

Seed Regulatory Modernization Information (includes records and labelling) Task Team Final Report

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Special recognition and gratitude for the dedication of all the individuals who participated, led and supported the Information (including records and labelling) Task Team.

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Executive Summary

The CFIA is committed to a full-scale review of Part I-Seeds other than Seed Potatoes, Part II-Seed Potatoes, Part III-Variety Registration and Part IV-Registration of Establishments that Prepare Seed and Licensing of Operators of the *Seeds Regulations*. The objective of the Information (includes records and labelling) Task Team was to provide recommendations in a report to the Seed Regulatory Modernization Working Group on opportunities for improvement with respect to how the *Seeds Regulations* govern the information requirements for seed sold in and imported into Canada.

The [Seeds Act](#) and [Seeds Regulations](#) have undergone periodic amendments and modernizations since the first laws were established in 1905. During this current initiative, the CFIA is looking to update the *Seeds Regulations* to:

- improve responsiveness and consistency,
- reduce complexity,
- be adaptable and flexible to address future technical advances and scientific innovation, and
- protect producers and consumers by strengthening existing requirements.

There are information requirements for labelling, official tags, advertising registered varieties, records for registered seed establishments (RSEs), use of variety names, brand names, grade, purity, germination, acceptable laboratories, methods of testing seed, imports and exemptions for pedigreed and non-pedigreed seed in the *Seeds Regulations*.

Stakeholders considered how the government should move forward in a [digital age](#) to use modern and emerging technologies when reviewing the availability of information, labelling and records requirements in the *Seeds Regulations*. Knowing which seeds (especially weeds) are present in a seed lot, the ability to identify a breeding method/technology for a variety and the impact on the declaration for organic production, accessing information stored in multiple formats and locations, etc. were identified as challenges to some stakeholders.

Based on the initial topics suggested by the Seed Regulatory Modernization Working Group, the Task Team presented a work plan for the analysis and discussion of the following eight topics:

- Grade Names
- Information Requirements at the Time of Sale
- Digitalization
- Quick Response (QR) Codes on the Official Tag
- Variety Names
- Varietal Blends
- Mixtures

- Imported Seed Requirements

The Task Team focused on three major opportunities for improvement:

1. Increase transparency and access to information on a seed lot and for varieties
2. Streamline processes and information requirements
3. Ability to adapt labelling requirements to changes within the seed sector

The Task Team discussed multiple options considering the pros/benefits and cons/risks of each possible option prior to providing recommendations on each Topic. In expressing the final recommendation results, the concept of a qualified consensus represented the threshold for agreement by the group. The term 'qualified consensus' is a majority of the members from each stakeholder group (i.e., regulated members and impacted/implicated members) agreed upon the recommendation.

Each Task Team Topic report submitted to the Seed-RM WG is available in [Appendix 1](#). A total of 40 options were proposed and discussed by the Task Team which generated 20 recommendations being presented to the Seed-RM WG:

Topic 1 – Grade Names

1. Continue to use grade names for pedigreed seed. For non-pedigreed seed, grade names (i.e. Common No.1) can be used on seed lots processed by Registered Seed Establishments (RSE) and graded by an accredited grader. Except for vegetable seeds in Grade Tables XVI-XX and other miscellaneous seeds, non-pedigreed seed intended for sale that is not processed by an RSE and graded by an accredited grader, the seed lot must be labelled with the purity and germination information described in Section 18 of the *Seeds Regulations*.
2. Modernize Section 18 with respect to supplying purity and germination information to the purchaser within an appropriate timeframe significantly less than 30 days.

Topic 2 – Information Requirements at the Time of Sale

3. The Task Team reached a qualified consensus to significantly shorten the 30 day timeframe in subsection 18(3) of the *Seeds Regulations* when the purity and/or germination information is requested by a potential purchaser as this information would be available as soon as a seed lot is known to meet the grade name standards.
4. The Task Team reached a qualified consensus to have an ambulatory incorporation by reference (IBR) document to provide flexibility for crop specific labelling requirements and to incorporate additional labelling requirements in the future. The Task Team recommends that the CFIA would be responsible for this ambulatory IBR document.
5. As an overall recommendation, the Task Team recommends that there should be further education on the standards and the requirements in the *Seeds Regulations*.

