

Foxtail control in hard red spring wheat with AE F130060 at Rosemount, MN -

2003. Durgan, Beverly R., and Douglas Miller. The purpose of this experiment was to evaluate foxtail control and crop injury with AE F130060 with Destiny or Quad 7 adjuvants and in tank-mix combinations with broadleaf herbicides. The experiment was conducted at Rosemount, MN on a Waukegon silt loam soil. Following soybeans, the experimental area was fall chisel plowed. In the spring, the area was fertilized with 50 lbs/A N and 70 lbs K. The field was field cultivated twice and harrowed twice. '2375' hard red spring wheat was seeded on May 2 at 85 lbs/A. The experimental design was a randomized complete block with three replications and plot size was 10 by 24 ft. All herbicide treatments were applied to a 6 ft strip with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat-fan nozzles. Bromoxynil (0.3 lb ai/A) was broadcast on June 13 to control broadleaf weeds. Visual weed control ratings, wheat injury ratings, and yields are presented in the table. Environmental conditions and plant sizes are listed below.

Treatment Date June 3
Target weed or 3-4 leaf foxtail
crop stage

Temperature (° F)
air 74
soil (at 2") 73
Soil Moisture dry
Wind (mph) 0-4 N
Relative Humidity (%) 43
Dewpoint (%) 48
Sky 60% clouds

Rainfall before
Application
Week 1 (inch) 0.15
Rainfall after
Application
Week 1 (inch) 0.74
Week 2 (inch) 0.05

Wheat
leaf stage 4 to early 5
tillers 2-3
height (inch) 6-8

Giant and Yellow foxtail
density (#/ft²) 75
leaf no. 2-5 (most 3-4)
height (inch) 0.5-2

Table. Foxtail control in hard red spring wheat with AE F130060 at Rosemount, MN - 2003 (Durgan and, Miller).

Treatment	Rate (lb ai/A)	Foxtail Control			Injury			Wheat	
		6/15	7/12	7/27	6/15	7/12	7/27	Height (inch)	Yield (bu/A)
		----- % -----							
AE F130060 + Destiny ¹	0.0156 + 1.9%	0	48	43	5	5	5	30	44
AE F130060 + Quad 7 ¹	0.0156 + 1.0%	0	48	43	0	3	3	30	46
AE F130060 + bromoxynil & MCPA ester ² + Destiny	0.0156 + 0.25 & 0.25 + 1.9%	10	47	43	10	7	5	29	45
AE F130060 + bromoxynil & MCPA ester + Quad 7	0.0156 + 0.25 & 0.25 + 1.0%	7	65	60	3	2	3	30	47
AE F130060 + MCPA ester + fluroxypyr + Destiny	0.0156 + 0.375 + 0.125 + 1.9%	0	63	62	5	5	7	29	41
AE F130060 + MCPA ester + fluroxypyr + Quad 7	0.0156 + 0.375 + 0.125 + 1.0%	3	58	55	3	8	8	27	40
AE F130060 + thifensulfuron + fluroxypyr + Destiny	0.01566 + 0.0187 + 0.125 + 1.9%	3	55	52	3	5	5	28	46
AE F130060 + thifensulfuron + fluroxypyr + Quad 7	0.0156 + 0.0187 + 0.125 + 1.0%	13	70	62	12	8	8	31	43
Clodinafop & safener	0.05	87	99	95	0	0	0	29	41
Weedy check		--	--	--	0	0	0	31	46
LSD (P=.05)		9	9	11	8	6	6	3	ns

¹ Adjuvant

² Premix = Bronate Advanced 5E.