



Seed Regulatory Modernization

CSGA's Opportunity to Chart the Course for the Canadian Seed System

June 2021

The Canadian Food Inspection Agency (CFIA), with the support of Agriculture and Agri-Food Canada, has begun the Seed Regulatory Modernization process. In simple terms, this is a comprehensive review of the *Seeds Regulations* designed to make the system simpler, easier to use, and more aligned with modern practices, and strengthen consumer protection. This project will lay the foundation for a strong Canadian seed system for years to come.

Right now, seed sector stakeholders are working together in task teams with the CFIA to define the first draft of options for change. In the winter of 2021-2022, the CFIA will reach out to all sector stakeholders for their input on those options. The Canadian Seed Growers' Association (CSGA) has developed recommendations on which policies and regulations need to change to encourage dialogue now.

In-depth discussions with seed growers, plant breeders, provincial advisors, and company representatives on regulatory modernization have resulted in a series of CSGA recommendations focused on:

- A. Industry leadership and a renewed partnership with government
- B. Digitalized services
- C. Varieties
- D. Seed Quality Assurance
- E. CFIA Commitments

These ideas are part of the 2021 [CSGA 2.0 Business Plan](#) which outlines the Association's vision for the future of the seed system.

Included in CSGA's vision is a greater leadership role for the Association. This entails working even harder to ensure a deep understanding of all seed stakeholders' views, leading to decisions that benefit Canadians. CSGA is ready to do more and to help deliver an even more robust world-class seed system.

This briefing provides CSGA's recommendations for seed regulatory reform and why they are important. In some cases, the recommendations represent change; in others, they maintain essential aspects of today's system. In either case, these ideas are relevant to the entire Canadian agri-food sector, which depends on a reliable supply of high-quality, identity-assured seed.

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A. Renewing the Industry-Government Partnership

The seed system in Canada is a successful example of an industry-government partnership. More than a century of working together has built a strong system with a high degree of trust and confidence in both government and industry players. Over the years, government has leveraged that trust, asking industry to play a larger role. CSGA sees that trend continuing where the value of the ongoing government role in the seed system is key. The Association sees a continued, long-term need for ongoing CFIA responsibility and involvement. Renewing the partnership and enabling greater industry leadership is not about deregulating or removing government but rather the continued leveraging of that trust. Therefore, these recommendations speak to what specific parties should do in the future.

CSGA Recommendation A1: The CFIA should continue to be ultimately responsible for the seed certification program.

Why is this important? The CFIA is responsible for administering and enforcing the *Seeds Act* and authorizes competent individuals to perform activities that result in official certification under its supervision. CSGA has worked with government for almost 120 years to deliver a national seed quality and variety assurance program. The model works and is critical to a successful agricultural economy. While industry may perform much of the day-to-day work, government responsibility guarantees trust in the entire system. This is especially relevant in a global market; when issues arise that demand government-to-government dialogue, having the Canadian government backstopping the system is invaluable. CFIA should continue to be responsible for Canada's seed certification program.

CSGA Recommendation A2: The CSGA's delegated authority should be expanded to include certification of Foundation, Registered and Certified seed.

Why is this important? CSGA is the regulatory authority for seed crop certification and varietal purity standards for all crop kinds except potatoes. CSGA is also responsible for certifying Breeder and Select seed, but the CFIA is presently responsible for the certification of Foundation, Registered, and Certified seed. This creates inefficiencies and information gaps. CSGA is ready to take responsibility for the certification of all seed with CFIA oversight. CSGA has proven that it is up to the task with its well-established Branches, representative committees, crop-specific working groups and experience establishing science-based certification standards. CSGA is the most effective and efficient body to deliver these services on behalf of the sector. Stakeholders would benefit from a single window for services for all seed classes.

CSGA Recommendation A3: The *Seeds Regulations* should recognize CSGA to establish technical requirements for seed certification in Canada.

