

Managing Feral Rye in Winter Canola through Herbicide Selection

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A preliminary herbicide efficacy study for the management of feral rye in winter canola was initiated in the spring of 2011. Our objective is to evaluate herbicides to improve the quality of subsequent winter wheat crops and prevent herbicide resistance in weeds. Select (clethodim), Assure II (quizalofop), and Roundup (glyphosate) were applied early spring. Because winter canola plants had canopy closure in the fall of 2010, feral rye was sprayed only in the spring. Final feral rye control in mid-May was 74%, 64%, and 99% for Assure II, Select Max, and Roundup, respectively (see table). Feral rye biomass and head counts responded similarly within each herbicide treatment. In the plots treated with Roundup no seed heads were produced, and Assure II treated plots resulted in only three feral rye seed heads/yard². This is in sharp contrast to 255 feral rye heads/yard² produced in the untreated plots. Winter canola yield increased 40% to 48% compared to the untreated check depending on the herbicide treatment.

Effect of grass herbicides on feral rye control, biomass, seed heads, and winter canola yield.^a

| Herbicide | Control | Rye Biomass | Heads | Yield |
|------------|---------|-------------|---------------------|-------|
| | % | lbs/A | no yd ⁻² | lbs/A |
| Untreated | 0 | 3,920 | 255 | 1,165 |
| Assure II | 74 | 823 | 3 | 1,635 |
| Select Max | 64 | 1,597 | 40 | 1,680 |
| Roundup | 99 | 290 | 0 | 1,730 |

^aBiomass and head counts recorded June 1, 2011. Control recorded on May 16, 2011.

Additional plots we established last fall (2011) in a severe, natural infestation of rye in Douglas Co. Assure II, Select 2EC, and Roundup were applied to CP115 winter canola (glyphosate tolerant) on October 16, 2011. Three weeks later control of the initial severe feral rye population with Roundup was excellent; however controlling this population opened up the canopy and a new flush of feral emerged. This new flush of rye was not occurring in the untreated or other two herbicide treated plots because feral rye ground cover was complete in these treatments. Assure II and Select 2EC stunted the feral rye considerably.



Feral rye at Okanogan and Bridgeport was controlled with glyphosate.

A Change is in the Air: Refining Canola Fertilizer Recommendations

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Current nitrogen (N) recommendations for canola are widely variable. Our objective is to develop nutrient (primarily N and sulfur) recommendations for major oilseed crops that maximize oil yield and quality. We initiated a N x sulfur (S) experiment in 2007 at the Wilke Farm near Davenport and the Palouse Conservation Field Station (PCFS) near Pullman that includes a range of N rates (0