

Table 4. Evaluation of preemergence foundation programs and glyphosate timing in Roundup Ready corn. (KC-RRYD)

Treatment	Rate	Unit/acre	Timing	Crop injury	Foxtail spp.		Lambsquarters		Velvetleaf		P. Smartweed		Waterhemp		Crop Yield	
				6/22	6/22	7/18	6/22	7/18	6/22	7/18	6/22	7/18	6/22	7/18	10/11	
				(% injury)												
					---- (% weed control) ----											
1 DUAL II MAGNUM	30	fl oz	PRE	3	83	60	40	48	58	56	33	61	58	80	150.1	
2 DUAL II MAGNUM	30	fl oz	PRE	0	95	95	92	96	95	97	90	98	87	93	170.9	
ROUNDUP ULTRA (4SL)	24	fl oz	EPOST													
FERT-21% AMS	3	lb														
3 DUAL II MAGNUM	30	fl oz	PRE	1	97	92	97	91	93	91	89	98	91	96	171.6	
ROUNDUP ULTRA (4SL)	24	fl oz	POST													
FERT-21% AMS	3	lb														
4 DUAL II MAGNUM	30	fl oz	PRE	4	98	99	86	86	98	95	60	94	92	96	153.3	
ROUNDUP ULTRA (4SL)	24	fl oz	LPOST													
FERT-21% AMS	3	lb														
5 ROUNDUP ULTRA (4SL)	24	fl oz	EPOST	0	71	75	93	95	90	98	76	97	59	79	169.1	
FERT-21% AMS	3	lb														
6 ROUNDUP ULTRA (4SL)	24	fl oz	POST	4	89	86	96	99	98	94	89	97	73	78	166.6	
FERT-21% AMS	3	lb														
7 ROUNDUP ULTRA (4SL)	24	fl oz	LPOST	10	98	99	98	97	98	96	84	99	98	98	149.2	
FERT-21% AMS	3	lb														
8 ROUNDUP ULTRA (4SL)	24	fl oz	EPOST	0	79	78	99	99	96	99	97	99	95	98	158	
FERT-21% AMS	3	lb														
ROUNDUP ULTRA (4SL)	24	fl oz	LPOST													
FERT-21% AMS	3	lb														
9 DUAL II MAGNUM	30	fl oz	PRE	0	61	75	91	99	88	99	88	99	91	98	159.7	
NORTHSTAR (47.7WG)	5	oz	POST													
NON-IONIC SURFACTANT	0.25	% v/v														
FERT-21% AMS	3	lb														
10 UNTREATED CHECK	0		CHECK	0	0	0	0	0	0	0	0	0	0	0	121.9	
LSD (0.05)				2.41	6.68	19.3	8	15.47	9.89	18.35	20.3	20.1	13.46	8.29	10.4	

Table 5. Evaluation of PRE/POST herbicide systems for weed control in corn. (KC-SYST)

