

Table 1. Evaluation of weed control in soybeans with Gauntlet, FirstRate, Valor, and Domain applied preemergence and postemergence Glyphomax Plus, Touchdown IQ, Roundup UltraMAX, and Phoenix.

Treatment ^a	Rate Product/Acre	Appl time	Soybean inj		Setfa	Abuth	Amata	Cheal	Polpy
			7/1	7/11	7/11	7/11	7/11	7/11	7/11
			----- (%) -----		----- (% weed control ^b) -----				
Untreated			0	0	0	0	0	0	0
Gauntlet DF + (Glyphomax Plus 4SL + NIS + AMS)	2.97 oz + (1.5 pt + 0.25 % + 1.5 % w/w)	PRE + (POST1)	0	0	99	99	98	99	98
Gauntlet DF + (Glyphomax Plus + NIS + AMS)	3.95 oz + 1.5 pt + 0.25 % + 1.5 % w/w)	PRE + (POST1)	0	0	99	99	99	99	99
FirstRate 84WG + (Glyphomax Plus + AMS)	0.6 oz + (1.5 pt + 1.5 % w/w)	PRE + (POST1)	0	0	99	99	99	99	96
FirstRate 84WG + Glyphomax Plus + NIS + AMS	0.3 oz + 1.5 pt + 0.25 % + 1.5 % w/w)	POST1	3	2	99	99	93	99	95
FirstRate 84WG + Flexstar 1.88HL + Select 2EC + 28% UAN + NIS	0.3 oz + 12.0 oz + 6.0 oz + 2.5 % + 0.125 %	POST1	10	0	87	98	93	55	90
Roundup UltraMAX 5SL + Aim 2EW	26.0 oz + 0.25 oz	POST1	17	7	99	98	99	99	95
Roundup UltraMAX 5SL + AMS + (Roundup UltraMAX 5SL + AMS)	26.0 oz + 8.5 lb/100 gal + (20.0 oz + 8.5 lb/100 gal)	POST1 + (POST3)	2	0	99	99	98	99	98
Roundup UltraMAX 5SL	26.0 oz	POST1	0	0	99	96	98	99	93
Touchdown IQ 3SL + AMS + (Touchdown IQ 3SL + AMS)	32.0 oz + 8.5 lb/100 gal + (24.0 oz + 8.5 lb/100 gal)	POST1 + (POST3)	3	0	99	98	98	99	95
Valor 51WG + (Roundup UltraMAX 5SL + AMS)	1.5 oz + (26.0 oz + 2.5 lb)	PRE + (POST1)	2	0	99	99	99	99	99
Domain 60DF + (Roundup UltraMAX 5SL + AMS)	9.6 oz + (26.0 oz + 2.5 lb)	PRE + (POST1)	0	0	99	99	99	99	99
Valor 51WG + (Phoenix 2EC + FirstRate 84WG + Select 2EC + NIS)	1.5 oz + (8.0 oz + 0.3 oz + 6.0 oz + 0.25%)	PRE + (POST1)	17	5	93	93	99	95	95
Phoenix 2EC + FirstRate 84WG + NIS + AMS + (Select 2EC + COC + AMS)	9.6 oz + 0.3 oz + 0.25 % + 2.5 lb + (6.0 oz + 1.0 % + 2.5 lb)	POST1 + (POST2)	20	10	82	88	92	57	87
Cobra 2EC + FirstRate 84WG + COC + AMS + (Select 2EC + COC + AMS)	9.6 oz + 0.3 oz + 1.0 pt + 2.5 lb + (6.0 oz + 1.0 % + 2.5 lb)	POST1 + (POST2)	25	12	85	88	95	60	85
Phoenix 2EC + Harmony GT 75DF + Select 2EC + NIS + AMS	9.6 oz + 0.083 oz + 8.0 oz + 0.125 % + 2.0 lb	POST1	32	23	88	72	95	86	92
LSD (P=0.05)			3	3	2	6	4	19	4

^aNIS = Activator 90, a non-ionic surfactant from UAP-Loveland Industries; AMS = Ammonium sulfate fertilizer

from Terra Industries; 28% UAN = Urea ammonium sulfate fertilizer from United Supplies; COC = Herbimax crop oil concentrate 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 weed control in soybeans with Gauntlet, FirstRate, Valor, and Domain applied preemergence and postemergence Glyphomax Plus, Touchdown IQ, Roundup UltraMAX, and Phoenix.

