

Table 1. Evaluation of crop phytotoxicity and weed control in corn from preemergence and postemergence applied herbicides.

Treatment ^a	Rate Product/Acre	Appl time	Corn inj.	Setfa	Abuth	Amata	Cheal	Polpy
			6/24 - (%) -	6/24 ----- (% weed control ^b) -----	6/24	6/24	6/24	6/24
Untreated	-	-	0	0	0	0	0	0
Define 60DF + (Marksman 3.2FL + 28% UAN)	21.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	5	99	99	99	99	99
Axiom 68DF + (Marksman 3.2FL + 28% UAN)	23.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	5	99	99	99	99	99
Epic 58DF + (Marksman 3.2FL + 28% UAN)	12.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	7	99	99	99	99	99
Surpass 6.4EC + (Hornet 68.5WDG + Callisto 4SC + Atrazine 90DF + 28% UAN + COC)	2.5 pt + (3.0 oz + 1.5 oz + 0.28 lb + 2.5 % + 1.0 %)	PRE + (POST)	10	98	88	99	85	93
Surpass 6.4EC + (Hornet 68.5WDG + Callisto 4SC + Atrazine 90DF + 28% UAN + COC)	2.5 pt + (3.0 oz + 1.0 oz + 0.28 lb + 2.5 % + 1.0 %)	PRE + (POST)	13	99	87	99	85	91
Dual II Magnum 7.64EC + (Aim 2EW + Callisto 4SC + COC + NIS)	1.67 pt + (0.5 oz + 3.0 oz + 1.0 % + 0.25 %)	PRE + (POST)	15	99	92	99	83	90
Dual II Magnum 7.64EC + (Aim 2EW + Hornet 68.5WDG + NIS)	1.67 pt + (0.5 oz + 3.0 oz + 0.25 %)	PRE + (POST)	17	98	93	99	90	95
Dual II Magnum 7.64EC + (Steadfast 75WDG + Distinct 70WG + COC + AMS)	1.67 pt + (0.75 oz + 2.0 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	7	99	98	99	93	98
Dual II Magnum 7.64EC + (Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS)	0.69 pt + (0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	5	99	99	99	99	99
Bicep II Magnum 5.5L + (Steadfast 75WDG + Distinct 70WG + COC + AMS)	0.84 qt + (0.75 oz + 2.0 oz + 1.0 % v/v + 2.0 lb)	PRE + (EPOST)	7	99	98	99	98	99
Bicep II Magnum 5.5L + (Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS)	0.84 qt + (0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	5	99	99	99	99	99
Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS	0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb	EPOST	5	99	99	99	99	99
Option 35WDG + Atrazine 90DF + MSO + AMS	1.5 oz + 17.8 oz + 1.0 % + 2.0 lb	EPOST	7	98	99	99	99	99
Balance Pro 4SC + (Option 35WDG + Atrazine 90DF + MSO + AMS)	1.5 oz + (1.5 oz + 17.8 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	7	99	99	99	99	99
Steadfast 75WDG + Atrazine 90DF + COC + AMS)	0.75 oz + 13.3 oz + 1.0 % + 2.0 lb)	POST	15	65	80	85	77	82
Steadfast 75WDG + Callisto 4SC + COC + AMS	0.75 oz + 1.5 oz + 1.0 % + 2.0 lb	POST	13	63	62	63	57	58
Harness 7EC + (Yukon 67.5WDG + NIS + AMS)	2.5 pt + (4.0 oz + 0.25% + 2.0 %)	PRE + (POST)	5	98	62	99	70	92
Accent 75DG + Yukon 67.5WDG + NIS	0.67 oz + 4.0 oz + 0.25%	POST	12	52	57	57	58	58
LSD (P=0.05)			5	7	7	6	8	8

^a28% UAN = urea ammonium sulfate fertilizer from United Supplies; COC = Herbimax crop oil concentrate from UAP-Loveland Industries; NIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries; AMS = ammonium sulfate fertilizer from Terra Industries; MSO = methylated seed oil from UAP-Loveland Industries.

^b% weed control = Setfa = giant foxtail; Abuth = velvetleaf; Amata = common waterhemp; Cheal = common lambsquarters; Polpy = Pennsylvania smartweed.

