Grow With Us

2023, Issue 3

September/October 2023

IN THIS ISSUE

Utilizing High Legume Pastures for Grazing in Alberta

by Alyssa Krawchuk, LARA

Lakeland Agricultural Research Association (LARA), in partnership with 11 other applied research and forage associations, assessed the seeding, establishment and grazing potential of high legume pastures (>60% legume) in Alberta over a 2 year period. The high legume pasture project addressed the goal of a high performing, bloat safe, stable yielding, longer active growing season, high profit, and high soil carbon capture pasture.

Funding for the project was provided by Growing Forward 2 and supported by the Agriculture Research and Extension Council of Alberta and Alberta Agriculture and Forestry.

Historically, Alberta farmers and ranchers have been hesitant to establish high legume pastures for grazing due to the increased risk of bloat in cattle. The major cause of bloat is due to rapid forage digestion in the rumen. This can be alleviated with the introduction of a bloat safe legume into the pasture mix, such as sainfoin.

Sainfoin is considered a bloat safe legume due to condensed tannins that bind with soluble protein in the rumen and inhibits rumen activity, thus slowing down digestion rate. In addition to including sainfoin in the pasture mix, including grass species provides another non-bloat forage to further reduce the risk of bloat in high legume pastures.

A total of 13 ten-acre pastures were established in 2016 across the province. Each was seeded with a mixture of AC Mountainview sainfoin (20%), alfalfa (40%) and grass (40%) for grazing in 2017. A variety of equipment was used during seeding, but there are some very key aspects that need to be considered when establishing a high legume pasture.

Legumes need to be inoculated with a rhizobia-bacteria prior to seeding to allow for greater nitrogen fixation potential from the atmosphere. Inoculated seed needs to be placed into a prepared seedbed that is firm, free of weeds and to a depth of no more than 0.65 cm. Legume seeds are small and have difficulty emerging from increased depth, which is often a reason for poor establishment.

This project, along with previous research completed by Dr. Surya Acharya at Agriculture and Agri-Food Canada in Lethbridge, indicates that sainfoin needs to be properly managed to ensure it remains in a stand long-term. Proper management of sainfoin during the year of establishment and subsequent grazing periods can allow sainfoin to persist in a forage stand for years with a similar regrowth to that of alfalfa.

The benefits of growing a high legume pasture are many, including high quality and quantity of forage over the grazing season which can increase the chance of cattle increasing their body condition score during the growing season. In the long-term, cattle heading into winter with high body condition scores are easier to keep weight on and may be fed less while maintaining their condition.

In addition, high legume pastures can aid in building soil health by enhancing the nitrogen supplying power of the soil, reduce soil erosion by wind and water, improve soil water holding capacity, increase soil reserves of organic matter and add greater biodiversity in soil organisms both above and below ground. Some research suggests that excluding legumes from a pasture stand, combined with nitrogen fertilizer inputs, can have a negative impact on the soil microbiome.

Including legumes in a stand can also increase yield stability during extreme conditions such as drought as the plants

susceptibility to these stressors varies between species and cultivars. Research has shown that grass-legume mixtures can adapt to stressful conditions better than grass stands alone.

The High Legume Pasture Project completed in 2017, looked at the establishment of a high legume pasture on a prepared seedbed. Currently, there is limited research assessing the ability of bloat safe legumes such as sainfoin to be utilized in pasture rejuvenation. Anecdotal evidence suggests that allowing sainfoin to reseed itself can allow it to persist in existing stands.

Welcome Momna Farzand

My name is Momna Farzand, and I am excited to join LARA as a Cropping Agrologist.

I completed a Bachelor of Science degree in Botany from University of the Punjab, Pakistan in August 2018. After completing my bachelor's in Pakistan, I heard a lot about the agriculture programs available in Canada, the Plant Science program at University of Alberta caught my attention.

