# Agriculture Demonstration of Practices and Technology (ADOPT) Projects 2024

**Funding for these ADOPT projects was approved by the Minister for the June 2024 cycle of ADOPT.**

## Conservation Learning Centre (CLC)

### Winter Cereal Demonstration Showcasing Winter Wheat, Winter Triticale, and Fall Rye (*20240952*)

Principal Investigator: Zoe Galbraith, Conservation Learning Centre (CLC)
Objectives:

- This project wants to demonstrate how seeding date affects the survival and productivity of winter cereals across different regions in Saskatchewan.

**ADOPT Funding:** $12,740

### Comparing high tunnel and field grown cantaloupe in North Central Saskatchewan to determine size profiles for a retail market (*20240961*)

Principal Investigator: Robin Lokken, Conservation Learning Centre (CLC)
Objectives:

- This project wants to demonstrate the potential of growing cantaloupe in North Central Saskatchewan.

**ADOPT Funding:** $9,050

## Indian Head Agricultural Research Foundation (IHARF)

### Winter Cereal Showcase Demonstrating Winter Wheat, Winter Triticale, and Fall Rye Response to Seed-Applied Fungicides (*20240951*)

Principal Investigator: Chris Holzapfel, Indian Head Agricultural Research Foundation (IHARF)
Objectives:

- The project aims to assess the impact of seed treatment fungicides on the winter survivability and yield potential of winter wheat, winter triticale, and fall rye.

**ADOPT Funding:** $12,000

## Irrigation Crop Diversification Corporation (ICDC)

### Winter Cereal Demonstration Showcasing Winter Wheat, Winter Triticale, and Fall Rye (*20240956*)

Principal Investigator: Gursahib Singh, Irrigation Crop Diversification Corporation (ICDC)
Objectives:

- This project wants to demonstrate how seeding date affects the survival and productivity of winter cereals across different regions in Saskatchewan.

**ADOPT Funding:** $12,740

## Northeast Agriculture Research Foundation (NARF)

### Winter Cereal Demonstration Showcasing Winter Wheat, Winter Triticale, and Fall Rye (*20240953*)

Principal Investigator: Brianne McInnes, Northeast Agriculture Research Foundation (NARF)
Objectives:

- This project wants to demonstrate how seeding date affects the survival and productivity of winter cereals across different regions in Saskatchewan.

**ADOPT Funding:** $12,740

**Regenerative farming of winter crops with leguminous companion crops (*20240964*)**

Principal Investigator: Ishita Patel, Northeast Agriculture Research Foundation (NARF)

Objectives:

- The project aims to assess the effects of seeding legume companion crops with winter wheat and winter camelina on soil nutrients, yield, and N fertilizer inputs.

**ADOPT Funding:** $10,000

**Prairie Swine Centre Inc.**

**Developing practical periodic environmental enrichment routines for commercial farms (*20240960*)**

Principal Investigator: Miranda Smit, Prairie Swine Centre Inc.

Objectives:

- This project will demonstrate the use or provision of periodic enrichment (meaning 1-3 times per week) in three different hog farms.

**ADOPT Funding:** $40,000

**South East Research Farm (SERF)**

**Winter Cereal Demonstration Showcasing Winter Wheat, Winter Triticale, and Fall Rye (*20240955*)**

Principal Investigator: Lana Shaw, South East Research Farm (SERF)

Objectives:

- This project wants to demonstrate how seeding date affects the survival and productivity of winter cereals across different regions in Saskatchewan.

**ADOPT Funding:** $12,740

**Western Applied Research Corporation (WARC)**

**Winter Cereal Demonstration Showcasing Winter Wheat, Winter Triticale, and Fall Rye (*20240954*)**

Principal Investigator: Jessica Enns, Western Applied Research Corporation (WARC)

Objectives:

- This project wants to demonstrate how seeding date affects the survival and productivity of winter cereals across different regions in Saskatchewan.

**ADOPT Funding:** $12,740

**Wheatland Conservation Area (WCA)**

**Winter Cereal Demonstration Showcasing Winter Wheat, Winter Triticale, and Fall Rye (*20240957*)**

Principal Investigator: Bryan Nybo, Wheatland Conservation Area (WCA)

Objectives:

- This project wants to demonstrate how seeding date affects the survival and productivity of winter cereals across different regions in Saskatchewan.

