

Timing of Spring Application for Winter Annual Weed Control.

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Winter annual weeds like flixweed (*Descurainia sophia*), shepherd's purse (*Capsella bursa-pastoris*), narrow-leaved hawk's-beard (*Crepis tectorum*) and stinkweed (*Thlaspi arvense*) can remove a lot of soil moisture in the spring as they begin to grow very early and are very inefficient water users. With farm size increasing and seeding taking 4 weeks or more, winter annual weeds may be robbing crop yield if not controlled early.

Trials were set up in 2005 at Saskatoon, Scott and Hanley, Sask. and in 2006 and 2007 at Saskatoon and Scott. There were two application dates of glyphosate, 1st week of May and 4th week of May and 2 seeding dates 1st week of May and 4th week of May. Glyphosate was applied at 450 gai ha⁻¹ (equivalent to 0.5 litres per acre of Roundup Original). The treatments were Early application followed by Early seeding, Early application followed by Late seeding and Late application followed by Late seeding. All applications times of glyphosate controlled the winter annual weeds >90%. The yield of wheat with the Early-Early and Early-Late treatments were similar or greater than the Late-Late treatment 5 of the 6 years yield was collected. When averaged across all site years the Early-Early and Early-Late treatments yielded 8% higher than the Late-Late treatment. Even on years with good spring moisture winter annual weeds should be controlled early to avoid yield loss.