To pursue my goals, I joined the master's Program in Plant Science at the University of Alberta in September 2019. My master's research work focused on the identification and characterization of stripe rust resistance in Canadian spring wheat populations using conventional and molecular approaches. I worked on that project in collaboration with Spring Wheat Breeding Program at Agriculture and Agri-Food Canada, Lethbridge. I was successful to identify stripe rust resistance QTLs in two Canadian spring wheat AAC Innova/AAC Proclaim and AAC Cameron/P2711. Moreover, I was honoured to be the recipient of two prestigious awards by Alberta Wheat Commission (AWC) and Western Grains Research Foundation (WGRF). Those awards motivated me to work even harder to appreciate the investment of producers, AWC and WGRF. After completing my master's in September 2021, I started working as a Research Assistant with Wheat Breeding Program at the University of Alberta.

To me the most exciting aspect of joining LARA is to meet and work with producers in the Lakeland area. Working with LARA will extend my network and allow me to contribute to a more inclusive and diverse community. My main objectives are to empower producers in the fight against common wheat diseases, to reduce production cost, and maximize yield.

....

New Clubroot Strain Capable of Infecting Resistant Canola Found

by Alberta Seed Guide

A study from the University of Alberta has identified new strains of clubroot across Western Canada, an Aug. 14 news release said. There were several clubroot strains capable of infecting canola plants bred to resist the disease discovered.

The U of A researchers identified 25 unique clubroot pathotypes from samples collected from more than 250 fields in Alberta, Saskatchewan and Manitoba in 2019 and 2020. The release noted seven of the strains are new — six of which can bypass the crop's bred resistance against the disease.

"The findings really underscore how quickly pathotype shifts are occurring and how quickly we are finding new pathotypes. And it is likely we will continue to find new one," Keisha Hollman, study lead and a PhD candidate in plant science in the U of A Faculty of Agricultural, Life and Environmental Sciences, said in the release. Stephen Strelkov, a U of A plant pathologist, supervised Hollman's research.

The findings from this study will help inform clubroot management efforts. Hollman added producers must continue to manage the risk through "integrated management strategies" that help take the pressure off genetic resistance alone. These measures include sanitizing farm equipment between fields, and rotating out of canola for at least two years or more.

https://www.seed.ab.ca/new-clubroot-strains-capable-of-infecting-resistant-canola-found/

Stripe Rust; one of the five priority-one diseases of Wheat in Canada

by Momna Farzand, LARA

Canada is one of the top wheat producing nations in the world in terms of acreage and annual production (FAOSTAT, 2023). In 2021, approximately 9.3 million hectares (Mha) of wheat was harvested, with a record estimated production of 22.3 million tonnes (Mt) in Canada (FAOSTAT, 2023). Fungal diseases constitute a major threat to wheat production around the globe. Stripe rust (also known as yellow rust) caused by Puccinia striiformis Westend. f.sp. tritici Erikss. (Pst), is one of the most devastating diseases of wheat (Chen, 2005). It can cause complete yield loss in wheat, depending upon the type of the infection, specific climate conditions and the genetics of the wheat grown (Chen, 2005; Wellings, 2011).

In western Canada, stripe rust epidemics have been reported in 2005, 2006, 2011 and 2016 (Aboukhaddour et al., 2020). The disease is widespread in western Canada due to the inoculum carried by wind from the Pacific Northwest and the Great Plains of North America, where epidemics occur frequently (Brar & Kutcher 2016). In addition, the recent expansion in the range of disease can be attributed to evolution of new high temperature adapted races (Milus et al., 2009) and overwintering of pathogen on winter wheat (Brar & Kutcher 2016). The management of disease through fungicide application is costly and imposes adverse effects on the environment. The most cost effective, sustainable, and environmentally friendly approach is growing resistant wheat varieties.

Major goals of wheat breeding programs in western Canada are to develop cultivars with good agronomic performance, suitable end use quality and resistance to priority one diseases. In the ever-evolving dynamic population, due to population shifts and/or mutations, and appearance of new more aggressive strains of pathogens, wheat cultivars can be rendered susceptible to one or more diseases. Hence, there is continuous need to identify and incorporate new sources of resistance to these diseases.

We have new uncharacterized sources of stripe rust resistance among all wheat classes. Moreover, there are germplasm lines from various sources that have shown good levels of resistance for the last few years. These new resistance sources need to be characterized as seedling or adult plant resistance gene(s) and molecular markers developed in order to efficiently deploy these genes/quantitative trait loci (QTLs) in new resistant varieties for Alberta. Mapping molecular markers linked to resistance genes is a key step for efficient gene pyramiding into breeding material (Chen et al., 2016).