Why is this important? Advances in genomics, seed science, new crops and technologies, and market trends emerge faster than government regulators can respond. Seed certification requirements need

to be agile enough to respond to these rapid changes. CSGA has developed and maintained Breeder and Select seed certification requirements and certification requirements for seed crops of Foundation, Registered and Certified status. It makes sense that CSGA should be entrusted with the regulatory authority to establish the technical requirements for the certification of seed for all agricultural crops in Canada except potatoes.

Technical details about seed certification, including sampling, testing, and labelling, can be set out in a document for which CSGA would be responsible. This document would have the authority of a regulation but would be easier to adjust to keep up with changing technology and stakeholder needs.

Taking on this role means ensuring that all seed stakeholder interests are considered, not just those of seed growers. CSGA is ready. Its Regulatory Services Committee already includes seed grower representatives from across the country, and seed company, seed analyst and CFIA representatives. Additionally, CSGA has established crop-specific working groups to provide expert advisory and consultation resources. In the future, the Association would consider doing even more – like involving producer groups directly – to make sure that all stakeholders have a voice in seed certification requirements.

B. Digitalized Services

Every facet of the Canadian economy, including agriculture, is going digital, and seed is no exception. CSGA has been moving in this direction for many years. Today, through the Association's *SeedCert* platform and affiliated software applications, seed growers apply online, licensed seed crop inspectors (LSCI) access descriptions of varieties and submit inspection reports. and the CFIA supervises and plans its oversight activities. During the COVID-19 pandemic, CSGA's investments in digitalization ensured an efficient crop inspection season with no fields left uninspected in 2020. Extending the system to collect data on seed certified – including quantity and quality – could increase the integrity of Canada's seed certification system and create new opportunities for clients and regulator. For example, data collation from seed test reports could provide an early warning system for new and emerging weeds. Automated analysis of impurities reported in crop inspections versus impurities reported in seed test reports could help direct risk-based seed lot monitoring activities.

Additionally, making seed certification information more readily available to seed system participants is critical to helping them make the most informed decisions to meet their business needs.

Finally, when it comes to data, privacy and security are paramount. CSGA is currently working towards third party certification to collect, store, and analyze data to assure best practices in protecting user data and ensuring client trust.

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CSGA Recommendation B1: The seed certification system should be digital end-to-end to facilitate single-window access to seed regulatory services.

Why is this important? Digitalization is necessary to efficiently provide the Canadian seed sector with the "seed to fork" traceability expected by a growing number of consumers. Gaps or "black boxes" at any step of the process result in a loss of that transparency and traceability. Digitalization will facilitate data transfer and analysis to ease administrative burden, clarify trends, and allow the value chain to unlock value-added opportunities. CSGA introduces its digital crop certificate in 2021. Digitizing other seed certification records, such as the pedigreed seed declaration, will reduce costs, enhance traceability, enable transparency, and provide value-added traceability opportunities for seed sector stakeholders and their customers. CSGA has existing frameworks to manage data confidentiality, how data is used, and to prevent fraud.

C. Varieties

Over the past 20 years, more than 2,000 varieties of agricultural crop kinds have been registered for sale in Canada. The development of a hemp sector in Canada and a massive expansion of pulse production in Western Canada have only been possible due to the availability of varieties adapted to Canada. Variety registration and seed certification played significant roles in ensuring that Canadian producers had confidence in the seed they chose to grow these crops.

There is a growing demand for greater traceability and transparency in the food production system. Consumers seek more information about the food they buy, where it came from and how it was produced. The hesitancy of some consumers and markets toward plant biotechnology, the "greening" of the marketplace, and other consumer trends suggest that more information about the varieties that make up the food supply will be expected.

CSGA Recommendation C1: Variety registration should be maintained, and the CFIA should continue to be responsible.

Why is this important?

Variety registration is a central element of Canada's robust and resilient seed and crop system. Official evaluation, recognition, and monitoring of varietal identity are essential for transparent, value-added crop production. Demands for traceability and transparency are increasing throughout the value chain and internationally, and we see variety registration as a key element in answering those demands. The CFIA should continue to be the ultimate authority for variety registration. Innovative plant genetics hold much promise, but that promise will only be realized if consumers trust those new products. From seed to energy to public health, Canadian citizens trust independent, transparent government bodies, and the CFIA should continue in this valuable role.

