

NEWSLETTER

Diversification Centres

May 2024



A small plot research trial seeded at Prairies East Sustainable Agriculture Initiative (PESAI) in 2023

Diversification Centres Getting Ready for Spring Planting

As the icy grip of winter gradually loosens across Manitoba, the province's Diversification Centres are gearing up for planting research experiments for the 2024 growing season. The Centres conduct applied research trials in collaboration with provincial Crop and Livestock Specialists, industry stakeholders, academic institutions, local producers, and entrepreneur to develop sustainable agronomic solutions for cereals, corn, oilseeds,

pulses, special crops, forages, and potatoes.

By harnessing the collective expertise of a multidisciplinary network, the aim is to evaluate crop varieties to test their capability to withstand the multifaceted challenges posed by climate variability, market demands, and evolving agricultural practices. As the season advances, the progress of these research projects is shared through field days, workshops, videos, X posts, and news releases.

UPCOMING EVENTS*

May 1

CropTalk - 2024

Webinar Series

May 10

Manitoba Nutrition & Dietetics Research Day

University of Manitoba –
Winnipeg, MB

May 14-16

Animal Nutrition Conference of Canada

Fairmont Winnipeg, MB

May 15

Annual General Meeting – Canadian Forage & Grassland Association

Virtual Meeting

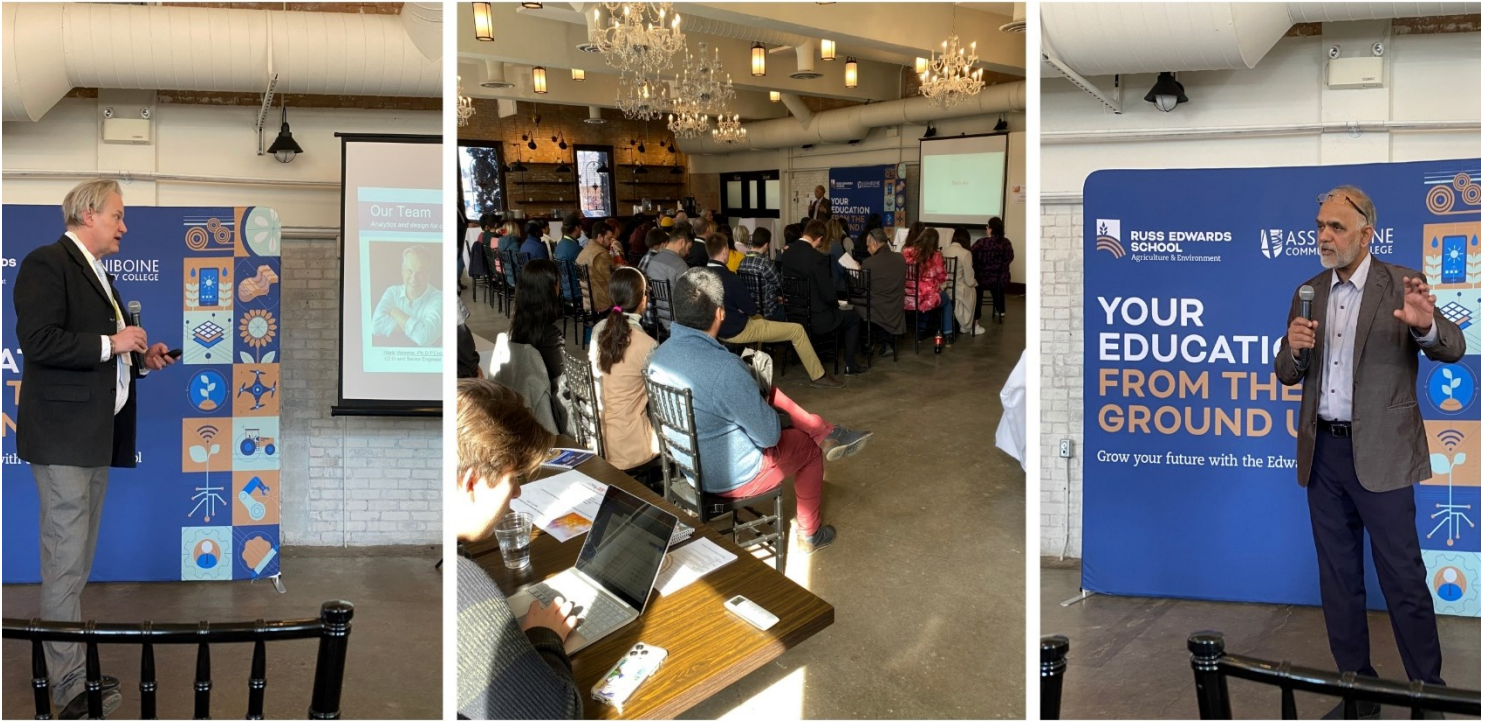
June 18-19

Manitoba Sustainable Protein Research Symposium 2024

Fairmont Winnipeg, MB

*Click event's link for more details.

MCDC Participated in the Applied Research Showcase at ACC



Dr. Hank Venema (Left) and Dr. Sajjad Rao (Right) presenting at the Applied Research Showcase

The Manitoba Crop Diversification Centre (MCDC) participated in the Applied Research Showcase, hosted by the Russ Edwards School of Agriculture and Environment of Assiniboine Community College (ACC) on April 4 in Brandon, MB. The event aimed to spotlight ACC's applied research and foster collaboration within the agricultural community. Among the attendees were Haider Abbas (Applied Research Specialist) and Faryal Yousaf (Applied Research Technician) from MCDC, who noted a huge interest among students in MCDC's applied research program. Abbas and Yousaf also discussed integrating field learning experiences with academic coursework for ACC's agriculture students.