6. The CFIA should further explore the legal limitations to publicly provide information around the breeding method/technique that does not trigger a PNT authorization but the variety has been genetically modified (e.g., gene edited, etc.).

Topic 3 – Digitalization

7. The Task Team reached a qualified consensus to recommend option 2 to update the regulations to remove reference to specific documents, forms, etc. if this information is available under a CFIA approved quality management system with oversight by the conformity verification body and/or the CFIA to maintain registrations, accreditations, licenses, etc.
8. ¹The majority of the Task Team members supported recommending the following two options but did not reach a qualified consensus:
 - a. Option 3 to require the information on the pedigreed seed declaration to be digitally submitted to the regulator.
 - b. Option 5 to digitize the seed certification process for pedigreed seed into a single window by expanding the CSGA's SeedCert platform.
9. The Task Team supports streamlining the process for a Bulk Storage Facility (BSF) to be able to downgrade pedigreed seed. The majority of the regulated members thought there was value in option 4 as a digital tool to help streamline the grading process.
10. The majority of the Task Team members only supported aspects of option 6 to create a variety platform which could be driven by the seed sector. Considering there is information in multiple locations and the potential that seed guides may not continue in the future, the Task Team members thought there was value in having variety information accessible in real-time and in one location for registered varieties, PNTs, PBR, information from the transparency database (i.e. gene edited varieties), etc. and information from seed guides if they are no longer available.
11. The Task Team members recommends that there should be funds continually allocated for the development, maintenance and continuous improvement of any digital seed platforms to ensure continuous improvement of digital platforms, be able to remain competitive as technology evolves and the digital systems work well. It appears that digitization could bring cost savings into the seed system but will require ongoing funding to support digital platforms.

Topic 4 – QR Codes on the Official Tag

12. Regardless of whether QR codes were to become part of the official tag or not, the required information in sub-section 33(2) of the *Seeds Regulations* should continue to be printed on the official tag.
13. CFIA and the seed sector should continue to examine ideas and potential opportunities around the use of QR codes and digital seed tags.

¹ This recommendation was modified from the original Digitalization topic report submitted to the Seed-RM WG in Appendix 1 for clarity and consistency but did not change the recommendation.

Topic 5 – Variety Names

14. There was a qualified consensus to recommend option 2 to keep the current requirements and exemptions as is for the use of variety names on non-pedigreed seed sold, advertised and imported into Canada listed in Schedule II.

Topic 6 – Varietal Blends

15. Use the existing green mixture tag (CFIA 0038) for non-PPTM varietal blends.

Topic 7 – Mixtures

16. Consideration should be given to providing additional flexibility to mixtures and corresponding labelling requirements after consulting with the stakeholders involved in mixtures.
17. Records must be kept by facilities involved in producing mixtures, including facilities that are not Registered Seed Establishments.

Topic 8 – Imported Seed Requirements

18. There was a qualified consensus to recommend option 3 where small seed lots of 5 kg or less for large seeded crop kinds (such as peas, wheat, soybeans and corn) or is 500 g or less for small seeded crop kinds (such as alfalfa, tomato or canola) should be required to have a purity analysis prior to importation into Canada with the exemption of small lots for research; the importance of the research exemption was reinforced by some of the members.
19. There was a qualified consensus to recommend option 4 to allow OECD and AOSCA pedigreed seed imported into Canada that is sealed and labelled with AOSCA and OECD tags to be sold in the original packages with the seed quality information required by section 18 of the *Seeds Regulations* instead of re-tagging with an inter-agency tag and applying a Canada pedigreed grade name.
20. There was a qualified consensus to recommend option 5 to develop and implement a digital platform to improve and streamline the information flow for clearing imported seed lots into Canada. Digitalization should complement and align with the authorized importer program. It was suggested that this option would help streamline the implementation of other options as it may take a while to develop and implement.

In addition to the above topic report recommendations, the Task Team discussed the following overarching opportunities for improvement to consider during the Seed-RM process:

- Increase transparency and access to information of non-conformances and non-compliances with the frequency of occurrence to be publicly available to help promote compliance and awareness.

