POST grass + mesotrione tankmixes. Zollinger, Richard K. and Jerry L. Ries. An experiment was conducted near Casselton, ND, to evaluate yellow foxtail control in corn. Pioneer '39K42' was planted on May 23, 2002. POST treatments were applied June 29 at 8:30 am with 80 F air, 90 F soil surface, 50% relative humidity, 100% clouds, 5 to 10 mph S wind, moist soil surface, wet subsoil, good to excellent crop vigor, and no dew present to 10 to 14 inch (5 collar) corn. Weed species present were: 1 to 6 inch (5 to 20/yd^2) foxtail species (25% yellow population to 75% green population); 1 to 6 inch (3 to 15/yd^2) redroot pigweed; 1 to 6 inch (3 to 15/yd^2) common lambsquarters; 3 to 6 inch (3 to 15/yd^2) common cocklebur; and 1 to 6 inch (5 to 15/yd^2) wild mustard. Treatments were applied to the center 6.67 feet of the 10 by 40 foot plots with a bicycle-wheel-type plot sprayer delivering 8.5 gpa at 40 psi through 8001 flat fan nozzles. The experiment had a randomized complete block design with three replicates per treatment.

Greater than 3 inches of rain fell on June 23 and 2 inches of rain on July 10. POST application was applied later than normal due to excessively wet conditions. No corn injury occurred and all treatments controlled wild mustard, redroot pigweed, common cocklebur, and common lambsquarters. Only highest rates of nicosulfuron&rimsulfuron + mesotrione or A12854 controlled yellow foxtail. Reducing rates of either component reduced control. AE F130360 in any combination did not control yellow foxtail. (Dept. of Plant Sciences, North Dakota State University, Fargo).

Table. POST grass + mesotrione tankmixes (Zollinger and Ries).

Treatment[1]	Rate	July 13 SETSS	July 27 SETSS
	(lb/A)	(%)	(%)
Nicosulfuron&rimsulfuron+mesotrione+atrazine+PO+28-0-0	0.023&0.01+0.094+0.375	77	78
Nicosulfuron&rimsulfuron+A12854+PO+28-0-0	0.023&0.01+0.1&1&0.375	92	85
Nicosulfuron&rimsulfuron+mesotrione+atrazine+PO+28-0-0	0.015&0.006+0.094+0.375	85	80
Nicosulfuron&rimsulfuron+A12854+PO+28-0-0	0.015&0.006+0.1&1&0.375	92	70
Nicosulfuron&rimsulfuron+A12854+PO+28-0-0	0.01&0.003+0.1&1&0.375	75	72
Nicosulfuron&rimsulfuron+A12854+PO+28-0-0	0.015&0.006+0.067&0.33&0.125	80	75
Nicosulfuron&rimsulfuron+A12854+PO+28-0-0	0.01&0.003+0.067&0.33&0.125	73	70
Nicosulfuron&rimsulfuron+A12854+ dicamba+PO+28-0-0	0.01&0.003+0.067&0.33&0.125+ 0.125	58	57
AE F130360 01+mesotrione+atrazine+MSO+28-0-0	0.0656+0.094+0.375	65	63
AE F130360 01+A12854+MSO+28-0-0	0.0656+0.01&1&0.375	60	63
AE F130360 01+mesotrione+atrazine+MSO+28-0-0	0.0547+0.094+0.375	63	52
AE F130360 01+A12854+MSO+28-0-0	0.0547+0.01&1&0.375	60	62
AE F130360 01+A12854+MSO+28-0-0	0.0437+0.01&1&0.375	65	68
AE F130360 01+A12854+MSO+28-0-0	0.0547+0.067&0.33&0.125	65	65
AE F130360 01+A12854+MSO+28-0-0	0.0437+0.067&0.33&0.125	53	57
AE F130360 01+A12854+dicamba+MSO+28-0-0	0.0437+0.067&0.33&0.125+0.125	67	62
LSD (0.05)		9	11

[1]A12854 = mesotrione & s-metolachlor & atrazine; PO = petroleum oil concentrate = Herbimax at 1.5pt/A; 28-0-0 = urea ammonium nitrate at 1.5qt/A; MSO = methylated seed oil = Scoil at 1.5pt/A.