The morning kicked off with registration and networking over coffee, followed by opening remarks from Mr. Tim Hore. Keynote speaker Mr. James Hood, alongside other distinguished speakers such as Dr. Hank Venema, emphasized the importance of innovation in addressing climate resilience challenges. Dr. Sajjad Rao and Dr. Poonam Singh delved into applied research innovations, focusing on accelerating Food, Energy, and Water (FEW) solutions and harnessing waste-stream resources for sustainable crop cultivation. The student poster session highlighted the event, showcasing the next generation's involvement in agricultural research. Capstone presentations provided a platform for students to demonstrate their research projects and innovations. Wrapping up the day, Dr. Baljeet Singh discussed field crop production opportunities and soil health management research at ACC.



Gearing Up for Research and Extension with Forages

In 2023, the Parkland Crop Diversification Foundation (PCDF) partnered with Ducks Unlimited Canada (DUC) to establish alfalfa and timothy hay plots. The plots were planted with different seeding rates of oats (none, 0.5 bu/ac or 2 bu/ac) and phosphorous (none or 25 lbs/ac). The success of the establishment of the alfalfa and timothy varied greatly, depending on the seeding rate of the oats. Plots seeded without oats were established much better than plots seeded with oats, regardless of the seeding rate for oats. This observation confirms the findings of DUC, which recommends that new hay stands be seeded without a nurse crop (such as oats). Especially when moisture is limited, the nurse crop can use valuable soil moisture, making it unavailable to the perennial hay crop. Despite the short-term advantages that the nurse crop may provide to the producers in the year of establishment, the practice may reduce the yield and performance of the perennial hay crop in the following years.



Hay with Nurse Crop



Hay without Nurse Crop



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As the alfalfa-timothy plots break dormancy in the year after establishment, the effects of the nurse crop remain clear. The alfalfa crowns are larger, more numerous, and have already produced more new growth than in the plots planted with oats. The timothy has also sprung up faster and more productively in the plots without oats. This reflects the much more established root system that those plants could develop in 2023 without competition from oat plants.

PCDF will collect hay samples from the plots during the upcoming season. In addition to providing a deeper understanding of the impact of the nurse crop on hay yields, the samples will allow for a comparison of the impact of the different phosphorous rates at the time of planting. It is expected that the plots that were planted without oats and that received 25 lb/ac will perform better than the other treatments because much of that phosphorous will still be available in the soil for the developing alfalfa and timothy plants.