- There should be further consultation with impacted regulated stakeholders when considering crop, commodity and import specific information and labelling requirement changes.
- There should be initiatives to increase education, awareness and knowledge to promote compliance and consistency in the seed program.

Additional support was provided to the Task Team from the following experts on digitalization:

- plant digitization at the CFIA (Michael Wood, CFIA);
- variety registration digitalization of applications and descriptions of varieties (Heather Ryan, CFIA); and
- the Canadian Seed Growers' Association (CSGA) on their SeedCert platform, digital tag pilot project, OECD digitization and CSGA's digitalization proposals (Doug Miller, CSGA).

Introduction

The Canadian Food Inspection Agency (CFIA) is the ultimate authority for the administration and enforcement of the [Seeds Act](#) and [Seeds Regulations](#) in Canada. The main purpose of the *Seeds Act* and *Seeds Regulations* is to protect producers and consumers from misrepresentation, prevent the use of low quality seed, and to create a level playing field for companies and individuals involved in seed production.

Seed sold, imported into and exported from Canada are subject to the standards and requirements in the [Seeds Act](#) and [Seeds Regulations](#) unless exempt in the regulations. The information requirements in the *Seeds Regulations* for pedigreed and non-pedigreed seed sold in Canada includes:

- labelling
- official tags
- advertising registered varieties
- records for registered seed establishments (RSEs)
- use of variety names
- grade
- purity and germination
- acceptable laboratories and methods of testing seed

Seed is required to meet the minimum standards in sections [6 and 7](#) of the *Seeds Regulations*. There are different test requirements in section [11](#) based on seed being labelled with or without a Canada pedigreed grade name, if the crop is seed corn and if the seed is imported into Canada. Seed offered for sale in Canada is required to meet the standards of the labelled grade name at the time of sale. A purchaser may request purity and germination information listed in section [18](#) from a vendor within 1 year of purchase and the vendor is required to provide this information in writing within 30 days.

There are additional labelling requirements for seeds of field crops, mixtures, flowers, herbs, roots, vegetables, and other miscellaneous seeds, imported seed sold in Canada and for pedigreed seed.

There are exemptions from labelling seed only at the time of import (i.e., this exemption does not extend past the time of import and imported seed that is subsequently sold must meet the labelling requirements) and non-pedigreed seed grown, sold and delivered on a producer's premise in section [22](#). There are exemptions for seed labelled for export or conditioning to meeting standards and requirements in the *Seeds Regulations*.

The *Seeds Regulations* defines an [official tag](#) as a label either issued or approved by the CFIA to be applied to seed having [pedigreed status](#). Official seed tags are issued by the CFIA. A

Registered Seed Establishment (RSE) may apply for a licence and receive approval from the CFIA to print official seed tags. An official tag should be labelled with the following information as per sections [33 to 36](#) of the *Seeds Regulations* with the exception of a Canada Substandard grade. Every package shall be [fastened](#) and tagged with a domestic, inter-agency, unregistered or pedigreed status tag. A [domestic tag](#) refers to an official tag for seed that is derived from a crop grown in Canada and graded with a Canada pedigreed seed grade name. An [inter-agency certification tag](#) is an official tag for seed that is certified by an [official certifying agency](#) and graded with a Canada pedigreed grade name. Inter-agency tags are affixed to packages of seed derived in whole or in part from a crop not grown and conditioned in Canada when graded with a Canada pedigreed grade name. An unregistered variety official tag is for [Schedule III](#) crop seed sold in Canada that is not a variety registered under Part III. Unregistered variety tags should be used for seed that has been grown in Canada and for seed that was not grown in Canada. A pedigreed status tag may also be applied to seed derived from a crop grown in Canada and not graded. The Canadian Seed Growers' Association (CSGA) issues Breeder and Select status certification tags/labels since CSGA certifies these seed lots in Canada.