Thus, the objectives of my master's research work were to map genes/QTLs associated with stripe rust resistance in two Canadian spring wheat populations, AAC Innova/AAC Proclaim and AAC Cameron/P2711 and identify molecular markers linked to stripe rust resistance loci in both populations. AAC Innova/ AAC proclaim was a doubled haploid (DH) population comprising of 291 lines and developed from the cross of susceptible cultivar AAC Proclaim with resistant AAC Innova. AAC Cameron/P2711 was a recombinant inbred line (RIL) population comprising of 252 RILs and developed from the cross between wheat cultivar AAC Cameron and germplasm line P2711. Both populations were developed at Agriculture and Agri-Food Canada, Lethbridge.

We evaluated those populations for stripe rust severity at the adult plant stage in disease nurseries at Creston, British Columbia and Lethbridge, Alberta. The experimental sites, Creston, BC (49°09'N, 116°51'W), and Lethbridge, AB (49°41'N, 112°49'W), are situated in proximity to Pacific Northwest (PNW) of the United States, which is a hot spot region for stripe rust occurrence in North America (Chen, 2005) and provides natural inoculum in western Canada through wind trajectories. The experiment was planted in a randomized complete block design. Each line was planted as one-meter-long rows with the space of 25 cm between them to facilitate disease evaluation. Approximately 60 seeds were planted in individual rows. Spread rows, consisting of a mixture of stripe rust susceptible cultivars, were planted as border rows to create sufficient levels of infection. Stripe rust severity was recorded two or three times visually as 0 to 100% (0 = immune and 100% = completely susceptible) based on modified Cobb scale (Peterson, 1948).

Furthermore, populations were genotyped using wheat 90K SNP (single nucleotide polymorphism) assay and highly polymorphic SNPs were used to construct high-density genetic maps for each population individually. The maps provide enough coverage to dissect stripe rust resistance segregating in these population. QTL analysis was undertaken for each environment separately and across the environments using pooled data. Composite interval mapping (CIM) was carried out with Windows QTL mapping identified one major (QYr.lrdc-2A) and ten minor effect QTLs (QYr.lrdc-2B.1, QYr.lrdc-2B.2, QYr.lrdc-2B.3, QYr.lrdc-2B.4, QYr.lrdc-2D, QYr.lrdc-3B, QYr.lrdc-5A, QYr.lrdc-5B, QYr.lrdc-5D and QYr.lrdc-7D) in AAC Innova/AAC Proclaim Population. AAC Innova contributed stripe rust resistance for most of the QTLs identified in this Population. In AAC Cameron/P2711 population, a total of seven stripe rust resistance QTLs (QYr.lrdc-1A.1, QYr.lrdc-1A.2, QYr.lrdc-2A.1, QYr.lrdc-2A.2, QYr.lrdc-2B, QYr.lrdc-3B and QYr.lrdc-5A) were identified. Four resistance QTLs were contributed by P2711 and three from AAC Cameron. All identified QTLs had a moderate effect on stripe rust severity when used individually but showed larger effects when deployed with other QTLs identified in this population. The stable QTLs and their closely associated markers identified in these studies can be easily utilised within a breeding program for the development of stripe rust resistant cultivars.

References

Aboukhaddour, R., Fetch, T., McCallum, B. D., Harding, M. W., Beres, B. L., & Graf, R. J. (2020). Wheat diseases on the prairies: A Canadian story. Plant Pathology, 69(3), 418-432.

Brar, G. S., & Kutcher, H. R. (2016). Race characterization of Puccinia striiformis f. sp. tritici, the cause of wheat stripe rust, in Saskatchewan and Southern Alberta, Canada and virulence comparison with races from the United States. Plant Disease, 100(8), 1744-1753.

Chen, C., He, Z., Lu, J., Li, J., Ren, Y., Ma, C., & Xia, X. (2016). Molecular mapping of stripe rust resistance gene YrJ22 in Chinese wheat cultivar Jimai 22. Molecular Breeding, 36(8), 118.