**ADOPT Funding:** $12,740

**Witchekan Lake First Nation**

**Training for Buffalo Management (*20240968*)**

Principal Investigator: Lyle Whitefish, Witchekan Lake First Nation

Objectives:

- This project wants to enhance the skills of Witchekan Lake First Nation band members in effective and sustainable herd management by providing training on buffalo health management, veterinary care, and advanced knowledge of sustainable grazing practices.

**ADOPT Funding:** $7,500

**Enhancing Buffalo Farming Infrastructure (*20240973*)**

Principal Investigator: Lyle Whitefish, Witchekan Lake First Nation

Objectives:

- The overall objective for the project is to enhance the safety, comfort, and productivity of buffalo through infrastructure improvements for effective management.

**ADOPT Funding:** $20,000

**Funding for these ADOPT projects was approved by the Minister for the November 2024 cycle of ADOPT.**

## Eagle Lake Grazing Corporation

### Commercial Replacement Heifer Selection Using Genomic Testing (*20241040*)

Principal Investigator: Chelsey Siemens, Eagle Lake Grazing Corporation
Objectives:

- This project will demonstrate the process and value of using genomic testing (Igenity Beef) for selection of commercial beef replacement heifers on-farm.

**ADOPT Funding:** $13,200

## East Central Research Foundation

### Intercropping Chickpeas and Flax in the black soil zone (*20241029*)

Principal Investigator: Michael Hall, East Central Research Foundation
Objectives:

- The project aims to show how intercropping with flax can reduce production risks for chickpeas in the black soil zone by evaluating the effects of flax seed placement and seeding rate on chickpea disease development, seed quality, maturity, and yield.

**ADOPT Funding:** $6,200

### Demonstration of Canola Yield Response to Variations in Seeding Depth and Phosphorus Placement (*20241030*)

Principal Investigator: Michael Hall, East Central Research Foundation
Objectives:

- The project aims to evaluate the effects of phosphorus placement and seeding depth on canola seed safety, emergence, and yield.

**ADOPT Funding:** $12,800

### Demonstration of the effects of seeding date on new and niche flax varieties (*20241037*)

Principal Investigator: Michael Hall, East Central Research Foundation
Objectives:

- The project aims to demonstrate the effects of seeding date on new and niche flax varieties.

**ADOPT Funding:** $9,400

### Improving Standability of Wheat without PGRs (*20241066*)

Principal Investigator: Michael Hall, East Central Research Foundation
Objectives:

- This project wants to demonstrate the effectiveness of various management strategies (PGR, seed rate, variety, nitrogen fertility, potassium) on reducing lodging in wheat.

**ADOPT Funding:** $10,500

## Indian Head Agricultural Research Foundation (IHARF)

### Field Pea Response to Varying Phosphorus Forms and Placement Options (*20240989*)

Principal Investigator: Chris Holzapfel, Indian Head Agricultural Research Foundation (IHARF)
Objectives:

- This project wants to showcase how field peas respond agronomically to different phosphorus (P) fertilizer formulations and placement methods across various soil and climatic zones in Saskatchewan.

**ADOPT Funding:** $12,500

### Demonstration of the effects of seeding date on new and niche flax varieties (*20241034*)

Principal Investigator: Chris Holzapfel, Indian Head Agricultural Research Foundation (IHARF)
Objectives:

- The project aims to demonstrate the effects of seeding date on new and niche flax varieties.

**ADOPT Funding:** $9,400

### Improving Standability of Wheat without PGRs (*20241065*)

Principal Investigator: Chris Holzapfel, Indian Head Agricultural Research Foundation (IHARF)
Objectives:

- This project wants to demonstrate the effectiveness of various management strategies (PGR, seed rate, variety, nitrogen fertility, potassium) on reducing lodging in wheat.

**ADOPT Funding:** $0 [Funding provided by SaskWheat]

## Northeast Agriculture Research Foundation (NARF)

### Field Pea Response to Varying Phosphorus Forms and Placement Options (*20240992*)

Principal Investigator: Brianne McInnes, Northeast Agriculture Research Foundation (NARF)
Objectives:

- This project wants to showcase how field peas respond agronomically to different phosphorus (P) fertilizer formulations and placement methods across various soil and climatic zones in Saskatchewan.