Treatment ^a	Rate Product/Acre	Appl time	Soybean inj	Setfa	Abuth	Amata	Cheal	Polpy
			7/26 ---- (%) ----	7/26 ----- (% weed control ^b) -----	7/26	7/26	7/26	7/26
Untreated			0	0	0	0	0	0
Gauntlet DF + (Glyphomax Plus 4SL + NIS + AMS)	2.97 oz + (1.5 pt + 0.25 % + 1.5 % w/w)	PRE + (POST1)	0	99	99	98	99	96
Gauntlet DF + (Glyphomax Plus + NIS + AMS)	3.95 oz + 1.5 pt + 0.25 % + 1.5 % w/w)	PRE + (POST1)	0	99	99	99	99	99
FirstRate 84WG + (Glyphomax Plus + AMS)	0.6 oz + (1.5 pt + 1.5 % w/w)	PRE + (POST1)	0	99	99	99	99	98
FirstRate 84WG + Glyphomax Plus + NIS + AMS	0.3 oz + 1.5 pt + 0.25 % + 1.5 % w/w	POST1	0	99	99	90	99	95
FirstRate 84WG + Flexstar 1.88HL + Select 2EC + 28% UAN + NIS	0.3 oz + 12.0 oz + 6.0 oz + 2.5 % + 0.125 %	POST1	0	85	98	92	40	78
Roundup UltraMAX 5SL + Aim 2EW	26.0 oz + 0.25 oz	POST1	5	99	95	98	96	95
Roundup UltraMAX 5SL + AMS + (Roundup UltraMAX 5SL + AMS)	26.0 oz + 8.5 lb/100 gal + (20.0 oz + 8.5 lb/100 gal)	POST1 + (POST3)	0	99	99	98	99	98
Roundup UltraMAX 5SL	26.0 oz	POST1	0	99	96	98	99	93
Touchdown IQ 3SL + AMS + (Touchdown IQ 3SL + AMS)	32.0 oz + 8.5 lb/100 gal + (24.0 oz + 8.5 lb/100 gal)	POST1 + (POST3)	0	99	98	96	96	95
Valor 51WG + (Roundup UltraMAX 5SL + AMS)	1.5 oz + (26.0 oz + 2.5 lb)	PRE + (POST1)	0	99	99	99	99	99
Domain 60DF + (Roundup UltraMAX 5SL + AMS)	9.6 oz + (26.0 oz + 2.5 lb)	PRE + (POST1)	0	99	99	99	99	99
Valor 51WG + (Phoenix 2EC + FirstRate 84WG + Select 2EC + NIS)	1.5 oz + (8.0 oz + 0.3 oz + 6.0 oz + 0.25%)	PRE + (POST1)	2	90	95	99	91	95
Phoenix 2EC + FirstRate 84WG + NIS + AMS + (Select 2EC + COC + AMS)	9.6 oz + 0.3 oz + 0.25 % + 2.5 lb + (6.0 oz + 1.0 % + 2.5 lb)	POST1 + (POST2)	7	83	93	92	47	78
Cobra 2EC + FirstRate 84WG + COC + AMS + (Select 2EC + COC + AMS)	9.6 oz + 0.3 oz + 1.0 pt + 2.5 lb + (6.0 oz + 1.0 % + 2.5 lb)	POST1 + (POST2)	5	88	92	95	52	72
Phoenix 2EC + Harmony GT 75DF + Select 2EC + NIS + AMS	9.6 oz + 0.083 oz + 8.0 oz + 0.125 % + 2.0 lb	POST1	13	88	72	95	77	82
LSD (P=0.05)			4	4	4	5	20	7

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from Terra Industries; 28% UAN = Urea ammonium sulfate fertilizer from United Supplies; COC = Herbimax crop oil concentrate 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 weed control in soybeans with Gauntlet, FirstRate, Valor, and Domain applied preemergence and postemergence Glyphomax Plus, Touchdown IQ, Roundup UltraMAX, and Phoenix.