Chen, X. M. (2005). Epidemiology and control of stripe rust [Puccinia striiformis f. sp. tritici] on wheat. Canadian Journal of Plant Pathology, 27(3), 314-337.

Food and Agriculture Organization of the United Nations. (2023). FAOSTAT. Retrieved from http://www.fao.org/faostat/en/#data/QC.

Milus, E. A., Kristensen, K., & Hovmøller, M. S. (2009). Evidence for increased aggressiveness in a recent widespread strain of Puccinia striiformis f. sp. tritici causing stripe rust of wheat. Phytopathology, 99(1), 89-94.

Peterson, R. F., Campbell, A. B., & Hannah, A. E. (1948). A diagrammatic scale for estimating rust intensity on leaves and stems of cereals. Canadian Journal of Research, 26(5), 496-500.

Wang, S., Basten, C. J., & Zeng, Z. B. (2005). Windows QTL Cartographer 2.5 user manual. North Carolina State University, Raleigh.

Wellings, C. R. (2011). Global status of stripe rust: a review of historical and current threats. Euphytica, 179(1), 129-141.

CowBytes ration balancing software is now available through the Beef Cattle Research Council!

CowBytes ration-balancing software allows producers to formulate their own feed rations while considering various combinations of feed and byproducts at different prices, and in doing so, can find a way to reduce feed costs while still meeting production targets. Ensuring that cattle are being fed a balanced ration can also save producers on feed costs in the long run by preventing over- or under-feeding.

CowBytes is an easy-to-use ration-balancing software program that can assist cattle producers in developing rations and improving their herd nutrition. The program allows producers to select the type and breeds of cattle that they want to feed, production level, environmental conditions, feed type and provides producers with eight different types of reports including feed mix and batch scale sheets.

Do You Have Dirt or Soil?

By Kevin Elmy

What is the most important asset on every farm? Our land. Whether it is owned or rented, land is where the farm starts. This is where our equipment and livestock generate revenue. Our return on investment can then be linked to the productivity of our land.

Prior to the conversion of the land to agricultural practices, the soil had inherent fertility and production potential. With the introduction of agricultural practices, the soils started to degrade. In too many cases our soils degraded to dirt. What is the difference? Dirt is soil without life. Dirt needs to be fed with synthetic inputs in order to produce plant growth. In dirt, the microbes are inactive, no link with plants and the soil making nutrients available to create plant growth. It would be extremely rare for soil to have no microbial activity but there are processes used that sterilizes the soil to kill all the microbes in it. But in nature's intelligence, microbes find a way back into the dirt to try to make it soil.

Soil biology is stimulated by having diverse plant groups growing in the soil. Some call it a crop rotation, or you can create a diverse mix using poly-cropping or cover cropping. When we reduce the number of crops, we are growing we are only feeding part of the soil microbiology, causing the unfed microbes to go dormant. These dormant microbes may be some of the control organisms that will suppress disease in the crops we are growing, resulting in adding a chemical measure to control the disease. In many cases the chemical may have unintended consequences of damaging or killing other species in the soil thus reducing microbial diversity.

In the soil we also have free living organisms that fix nitrogen and solubilize phosphate and other nutrients required by plants. By supplying nutrients to plants as fertilizer, the plants do not need to signal for microbes to scavenge nutrients for them. When the easily available nutrients are used, then the plant signals for those microbes to help them out. By that time, it may be too late for that season for adequate nutrients to become available.

Mycorrhizal fungi can be rendered inoperative in a similar manner. But it is not just fertilizer application that can signal for the plant not needing them, but fungicides also. Mycorrhizal fungi, in conjunction with other microbes, creates a stream of many of the plant's nutritional needs plus water. It can also help plants communicate other distresses like pests and disease to enable the other plants to start producing secondary plant metabolites to help protect the plant against the future attack.

If your land is addicted to inputs to produce plant growth, you may be farming dirt. Soil will be full of microbial life, able to cycle nutrients for plants to use. This is the base of regenerative agriculture. Converting dirt to soil does take time. Increasing plant diversity, reducing tillage, reducing the use of synthetics, keeping a living root in the soil, and incorporating livestock all help build a strong microbial community in the soil.

