



# RESEARCH FACTS

RESEARCH & TECHNOLOGY DEVELOPMENT FOR THE CANADIAN BEEF INDUSTRY

## IN PROGRESS

### Assessing the impact of grazing annual forage cover crops in an integrated crop-livestock system

**Project Title:**

Assessing the impact of grazing annual forage cover crops in an integrated crop-livestock system

**Researchers:**

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**Project Code:**

FRG.08.18

**Completed:**

*In Progress.  
Results expected in March 2022.*

#### **Background**

Cover crops are known not only for their nutritious feed value for cattle but also their ability to improve certain aspects of soil health. This suggests that there are opportunities for synergies between livestock and crop producers to provide both animal feed and soil improvements. These synergies have yet to be quantified under Canadian conditions.

#### **Objectives**

To quantify the benefits associated with integrated crop-livestock systems. Our objectives are to assess how grazing a forage cover crop within an annual cropping rotation.

#### **What they will do**

Researchers are going to assess the value of integrated livestock and crop systems. This trial will take place on 3 different producers farms in SK and MB. This project will look at the soil health, productivity, ecosystem services, and economics of adding cover crops into a cropping system.

They will use 4 treatments:

- control (annual crop rotation of legume, cereal, oilseed, cereal)
- simple mixture (2 cereals, a legume and a brassica)
- complex mixture (2 cool season cereals, 2 warm season crops, 2 legumes, 2 brassicas)

The trial will go 4 years rotating between a cereal and the mixtures. Cattle will either graze the mixtures at the end of the growing season or they will be harvested for silage and fed to cattle.

### ***Implications***

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This should provide scientific data around the soil health, economic, productivity and ecosystem service value of integrating crops and livestock using a cover cropping system.

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