Treatment ^a	Rate Product/Acre	Appl time	Setfa	Abuth	Amata	Cheal	Polpy	Soybean yield -(bu/A) -
			8/23	8/23	8/23	8/23	8/23	
Untreated			0	0	0	0	0	34
Gauntlet DF + (Glyphomax Plus 4SL + NIS + AMS)	2.97 oz + (1.5 pt + 0.25 % + 1.5 % w/w)	PRE + (POST1)	99	99	98	99	96	54
Gauntlet DF + (Glyphomax Plus + NIS + AMS)	3.95 oz + 1.5 pt + 0.25 % + 1.5 % w/w)	PRE + (POST1)	99	99	99	99	99	56
FirstRate 84WG + (Glyphomax Plus + AMS)	0.6 oz + (1.5 pt + 1.5 % w/w)	PRE + (POST1)	99	99	99	99	98	57
FirstRate 84WG + Glyphomax Plus + NIS + AMS	0.3 oz + 1.5 pt + 0.25 % + 1.5 % w/w)	POST1	99	99	90	99	95	55
FirstRate 84WG + Flexstar 1.88HL + Select 2EC + 28% UAN + NIS	0.3 oz + 12.0 oz + 6.0 oz + 2.5 % + 0.125 %	POST1	85	98	92	35	78	48
Roundup UltraMAX 5SL + Aim 2EW	26.0 oz + 0.25 oz	POST1	99	95	98	98	95	55
Roundup UltraMAX 5SL + AMS + (Roundup UltraMAX 5SL + AMS)	26.0 oz + 8.5 lb/100 gal + (20.0 oz + 8.5 lb/100 gal)	POST1 + (POST3)	99	99	98	99	98	59
Roundup UltraMAX 5SL	26.0 oz	POST1	99	98	98	98	95	53
Touchdown IQ 3SL + AMS + (Touchdown IQ 3SL + AMS)	32.0 oz + 8.5 lb/100 gal + (24.0 oz + 8.5 lb/100 gal)	POST1 + (POST3)	99	99	98	98	96	56
Valor 51WG + (Roundup UltraMAX 5SL + AMS)	1.5 oz + (26.0 oz + 2.5 lb)	PRE + (POST1)	99	99	99	99	99	57
Domain 60DF + (Roundup UltraMAX 5SL + AMS)	9.6 oz + (26.0 oz + 2.5 lb)	PRE + (POST1)	99	99	99	99	99	56
Valor 51WG + (Phoenix 2EC + FirstRate 84WG + Select 2EC + NIS)	1.5 oz + (8.0 oz + 0.3 oz + 6.0 oz + 0.25%)	PRE + (POST1)	90	95	99	90	95	56
Phoenix 2EC + FirstRate 84WG + NIS + AMS + (Select 2EC + COC + AMS)	9.6 oz + 0.3 oz + 0.25 % + 2.5 lb + (6.0 oz + 1.0 % + 2.5 lb)	POST1 + (POST2)	83	93	92	47	80	51
Cobra 2EC + FirstRate 84WG + COC + AMS + (Select 2EC + COC + AMS)	9.6 oz + 0.3 oz + 1.0 pt + 2.5 lb + (6.0 oz + 1.0 % + 2.5 lb)	POST1 + (POST2)	88	92	95	40	68	46
Phoenix 2EC + Harmony GT 75DF + Select 2EC + NIS + AMS	9.6 oz + 0.083 oz + 8.0 oz + 0.125 % + 2.0 lb	POST1	88	72	95	75	82	55
LSD (P=0.05)			4	4	5	23	7	9

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from Terra Industries; 28% UAN = Urea ammonium sulfate fertilizer from United Supplies; COC = Herbimax crop oil concentrate from UAP-Loveland Industries.

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