Kevin Elmy is a third-generation farmer who started researching better ways to farm in 1999. In 2000, he and his family started using soil health principles on their farm, and in 2009, they started using cover crops. By building healthy soil, they have been able to reduce synthetic inputs to the land dramatically while maintaining yields.

Unpacking a Water Quality Test

by Barry Yaremcio

Water quality is often overlooked when developing cattle rations. For every kilogram of dry feed consumed, an animal drinks between three to five kg of water. Temperature and feed type can affect water intake. As well, lactating cows have a higher water intake compared to pregnant animals.

A lack of water reduces feed intake and nutrients consumption. Understanding and interpreting your water analysis report is necessary to develop a balanced feeding program. Note that milligrams per ml (ug/ml) are interchangeable with parts per million (ppm).

Calcium concentrations below 1,000 ppm are considered safe. If animals are fed a high calcium ration (i.e. mainly alfalfa), total intake could impair the absorption of phosphorus and other trace minerals, which reduces metabolic efficiency and causes health problems. Increasing phosphorus levels in the ration to keep the calcium-to-phosphorus ratio below 7:1 is required.

Surface runoff water from pastures or fields with high fertilizer or manure application can contain high **phosphorus** levels. Adjusting rations to maintain the proper calcium-to-phosphorus ratio is necessary.

Iron content in water is extremely variable. Geography and geological formations influence content. Iron is known to tie up copper when levels exceed 300 ppm. Ten ppm reduces total water intake and milk production.

Magnesium found in water is commonly in sulphate form. This can cause a laxative effect, especially in young calves when levels exceed 300 to 400 ppm.

Manganese concentrations above 1,000 ppm from water and feed cause a reduction in rumen microbial growth, volatile fatty acid production, reduction in appetite and growth rate (Dearing, Utah State, 2005).

PH measures the alkalinity or acidity of water. Recommended pH for water is between 6.0 and 8.0. Values above 7.0 are basic and below 7.0 is acidic. Slightly alkaline water (basic) is ideal. Alkalinity indicates the buffering ability of water. Buffers are mainly bicarbonates and carbonates which reduce the acidification of the rumen. However, the amount of buffering from water is extremely insignificant compared to what is produced by the rumen and contained in saliva.

Nitrate is reported as nitrate, nitrate-N, or potassium nitrate. To compare results, equivalent amounts are 0.5 per cent nitrate, 0.12 per cent nitrate-N and 0.81 per cent potassium nitrate. If well water contains nitrate, the well is not sealed properly, and surface runoff has contaminated the well. Remediation is required. Spring runoff from pastures or fertilized cultivated land can cause nitrate accumulations in dugouts. Improving the buffer zone around the dugout with a grassed area can capture and use some of the available nitrogen.

Nitrate in water can be a larger concern than what is in feed. Nitrate in water is absorbed into the bloodstream quickly, unlike nitrate from feed sources which is gradually digested and released over time. Nitrate from water is considered safe at levels below 440 ppm. As water intake increases, the safe level decreases. A safe nitrate level should be calculated on a case-by-case basis.

When evaluating **sodium** (salt) content in a ration, contributions from feed, water and supplements need to be included. Sodium is reported as parts per million or milligrams per millilitre — again, these values are interchangeable. Sodium makes up 39 per cent of the weight of salt. To convert sodium to a salt equivalent, divide the sodium value by 0.39. Cattle require 0.25 per cent salt or 0.0975 per cent sodium intake daily. Water that contains 300 ppm sodium provides sufficient salt to meet animal requirements. Salt content in supplements or minerals needs to be reduced when combined sodium levels in the water and feed exceed 300 ppm.

Total dissolved solids (TDS) influence the palatability of water. As TDS increases, water intake decreases. TDS measures the inorganic salts (sodium and potassium are most common) and organic matter that is suspended in the water. Depending on which minerals are present, adjustments to the supplementation program may be necessary. Mineral or trace mineral tie-up or reduced absorption occurs with high TDS levels, which can cause deficiencies. In summer, cattle walking into dugouts, creeks or sloughs will disturb the bottom of the water body. Soil and other particles become suspended in the water which will increase the TDS content. Levels of 4,000 ppm have caused animal health and performance problems. Levels above 1,000 ppm can cause mild and temporary diarrhea. Younger animals are more sensitive to high levels of TDS than mature animals.

