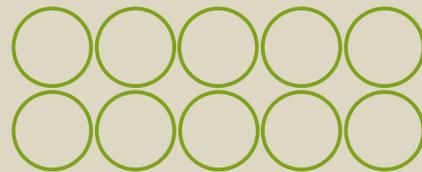




# LAKELAND AGRICULTURAL RESEARCH ASSOCIATION



**Innovation. Research. Education**





# OUR RESEARCH CAPABILITY

The Lakeland Agricultural Research Association (LARA) is a producer-led, not-for-profit organization that is mandated to conduct agricultural research and extension in the counties of St. Paul and the MD of Bonnyville. We maintain a permanent research site in Fort-Kent (AB), where 42 acres are dedicated to small-plot and field scale research. Every year, we also run an additional site for small-plot research in the county of St. Paul. We can only do agricultural research on clubroot-free fields. Thus, all research sites have to be soil sampled in the spring of every year for the presence of the clubroot pathogen (*Plasmodiophora brassicae*).

On an average year, LARA will run approximately from 25 to 30 small-plot trials (from 1500 to 1800 plots in total). These include regional variety, industry, and government-funded trials. We regularly set up demonstration trials (un-replicated) for summer field days, where we invite trial collaborators to present.

On any given year, we have the capacity to conduct more research trials (field scale and/or small plot). If you are part of an organization that would like to trial a product, for example, please contact Alyssa Krawchuk (email: [director@laraonline.ca](mailto:director@laraonline.ca), phone: 780-826-7260). We can get you a quote within a week. We ask organizations to contact us before April 1st, so that we have enough time to coordinate the sourcing of supplies for the trial.





# SEEDING

We are equipped with 2 seeders, one being a traditional hoe drill, while the other is a disk drill. Both have seed and fertilizer cones allowing for flexible seed/fertilizer combinations within trials, and both are equipped with liquid kits.

## **Fabro No-Till Hoe Drill Seeder**

This 5-row hoe drill seeder is currently used for most of our trials.

Features include:

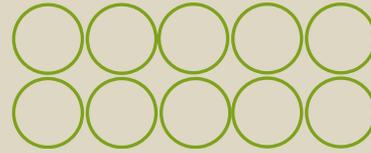
- 10-gallon liquid tank to the seed furrow
- 5 hoe openers @ 9-inch spacing (45 inch/1.15 m plot width)





## R-Tech JT-5PLC Disk Drill Seeder

This is our new seeder, which will be used for seeding the majority of our trials.



Features include:

- 5 Pillar Laser MK III openers @ 10-inch row spacing (50 inch/ 1.27 m plot width)
- Includes roller crimper that can be front mounted or pulled behind tractor – used to mechanically terminate and mulch cover crops while preserving soil structure, allows us to crimp and seed simultaneously.
- 200-pound bulk seed and fertilizer boxes
- 2 10-gallon liquid tanks to the side band





# SPRAYING

We have two sprayers, a custom 30-foot R-Tech boom sprayer and a 1.5-meter R-Tech bicycle sprayer.

## **R-Tech 30-Foot Boom Sprayer**

This sprayer is used for burndown on plots, broad in-crop herbicide application, and desiccating crops when needed.

Features include:

- 80-gallon chemical tank and 15-gallon freshwater rinse tank
- TeeJet 5 section boom control
- Hydraulic boom height adjustability





### **R-Tech Bicycle Sprayer**

This sprayer can be used for spraying individual plots within trials.

Features include:

- 3 nozzles, 1.5 m spray width
- Pop bottle header for separate applications within trials.





# HARVEST



Our grain trials are harvested with a 2020 Wintersteiger Classic Plus 1.5-meter plot combine, while forage trials are harvested with a ~1980 R-Tech Alfalfa-Omega SPF-40-1.25 self-propelled flail forage harvester.

## **2020 Wintersteiger Classic Plus**

This 1.5-meter combine is used to harvest all our grain trials.

Features include:

- 49 horsepower
- Suitable for a wide variety of crops with quick swappable concaves and sieves





**~1980 R-Tech Alfalfa-Omega SPF-40-1.25**

This self-propelled flail forage harvester is used to harvest our silage trials.





# HEAVY EQUIPMENT

We have four tractors: a 1990 Ford 1720, 2010 John Deere 3320, 2016 Massey Ferguson MF 4610M, and 2024 Massey Ferguson MF 2850E. All tractors are equipped with 3-point hitches and PTOs.



## 1990 Ford 1720

This tractor is mainly used with our hoe-drill seeder.

Features include:

- 28 horsepower (23.5 @ PTO)
- 48 inches center-to-center width



## 2024 Massey Ferguson 2850E

This is our newest tractor. It is used for seeding with the R-tech disk-drill, as well as rototilling and mowing around our plots.

Features include:

- 49 horsepower (41 @ PTO)





## 2010 John Deere 3320

This tractor is used for the majority of field maintenance, including spraying, mowing, and rototilling around plots.

Features include:

- 32.5 horsepower (25 @ PTO)
- 4-wheel drive (MFWD)
- 49 inches center-to-center width



## 2016 Massey Ferguson MF4610M

This tractor is used to seed fills at our Fort Kent research farm and is also used for larger projects.

Features include:

- 99-horsepower (80 @ PTO)
- Equipped with Massey Ferguson 936x Utility Loader with HLA HD5500 pallet forks and 85" dump bucket. 1,540 kilogram (3,430 pound) lifting capacity.
- 65 inches center-to-center width





# FIELD & LAB EQUIPMENT

We have a wide variety of implements and equipment to facilitate field and lab work and provide accurate, precise data.





## In-field measurement

### Kilotech KHS 200-60

This digital scale is used in conjunction with a 6-foot height-adjustable tripod, allowing us to weigh up to 60 kilograms (120 pounds) of fresh silage or grain directly at harvest. The scale's resolution is 20 grams (0.02 pounds).



## Plot Maintenance

### Farm King C4560 Rototiller

55-inch (1.4-m) tillage width

### Mowers:

- Farm King 528 60" rotary mower
- Tebben Rotary Mover

### 2 6-inch wheel hoes

### Stirrup hoes



## Grain Processing

We have a wide variety of sieves, as well as a seed thresher to effectively clean grain post-harvest, and a Key-Mat seed counter for TKWs.





## **FOSS Infratec™ 6008 9464 Grain Analyzer**

This is our new grain analyzer, allowing us to measure moisture, protein, oil content, and other parameters for cereal, pulse, and oilseed grain samples.



## **Labtronics Model 919 Grain Moisture Meter**

This moisture meter provides grain moisture readings within 0.1% and allows for easy measurement using the provided charts.



## **Soil Sampling**

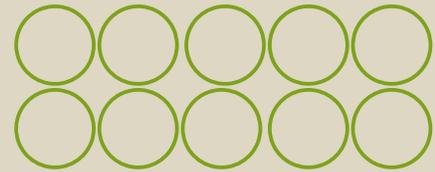
### **6-inch Dutch Auger**

The Dutch auger allows us to collect disturbed soil samples at varying depths for chemical nutrient analysis and clubroot presence.





# WORK WITH US



**Contact Us**

[lance@laraonline.ca](mailto:lance@laraonline.ca)



**Our Website**

[www.laraonline.ca](http://www.laraonline.ca)