**ADOPT Funding:** $11,500

### Demonstrating weed management options in chickpeas (*20241003*)

Principal Investigator: Ishita Patel, Northeast Agriculture Research Foundation
Objectives:

- The project aims to demonstrate weed management options in chickpeas, showcase new herbicide actives and recently registered tank mixes, and evaluate the crop safety of these new herbicides compared to currently used ones.

**ADOPT Funding:** $10,000

### Intercropping faba bean with canola and wheat under reduced Nitrogen fertilizer input (*20241004*)

Principal Investigator: Ishita Patel, Northeast Agriculture Research Foundation
Objectives:

- This project aims to demonstrate intercropping faba beans with canola and wheat under reduced nitrogen input. It will highlight the environmental, agronomic, and economic benefits and challenges of these intercropping combinations.

**ADOPT Funding:** $9,300

**Direct seeding of canola into summer seeded cover crops in Saskatchewan (*20241012*)**

Principal Investigator: Brianne McInnes, Northeast Agriculture Research Foundation (NARF)
Objectives:

- This project intends to demonstrate whether canola can be direct seeded into summer seeded annual cover crops in Saskatchewan, and if the cover crops have any effect on establishment and yield of the subsequent canola crop.

**ADOPT Funding:** $12,022

**Demonstration of the effects of seeding date on new and niche flax varieties (*20241033*)**

Principal Investigator: Ishita Patel, Northeast Agriculture Research Foundation
Objectives:

- The project aims to demonstrate the effects of seeding date on new and niche flax varieties.

**ADOPT Funding:** $10,400

**Underseeding tall fescue to canola for a diverse biennial cash and forage crop rotation (*20241039*)**

Principal Investigator: Ishita Patel, Northeast Agriculture Research Foundation
Objectives:

- This project will demonstrate how canola underseeded with tall fescue can be an option to diversify cash and forage crop rotation and to determine the effect of seeding rate of each crop on overall establishment, yield, land use efficiency, and economic return.

**ADOPT Funding:** $8,000

**Improving Standability of Wheat without PGRs (*20241067*)**

Principal Investigator: Ishita Patel, Northeast Agriculture Research Foundation
Objectives:

- This project wants to demonstrate the effectiveness of various management strategies (PGR, seed rate, variety, nitrogen fertility, potassium) on reducing lodging in wheat.

**ADOPT Funding:** $10,500

**Prairie Swine Centre**

**The effects of providing perforated rubber mats on the welfare and health of gestating sows and gilts (SOWMAT) (*20241022*)**

Principal Investigator: Jen-Yun Chou, Prairie Swine Centre
Objectives:

- Specifically, the project aims to quantify the slip-resistance qualities of the perforated mats and to investigate if their provision will positively influence sows and gilts to spend more time in the common area.

**ADOPT Funding:** $20,000

**Saskatchewan Barley Development Commission**

**4R Management: Can split applications be managed in malt barley to reduce risk and maintain yield and quality? (*20241010*)**

Principal Investigator: Mitchell Japp, Saskatchewan Barley Development Commission
Objectives:

- The project aims to showcase non-traditional 4R nitrogen management strategies in malt barley that can maintain quality while managing risk and enhancing yield.

**ADOPT Funding:** $32,000

**Plant Growth Regulator Mixes to Improve Crop Safety and Efficacy in Barley (*20241052*)**

Principal Investigator: Mitchell Japp, Saskatchewan Barley Development Commission

Objectives:

- This project will investigate the plant growth regulators and mixes to improve efficacy and crop safety in barley.

**ADOPT Funding:** $48,000

**Saskatchewan Beekeeping Development Commission**

**Demonstration of Drifting Bees as a Source of Disease Transmission in Saskatchewan Honey Bee Colonies (*20241021*)**

Principal Investigator: Medhat Nasr, Saskatchewan Beekeeping Development Commission

Objectives:

- This proposed project intends to quantify and show visually to beekeepers:
  - The extent of drifting that can happen within their apiaries
  - The methods they could use to decrease drifting.
  - The possible benefits that could be gained by managing bee drift.

