

**Herbicide Performance in Corn at Morris, MN - 2001.** Jeffrey L. Gunsolus and George Nelson. The previous crop was soybeans. A 31-80-80 fertilizer was broadcast applied on October 20, 2000 and a 120-00-00 fertilizer was broadcast on November 3 and incorporated via chisel plow. The trial site was field cultivated on May 9, 2001. The site was field cultivated a second time on May 15 and seeded on May 16. The study was seeded in 4-row plots at 34,000 seeds per acre to NK 42N7 LL-BT-IT corn with a Hiniker planter, Counter CR insecticide was applied at 6 lb/A at seeding. Preemergence treatments were applied on May 17 with the wind out of the west at 10-20 mph. Postemergence treatments were applied at 2-collar (5 leaf) stage of corn on June 19, wind out of southwest at 10-15 mph, and the high temperature for the day was 73 degrees. Weed control ratings were taken on July 7. No crop injury or stand loss was noted. The corn was harvested with an Almaco plot combine on October 15 with a harvest area of 137.5 square feet (5 ft. by 27.5 ft.). Data are presented in the table below.

**Table. Herbicide performance in corn at Morris, MN - 2001. (Gunsolus and Nelson).**

Treatment	Rate (lb/A)	Weed Control				Corn Yield (Bu/A)
		Gr/ye <sup>1</sup>	Colq	Poam	Wimu	
		------(%)-----				
<b>(Preemergence)</b>						
Acetochlor <sup>2</sup> + flumetsulan & clopyralid <sup>3</sup>	2.2 + 0.047 & 0.125	92	1100	100	100	109
<b>(Preemergence) + (Postemergence)</b>						
(Acetochlor) + (flumetsulan & clopyralid + atrazine + COC <sup>4</sup> + AMS <sup>5</sup> )	(2.2) + (0.034 & 0.094 + 0.75 + 1% + 2.5)	97	100	100	100	111
(Acetochlor) + (flumetsulan & clopyralid + dicamba <sup>6</sup> + NIS <sup>7</sup> + AMS)	(2.2) + (0.034 & 0.094 + 0.125 + 0.25% + 2.5)	77	95	100	100	112
(Acetochlor) + (flumetsulan & clopyralid + carfentrazone + NIS + AMS)	(2.2) + (0.034 & 0.094 + 0.008 + 0.25% + 2.5)	95	100	100	100	116
(Acetochlor) + (carfentrazone + atrazine + COC)	(2.2) + (0.008 + 1.0 + 1%)	96	100	100	100	124
(Acetochlor) + (carfentrazone + atrazine + dicamba + NIS)	(2.2) + (0.008 + 0.5 + 0.125 + 0.25%)	95	100	100	100	97
(Dimethenamid) + (dicamba & diflufenzopyr <sup>8</sup> + NIS + AMS)	(1.0) + (0.125 & 0.05 + 0.25% + 1.0)	94	100	100	100	114
(Dimethenamid) + (nicosulfuron & dicamba & diflufenzopyr <sup>9</sup> + dicamba & SAN 1269H + NIS + AMS)	(0.75) + (0.023 & 0.093 & 0.037 + 0.03 & 0.012 + 0.25% + 1.0)	94	100	100	100	115
(S-metolachlor & CGA-154281 <sup>10</sup> ) + mesotrione + atrazine + COC + 28%N <sup>11</sup> )	(1.91) + (0.09 + 0.25 + 1% + 2.5%)	98	100	100	100	123
(S-metolachlor & CGA-154281) + (primisulfuron & dicamba <sup>12</sup> + COC + 28%N)	(1.91) + (0.023 & 0.125 + 1% + 2.5%)	98	100	100	100	106
(S-metolachlor & CGA-154281) + (primisulfuron & dicamba <sup>12</sup> + nicosulfuron + COC + 28%N)	(0.97) + (0.019 & 0.1 + 0.015 + 1% + 2.5%)	97	100	100	100	119
(S-metolachlor & CGA-154281) + (primisulfuron & dicamba + atrazine + COC + 28%N)	(0.97) + (0.019 & 0.1 + 0.5 + 1% + 2.5%)	96	100	100	100	103
(FOE 5043 & metribuzin <sup>13</sup> ) + (flumetsulan & clopyralid + COC + 28%N)	(0.75 & 0.187) + (0.034 & 0.094 + 1% + 2.5%)	92	100	100	100	114
(Acetochlor) + (nicosulfuron & rimsulfuron & clopyralid & flumetsulam <sup>14</sup> + atrazine + COC + 28%N)	(1.2) + (0.012 & 0.012 & 0.094 & 0.034 + 0.8 + 1% + 2.5%)	99	75	75	75	130
(RPA 210772 <sup>15</sup> ) + (glufosinate + atrazine + AMS)	(0.07) + (0.31 + 1.0 + 3.0)	99	100	100	100	118
(FOE 5043) + (glufosinate + atrazine + AMS)	(0.375) + (0.31 + 1.0 + 3.0)	96	75	75	75	116
(Acetochlor <sup>16</sup> ) + MON 12075 + NIS	(1.09) + (0.17 + 0.25%)	91	100	100	100	123
<b>(Postemergence)</b>						
Imazethapyr & imazapyr <sup>17</sup> + dicamba & atrazine <sup>18</sup> + NIS + AMS	0.042 & 0.014 + 0.27 & 0.52 + 0.25% + 2.5	85	99	100	100	119
Nicosulfuron & rimsulfuron <sup>19</sup> + mesotrione + atrazine + COC + 28%N	0.023 & 0.012 + 0.06 + 0.25 + 1% + 2.5%	84	100	100	10	123
Nicosulfuron & rimsulfuron + flumetsulan & clopyralid + atrazine + COC + 28%N	0.023 & 0.012 + 0.034 & 0.094 + 0.5 + 1% + 2.5%	84	100	99	100	110
Nicosulfuron & rimsulfuron + carfentrazone + atrazine + COC + 28%N	0.023 & 0.012 + 0.008 + 0.5 + 1% + 2.5%	84	100	100	100	117
Nicosulfuron & rimsulfuron & clopyralid & flumetsulam + dicamba & atrazine + COC + 28%N	0.012 & 0.012 & 0.094 & 0.034 + 0.14 & 0.26 + 1% + 2.5%	82	100	100	100	123
Weedy check		-	-	-	-	72
Weedfree check		100	100	100	100	114
LSD (0.05)	--	12	ns	ns	ns	21

<sup>1</sup> Gr/ye = Green and yellow foxtail.

<sup>2</sup> Surpass 6.4E.

<sup>3</sup> Hornet 68.5DF.

<sup>4</sup> COC = Class 17% crop oil concentrate.

<sup>5</sup> AMS = ammonium sulfate.

<sup>6</sup> Clarity 4L..

<sup>7</sup> NIS = Class preference nonionic surfactant.

<sup>8</sup> Distinct 70DF.

<sup>9</sup> Celebrity Plus 75.3DF.

<sup>10</sup> Dual II Magnum 7.64E.

<sup>11</sup> 28%N = 28% aqueous solution of urea and ammonium nitrate.

<sup>12</sup> Northstar 47.4WG.

<sup>13</sup> Axiom 60DF.

<sup>14</sup> Accent Gold 83.8DF.

<sup>15</sup> Balance Pro 4L.

<sup>16</sup> Harness 7E.

<sup>17</sup> Lightning 70DF.

<sup>18</sup> Marksman 3.3F.

<sup>19</sup> Steadfast 75DF