

POST Yellow Foxtail Control in Durum Wheat, Carrington, 2009.

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The experiment was conducted at the NDSU Carrington Research Extension Center on a conventionally-tilled Heimdal-Emrick loam soil. The experimental design was a randomized complete block with three replicates. 'Lebsock' durum was seeded May 14. Herbicide treatments were applied with a CO₂-pressurized hand-boom plot sprayer delivering 10 gal/A at 35 psi through 8001 flat-fan nozzles to the center 6.7 ft of 10- by 25-ft plots. Treatments were applied on June 10 with 62° F, 38% RH, 75% cloudy sky, and 12 mph wind to 4-leaf wheat and 1- to 4-leaf yellow foxtail. Average plant density in untreated plots on June 11: wheat, 18 plants/ft² and 8 foxtail plants/ft². The trial was harvested with a plot combine on September 10.

Plant chlorosis (0 = green, 9 = yellow) visually evaluated 5 d after herbicide application was most prominent with Difenzoquat (Table). Crop response of <10% was noted among treatments except Difenzoquat when evaluated about 2 and 4 wk after application of herbicides. Seed yield was reduced with Difenzoquat compared to yield of the untreated check. Herbicide treatments numbered 2 and 6-12 provided good to excellent (85-96%) control of yellow foxtail.

Table. POST Yellow Foxtail Control in Durum Wheat.

Herbicide		Wheat Response					Yellow Foxtail Control		
Treatment		Rate	6/15	6/25	7/13	Seed Yield	Test Weight	6/25	7/13
No.		oz ai/A	Chlorosis (0-9)	Injury (%)		bu/A	lb/bu	%	
1	Mesosulfuron+Brox&MCPA5+MSO	0.036+8+1%	2	3	0	57.8	61.0	70	27
2	Flucarbazone+Brox&MCPA5+Basic Blend	0.32+8+1%	2	5	6	54.7	60.6	80	88
3	Prcz&Mess+Brox&MCPA5+Basic Blend	0.178+8+1%	2	4	3	61.0	60.8	75	27
4	Immb+Brox&MCPA5+Basic Blend	5+8+1%	2	6	2	54.2	60.7	53	20
5	Prcz+Brox&MCPA5+Basic Blend	0.32+8+1%	2	6	2	52.8	60.6	75	10
6	Pyroxsulam+Brox&MCPA5+Basic Blend	0.26+8+1%	0	6	3	54.7	60.5	85	85
7	Pxlm&Florasulam&Flox+Basic Blend	1.68+1%	1	6	4	48.7	60.6	88	87
8	TralSC+Brox&MCPA5+Supercharge+AMS	2.9+8+0.5%+9.5	1	3	1	57.8	60.5	83	85
9	Fenoxaprop+Brox&MCPA5	0.8+8	0	2	0	58.1	60.7	63	85
10	Fenoxaprop+Brox&MCPA5	1.32+8	0	0	1	60.4	60.6	63	96
11	Clodinafop-ng+Brox&MCPA5	0.8+8	0	0	0	70.6	61.0	83	89
12	Pinoxaden+Brox&MCPA5	0.86+8	2	8	5	62.1	60.9	90	90
13	Difenzoquat+Brox&MCPA5	16+8	5	82	77	33.0	60.3	40	0
14	Untreated	0	0	0	0	60.1	60.7	0	0
C.V. (%)			61.1	38	39	12.6	0.7	7	10
LSD (0.05)			1	6	5	12	NS	8	9