Table 2. Evaluation of crop phytotoxicity and weed control in corn from preemergence and postemergence applied herbicides.

Treatment ^a	Rate	Appl time	Corn inj. 7/11	Setfa 7/11	Abuth 7/11	Amata 7/11	Cheal 7/11	Polpy 7/11
	Product/Acre		- (%) -	----- (% weed control ^b) -----				
Untreated	-	-	0	0	0	0	0	0
Define 60DF + (Marksman 3.2FL + 28% UAN)	21.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	0	99	99	99	99	99
Axiom 68DF + (Marksman 3.2FL + 28% UAN)	23.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	0	99	99	99	99	99
Epic 58DF + (Marksman 3.2FL + 28% UAN)	12.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	0	99	99	99	99	99
Surpass 6.4EC + (Hornet 68.5WDG + Callisto 4SC + Atrazine 90DF + 28% UAN + COC)	2.5 pt + (3.0 oz + 1.5 oz + 0.28 lb + 2.5 % + 1.0 %)	PRE + (POST)	0	98	99	99	99	99
Surpass 6.4EC + (Hornet 68.5WDG + Callisto 4SC + Atrazine 90DF + 28% UAN + COC)	2.5 pt + (3.0 oz + 1.0 oz + 0.28 lb + 2.5 % + 1.0 %)	PRE + (POST)	0	99	99	99	99	99
Dual II Magnum 7.64EC + (Aim 2EW + Callisto 4SC + COC + NIS)	1.67 pt + (0.5 oz + 3.0 oz + 1.0 % + 0.25 %)	PRE + (POST)	10	98	99	99	96	98
Dual II Magnum 7.64EC + (Aim 2EW + Hornet 68.5 WDG + NIS)	1.67 pt + (0.5 oz + 3.0 oz + 0.25 %)	PRE + (POST)	8	96	95	99	90	95
Dual II Magnum 7.64EC + (Steadfast 75WDG + Distinct 70WG + COC + AMS)	1.67 pt + (0.75 oz + 2.0 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	3	99	99	99	99	99
Dual II Magnum 7.64EC + (Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS)	0.69 pt + (0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	0	99	99	99	99	99
Bicep II Magnum 5.5L + (Steadfast 75WDG + Distinct 70WG + COC + AMS)	0.84 qt + (0.75 oz + 2.0 oz + 1.0 % v/v + 2.0 lb)	PRE + (EPOST)	0	99	98	99	99	99
Bicep II Magnum 5.5L + (Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS)	0.84 qt + (0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	0	99	99	99	99	99
Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS	0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb	EPOST	0	99	99	99	99	99
Option 35WDG + Atrazine 90DF + MSO + AMS	1.5 oz + 17.8 oz + 1.0 % + 2.0 lb	EPOST	0	96	99	99	99	99
Balance Pro 4SC + (Option 35WDG + Atrazine 90DF + MSO + AMS)	1.5 oz + (1.5 oz + 17.8 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	0	99	99	99	99	99
Steadfast 75WDG + Atrazine 90DF + COC + AMS)	0.75 oz + 13.3 oz + 1.0 % + 2.0 lb)	POST	7	82	63	90	92	94
Steadfast 75WDG + Callisto 4SC + COC + AMS	0.75 oz + 1.5 oz + 1.0 % + 2.0 lb	POST	5	82	96	99	98	99
Harness 7EC + (Yukon 67.5WDG + NIS + AMS)	2.5 pt + (4.0 oz + 0.25% + 2.0 %)	PRE + (POST)	0	96	95	99	93	99
Accent 75DG + Yukon 67.5WDG + NIS	0.67 oz + 4.0 oz + 0.25%	POST	3	78	90	88	88	98
LSD (P=0.05)			3	3	3	5	4	4

^a28% UAN = urea ammonium sulfate fertilizer from United Supplies; COC = Herbimax crop oil concentrate from UAP-Loveland Industries; NIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries; AMS = ammonium sulfate fertilizer from Terra Industries; MSO = methylated seed oil from UAP-Loveland Industries.

^b% weed control = Setfa = giant foxtail; Abuth = velvetleaf; Amata = common waterhemp; Cheal = common lambsquarters; Polpy = Pennsylvania smartweed.

Table 3. Evaluation of crop phytotoxicity and weed control in corn from preemergence and postemergence applied herbicides.

