

Foxtail control in hard red spring wheat with A12303 (Pinoxaden) + A12127 alone and with broadleaf herbicides at Rosemount, MN - 2005. Durgan, Beverly R., and Douglas Miller. This experiment was designed to evaluate foxtail control with A12303 + A12127 (Pinoxaden) alone and in tank mix with broadleaf herbicides at two application stages. 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 disked once, field cultivated once, and harrowed twice. 'Alsen' hard red spring wheat was seeded on May 10 at 85 lbs/A. The experimental design was a randomized complete block with three replications. Plot size was 10 by 24 ft. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat fan nozzles. Application data and environmental conditions are listed below. Crop injury and foxtail control were rated visually. Yields were measured. No injury symptoms were observed. Control and yield data are presented in the table below.

<u>Treatment Date</u>	<u>June 2</u>	<u>June 9</u>
Foxtail stage	1-3 leaf	1-5 leaf (average 4 leaf)
height (inch)	0.25 to 1	0.25 to 3
density (#/ft ²)	43	60
Wheat stage	3 leaf	5 leaf
tillers	1	1-2
height (inch)	4-6	6-8
Air temperature (°F)	80	73
Relative humidity (%)	40	37
Sky	10 % clouds	80% clouds
Wind	SSE 6-12	NNE 2-4
Soil conditions	moist at 0.75 inch	moist
Soil temperature (°F)	79	68
Rainfall before Application		
Week 1 (inch)	0.31	1.25
Rainfall after Application		
Week 1 (inch)	1.25	0.99
Week 2 (inch)	0.99	0.81

Table. Foxtail control in hard red spring wheat with A12303 + A12127 (Pinoxaden) alone and with broadleaf herbicides at Rosemount, MN - 2005 (Durgan and Miller).

Treatment	Rate (lb ai/A)	Foxtail Control		Yield (bu/A)
		7/9 (%)	7/16 (%)	
Postemergence (June 2)				
A12303 ¹ + A12127 ²	0.053 + 0.75%	95	94	42
A12303 + A12127 + bromoxynil & MCPA ³	0.053 + 0.75% + 0.25 & 0.25	93	93	46
A12303 + A12127 + thifensulfuron & tribenuron ⁴	0.053 + 0.75% + 0.012 & 0.006	95	96	43
A12303 + A12127 + copyralid & fluroxypyr ⁵ + MCPA ester	0.053 + 0.75% + 0.125 & 0.125 + 0.25	96	93	47
A12303 + A12127 + thifensulfuron + tribenuron	0.053 + 0.75% + 0.015 + 0.00375	97	96	48
A12303 + A12127 + thifensulfuron + MCPA ester	0.053 + 0.75% + 0.0187 + 0.25	93	94	48
Fenoxaprop & safener ⁶ + bromoxynil & MCPA	0.05 + 0.25 & 0.25	98	95	49
Clodinafop & cloquintocet ⁷ + bromoxynil & MCPA	0.05 + 0.25 & 0.25	96	93	48
Postemergence (June 2)				
A12303 + A12127	0.053 + 0.75%	99	94	49
A12303 + A12127 + bromoxynil & MCPA	0.053 + 0.75% + 0.25 & 0.25	99	95	46
A12303 + A12127 + thifensulfuron & tribenuron	0.053 + 0.75% + 0.012 & 0.006	99	96	48
A12303 + A12127 + copyralid & fluroxypyr + MCPA ester	0.053 + 0.75% + 0.125 & 0.125 + 0.25	99	96	45
A12303 + A12127 + thifensulfuron + tribenuron	0.053 + 0.75% + 0.015 + 0.00375	99	96	46
A12303 + A12127 + thifensulfuron + MCPA ester	0.053 + 0.75% + 0.0187 + 0.25	99	96	40
Fenoxaprop & safener + bromoxynil & MCPA	0.05 + 0.25 & 0.25	99	96	48
Clodinafop & cloquintocet + bromoxynil & MCPA	0.05 + 0.25 & 0.25	98	95	48
Untreated Check	--	0	0	36
LSD P=.05		4	ns	6

¹ Pinoxaden.

² Adjuvant.

³ Bronate Advanced 5E.

⁴ Premix = Harmony Extra.

⁵ Premix = Widematch 1.5E.

⁶ Puma 1E

⁷ Discover NG 0.5E.