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CSGA Recommendation C2: Schedule III to the Seeds Regulations should be incorporated by reference and updated, with the CFIA as the responsible authority.

Why is this important? Schedule III lists the crop kinds that are subject to variety registration. Many new crops that have emerged over the past 30 years (for example, hemp, food-type soybeans, quinoa, chickpeas) have not been added to Schedule III. Others (for example, corn, food-type soybeans, turf-type grasses, forage-type oats) were exempted from variety registration in 1997. Since 1997, a fractured system has emerged for verifying the certification eligibility of new varieties. While CFIA verifies certification eligibility for varieties subject to registration, the CSGA does the same for varieties exempt from registration through its Variety Certification Eligibility Application (Form 300). There is no benefit to running two parallel systems, especially as CSGA lacks the CFIA's scientific expertise and lab support. As the CFIA is ultimately responsible for the varietal certification of seed in Canada, it should also be responsible for the official recognition of varietal identity.

CSGA Recommendation C3: The current requirements concerning the use of variety names should continue.

Why is this important?

One of the fundamental building blocks of Canada's seed system is the requirement around variety names. If seed is sold by variety name in Canada, it must be certified – allowing growers, processors, producers, and other consumers a transparent view of precisely what they are buying, growing, and using. This is consistent with leading international practice, and some countries go even further, like in the EU and UK, where only certified seed can be sold.

Allowing non-certified seed to be sold by variety name or allowing the same seed to be sold under multiple names would seriously erode trust and transparency in the system that Canada has built over the last century.

Canada's current 'one variety-one name' policy levels the playing field between small Canadian operations and large multinationals. Ensuring a system where everyone can compete fairly benefits everyone. The current Canadian system is inclusive, fair, and promotes domestic innovation – and it should stay that way.

CSGA Recommendation C4: The CSGA should administer the Variety Profile Platform in support of enhanced transparency for the agri-food system.

Why is this important? Canada needs a one-stop shop for information on all varieties being grown, GMO status, gene editing information, key traits, and more. CSGA already holds thousands of variety descriptions for seed crop certification purposes. Now is the time to go further and provide easily accessible information on varieties, including market acceptance data, plant breeders' rights status,

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stewardship or sustainability requirements, and other valuable information to producers and consumers. CSGA wants to work with Seeds Canada and other interested partners on the implementation of a Variety Profile Platform while strictly protecting confidential business information. The market demands transparency, and the sector needs to provide it. Transparency and accessible information from an officially recognized source are essential in enabling trade. In the future, foreign customers will demand access to information about the varieties that Canada grows.

Canada's 'one variety-one name' policy, in combination with the Variety Profile Platform, would provide unparalleled transparency and build trust in the Canadian crop production value chain.

D. Seed Quality Assurance

The current framework of Registered Seed Establishments (RSEs) and accredited seed testing laboratories provides the foundation that enables Canada's seed quality assurance system for seed certification and seed importation purposes. However, non-pedigreed (Common grade) seed is not subject to the same requirements. Furthermore, the need to create and maintain records, a basic quality assurance component, only applies to seed certification and imports – not to domestic, non-certified seed. This results in increased quality risk to the consumer. Important decisions are required on how Common grade seed interacts with the rest of the system. To clarify, this refers to the commercial sale of Common seed, **not** farm-saved seed.

In addition to the specific rationales below, an improved approach to Common grade seed regulation and management will ensure that intellectual property owners are fairly compensated. Everyone in the system wants a sustainable funding model for new variety development, and the sale of Common seed of protected varieties should not go unchallenged.

CSGA Recommendation D1: Part IV of the Seeds Regulations should be incorporated by reference.

Why is this important? Part IV consists of regulations concerning the registration of establishments and the licensing of establishment operators for seed certification purposes. These requirements should be incorporated by reference and established by a CSGA-led, sector-wide consultation framework as the delegated authority to deliver the seed certification program. This would provide additional flexibility and enable innovative options for system oversight resulting from digitalization and other emerging technologies.

