Bayer spring wheat herbicide trial at Crookston, MN - 1997. Durgan, Beverly R., Eric Spandl, and Jim Cameron. This experiment was designed to evaluate wild oat control and wheat / barley injury with various tank mixes of MKH 6562 alone and with other broadleaf herbicides. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the experimental area received 100 lb/A of N and was fall plowed. In the spring the experimental area was disked and harrowed. 'Pioneer 2375' hard red spring wheat and 'Stander' Barley were seeded on May 6 at 1.5 and 1.75 Bu/A respectively. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 30 psi using 80015 flat fan nozzles. The experimental design was a randomized complete block with three replications and plot size was 10 by 16 ft. Application data and environmental conditions are listed below. Crop injury was visually rated on June 17, June 23, June 30 and July 14. Weed control was visually rated on June 30 and July 14. Wheat heights were measured and yields taken. All data are presented in the table below.

Treatment Date	June 11
Target weed or crop stage	3-5 leaf Wioa
Soil Moisture	dry
Sky	clear
Wind	calm
Air Temperature (°F)	69
Rainfall before Application	
Week 1 (inch)	0.00
Rainfall after Application	
Week 1 (inch)	0.81
Week 2 (inch)	3.28
Wheat leaf no.	5
Barley leaf no.	5

Table 1. Bayer herbicide trial in hard red spring wheat at Crookston, MN - 1997 (Durgan, Spandl, and Cameron).

Treatment	Rate	Wioa Control 6/30	Wioa Control 7/14	Wheat Injury 6/17	Wheat Injury 6/23	Wheat Injury 6/30	Wheat Injury 7/14	Height	Yield
	(lb/A)	(%)		(%)				(inch)	(Bu/A)
Postemergence (June 11)									
MKH 6562 + NIS[1]	0.027 + 0.25%	53	78	13	30	17	5	29	39
MKH 6562 + 2,4-D diethylamine + NIS	0.027 + 0.5 + 0.25%	50	82	17	25	18	7	28	43
MKH 6562 + 2,4-D butoxyethyl ester + NIS	0.027 + 0.5 + 0.25%	52	73	13	27	17	5	30	37
MKH 6562 + thifensulfuron & tribenuron[2] + 2,4-D butoxyethyl ester + NIS	0.027 + 0.011 & 0.005 + 0.25 + 0.25%	52	81	13	25	13	3	30	40
MKH 6562 + bromoxynil + MCPA ester	0.027 + 0.25 + 0.25	48	75	18	25	18	8	29	41
MKH 6562 + thifensulfuron & tribenuron + NIS	0.027 + 0.011 & 0.005 + 0.25%	52	85	15	32	23	13	28	40
Imazamethabenz[3] + NIS + COC[4]	0.31 + 0.25% + 2.5%	48	77	10	18	8	0	31	39
HOE 1133	0.104	67	96	8	20	7	0	31	41
Weedy check		--	--	0	0	0	0	29	32
LSD (0.05)		8	ns	4	8	4	3	ns	ns

[1] NIS = Class Preference nonionic surfactant.
[2] Premix = Harmony Extra 75DF.
[3] Assert 67SG.
[4] COC = Class Crop Crop Oil Concentrate.

Table 2. Bayer herbicide trial in barley at Crookston, MN - 1997 (Durgan, Spandl, and Cameron).

Treatment	Rate	Wioa Control 6/30	Wioa Control 7/14	Barley Injury 6/17	Barley Injury 6/23	Barley Injury 6/30	Barley Injury 7/14	Height	Yield
	(lb/A)	(%)		(%)				(inch)	(Bu/A)
Postemergence (June 11)									
MKH 6562 + NIS[1]	0.027 + 0.25%	47	88	17	50	48	30	30	71
MKH 6562 + 2,4-D diethylamine + NIS	0.027 + 0.5 + 0.25%	47	94	22	45	35	25	30	75
MKH 6562 + 2,4-D butoxyethyl ester + NIS	0.027 + 0.5 + 0.25%	47	90	15	45	42	27	28	70
MKH 6562 + thifensulfuron & tribenuron[2] + 2,4-D butoxyethyl ester + NIS	0.027 + 0.011 & 0.005 + 0.25 + 0.25%	45	89	17	45	40	25	31	75
MKH 6562 + bromoxynil + MCPA ester	0.027 + 0.25 + 0.25	47	90	22	48	52	32	30	77
MKH 6562 + thifensulfuron & tribenuron + NIS	0.027 + 0.011 & 0.005 + 0.25%	47	94	18	48	55	30	30	78
Imazamethabenz[3] + NIS + COC[4]	0.31 + 0.25% + 2.5%	45	91	15	37	33	22	31	83
HOE 1133	0.104	68	98	5	7	5	0	33	95
Weedy check		--	--	0	0	0	0	30	73
LSD (0.05)		8	ns	3	5	11	6	ns	9

[1] NIS = Class Preference nonionic surfactant.
[2] Premix = Harmony Extra 75DF.
[3] Assert 67SG.
[4] COC = Class Crop Crop Oil Concentrate.