**ADOPT Funding:** $24,310

**A Demonstration of Effects of Larval Age and Care on Rearing Quality Honey Bee Queens (*20241023*)**

Principal Investigator: Medhat Nasr, Saskatchewan Beekeeping Development Commission

Objectives:

- This proposed project will demonstrate the importance of maximizing both larval age and rearing conditions to optimize the quality of the produced queens using queen rearing techniques that have been widely available since the 1960's.

**ADOPT Funding:** $12,075

**Saskatchewan Conservation Learning Centre Inc.**

**Demonstration of the effects of seeding date on new and niche flax varieties (*20241038*)**

Principal Investigator: Robin Lokken, Saskatchewan Conservation Learning Centre Inc.

Objectives:

- The project aims to demonstrate the effects of seeding date on new and niche flax varieties.

**ADOPT Funding:** $9,400

**Saskatchewan Forage Council**

**Early Spring Seeding Saline Tolerant Forages With a Drone (*20241025*)**

Principal Investigator: Shelanne Longley, Saskatchewan Forage Council

Objectives:

- This project will evaluate the establishment and possible benefits for the use of drones in spring seeding in hard to access areas.

**ADOPT Funding:** $13,703

**Saskatchewan Fruit Growers Association (SFGA)**

**Training Apples on Trellis Wire to Create a High-density Wall System and Display of Market-Diverse University of Saskatchewan apples (*20241026*)**

Principal Investigator: Judy Riou, Saskatchewan Fruit Growers Association (SFGA)
Objectives:

- The project will demonstrate the feasibility of a trellis system to train high-density dwarf apple trees for improved apple production.

**ADOPT Funding:** $21,840

**Saskatchewan Oat Development Commission**

**N management in Oats to increase grain protein, reduce lodging and maintain test weight (*20241050*)**

Principal Investigator: Shawna Mathieson, Saskatchewan Oat Development Commission
Objectives:

- The demonstration aims to determine the effects of split application of nitrogen (N) or side banding on lodging, protein, test weight and yield of milling oat.

**ADOPT Funding:** $65,880

**Saskatchewan Pulse Growers**

**Chickpea Demonstration Trial: Investigating optimal seeding practices and cultivar selection (*20241005*)**

Principal Investigator: Mark Zatylny, Saskatchewan Pulse Growers
Objectives:

- The project aims to evaluate the yield performance and adaptability of three chickpea varieties (CDC Lancer, CDC Pasqua, and CDC Orkney) under different combinations of seeding dates and seeding rates.

**ADOPT Funding:** $41,000

**Saskatchewan Sheep Development Board**

**Non-Laparoscopic Artificial Insemination in Sheep (*20241053*)**

Principal Investigator: Adriane Good, Saskatchewan Sheep Development Board
Objectives:

- They propose to introduce and demonstrate to Saskatchewan sheep producers the benefits and technique of using Artificial Insemination (AI) as a valuable tool to improve sheep flock's performance and the over-all quality of the industry flocks.

**ADOPT Funding:** $4,610

**Saskatchewan Vegetable Growers Association**

**Evaluation of Jack-o-Lantern type pumpkin cultivars for suitability to Saskatchewan growing conditions and market requirements (*20240997*)**

Principal Investigator: Doug Waterer, Saskatchewan Vegetable Growers Association
Objectives:

- This trial will identify new pumpkin cultivars with better quality characteristics and field performance under Saskatchewan growing conditions.

**ADOPT Funding:** $25,200

**Evaluation of pie - type pumpkin cultivars for suitability to Saskatchewan growing conditions and market requirements (*20240998*)**

Principal Investigator: Doug Waterer, Saskatchewan Vegetable Growers Association

Objectives:

- This trial will assess the field performance characteristics of pie-type pumpkins under Saskatchewan growing conditions.

**ADOPT Funding:** $25,200

**SaskOilseeds**

**Do micronutrients applied to canola actually increase yield? (*20241011*)**

Principal Investigator: Kaeley Kindrachuk, SaskOilseeds

Objectives:

- This project aims to demonstrate the yield and quality response of canola to micronutrient applications in various soil zones. This project will showcase the importance of soil and tissue testing for evaluating the effectiveness of micronutrient products in canola.

