

**Table 1. Evaluation of various preemergence and postemergence applied herbicides for woolly cupgrass control in corn.**

Treatment <sup>a</sup>	Rate Product/acre	Appl time	Corn <sup>b</sup> stand	Corn injury		Erbvi 6/12/03	Amata 6/12/03	Cheal 6/12/03
				6/4/03	6/12/03			
				----- (%)	-----	---	(% weed control <sup>c</sup> )	---
Untreated	-	-	32	0	0	0	0	0
Balance Pro 4SC + Lumax 3.95SE	1.5 fl oz + 3.0 qt	PRE	32	0	0	98	99	99
Balance Pro 4SC + Degree Xtra 4.04CS	1.5 fl oz + 3.7 qt	PRE	32	0	0	96	99	99
Balance Pro 4SC + Keystone 5.25SE	1.5 fl oz + 2.6 qt	PRE	33	0	0	96	99	99
Epic 58DF + Atrazine 4L	14 oz wt + 1.25 qt	PRE	34	0	0	96	99	69
Balance Pro 4SC + (Liberty 1.67SL + Atrazine 4L + AMS)	1.5 fl oz + (32 fl oz + 1.0 qt + 3.0 lb)	PRE + (MPOST)	34	0	0	78	99	99
Balance Pro 4SC + Atrazine 4L + (Option 35WDG + MSO + 28% UAN)	1.5 fl oz + 1.0 qt + (1.5 oz wt + 1.5 pt + 1.5 qt)	PRE + (MPOST)	32	0	0	87	99	99
Balance Pro 4SC + Atrazine 4L + (Equip 32WG + MSO + 28% UAN)	1.5 fl oz + 1.0 qt + (1.5 oz wt + 1.5 pt + 1.5 qt)	PRE + (MPOST)	33	0	0	80	99	99
Balance Pro 4SC + Define 4SC + Atrazine 4L	2.0 fl oz + 17.0 fl oz + 2.0 qt	PRE	32	0	0	93	99	99
Liberty 1.67SL + Define 4SC + Atrazine 4L + AMS	32.0 fl oz + 7.5 fl oz + 1.0 qt + 3.0 lb	EPOST	32	0	0	0	0	0
Liberty 1.67SL + Atrazine 4L + AMS	32.0 fl oz + 1.5 qt + 3.0 lb	EPOST	33	0	0	0	0	0
Bicep II Magnum 5.5L + (Steadfast 75WG + Distinct 70WG + COC + AMS)	0.84 qt + (0.75 oz wt + 2.0 oz wt + 1.0 % v/v + 2.0 lb)	PRE + (MPOST)	32	0	0	53	98	99
Steadfast 75WG + Atrazine 4L + Callisto 4SC + COC + 28% UAN	0.75 oz wt + 0.5 qt + 3.0 fl oz + 1.0 %v/v + 2.5 %v/v	MPOST	31	0	0	0	0	0
Prowl H2O 3.8 + Steadfast 75WG + Callisto 4SC + COC + 28% UAN	4.0 pt + 0.75 oz wt + 3.0 fl oz + 1.0% v/v + 2.5 % v/v	EPOST	34	0	0	0	0	0
Celebrity Plus + NIS + 28% UAN	4.7 oz wt + 0.25% v/v + 2.5 % v/v	MPOST	32	0	0	0	0	0
<b>LSD (P=0.05)</b>			<b>3</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>22</b>

<sup>a</sup>AMS = ammonium sulfate fertilizer from Agrilience, LLC; MSO = methylated seed oil plus surfactant from UAP-Loveland Industries; 28%UAN = mixture of urea and ammonium sulfate from United Suppliers; COC = Herbimax crop oil concentrate from UAP - Loveland Industries; NIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries.

<sup>b</sup>Corn stand per 17' 5" row feet on June 12.

