Annual weed control with Instigate, Breakfree, Realm Q, and Abundit in corn at Lamberton, MN in 2012.

Getting, Jodie K.

The objective of this study was to evaluate Instigate applied preemergence followed by Realm Q or Abundit for annual grass and annual broadleaf weed control in corn. This study was conducted on a Normania loam soil containing 4.1% organic matter, pH 5.6 and soil test P and K levels of 72 and 364 lb/A, respectively. A randomized complete block design with four replications and a plot size of 10 by 30 ft was used. The site was planted to soybeans in 2011 and was fall chiseled. The area was fertilized with 150 lbs of nitrogen as urea. On May 15, 2012, Dekalb 'DK 48-12' glufosinate resistant/glyphosate resistant field corn was planted in 30-inch rows at a seeding rate of 36,000 seeds/A. All treatments were applied with a tractor-mounted sprayer delivering 20 gpa at a pressure of 40 psi. The sprayer was equipped with 8002 flat-fan nozzles spaced 15 inches apart on the boom. Application dates, environmental conditions, plant densities and sizes in the weedy check and rainfall data are listed below:

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(Southwest Research and Outreach Center, University of Minnesota, Lamberton).

Table. Annual weed control with Instigate, Breakfree, Realm Q, and Abundit in corn at Lamberton, MN in 2012 (Getting).

			Yellow foxtail			Common lambsquarters				Tall waterhemp				
Treatment ^a	Rate	Jun 12	2 Jun 19	Jul 3	Aug 20	Jun 12	! Jun 19	Jul 3	Aug 20	Jun 1	2 Jun 19	9 Jul 3	Aug 20	0 Yield ^b
Preemergence/POST (5-collar corn)	(oz/A, pt/A, qt/A, lb/A or %)	(% control)							(bu/A)					
Instigate / Realm Q + Abundit + AMS	6 oz / 4 oz + 32 oz + 2 qt	93 bc	99 a	99 a	93 b	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	154 a
Instigate + Breakfree AZT Lite / Abundit + AMS	6 oz + 3 pt / 32 oz + 2 qt	92 c	99 a	99 a	98 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	161 a
Instigate + Breakfree AZT Lite / Abundit + AMS	6 oz + 4 pt / 32 oz + 2 qt	98 a	99 a	99 a	98 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	161 a
Instigate + Breakfree / Abundit + AMS	6 oz + 1.25 pt / 32 oz + 2 qt	97 a	99 a	98 a	97 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	154 a
Instigate + Breakfree / Abundit + AMS	6 oz + 2.5 pt / 32 oz + 2 qt	96 ab	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	157 a
Lumax / Abundit + AMS	2.5 qt / 32 oz + 2 qt	95 a-c	99 a	98 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	99 a	159 a
Check														
Weedy check		0 d	0 b	0 b	0 c	0 b	0 b	0 b	0 b	0 b	0 b	0 b	0 b	129 b
3	LSD (0.10)	3.6	ns	1.3	2.1	ns	ns	ns	ns	ns	ns	ns	ns	10.8

^a AMS = liquid spray grade ammonium sulfate. ^b Yield adjusted to 15.5% moisture.