CSGA would work closely with Seeds Canada (given its oversight role of the Registered Seed Establishments and accredited labs) and the CFIA to explore options to design the next-generation seed system, including determining responsibility for enforcement of Part IV. CSGA further envisions working more closely with crop producers as the critical beneficiaries of the seed system and whose views will be valuable for driving change. Implementation questions aside, this is another example of a

modernization reform that can make system administration more responsive to the changing needs of the sector and the effective adoption of new technologies.

CSGA Recommendation D2: Common seed of cereals, pulses, and oilseeds should be subject to strengthened regulation and meet minimum standards for purity and germination.

Why is this important? Today, commercial Common grade seed of cereals and pulses is not subject to regular monitoring or consistent regulatory enforcement. Forages are more consistently sampled and tested following recognized standard methods, but not cereals and pulses. Several possible solutions exist with modernized oversight tools, including using an RSE-like model with inspection and monitoring.

CSGA proposes that common seed should either be sampled, tested, and graded similarly to pedigreed seed or, as an alternative, they should be sold only by persons known to the regulator, but without a grade name. The challenge is building the consensus required to decide on the appropriate regulatory option for Common seed to end the ambiguity and move forward.

CSGA Recommendation D3: Common seed of small-seeded agricultural crop kinds should be sampled, tested, and graded by people authorized to do so, as currently done for pedigreed seed.

Why is this important? Common grade seed of small-seeded agricultural crop kinds is sown widely in a variety of growing conditions. It is a particular risk for the introduction and spread of weeds. Therefore, common seed of forage grasses and legumes should be subject to a higher standard of production and oversight.

Much of this seed is already processed by RSEs, and the current *Seeds Regulations* specify that it must be tested by a recognized lab. However, there are no requirements for record-keeping or retained samples unless an RSE has processed the seed. Common seed of small-seeded agricultural crop kinds should be subject to similar quality controls as pedigreed seed.

E. CFIA Commitments

As discussed above, CSGA sees a valuable role for government in the future seed system. With CSGA doing more day-to-day administration of the certification system, the CFIA can concentrate its resources on high value areas and where government is uniquely positioned to make a positive impact.

CSGA Recommendation E1: The CFIA should increase its investment in science support for the Seed Program, commit to continued engagement in international standards development organizations, and commit to succession planning to ensure that appropriate and adequate human resources are available.

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Why is this important? Keeping pace with evolving science is more challenging and important than ever, with new technologies coming into the marketplace faster than ever. The CFIA has unique resources. The varietal identity verification activity at the Fallowfield lab in Ottawa supports the seed varietal certification program. The Seed Science and Technology lab in Saskatoon is instrumental in developing and maintaining seed testing methods and building private sector capacity, including noxious weed seed identification. The CFIA is encouraged to continue investing in these areas and explore opportunities to include biochemical and molecular information in the definition of variety and determination of varietal identity. We all want Canada to continue to be a leader in the implementation of new technologies.

International engagement – engaging and coordinating with other governments – is a critical role for the federal government. The federal government is also instrumental in assuring international market access for Canadian producers. CFIA’s presence at international standards development organizations (such as the International Seed Testing Association, Association of Official Seed Analysts, OECD Seed Schemes, Association of Official Seed Certifying Agencies, and the American Association of Official Seed Control Officials) has a strong impact. CSGA wants to see the government stay engaged internationally to benefit the seed sector and all Canadian agriculture.

Finally, any system is only as good as its people. CFIA has a high-performing team delivering the Seed Program. CSGA recognizes the importance of these people in supporting the system and wants to see the Seed Program appropriately staffed for the long term.

Conclusion

CSGA’s mission is to advance the seed sector and, with its partners, deliver and promote a flexible, responsive, and cost-effective seed certification system supporting Canadian agriculture. However, Canada’s seed regulatory framework is complex and sometimes not well understood. Now is the time to talk with colleagues about what a modern seed system for Canada looks like. What is working? What isn’t? It is important to remember that a robust and resilient seed system is essential to all Canadians.

Please do not hesitate to contact CSGA at (613) 236-0497 or communications@seedgrowers.ca with any questions or concerns.

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