Treatment ^a	Rate	Appl time	Setfa 8/23	Abuth 8/23	Amata 8/23	Cheal 8/23	Polpy 8/23	Corn yield
	Product/Acre		----- (% weed control ^b) -----					bu/acre
Untreated	-	-	0	0	0	0	0	145
Define 60DF + (Marksman 3.2FL + 28% UAN)	21.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	96	99	99	99	99	189
Axiom 68DF + (Marksman 3.2FL + 28% UAN)	23.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	99	98	99	99	99	218
Epic 58DF + (Marksman 3.2FL + 28% UAN)	12.0 oz + (2.5 pt + 2.0 qt)	PRE + (EPOST)	98	99	99	99	99	206
Surpass 6.4EC + (Hornet 68.5WDG + Callisto 4SC + Atrazine 90DF + 28% UAN + COC)	2.5 pt + (3.0 oz + 1.5 oz + 0.28 lb + 2.5 % + 1.0 %)	PRE + (POST)	96	99	99	99	99	213
Surpass 6.4EC + (Hornet 68.5WDG + Callisto 4SC + Atrazine 90DF + 28% UAN + COC)	2.5 pt + (3.0 oz + 1.0 oz + 0.28 lb + 2.5 % + 1.0 %)	PRE + (POST)	95	99	99	99	99	198
Dual II Magnum 7.64EC + (Aim 2EW + Callisto 4SC + COC + NIS)	1.67 pt + (0.5 oz + 3.0 oz + 1.0 % + 0.25 %)	PRE + (POST)	92	99	99	98	98	201
Dual II Magnum 7.64EC + (Aim 2EW + Hornet 68.5 WDG + NIS)	1.67 pt + (0.5 oz + 3.0 oz + 0.25 %)	PRE + (POST)	88	93	99	92	95	194
Dual II Magnum 7.64EC + (Steadfast 75WDG + Distinct 70WG + COC + AMS)	1.67 pt + (0.75 oz + 2.0 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	98	98	99	99	99	214
Dual II Magnum 7.64EC + (Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS)	0.69 pt + (0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	98	99	99	99	99	212
Bicep II Magnum 5.5L + (Steadfast 75WDG + Distinct 70WG + COC + AMS)	0.84 qt + (0.75 oz + 2.0 oz + 1.0 % v/v + 2.0 lb)	PRE + (EPOST)	99	98	99	99	99	204
Bicep II Magnum 5.5L + (Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS)	0.84 qt + (0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	99	99	99	99	99	205
Steadfast 75WDG + Callisto 4SC + Atrazine 90DF + COC + AMS	0.75 oz + 1.5 oz + 13.3 oz + 1.0 % + 2.0 lb	EPOST	99	99	99	99	99	213
Option 35WDG + Atrazine 90DF + MSO + AMS	1.5 oz + 17.8 oz + 1.0 % + 2.0 lb	EPOST	96	99	99	99	99	222
Balance Pro 4SC + (Option 35WDG + Atrazine 90DF + MSO + AMS)	1.5 oz + (1.5 oz + 17.8 oz + 1.0 % + 2.0 lb)	PRE + (EPOST)	99	99	99	99	99	207
Steadfast 75WDG + Atrazine 90DF + COC + AMS)	0.75 oz + 13.3 oz + 1.0 % + 2.0 lb)	POST	82	57	88	92	94	177
Steadfast 75WDG + Callisto 4SC + COC + AMS	0.75 oz + 1.5 oz + 1.0 % + 2.0 lb	POST	83	96	99	99	99	181
Harness 7EC + (Yukon 67.5WDG + NIS + AMS)	2.5 pt + (4.0 oz + 0.25% + 2.0 %)	PRE + (POST)	93	96	99	98	99	211
Accent 75DG + Yukon 67.5WDG + NIS	0.67 oz + 4.0 oz + 0.25%	POST	88	96	92	99	99	193
LSD (P=0.05)			5	4	5	3	4	34

^a28% UAN = urea ammonium sulfate fertilizer from United Supplies; COC = Herbimax crop oil concentrate from UAP-Loveland Industries; NIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries; AMS = ammonium sulfate fertilizer from Terra Industries; MSO = methylated seed oil from UAP-Loveland Industries.

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