Other exciting forage-related projects at PCDF in 2024 include the Manitoba Crop Variety Evaluation Trials (MCVET) Annual Forages trial and demonstrations to extend early and late season grazing for cattle using fall rye and corn with intercrops. PCDF plans to host in-field workshops for these demonstrations. Please contact James Frey at (204) 247-0346 for more information.



Alfalfa-timothy Emergence in Full-oat Treatment



Sara Marzoff (PCDF) Taking Observations in Alfalfa-timothy Plot Without oats



Contact us: info@mbdiversificationcentres.ca

Featured Updates from WADO

Field Day is Tentatively Set for July 25th

The Westman Agricultural Diversification Organization (WADO) aims to showcase its 2024 applied research trials on July 25 in Melita. All are welcome!

Please contact Scott Chalmers (Applied Research Specialist) at Scott.Chalmers@gov.mb.ca or dial 204-522-5415 to register.



Seeding has Begun at WADO

The agricultural research endeavours at the WADO have started with various trials aimed at enhancing crop productivity and resilience. The commenced trials include the MCVET pea variety evaluation trial, Pulse Genetics pea variety evaluation trial, and ACC's pea fungicide trial. The weather and field conditions were optimal with earliness, soil moisture, soil cover, and rain on the way.

WADO Hosts Canola Research for the Region

In 2024, WADO is hosting a research site near Melita for the MCVET in collaboration with the Manitoba Canola Growers Association. The goal of the trial is to evaluate commercial or soon-to-be commercialized canola seed varieties available to farmers across canola-growing regions of Manitoba.