<sup>c</sup>% weed control = Erbvi = woolly cupgrass, Amata = common waterhemp, Cheal = common lambsquarters.

**Table 2. Evaluation of various preemergence and postemergence applied herbicides for woolly cupgrass control in corn.**

Treatment <sup>a</sup>	Rate Product/acre	Appl time	Corn injury		Erbvi 6/27/03	Amata 6/27/03	Cheal 6/27/03
			6/21/03	6/27/03			
			----- (%) -----		--- (% weed control <sup>b</sup> ) ---		
Untreated	-	-	0	0	0	0	0
Balance Pro 4SC + Lumax 3.95SE	1.5 fl oz + 3.0 qt	PRE	0	0	95	99	99
Balance Pro 4SC + Degree Xtra 4.04CS	1.5 fl oz + 3.7 qt	PRE	0	0	96	99	99
Balance Pro 4SC + Keystone 5.25SE	1.5 fl oz + 2.6 qt	PRE	0	0	95	99	99
Epic 58DF + Atrazine 4L	14 oz wt + 1.25 qt	PRE	0	0	95	99	99
Balance Pro 4SC + (Liberty 1.67SL + Atrazine 4L + AMS)	1.5 fl oz + (32 fl oz + 1.0 qt + 3.0 lb)	PRE + (MPOST)	0	0	99	99	99
Balance Pro 4SC + Atrazine 4L + (Option 35WDG + MSO + 28% UAN)	1.5 fl oz + 1.0 qt + (1.5 oz wt + 1.5 pt + 1.5 qt)	PRE + (MPOST)	0	17	90	99	99
Balance Pro 4SC + Atrazine 4L + (Equip 32WG + MSO + 28% UAN)	1.5 fl oz + 1.0 qt + (1.5 oz wt + 1.5 pt + 1.5 qt)	PRE + (MPOST)	10	10	87	99	99
Balance Pro 4SC + Define 4SC + Atrazine 4L	2.0 fl oz + 17.0 fl oz + 2.0 qt	PRE	0	0	90	99	99
Liberty 1.67SL + Define 4SC + Atrazine 4L + AMS	32.0 fl oz + 7.5 fl oz + 1.0 qt + 3.0 lb	EPOST	8	5	99	99	99
Liberty 1.67SL + Atrazine 4L + AMS	32.0 fl oz + 1.5 qt + 3.0 lb	EPOST	7	0	99	99	99
Bicep II Magnum 5.5L + (Steadfast 75WG + Distinct 70WG + COC + AMS)	0.84 qt + (0.75 oz wt + 2.0 oz wt + 1.0 % v/v + 2.0 lb)	PRE + (MPOST)	0	15	72	99	99
Steadfast 75WG + Atrazine 4L + Callisto 4SC + COC + 28% UAN	0.75 oz wt + 0.5 qt + 3.0 fl oz + 1.0 %v/v + 2.5 %v/v	MPOST	0	13	73	85	93
Prowl H2O 3.8 + Steadfast 75WG + Callisto 4SC + COC + 28% UAN	4.0 pt + 0.75 oz wt + 3.0 fl oz + 1.0% v/v + 2.5 % v/v	EPOST	10	10	72	63	62
Celebrity Plus + NIS + 28% UAN	4.7 oz wt + 0.25% v/v + 2.5 % v/v	MPOST	0	12	68	85	85
<b>LSD (P=0.05)</b>			<b>4</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>3</b>

<sup>a</sup>AMS = ammonium sulfate fertilizer from Agrilience, LLC; MSO = methylated seed oil plus surfactant from UAP-Loveland Industries; 28%UAN = mixture of urea and ammonium sulfate from United Suppliers; COC = Herbimax crop oil concentrate from UAP - Loveland Industries; NIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries.

<sup>b</sup>% weed control = Erbvi = woolly cupgrass, Amata = common waterhemp, Cheal = common lambsquarters.

