

Feral Rye Control in Winter Canola



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Feral rye is a problematic winter annual grass weed in the low-rainfall, winter wheat–summer fallow rotation of the Pacific Northwest. The inclusion of winter canola into the crop rotation provides additional herbicide options to control feral rye. A study was conducted for three years in north central Washington to determine the efficacy of Select 2EC, Assure II, and Roundup on feral rye control and winter canola yield. In 2011, when all three herbicides were applied in the spring, weed control ranged from 64% to 98% and yield increased more than 40% compared to the nontreated control (see table below). Fall plus spring applications of Assure II and Roundup were the most effective treatments for increasing canola yield and controlling rye (>95%) during the last two years of the study. Data from these experiments indicate that Roundup in Roundup-resistant winter canola (Fig. 1a and 1b) and Assure II in conventional or Roundup-resistant winter canola can effectively control feral rye.

Effect of three herbicides on feral rye control and winter canola yield.^a

Treatment	Rate	Bridgeport 2011		Bridgeport 2012		Okanogan 2014	
		Control	Yield	Control	Yield	Control	Yield
	oz/A	%	lbs/A	%	lbs/A	%	lbs/A
Nontreated	-	-	1300	-	270	-	0
Select (F)	6	-	-	67	700	69	750
Select (F+S)	6+6	-	-	83	770	89	740
Select (S)	6	64	1880	60	600	35	90
Assure II (F)	9	-	-	63	680	96	860
Assure II (F+S)	9+9	-	-	96	1070	100	780
Assure II (S)	9	74	1920	93	840	83	430
Roundup (F)	22	-	-	69	780	96	740
Roundup (F+S)	22+22	-	-	99	1030	99	1040
Roundup (S)	22	98	1930	99	860	100	350

^a F=fall; S=spring. Select and Assure II contained nonionic surfactant in 20011 and cropoil concentrate in 2012 and 2014. Roundup contained 2.5% ammonium sulfate. Control ratings recorded May of harvest year.



Figure 1a. Feral rye stand in 2013 before fall Roundup application.



Figure 1b. Feral rye control in spring 2014 after fall Roundup application.