

**POST Canada thistle control in corn, Carrington, 2013.** Greg Endres and Mike Ostlie. A field study was conducted at the NDSU Carrington Research Extension Center to examine control of Canada thistle with POST herbicides in corn. Experimental design was a randomized complete block with four replications. Roundup Ready corn (DKC33-78 RIB) was planted into wheat stubble at 36,000 seeds/A on May 14. Herbicides were applied with a CO<sub>2</sub>-pressurized plot sprayer delivering 12 (PRE) or 17 (POST) gal/A at 35 psi through 8001 flat fan nozzles to the center 6.7 ft of 10- by 30-ft plots. SureStart at 38 fl oz/A + Roundup PowerMax at 32 fl oz/A + Class Act NG at 32 fl oz/A was PRE applied to all plots on May 23 at 56 °F, 46% RH and 6 mph wind to emerging to 3-inch tall Canada thistle. Rain totaled 0.9 inches 2 wk following application of PRE herbicide. POST herbicide treatments were applied June 17 at 67 °F, 63% RH and 8 mph wind to 2- to 15-inch Canada thistle and V3-4 stage corn.

Canada thistle control visually evaluated 2 week after treatment was excellent (93%) with Halex GT plus Aatrex 4L while other treatments generally provided good (76 to 89%) control (Table). Status at 5 and 10 fl oz/A provided 82 to 83% control 1 month after treatment (MAT). Canada thistle plant regrowth or new shoots were noted with all herbicide treatments 1 MAT. Canada thistle was suppressed (64 to 76% control) 2 MAT with Roundup PowerMax, WideMatch, Halex GT plus Aatrex 4L and Status. At 3 MAT, Status at 10 fl oz/A provided suppression (71%), while control ratings with other herbicide treatments ranged from 23 to 61%. Corn response to herbicides and grain yield were not measured.

Table.

Herbicide		Canada thistle control			
Treatment <sup>1</sup>	Rate	2-Jul-13	19-Jul-13	4-Aug-13	12-Sep-13
		%			
RU PM	22 fl oz/A				
Class Act NG	2.5% v/v	76	74	68	61
WideMatch	21.3 fl oz/A	80	75	64	56
Capreno	3 fl oz/A				
Aatrex 4L	16 fl oz/A				
MSO	1% v/v				
UAN	48 fl oz/A	86	63	33	28
Halex GT	64 fl oz/A				
Aatrex4L	16 fl oz/A				
Class Act NG	2.5% v/v	93	78	69	60
Laudis	3 fl oz/A				
Aatrex 4L	16 fl oz/A				
MSO	1% v/v				
UAN	48 fl oz/A	89	66	39	23
Status	5 oz wt/A				
Class Act NG	2.5% v/v				
Superb HC	0.5% v/v	82	82	68	53
Status	10 oz wt/A				
Class Act NG	2.5% v/v				
Superb HC	0.5% v/v	87	83	76	71
Armazon	1 oz wt/A				
Aatrex 4L	16 fl oz/A				
MSO	1% v/v				
UAN	48 fl oz/A	78	49	31	35
CV (%)		3.9	7.5	12.5	24.5
LSD (0.05)		5	8	10	17

<sup>1</sup>RU PM=Roundup PowerMax; MSO=Destiny HC (Winfield).