

The science behind the need for break years between canola crops. Considerations for fertilizer planning. Take our clubroot myths quiz.



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The lead article this week looks at the science behind the need for breaks between canola crops.

The risks from high canola frequency

Scientific research in Western Canada has identified three factors that increase the risk of canola yield loss in short rotations. They are blackleg, clubroot and cabbage root maggot.

Blackleg: A one-year break between canola crops significantly reduces the carryover of the blackleg fungus on canola stubble, which reduces blackleg severity and the risk of yield loss. Two full years between canola crops provide a further reduction, and a three-year break can effectively eliminate the yield loss risk from blackleg. In most cases, blackleg can be managed with a two-year break between canola crops on most fields by using and rotating blackleg-resistant (R) varieties.

Clubroot: Pathogen spore load, disease risk and yield loss increase substantially when canola is grown frequently on clubroot-infested fields. Growing resistant varieties is an effective management tool, but crop rotation that provides at least a two-year break (canola then two years with other crops before going back to canola) must be used along with resistance, to maintain the effectiveness of clubroot resistance on those fields.

Root maggot: The late Lloyd Dosdall, entomologist with the University of Alberta, worked with AAFC on a rotation study showing that a one-year break between canola crops significantly reduced yield loss as a result of root maggots.

Various other factors come into play as well. [READ MORE.](#)

In This Issue

> Canola Watch QUIZ – Clubroot myths

This quiz highlights a few clubroot myths that CCC agronomy specialists heard at meetings this past winter. [TAKE THE QUIZ](#)

> 20 agronomy tips to improve sustainability

Economic and environmental sustainability often go together. Here are 20 tips to help a farm improve both. [READ MORE](#)

> Fertilizer planning: Seed-placed, logistics, in-crop

Canola needs sulphur, but there is no clear benefit to putting sulphur fertilizer in the seed row. [READ MORE](#)

> Soil health: Indicators and improvements

Soil health indicators that farmers can easily track are organic matter and crop performance. [READ MORE](#). [LISTEN TO THE PODCAST](#)

> Help with research on habitat and crop productivity

Researchers in Manitoba and Saskatchewan are looking for farmers to cooperate with habitat research. [READ MORE](#)

> Biobeds: What are they and why build them?

A biobed removes pesticides from water used to rinse sprayers, preventing contamination of surface and groundwater. [READ MORE](#)

> Coming events

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Alberta Canola has a free e-newsletter called Alberta Canola Connections.

Visit albertacanola.com and click the sign-up icon on the right side of the homepage.

SaskCanola has a free e-newsletter called SaskCanola Update. Visit www.saskcanola.com and click the sign-up icon on the right side of the homepage to stay connected.

Stay connected with the Manitoba Canola Growers by signing up for their Canola Crush Newsletter at www.canolagrowers.com

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