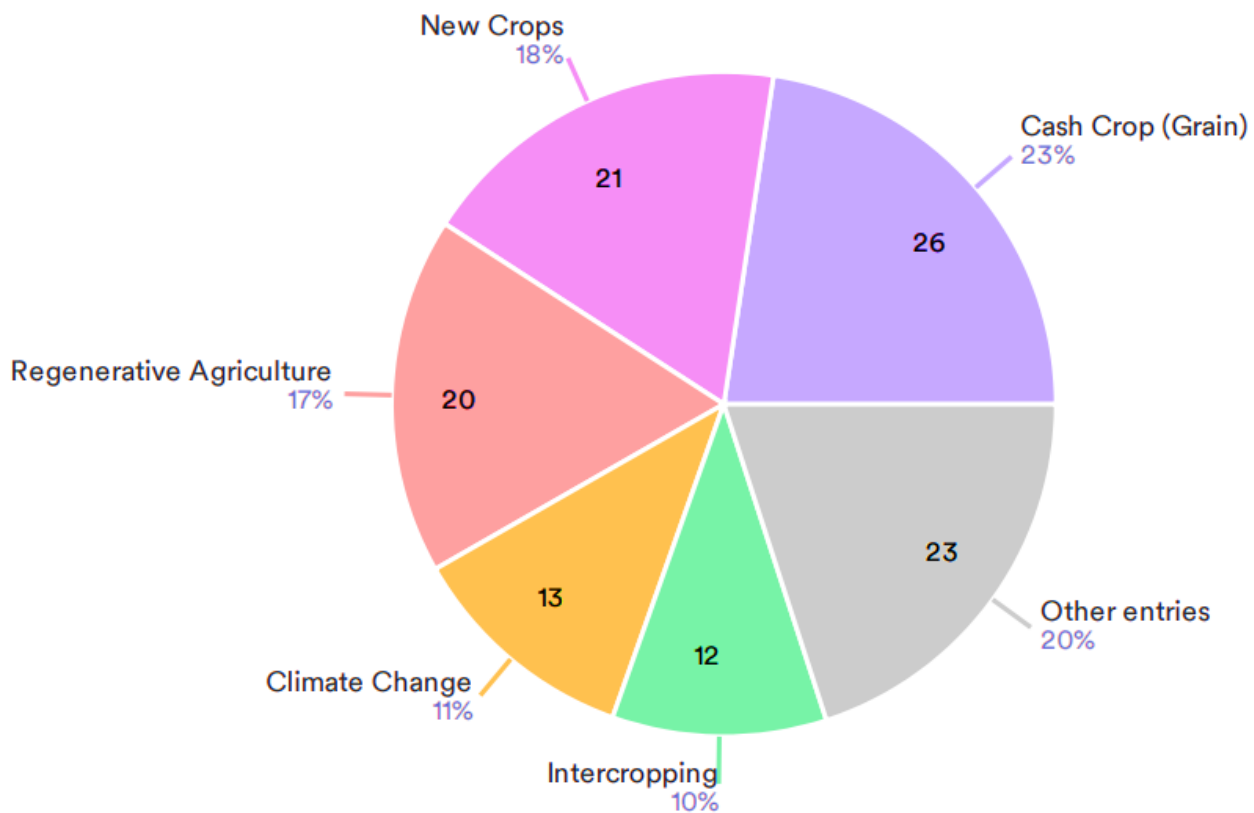


View our videos on YouTube: www.youtube.com/@manitobacropdiversificatio5457

PESAI Received Feedback on Research Priorities

PESAI sent a questionnaire to all PESAI members and the public to receive feedback on research priorities. This was sent during Christmas (2023), and the results were presented at the PESAI Annual General Meeting in April 2024. This survey was also advertised at local extension events like South Interlake Crop Testing Committee (SICTC) Crop Day (in Clandeboye), and Brokenhead River Ag conference (in Beausejour). Many local producers and ag retailers participated in the survey and expressed their opinions on various questions. We also asked about who they represent. About 74% were producers followed by 14 % as ag retailers. PESAI offered two tickets (through a lucky draw) each for the Winnipeg Jets and Manitoba Moose games for filling in the survey. Here are the questions and responses from the survey:

Question 1. Pick your preference(s) for the agriculture area(s) in which you want to see more research.

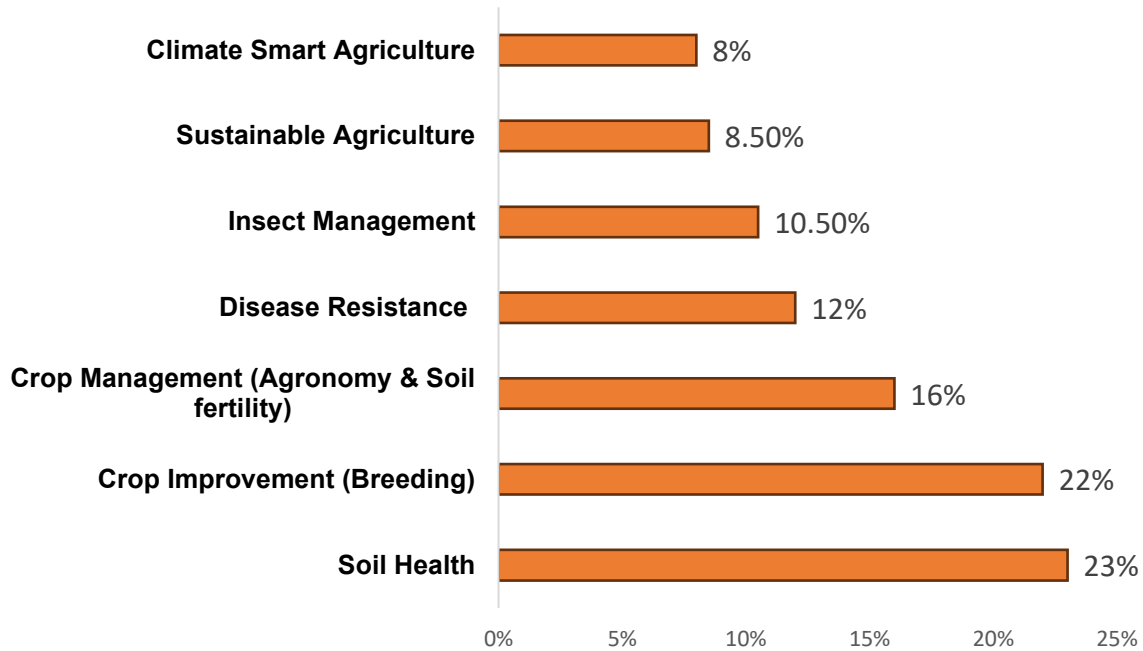


A total of 115 participants responded to this question. Most participants wanted to see research on cash crops followed by new crops. A significant proportion of participants are also interested in regenerative ag and intercropping research (a combined 27% of the respondents). The other entries section included forage production, livestock, and other options.