**ADOPT Funding:** $33,000

**Enhanced Phosphorus Uptake in Flax through Novel Fertilizer Formulations and Biological Inoculants (*20241051*)**

Principal Investigator: Kade Kettenbach, SaskOilseeds

Objectives:

- The aim of the proposed project is to demonstrate the differences in phosphorus fertilizer formulation and biological inoculants to improve phosphorus uptake in flax.

**ADOPT Funding:** $47,000

**South East Research Farm (SERF)**

**Demonstrating weed management options in chickpeas (*20241001*)**

Principal Investigator: Lana Shaw, South East Research Farm (SERF)

Objectives:

- The project aims to demonstrate weed management options in chickpeas, showcase new herbicide actives and recently registered tank mixes, and evaluate the crop safety of these new herbicides compared to currently used ones.

**ADOPT Funding:** $10,000

**Demonstration of the effects of seeding date on new and niche flax varieties (*20241035*)**

Principal Investigator: Lana Shaw, South East Research Farm (SERF)

Objectives:

- The project aims to demonstrate the effects of seeding date on new and niche flax varieties.

**ADOPT Funding:** $9,400

**Improving Standability of Wheat without PGRs (*20241068*)**

Principal Investigator: Lana Shaw, South East Research Farm (SERF)

Objectives:

- This project wants to demonstrate the effectiveness of various management strategies (PGR, seed rate, variety, nitrogen fertility, potassium) on reducing lodging in wheat.

**ADOPT Funding:** $10,500

## Western Applied Research Corporation

### Field Pea Response to Varying Phosphorus Forms and Placement Options (*20240991*)

Principal Investigator: Jessica Enns, Western Applied Research Corporation
Objectives:

- This project wants to showcase how field peas respond agronomically to different phosphorus (P) fertilizer formulations and placement methods across various soil and climatic zones in Saskatchewan.

**ADOPT Funding:** $11,500

### Demonstrating weed management options in chickpeas (*20241002*)

Principal Investigator: Jessica Enns, Western Applied Research Corporation
Objectives:

- The project aims to demonstrate weed management options in chickpeas, showcase new herbicide actives and recently registered tank mixes, and evaluate the crop safety of these new herbicides compared to currently used ones.

**ADOPT Funding:** $10,000

### Direct seeding of canola into summer seeded cover crops in Saskatchewan (*20241013*)

Principal Investigator: Jessica Enns, Western Applied Research Corporation
Objectives:

- This project intends to demonstrate whether canola can be direct seeded into summer seeded annual cover crops in Saskatchewan, and if the cover crops have any effect on establishment and yield of the subsequent canola crop.

**ADOPT Funding:** $11,522

### Winter cereal options for early spring grazing and grain yield (dual-purpose) (*20241055*)

Principal Investigator: Alex Waldner, Western Applied Research Corporation
Objectives:

- This project wants to evaluate winter cereal options for early spring grazing and grain harvest.

**ADOPT Funding:** $8,000

### Improving Standability of Wheat without PGRs (*20241064*)

Principal Investigator: Jessica Enns, Western Applied Research Corporation
Objectives:

- This project wants to demonstrate the effectiveness of various management strategies (PGR, seed rate, variety, nitrogen fertility, potassium) on reducing lodging in wheat.

**ADOPT Funding:** $0 [Funding provided by SaskWheat]

## Wheatland Conservation Area

### Field Pea Response to Varying Phosphorus Forms and Placement Options (*20240990*)

Principal Investigator: Bryan Nybo, Wheatland Conservation Area
Objectives:

- This project wants to showcase how field peas respond agronomically to different phosphorus (P) fertilizer formulations and placement methods across various soil and climatic zones in Saskatchewan.

**ADOPT Funding:** $11,500

**Demonstrating weed management options in chickpeas (*20241000*)**

Principal Investigator: Amber Wall, Wheatland Conservation Area Inc.

Objectives:

- The project aims to demonstrate weed management options in chickpeas, showcase new herbicide actives and recently registered tank mixes, and evaluate the crop safety of these new herbicides compared to currently used ones.

**ADOPT Funding:** $10,000

**Demonstration of the effects of seeding date on new and niche flax varieties (*20241036*)**

Principal Investigator: Bryan Nybo, Wheatland Conservation Area Inc.

Objectives:

- The project aims to demonstrate the effects of seeding date on new and niche flax varieties.

**ADOPT Funding:** $9,400