Ruminants are highly susceptible to high **sulphur** intake. High amounts of sulphur reduce copper availability. Sulphur concentrations in water below 1,000 ppm (CCME 2005) are considered safe. A reduction in average daily gain occurs when sulphur levels exceed 2,000 ppm on a dry basis (Zinn et. al., 1997). High sulphur levels in water are a concern, especially in Western Canada. Total sulphur intake from water and feed should not exceed 0.4 per cent for high concentrate rations and 0.55 per cent for high forage rations. Concentrations at or above these levels can result in polio. The resulting brain swelling causes death. With the increased use of brassica species in grazing and forage blends, sulphur levels from feed and water can exceed upper limits.

Dugouts are a common water supply. In a year with low spring runoff and minimal recharge, or hot conditions that increase evaporation, TDS and mineral concentrations increase over time. In 1997, a hot dry year in Saskatchewan, over 100 cows were found dead on a community pasture. High sulphur levels in the dugout water caused polio. Saskatchewan Agriculture then tested 260 dugouts across the province for water quality and found that 50 per cent had sulphate levels above 2,000 ppm which exceeds the recommended upper limit (Feist).

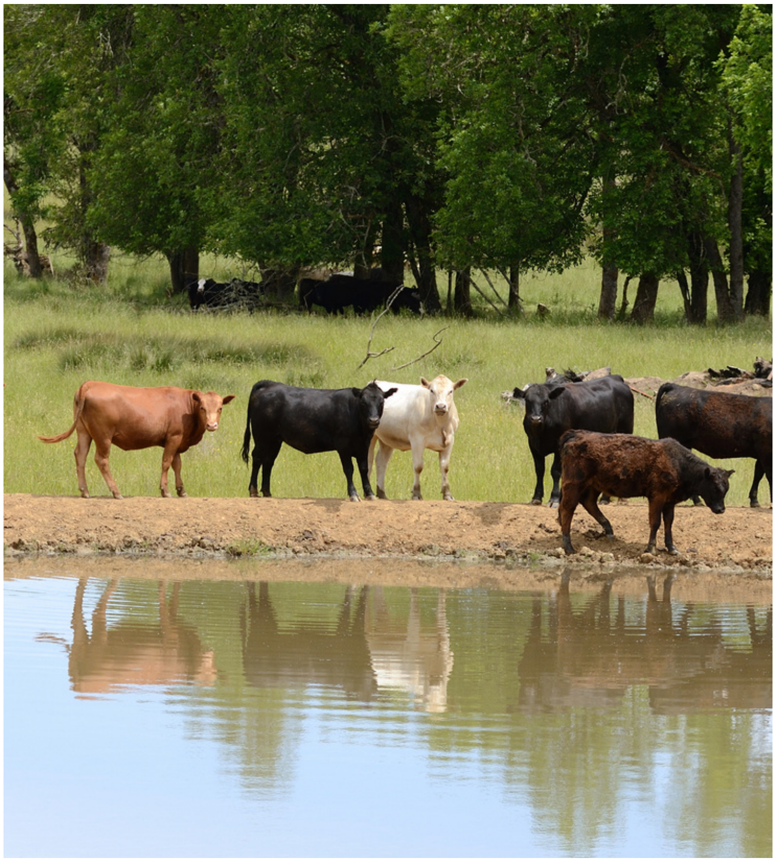
Although **molybdenum** isn't included in this report, it may be included, depending on the laboratory used and analysis requested. Molybdenum levels in groundwater from areas that are poorly drained are higher than from well-drained soils. If molybdenum concentrations in the feed and water are equal, water could contribute five times more molybdenum than feed because of the amount of water consumed. Molybdenum and sulphur interfere with copper absorption. One ppm of molybdenum can tie up seven ppm of copper. If molybdenum is greater than five ppm and sulphur is higher than 0.33 per cent, copper absorption is reduced by 60 per cent (Animals (Basel). 2021 Jul; 11(7): 2083). Some nutritionists increase copper levels in the ration when molybdenum levels exceed a total of three ppm.

