

Research Projects for 2025 & Seed Variety Update

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Research Projects

- This past years Mustard 21 (M21) and the Saskatchewan Mustard Development Commission (SMDC) were involved in the Sustainable Canadian Agricultural Partnership program (SCAP).
- The big win for mustard growers is the access to AAFC breeding program.
- Progress is being made on clubroot resistance in mustard, herbicide tolerance and disease resistance.
- Testing for new hybrids continues to build on the yield advantage and disease resistance.



Research Projects - SCAP

- SCAP refers to the next round of funding for research and it stand for Sustainable Canadian Agricultural Partnership.
- The priorities for AAFC in the SCAP program are:
 - Climate Change and Environment Green House Gas Reduction
 - Economic Growth and Development
 - Sector Resilience and Societal Challenges



SCAP for 2023 to 2028

Projects for next round of funding are:

1. Greenhouse Gas Study

- Objective is to study baseline nitrous oxide emission measurements from the following crops: mustard, camelina, flax, sunflower, wheat, and carinata.
- The study will vary the rates of nitrogen and trace the flow of the nitrogen to get a better understanding of the flow of nitrogen.



SCAP for 2023 to 2028

2. Climate Smart condiment mustard for crop productivity and resilience.

- Objective is to develop brown and oriental mustard hybrids and yellow mustard composite varieties with herbicide tolerance.
- In addition, screening of brown mustard germplasm for low cadmium content to meet the EU standards. Also work to develop clubroot tolerant mustard lines as well as lines with saline tolerance.



Projects outside of SCAP for 2023 to 2028

- Objective is to work closely with the industry partners to develop new uses for mustard.
- Work with the Saskatchewan Food Industry Development Centre (Food Centre) in Saskatoon on adding mustard to pet food.
- Goal is to increase gut health in pets.
- Bio pellets with Chemical Engineering department at the University of Saskatchewan.
- Developing an environmental scan to see if there are other projects we can adopt.



New Varieties – AAC Hybrid Brown Elite



- M21 launched Hybrid Brown 18 in 20019
- Similar yield to AAC Brown 18
- Breed to have closer milling characteristics to Centennial Brown
- Better pod shatter resistance than AAC Brown 18



New Varieties - AAC Yellow 80



- AAC Yellow 80 is a composite variety
- It yields 10% higher than the OP variety Andante
- This year I had several calls from growers saying how good it looks in the field and the same was said about the research plots









New Varieties – Oriental Hybrid

- AAFC and M21 are working on a hybrid oriental line of mustard.
- A candidate will be selected in 2025 and brought forward for advancement.
- M21 expects to have small amounts of this variety available for the spring of 2026



What's next?

AAFC and M21 are working on:

- Herbicide tolerance
- Club root resistance
- Saline Tolerance
- Pod shatter

These projects are all part of SCAP



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Our Industry Partners:

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Saskatchewan Mustard Development Commission (Sask Mustard)

Canadian Mustard Association (CMA)



Thank you! Questions?

