

Herbicide Performance in Corn at Morris, MN - 2002. Jeffrey L. Gunsolus and George Nelson. The experimental area was in soybeans in 2001. An 18-46-60 fertilizer was broadcast applied on October 19, 2001 and a 100-00-00 broadcast on October 24th and incorporated via chisel plow. The trial site was field cultivated for seedbed preparation on May 15, 2002 and seeded that same day. The study was seeded in 4-row plots at 32,000 seeds per acre to NK 42N7 LL-BT-IT corn with a Hiniker planter, Counter CR insecticide was applied at 6 lb/ac at seeding. Pre-emergence treatments were applied on May 16th with a slight breeze (5 mph) out of the west. All Post-emergence treatments were applied at V4 (6 leaf) stage of corn on June 14th, with the wind out of northwest at 10-15 mph, and the high temperature for the day was 55 degrees. At application pigweed was 3-5 inches, lambsquarter 2-4 inches, and green foxtail 2-4 inches in height. The corn was not harvested for yield due to severe lodging from strong winds on July 20th. Data are presented in the table below.

Table. Herbicide performance in corn at Morris, MN - 2002. (Gunsolus and Nelson).

Treatment	Rate (lb/A)	Weed Control			Corn Injury
		Gr/ye ¹	Colq	Poam (%)	
(Preemergence)					
Acetochlor ² + flumetsulan & clopyralid ³	2.2 + 0.047 & 0.125	92	50	77	1
Isoxaflutole + flufenacet + atrazine	0.07 + 0.375 + 1.0	93	86	72	0
(Preemergence) + (Postemergence)					
(Acetochlor) + (flumetsulan & clopyralid + atrazine + COC ⁴ + AMS ⁵)	(2.2) + (0.034 & 0.094 + 0.75 + 1% + 2.5)	99	100	100	2
(Acetochlor) + (flumetsulan & clopyralid + dicamba ⁶ + NIS ⁷ + AMS)	(2.2) + (0.034 & 0.094 + 0.125 + 0.25% + 2.5)	95	100	100	5
(Dimethenamid) + (flumetsulan & clopyralid + carfentrazone + NIS + AMS)	(0.094) + (0.034 & 0.094 + 0.008 + 0.25% + 2.5)	93	88	76	1
(Dimethenamid) + (carfentrazone + atrazine + COC)	(0.094) + (0.008 + 1.0 + 1%)	92	100	99	5
(Dimethenamid) + (dicamba & diflufenzopyr ⁸ + NIS + AMS)	(0.094) + (0.128 & 0.051 + 0.25% + 1.0)	98	100	100	0
(Flufenacet & metribuzin ⁹) + (AE F130360 + MSO + 28%N)	(0.128 & 0.5) + (0.03 + 0.94% + 2.0%)	99	67	97	0
(S-metolachlor & CGA-154281 ¹⁰) + mesotrione + atrazine + COC + 28%N ¹¹)	(1.91) + (0.094 + 0.125 + 1% + 2.5%)	91	100	100	0
(S-metolachlor & CGA-154281) + (primisulfuron & dicamba ¹² + COC + 28%N)	(1.91) + (0.023 & 0.125 + 1% + 2.5%)	94	97	97	0
(S-metolachlor & CGA-154281) + (nicosulfuron & rimsulfuron ¹³ + mesotrione + atrazine + COC + 28%N)	(0.97) + (0.016 & 0.008 + 0.094 + 0.25 + 1% + 2.5%)	99	100	100	0
(S-metolachlor & CGA-154281) + (mesotrione + glufosinate + AMS)	(0.97) + (0.094 + 0.18 + 3.0)	99	96	87	0
(Flufenacet) + (AE F130360 + dicamba & diflufenzopyr MSO + 28%N)	(0.375) + (0.03 + 0.128 & 0.051 + 0.94% + 2.0%)	98	98	99	0
(S-metolachlor & CGA-154281) + (nicosulfuron & rimsulfuron & clopyralid & flumetsulam ¹⁴ + atrazine + COC + 28%N)	(0.71) + (0.014 & 0.014 & 0.113 & 0.042 + 0.125 & 0.5 + 1% + 2.5%)	99	100	100	0
(Flufenacet) + (glufosinate + atrazine + AMS)	(0.375) + (0.31 + 0.5 + 3.0)	100	99	100	0
(Acetochlor ¹⁵) + MON 12075 + NIS	(2.0) + (0.17 + 0.25%)	98	99	100	0
(Postemergence)					
Imazethapyr & imazapyr ¹⁶ + dicamba & atrazine ¹⁷ + NIS + AMS	0.042 & 0.014 + 0.28 & 0.54 + 0.25% + 2.5	98	99	98	1
Nicosulfuron & rimsulfuron + mesotrione + atrazine + COC + AMS	0.023 & 0.012 + 0.063 + 0.25 + 1% + 2.0	100	100	100	0
Nicosulfuron & rimsulfuron + flumetsulan & clopyralid + atrazine + COC + AMS	0.023 & 0.012 + 0.034 & 0.094 + 0.5 + 1% + 2.0	98	98	98	0
Nicosulfuron & rimsulfuron + carfentrazone + atrazine + COC + AMS	0.023 & 0.012 + 0.008 + 0.5 + 1% + 2.0	96	98	94	11
Nicosulfuron & rimsulfuron & clopyralid & flumetsulam + dicamba + atrazine + COC + AMS	0.014 & 0.014 & 0.113 & 0.042 + 0.125 & 0.5 + 1% + 2.0	97	99	98	4
Nicosulfuron & rimsulfuron & clopyralid & flumetsulam + mesotrione + atrazine + COC + AMS	0.014 & 0.014 & 0.113 & 0.042 + 0.031 & 0.25 + 1% + 2.0	97	99	95	0
Weedy check		-	-	-	0
Weedfree check		100	100	100	0
LSD (0.05)		5	7	9	4

¹ Gr/ye = Green and yellow foxtail.

² Surpass 6.4E.

³ Hornet 68.5DF.

⁴ COC = Class 17% crop oil concentrate.

⁵ AMS = ammonium sulfate.

⁶ Clarity 4L.

⁷ NIS = Class preference nonionic surfactant.

⁸ Distinct 70DF.

⁹ Axiom 60DF

¹⁰ Dual II Magnum 7.64E.

¹¹ 28%N = 28% aqueous solution of urea and ammonium nitrate.

¹² Northstar 47.4WG.

¹³ Steadfast 75DF

¹⁴ Accent Gold 83.8DF.

¹⁵ Harness 7E.

¹⁶ Lightning 70DF.

¹⁷ Marksman 3.3F.