Water quality is not constant. It changes from year to year and month to month depending on weather conditions. Work with a ruminant nutritionist to evaluate your water analysis report and balance a ration that will provide optimal nutrition for your herd.

Article originally published in the Canadian Cattlemen's magazine August 2023.

https://www.canadiancattlemen.ca/features/unpacking-a-water-quality-test/

Barry Yaremcio holds a master's degree in animal science (nutrition) and a bachelor's degree in agriculture (animal science). He worked in extension for Alberta Agriculture for several years and now is a ruminant nutritionist and production management consultant. Reach him through beefconsultant.com.



Do More Ag Foundation Releases Canadian Ag Mental Health Study

by Rebecca Carmelipeslak

A new study from the Do More Agriculture Foundation (Do More Ag) evaluated the organization's work so far and recommended its next steps, according to a release. The study titled "Measuring Impact and Future Action" was led by Wilton Consulting Group (WCG) and Openly.

"The Do More Ag initiatives are essential to open dialogue and eliminate the stigma around mental health in the agricultural sector," said Marie-Claude Bibeau, Canada's minister of agriculture and agri-food. "The expertise they have developed over the years now enables them to look at diversity in the sector, provide a more adapted response and find tailored solutions to each individual's unique reality."

Agri-Diversity Program sent funding to Do More Ag in 2021 to help with studies to understand mental health awareness, education, and resources in the Canadian agricultural sector. Through this funding Do More Ag was able to complete the study which paved a path forward to help groups who are underrepresented in the Canadian agricultural sector.

"We are thankful for all the insights people involved in the Canadian agricultural industry shared over the course of the research," said Bronwynne Wilton, the principal and lead consultant at WCG. "These insights highlighted some of the strengths in this field, such as the increased conversations and awareness about mental health. The discussions also clearly identified areas where more work needs to be done, such as embracing inclusion, diversity, equity, and accessibility (IDEA), so that people feel safe and welcome in our industry."

"We are immensely proud to have contributed to reducing the stigma of mental health and to have helped pave the way for conversation and tangible action in agriculture," said Lauren Martin, Do More Ag board chair. "As our organization has evolved along with the conversation around mental health, it was time for us to reflect on next steps."

There were several recommendations outlined through the research study. Some focuses included expanding Do More Ag's reach nationwide as well as diversifying its outreach offerings.

Do More Ag is also looking to strengthening existing partnerships and host dialogs with partners regularly. The organization looks to serve as a connection between individuals, companies and organizations in the agricultural sector that support mental health. Through this connection, Do More Ag hopes to continue to share research, resources, programs and services throughout the agricultural community.

Future efforts will also include expanding research to find the roots of mental health stressors as well as sharing the knowledge among everyone. Do More Ag will also continue to increase understanding of mental health in the community through various programs like AgCulture.

"Last year the foundation's focus was on listening and learning; this not only involved our work with the Wilton Group and Openly, but it also took me across Canada speaking with farmers, industry reps, organizations, researchers and elected officials," said Do More Ag Executive Director Megz Reynolds. "I am so thankful to everyone who participated in our research project and took the time to engage and share. One of the most common asks throughout the past year has been for peer-to-peer support, we are excited to share that we have been working on that, and we have launched AgTalk as a result."

AgTalk offers 24/7 bilingual clinical moderation, powered by Togetherall, which "ensures a secure environment for open discussions on mental health," according to the release.

"Once again, thank you to the Agri-Diversity Program and to everyone who participated through interviews, the survey, focus groups and our advisory team," added Megz Reynolds.

Do More Ag will continue to connect the resources that are offered with those members of the Canadian agricultural community that need mental health support.