Treatment	Rate	Unit	Timing	Crop Injury	Foxtail	P. Smartweed	Lambsquarters	Velvetleaf	Waterhemp
				(% injury)	-----	-----	22-Jun	-----	-----
1 HARNESS (7EC)	2.75	pt	PREPRE	0	95	92	99	98	99
HORNET (85.6DG)	2.4	oz	MPOST						
ATRAZINE(4SC)	1.5	pt							
ADJUVANT - COC (EC)	1	% v/v							
FERT-21% AMS	2	lb							
2 HARNESS (7EC)	2.75	pt	PRE	0	80	90	96	99	99
HORNET (85.6DG)	2.4	oz	MPOST						
CLARITY (4SL)	4	fl oz							
NONIONIC SURFACTANT	0.25	% v/v							
FERT-21% AMS	2	lb							
3 GUARDSMAN (5SE)	4.5	pt	PRE	2	83	99	99	94	85
DISTINCT (70WG)	4	oz	MPOST						
NONIONIC SURFACTANT	0.25	% v/v							
FERTILIZER - 28%UAN	1.25	% v/v							
4 OUTLOOK (6EC)	16	fl oz	EPOST	3	27	67	75	95	37
MARKSMAN (3.2SC)	3.5	fl oz							
FERTILIZER - 28%UAN	2.5	% v/v							
5 AE F130360 (70WG)	1.25	oz	EPOST	0	90	65	98	98	33
METH SEED OIL	1.5	pt							
FERTILIZER - 28%UAN	2	qt							
6 AE F130360 (70WG)	1.25	oz	EPOST	0	80	96	99	99	93
CALLISTO (4SC)	3	fl oz							
METH SEED OIL	1.5	pt							
FERTILIZER - 28%UAN	2	qt							
7 BALANCE PRO (4SC)	2.25	fl oz	PRE	3	85	99	99	99	99
ATRAZINE(4SC)	1	lb a.i.							
AE F130360 (70WG)	1.25	oz	EPOST						
METH SEED OIL	1.5	pt							
FERTILIZER - 28%UAN	2	qt							
8 OUTLOOK (6EC)	16	fl oz	PRE	5	98	96	96	99	94
CELEBRITY PLUS (75.3)	4.7	oz	MPOST						
NONIONIC SURFACTANT	0.25	% v/v							
FERTILIZER - 28%UAN	2.5	% v/v							
9 OUTLOOK (6EC)	16	fl oz	PRE	2	98	87	96	90	95
BASIS GOLD (89.5DF)	14	oz	MPOST						
CLARITY (4SL)	4	fl oz							
ADJUVANT - COC (EC)	1	% v/v							
FERTILIZER - 28%UAN	2	qt							
10 OUTLOOK (6EC)	16	fl oz	PRE	5	96	78	72	98	93
ACCENT GOLD (83.8WG)	2.9	oz	LPOST						
ADJUVANT - COC (EC)	1	% v/v							
FERTILIZER - 28%UAN	2	qt							

Table 5. (continued)

Treatment	Rate	Unit	Timing	Crop Injury	Foxtail	P. Smartweed	Lambsquarters	Velvetleaf	Waterhemp
				22-Jun					
12 DEGREE (3.8EC)	4	pt	PRE	7	82	88	90	99	99
NORTHSTAR (47.7WG)	5	oz	MPOST						
NONIONIC SURFACTANT	0.25	% v/v							
FERTILIZER - 28%UAN	2.5	% v/v							
12 DUAL II MAGNUM	1.66	pt	PRE	2	70	96	99	99	96
BUCTRIL + ATRAZINE	2	pt	MPOST						
13 AXIOM (68DF)	20	oz	PRE	0	88	83	99	99	98
SHOTGUN (3.25SE)	2	pt	MPOST						
14 UNTREATED CHECK			CHECK	0	0	0	0	0	0
LSD (0.05)				6.81	9	14.49	16.11	5.72	12.27

Table 6. Evaluation of various preemergence herbicides for weed control and crop injury in corn. (KC-PRE)

Treatment	Rate	Unit/acre	Timing	Crop Injury		Foxtail		Lambsquarters		Penn. Smartweed		Waterhemp		Velvetleaf	
				5/25	6/22	5/25	6/22	5/25	6/22	5/25	6/22	5/25	6/22	5/25	6/22
1 DUAL II MAGNUM	1.67	pt	PRE	0	0	75	78	78	43	85	72	93	43	77	96
2 OUTLOOK (6EC)	16	fl oz	PRE	0	0	77	77	82	47	70	58	93	43	77	68
3 DEGREE (3.8EC)	4	pt	PRE	0	0	82	73	78	50	75	58	96	60	77	62
4 HARNESS (7EC)	2.2	pt	PRE	0	0	80	73	80	52	83	65	98	70	86	65
5 AXIOM (68DF)	20	oz	PRE	2	0	82	77	83	47	82	75	96	58	85	73
6 BALANCE PRO (4SC)	3	fl oz	PRE	8	10	82	85	98	96	93	96	91	94	98	98
7 BALANCE PRO (4SC)	2.25	fl oz	PRE	2	3	95	96	99	99	96	96	99	99	99	99
SURPASS (6.4EC)	1.25	pt													
ATRAZINE(90WG)	1	lb a.i.													
8 ICIA5676/CALLISTO	5	pt	PRE	0	0	83	78	99	96	98	99	99	98	98	99
9 UNTREATED CHECK			CHECK	0	0	0	0	0	0	0	0	0	0	0	0
LSD (0.05)				5.07	5.07	12	8.83	10	10.94	12.67	18.26	8.73	17.19	9.94	26.44