

## **Agronomic implications of more intensive canola rotations**

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Abstract;

Rotation experiments were initiated in 1998 at Scott and Melfort to examine the implications of growing canola more frequently than the recommended 1 in 4 rotation. Rotations of continuous canola, canola-wheat, canola-wheat-pea, canola-wheat-pea-wheat and canola-wheat-flax-wheat were compared using an older blackleg susceptible cultivar [Westar] or a current herbicide tolerant hybrid with good blackleg resistance [Invigor]. Results to date suggest that herbicide tolerance has largely overcome the need for long rotations for weed control, and that current blackleg tolerance is very beneficial for reducing incidence of this disease even in shortened rotations, and that yields are not greatly affected except where canola is grown continuously. However, shortened rotations are not without increased risk, and during the most recent 4 year period there are indications that yield is declining in the canola-wheat rotation even where herbicide tolerant hybrids with good blackleg resistance are grown.