

Preemergence and Postemergence Herbicides for Weed Control in Liberty Link Corn- 2007

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Location: WCREC Irrigated Farm, North Platte

Procedure: Plots were laid out in randomized complete block design with three replications. Treatments were applied with a tractor mounted sprayer with a 15 foot boom (six XR11003 nozzles on 30 inch spacing) at 20 psi nozzle pressure, 10 gpa carrier volume and 4.2 mph. Corn hybrid N67P4 LL was planted May 3, 2007. Preemergence treatments were applied May 7. Early postemergence treatments were applied May 30, with corn in 2-4 leaf stage and common lambsquarter 1-3 inches tall. Bristly foxtail was just emerging. Late postemergence treatments were applied June 11, with corn 5 leaf (10-12"), common lambsquarter 4-8", and bristly foxtail 3-6". Weed control ratings were taken visually on June 11 and June 21. Common lambsquarter pressure was very heavy in the check plots. Plots were machine harvested October 31.

Treatment	Rate	Prod/a	Timing	Percent Control			
				Bristly Foxtail		Common Lambsquarter	
				6-11	6-21	6-11	6-21
1. Untreated Check				0	0	0	0
2. Radius		23 oz	PRE	96	40	85	77
3. Radius + Atrazine		23 oz + 1 qt	PRE	97	60	98	99
4. Balance Pro + Atrazine		2.5 oz + 1 qt	PRE	96	70	97	99
5. Balance Pro		1.5 oz	PRE	78	95	72	97
Liberty + Atrazine + AMS		32 oz + 0.5 qt	POST				
6. Balance Pro		1.5 oz	PRE	93	60	40	68
Option + MSO + 28-0		1.5 oz + 1.5 pt + 1.5 qt	POST				
7. Balance Pro		2.25 oz	PRE	98	70	73	100
Buctril + Atrazine		2 pt	POST				
8. Atrazine		0.5 qt	PRE	78	99	97	100
Liberty + Laudis + AMS		32 oz + 2 oz	POST				
9. Balance Pro + Atrazine		1 oz + 0.5 qt	PRE	93	99	87	98
Liberty + Laudis + AMS		32 oz + 2 oz	POST				
10. Balance Pro + Atrazine		1.5 oz + 0.5 qt	PRE	82	98	85	98
Liberty + Laudis + AMS		32 oz + 2 oz	POST				
11. Balance Pro + Atrazine		1.5 oz + 0.5 qt	PRE	98	100	83	100
Liberty + Callisto + AMS		32 oz + 2 oz	POST				
12. Atrazine + Liberty + Lumax + AMS		0.5 qt + 32 oz + 2 qt	EPOST	100	100	100	100
13. Liberty + Laudis + Define + AMS		32 oz + 2 oz + 6 oz	EPOST	100	100	100	98
AMS applied at 8.5 lb/100 gal			Avg:	85	76	78	87
			LSD %	23.4	4.8	13.5	3.7

Table 2

Treatment	Rate	Prod/a	Timing	Population	Moist	Test Wt	Adj Yld
1. Untreated Check				24,043	13.4	62.1	122
2. Radius	23 oz		PRE	27,389	13.6	61.6	224
3. Radius + Atrazine	23 oz + 1 qt		PRE	27,364	14.0	60.7	224
4. Balance Pro + Atrazine	2.5 oz + 1 qt		PRE	24,888	14.1	61.2	207
5. Balance Pro	1.5 oz		PRE	26,945	13.6	61.7	219
Liberty + Atrazine + AMS	32 oz + 0.5 qt		POST				
6. Balance Pro	1.5 oz		PRE	25,257	13.9	61.3	206
Option + MSO + 28-0	1.5 oz + 1.5 pt + 1.5 qt		POST				
7. Balance Pro	2.25 oz		PRE	27,020	13.9	61.9	229
Buctril + Atrazine	2 pt		POST				
8. Atrazine	0.5 qt		PRE	28,065	13.5	61.8	246
Liberty + Laudis + AMS	32 oz + 2 oz		POST				
9. Balance Pro + Atrazine	1 oz + 0.5 qt		PRE	27,492	13.7	61.5	236
Liberty + Laudis + AMS	32 oz + 2 oz		POST				
10. Balance Pro + Atrazine	1.5 oz + 0.5 qt		PRE	25,403	13.5	61.6	229
Liberty + Laudis + AMS	32 oz + 2 oz		POST				
11. Balance Pro + Atrazine	1.5 oz + 0.5 qt		PRE	27,328	13.8	61.4	243
Liberty + Callisto + AMS	32 oz + 2 oz		POST				
12. Atrazine + Liberty + Lumax + AMS	0.5 qt + 32 oz + 2 qt		EPOST	25,940	14.1	60.6	231
13. Liberty + Laudis + Define + AMS	32 oz + 2 oz + 6 oz		EPOST	26,162	13.9	60.8	220
AMS applied at 8.5 lb/100 gal			Avg:	26,407	13.8	61.31	218
			LSD %	NS	NS	0.89	30.3