

# Research Projects

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#### Research Trial Overview

- SaskMustard has ongoing collaborations with key research groups in Saskatchewan.
- Some of the results you just saw from Lana Shaw.
- This coming year SaskMustard will be running the same research in the following three locations:
  - Redvers
  - Swift Current
  - Indian Head
- Trail treatments include seeding rate and fertility.



#### Research Trial Overview

- The objective with these trials is to determine seeding rates for AAC Brown 18.
  - As this is the first hybrid in brown mustard, we want to have a solid recommendation for growers.
- The fertility study is to determine the proper fertility to maximize the yield of a hybrid brown mustard.



#### Mustard Projects

- The mandate of Mustard 21 and SMDC is to look for new uses for mustard and a portion of my job is allocated to this task.
- I wanted to give you an update on where we are at with that process.
- I will start with discussing some of the projects that are currently underway.



## Projects for 2020 & Beyond

- There are several new initiatives we are working on to help build the demand for mustard.
- We are working on projects with animals as well as other properties.



#### Prairie Swine Centre Project

- We are working with Dr. Denise Beaulieu at the Prairie Swine Center where much of their focus is on the welfare of sows and piglets.
- The study includes trials to see if incorporating mustard meal in the bedding mix can reduce the amount of bacteria in the farrowing pens, therefore making them healthier.



## Prairie Swine Centre Project

- This study will take 8 months to complete but we should have some preliminary results back in the next few months.
- It may lead to a swine feeding study to see if there are any benefits to adding low levels of mustard meal to their diet.



## **USask Dairy Project**

- SaskMustard has been working on a study with Dr. Greg Penner at the University of Saskatchewan.
- The key drivers for economics in dairy are:
  - Maximizing yield of milk fat
  - Feed to milk recovery rate
- Stall resting, lying down time and freedom from bacterial udder infections are critical.



## **USask Dairy Project**

- The anti-microbial properties of mustard meal will be tested in dairy cow stalls to try to replace existing products and reduce infections.
- The study tracks the amount of time the cows spend lying down in treated and untreated stalls. Focus is for maximum rest.
- Like the swine study, we are looking to make a safer bedding area for the animals.



#### USask Bio-coal Project

- Bio-Coal is the production of coal-like pellet from agricultural residues using thermo-chemical treatments and co-pelletization.
- Working with the Engineering dept. at the USask and Dr. Ajay Dalai.
- Mustard meal is used to keep bio-coal fuel pellets from absorbing moisture when they are shipped to Europe.
- The mustard meal does not effect the burning point of the fuel pellets.



#### Summary

- At SaskMustard and Mustard 21 we are focused on finding new uses for mustard to increase the demand for the product and benefit the grower.
- We are encouraged by our preliminary results and I look forward to presenting our continuing findings at this time next year.

Thank you.



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