

April 8, 2022

Science Strategy Comments
Canadian Grain Commission
600-303 Main Street
Winnipeg, MB R3C 3G8

Email: discussions@grainscanada.gc.ca

Canadian Grain Commission Science Strategy Public Engagement

The National Farmers Union (NFU) is pleased to provide input regarding the research and science-based activities currently carried out at the Canadian Grain Commission (CGC).

The NFU strongly supports maintaining and enhancing the CGC's research capacity because it is a necessary component upholding the mandate of the CGC, which is to "in the interests of the grain producers, establish and maintain standards of quality for Canadian grain and regulate grain handling in Canada, to ensure a dependable commodity for domestic and export markets."

The CGC's Grain Research Laboratory's two primary roles - to assess the quality of the crops Canadian farmers grow for export and domestic consumption, and to ensure the methods and technology used to measure quality are accurate and adequate to the task – provide the scientific evidence that underpins the CGC's ability to ensure that the grain farmers produce has high value and the CGC's authority to ensure Canadian grain retains its integrity, and thus its value, through to its purchase by an end user. The Research Laboratory is part and parcel of the CGC's duty to ensure that farmers are treated fairly, not only when they make individual transactions with grain companies, but also by preventing misrepresentation within the grain system as a whole.

The NFU strongly supports the Grain Research Laboratory's current work and focus. Its funding must not only be maintained, but increased to reflect rising costs and the need for greater capacity to deal with emerging issues. Maintaining outward inspection and the fees associated with it are essential to the Grain Research Laboratory's work and role in safeguarding the quality of Canadian grain exports. The CGC's research capacity and scope provides the scientific foundation for its regulatory function, which in turn ensures public trust in Canada's grain system.

We particularly highlight the importance of the CGC's role in Canada's seed variety registration system: seed is the foundation of Canada's grain quality standards. The CGC's Grain Research Lab does all the analytical testing for new public varieties and grades all the check samples. It organizes and runs the quality analysis process for variety registration co-op trials. The quality, consistency, and integrity of this step in the variety registration process is critical to the validity of variety registration decisions, and is key to upholding quality standards for Canadian grain. Scientists from the Grain Research Lab also sit on the Recommending Committees for oilseed and pulse crops. Their expertise ensures new varieties are properly assessed at the recommendation stage.

Strong Communities. Sound Policies. Sustainable Farms.

Des communautés solidaires et des politiques sensées pour une agriculture durable.

The Grain Research Lab also studies and publishes on scientific matters regarding Canada's grain production, storage, and end uses that would not otherwise be investigated. This transparent CGC research underpins all of the CGC's inspection standards, processes, and measurements so that farmers, customers and policy makers can have full confidence that our system is based on evidence, and that it has the capacity to monitor and respond to changing conditions as they arise.

The Grain Research Laboratory should also be enabled to develop additional capacity in order to address emerging research needs, such as the impacts of climate change on grain quality and the impacts of potential changes in production and grain handling.

NFU members use and appreciate the Harvest Sample Program, and would like to see it better publicized so that more farmers can make use of it. We would also recommend adding a check-box on the sample envelopes for farmers to indicate whether the sample is certified organic grain. This would allow the CGC to compare certified organic with conventional grain for quality parameters such as incidence of fusarium. Results could lead to research questions to explore quality implications of different agronomic practices.

NFU strongly supports the Grain Research Lab having responsibility for monitoring and maintaining Canadian calibrations for measuring devices and technology used throughout the grain handling system, including moisture meters used by farmers. Carrying out this function under the CGC's mandate ensures it will be done fairly.

We know that climate change impacts will become more severe in coming decades even if countries meet their commitments to reduce GHG emissions. Total atmospheric CO₂ is already 419 ppm, well above the safe level of 350 ppm. Climate models show that the Prairie Provinces – our primary grain growing area – will warm even faster than other agricultural regions. We know that Canadian growing conditions will become less predictable and less favorable, and we can expect impacts on quality. The Grain Research Laboratory will ensure farmers can objectively demonstrate any quality advantages to obtain the best possible prices under increasingly erratic growing conditions. The lab's ability to accurately monitor quality of samples from CGC outward inspection will be critical to this task.

Climate change may lead to quality issues related to emerging diseases, temperature spikes during the growing season, more erratic moisture conditions, new pest pressures, etc. The Grain Research Laboratory is uniquely positioned to monitor and assess how climate impacts are affecting grain quality geographically and by crop kind. Its results, being public and transparent, will provide valuable information for further research on how to manage or mitigate quality effects of climate impacts.

Adaptation to climate change, as well as mitigation efforts, will affect production methods, which in turn may affect grain quality. It would be valuable for the Grain Research Laboratory to study quality outcomes for grain produced through intercropping, on fields where cover cropping is practiced, and non-chemical low-till (terminating via crimping and seeding into mulch), for example.

As a result of the CUSMA trade agreement, American-sourced grains can now be admixed with Canadian-grown grains in shipments destined for export. If there is an increase in the volume of grain from the USA delivered into Canada's grain handling system, there will be increased risk of quality issues



that result from American growing conditions and regulatory environment. For example, if dockage containing herbicide-resistant noxious weed seeds, grain with residue of unregistered chemicals, or unapproved GMOs (including gene-edited varieties) are found in export shipments, the Grain Research Laboratory needs to be equipped to detect these and prevent them from harming Canada's grain quality standards and/or prices.

To summarize, the NFU recommends the CGC Science Strategy:

- ✓ Maintain all current functions of the Grain Research Laboratory.
- ✓ Increase funding to keep up with rising costs and support expanding capacity to deal with emerging issues.
- ✓ Maintain outward inspection and associated fees to ensure funds and mandatory sampling for the Grain Research Laboratory to monitor quality of exported grain.
- ✓ Add "certified organic" check-box to Harvest Sample Program envelopes and use organic harvest samples in the research program.
- ✓ Monitor impacts of climate change related growing conditions on grain quality.
- ✓ Monitor impacts of new climate change adaptation and mitigation related production practices on grain quality.
- ✓ Monitor for quality impacts of US-origin grain in our grain handling system.
- ✓ Maintain authority over calibration of measuring devices and technology used in the grain handling system.

All of this respectfully submitted by

The National Farmers Union
April, 2022

The National Farmers Union is a voluntary direct-membership, non-partisan, national farm organization made up of thousands of farm families from across Canada. Founded in 1969, the NFU advocates for policies that promote the dignity, prosperity and sustainable future of farmers, farm families and their communities.