**Table 3. Evaluation of various preemergence and postemergence applied herbicides for woolly cupgrass control in corn.**

Treatment <sup>a</sup>	Rate Product/acre	Appl time	Erbvi Amata Cheal Erbvi Amata Cheal 7/11/03 7/11/03 7/11/03 8/27/03 8/27/03 8/27/03 ----- (% weed control <sup>b</sup> ) -----					
			Untreated	-	-	0	0	0
Balance Pro 4SC + Lumax 3.95SE	1.5 fl oz + 3.0 qt	PRE	92	98	99	92	98	99
Balance Pro 4SC + Degree Xtra 4.04CS	1.5 fl oz + 3.7 qt	PRE	95	99	99	95	99	99
Balance Pro 4SC + Keystone 5.25SE	1.5 fl oz + 2.6 qt	PRE	93	99	99	93	99	99
Epic 58DF + Atrazine 4L	14 oz wt + 1.25 qt	PRE	93	99	99	92	99	99
Balance Pro 4SC + (Liberty 1.67SL + Atrazine 4L + AMS)	1.5 fl oz + (32 fl oz + 1.0 qt + 3.0 lb)	PRE + (MPOST)	90	99	99	92	99	99
Balance Pro 4SC + Atrazine 4L + (Option 35WDG + MSO + 28% UAN)	1.5 fl oz + 1.0 qt + (1.5 oz wt + 1.5 pt + 1.5 qt)	PRE + (MPOST)	92	99	99	92	99	99
Balance Pro 4SC + Atrazine 4L + (Equip 32WG + MSO + 28% UAN)	1.5 fl oz + 1.0 qt + (1.5 oz wt + 1.5 pt + 1.5 qt)	PRE + (MPOST)	88	98	99	85	98	99
Balance Pro 4SC + Define 4SC + Atrazine 4L	2.0 fl oz + 17.0 fl oz + 2.0 qt	PRE	90	99	99	90	99	99
Liberty 1.67SL + Define 4SC + Atrazine 4L + AMS	32.0 fl oz + 7.5 fl oz + 1.0 qt + 3.0 lb	EPOST	88	98	99	88	98	99
Liberty 1.67SL + Atrazine 4L + AMS	32.0 fl oz + 1.5 qt + 3.0 lb	EPOST	93	96	99	90	96	99
Bicep II Magnum 5.5L + (Steadfast 75WG + Distinct 70WG + COC + AMS)	0.84 qt + (0.75 oz wt + 2.0 oz wt + 1.0 % v/v + 2.0 lb)	PRE + (MPOST)	85	99	99	80	99	99
Steadfast 75WG + Atrazine 4L + Callisto 4SC + COC + 28% UAN	0.75 oz wt + 0.5 qt + 3.0 fl oz + 1.0 %v/v + 2.5 %v/v	MPOST	83	99	99	75	99	99
Prowl H2O 3.8 + Steadfast 75WG + Callisto 4SC + COC + 28% UAN	4.0 pt + 0.75 oz wt + 3.0 fl oz + 1.0% v/v + 2.5 % v/v	EPOST	80	52	82	70	45	82
Celebrity Plus + NIS + 28% UAN	4.7 oz wt + 0.25% v/v + 2.5 % v/v	MPOST	80	93	98	70	95	98
<b>LSD (P=0.05)</b>			<b>6</b>	<b>6</b>	<b>2</b>	<b>8</b>	<b>6</b>	<b>2</b>

<sup>a</sup>AMS = ammonium sulfate fertilizer from Agrilience, LLC; MSO = methylated seed oil plus surfactant from UAP-Loveland Industries; 28%UAN = mixture of urea and ammonium sulfate from United Suppliers; COC = Herbimax crop oil concentrate from UAP - Loveland Industries; NIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries.

<sup>b</sup>% weed control = Erbvi = woolly cupgrass, Amata = common waterhemp, Cheal = common lambsquarters.