“As the Farmer Mental Health Expert Advisor for this project, I was privileged to be among many collaborators who contributed their industry knowledge, personal experiences and vision for the future of mental health in Canadian agriculture,” said Bonnie Taylor, a social worker. “The open discussions reinforced the urgency of addressing and supporting the mental health and wellness needs for all members of the agricultural industry, particularly for traditionally underrepresented groups. I look forward to witnessing the positive outcomes for the mental health and wellness of everyone in the agricultural industry once these recommendations are implemented.”

https://germination.ca/do-more-ag-releases-canadian-ag-mental-health-study/

UPCOMING Events

Don't miss out on these exciting upcoming events

Advanced Drone School

November 2-3, 2023

Ashmont Agriplex

Young Farmers Social

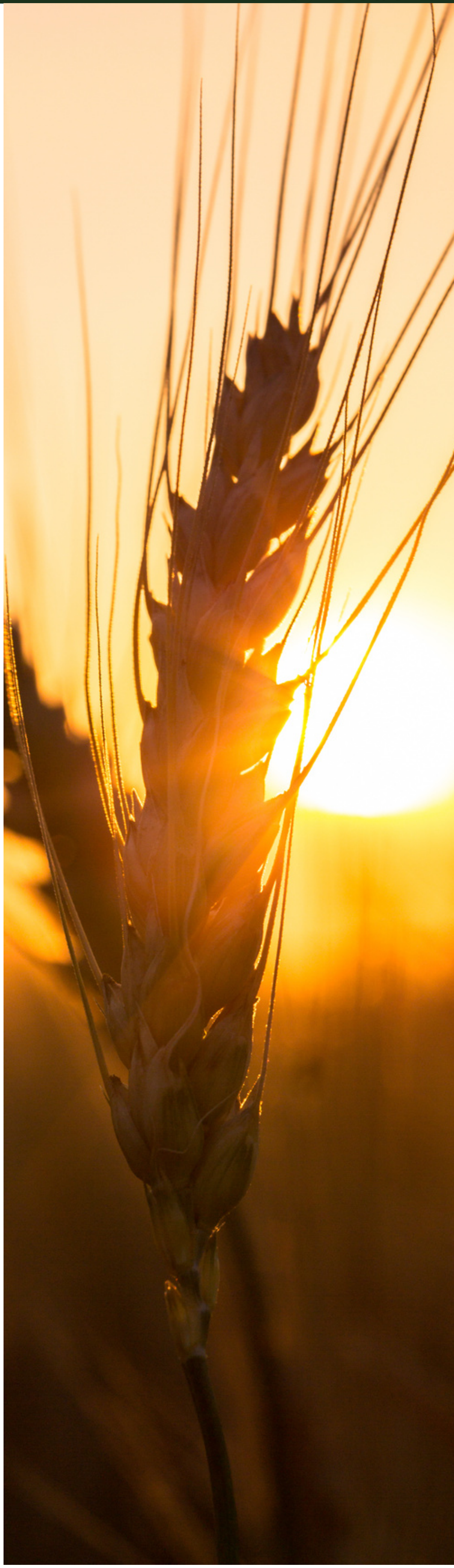
November 30, 2023

Eastbourne Hall

Finding Fairness in Farm Transition

December 1, 2023

Smoky Lake Agriplex



Lakeland Agricultural Research Association

Mission Statement:

Lakeland Agricultural Research Association (LARA) conducts innovative unbiased applied research and extension supporting sustainable agriculture.

Box 7068
Bonnyville, AB
T9N 2H4

Phone: (780) 826-7260
Fax: (780) 826-7099

Alyssa Krawchuk
Executive Director
director@laraonline.ca
(780) 826-1130

Momna Farzand
Cropping Agrologist
cropping@laraonline.ca
(780) 812-1037

Dustin Roth
Environmental Farm Plans
technician@laraonline.ca
(780) 812-1036

Find us on Facebook

Follow us on Twitter
@LakelandARA
@LARAlivestock
@LARAcropping

www.laraonline.ca

BOARD OF DIRECTORS

M.D. of Bonnyville
Murray Scott
Nick Kunec
Don Slipchuk (ASB Rep)
Josh Crick (ASB Alt)

County of St. Paul
Patrick Elsen
Phil Amyotte
Kevin Wirsta (ASB Rep)
Louis Dechaine (ASB Alt)

Smoky Lake County
Barb Shapka
Amanda Fischer
Dan Gawalko (ASB Rep)
Linda Fenerty (ASB Alt)

Lac La Biche County
Wanda Austin (Chair)
Laurier Bourassa
Sterling Johnson (ASB Rep)
Colette Borgun (ASB Alt)

Jay Cory *(LFA Rep)*

THANK YOU TO OUR MUNICIPAL AND COUNTY PARTNERS