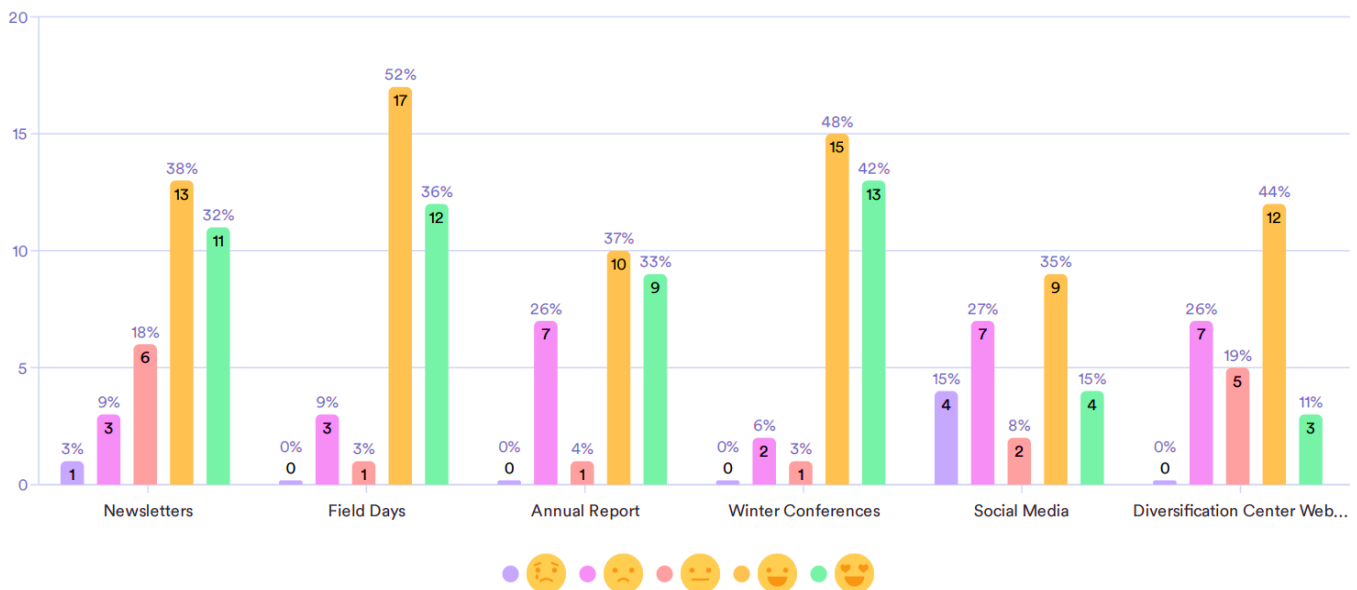
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Question 2. Which research areas are important to you?



A total of 105 participants responded to this question. Soil health research was the top priority for the participants, followed by crop improvement.

Question 3. Rate your preference for accessing information and outcomes from agricultural research.



A total of 45 participants responded to this question. Participants emphasized the importance of field days and winter conferences for getting information on agricultural research.



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Winter Cereals Started Growing with Temperature Rise at DCs

PESAI has six projects related to winter cereals and these plots started resumed growth with rise in temperatures. Staff has started taking greenhouse gas (GHG) emission samples in DU nitrous oxide project. In this project, different N sources are compared for GHG emissions. Spring broadcasting of nitrogen fertilizers is underway in these winter plots. There is some winter kill in few of the trials.



Winter Wheat Trial Plots at PCDF. The photo was taken after planting on September 29, 2023 – Source: PCDF

“Respect in the Workplace” Session Held for DC’s Staff

A training session on “Respect in the workplace” was conducted in Portage la Prairie on April 17. Adam F. was the main presenter, along with Heather Martens (Manitoba Agriculture). The staff from PESAI, WADO, and PCDF attended the session, while the MDCD staff already attended this training in 2023. This training was part of establishing consistent HR policies across all the DCs.



PESAI, WADO, and PCDF staff attending the “Respect in the Workplace” training



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