	Amount (in)	Date	Amount (in)
May 6	0.11	June 7	0.83
May 8	0.08	June 12	0.47
May 12	0.14	June 15	0.24
May 13	0.39	June 16	0.11
May 26	0.12	June 20	0.27
May 27	0.56	June 21	0.23
June 1	0.27	June 22	0.73
June 2	0.21	July 3	0.88
June 6	1.14	June 20	0.27

Table 3. Huskie in grain sorghum

Treatment	Rate	Unit	Application Timing	Injury	Velvetlf	Palmr amth	Sunflwr	Gr foxtl	Velvetlf	Palmr amth	Sunflwr	Gr foxtl	Velvetlf	Palmr amth	Sunflwr	Gr foxtl		
				PHYNEC	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
				%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
				6/18/09	6/18/09	6/18/09	6/18/09	6/18/09	7/2/09	7/2/09	7/2/09	7/2/09	7/29/09	7/29/09	7/29/09	7/29/09	7/29/09	7/29/09
Dual II Magnum	1	pt/a	PRE	0	20	61.3	20	60	95	94.8	92.5	81.3	95	94.8	92.5	80		
Huskie + AMS	13	oz/a	LPOST															
Aatrex	1	pt/a	LPOST															
2,4-D ester	8	oz/a	LPOST															
Dual II Magnum	1	pt/a	PRE	0	20	60	22.5	60	90	92.5	86.3	77.5	90	92.5	86.3	73.8		
Huskie + AMS	13	oz/a	LPOST															
Aatrex	1	pt/a	LPOST															
Banvel	4	oz/a	LPOST															
Dual II Magnum	1	pt/a	PRE	0	20	67.5	21.3	62.5	67.5	82.5	52.5	73.8	55	75	32.5	67.5		
Buctril	12	oz/a	LPOST															
Aatrex + NIS	1	pt/a	LPOST															
Dual II Magnum	1	pt/a	PRE	3.8	73.8	82.5	66.3	76.3	93.8	95	93.8	85	93.8	95	93.8	83.8		
Huskie + AMS	13	oz/a	EPOST															
Dual II Magnum	1	pt/a	PRE	0	20	62.5	20	61.3	86.3	86.3	71.3	78.8	83.8	85	66.3	72.5		
Huskie + AMS	13	oz/a	LPOST															
LSD (P=.05)				0.99	13.3	7.88	13.55	9.66	8.98	5.29	9.01	11.92	13.92	8.06	10.44	16.13		