There are additional information requirements for alternative service delivery (ASD) parties delivering a program or service that is directly related to the CFIA's mandate and would otherwise be delivered by the CFIA. Current ASDs providers in the seed program include: a conformity verification body, authorized crop inspection services, licensed seed crop inspectors, registered seed establishments, authorized exporters, graders, operators, accredited labs and analysts. Examples of the ASD activities include: audits of registered seed establishments and labs; crop inspections; sampling and testing; grading, tagging and sealing certified seed lots.

The CSGA is the national seed crop certification body in Canada and has been delegated authority to establish varietal purity standards for seed crops and to approve Breeder and Select seed. The CSGA has developed a digital end-to-end seed crop certification digital platform known as SeedCert. Licensed and official crop inspectors use SeedCert to submit inspection reports to the CSGA to issue a seed crop certificate. The CSGA has implemented QR codes on seed crop certificates issued to pedigreed seed growers. The CSGA is continuing to pilot the use of QR codes on their Breeder and Select tags to test the foundations of QR based technology.

As the conformity verification body, Seeds Canada, may provide additional guidance for registered seed establishments, graders, operators and accredited labs in their technical manuals to help ensure compliance with the *Seeds Regulations* when recommending and overseeing these ASD's quality manuals on behalf of the CFIA. Seeds Canada's technical manuals and other related documents related to the RSE program are accessible through a secure [document library](#) log in or by contacting Seeds Canada. The CFIA has the regulatory authority to follow-up on regulatory requirements, non-compliances and enforce the *Seeds Regulations*, not the conformity verification body.

Topics

The following topics were provided by the Seed-RM WG and other Task Teams to the Information (includes records and labelling) task team:

- Grade Names
- Information Requirements at the Time of Sale
- Digitalization
- Quick Response (QR) Codes on the Official Tag
- Variety Names
- Varietal Blends
- Mixtures
- Imported Seed Requirements

In addition, the following overarching topics provided by the Seed-RM WG were to be considered during the discussion of specific topics:

- Future Trends
- Government versus Industry Role
- Linkages and unintended consequences
- Incorporation by Reference
- International obligations
- Alternative service delivery including licensing and accreditation

Based on the above, the Task Team developed a work plan on November 20, 2023 consisting of 21 meetings with the following finalized list of topics:

- Grade Names
- Information Requirements at the Time of Sale
- Digitalization
- QR Codes on the Official Tag
- Variety Names
- Varietal Blends
- Mixtures
- Imported Seed Requirements

The initial Work Plan was presented to the Seed-RM WG at their January 24, 2024 meeting.

Task Team Representation, Review and Opportunities for Improvements

Task Team members were from the following groups (see [Appendix 2](#)):

- Regulated members:
 - Seed industry
 - Seed Growers
- Impacted/Implicated members:
 - Producer groups
 - Commodity associations/value chain associations
- Other government

In addition to support provided by government representatives, additional support was provided to the Task Team from the following experts on digitalization:

- plant digitization at the CFIA (Michael Wood, CFIA);
- variety registration digitalization of applications and descriptions of varieties (Heather Ryan, CFIA); and
- the Canadian Seed Growers' Association (CSGA) on their SeedCert platform, digital tag pilot project, OECD digitization and CSGA's digitalization proposals (Doug Miller, CSGA).

The Task Team reviewed the current seed system:

- Identifying the issues/ gaps/ inconsistencies associated with the current regulatory framework and providing context, identifying which sectors of the value chain are currently affected.
- Engaging with subject matter experts when requested.
- Considering if there was agility in the current system to adapt to changes and incorporate improvements without requiring a regulatory change.
- Providing options and developing recommendations that allow for present and future improvements and enhancements to the current seed regulatory framework in a report for consideration by the Seed Regulatory Modernization Working Group.

Based on the review, the following are examples of questions or key concerns that were considered by the Task Team when the topics were assessed:

- Should Canada continue to use grade names to convey information on seed quality or should Canada switch to a truth in labelling system where the information related to purity and germination be labelled on the seed tags?

- A seed lot is required to meet the standards of the labelled grade name at the time of sale, how long should the purity and germination information required in [18\(1\)](#) be made available upon request?
- How can improvements in information management and technology be implemented to digitalize and streamline the current system for pedigreed and non-pedigreed seed?
- Should the record and information requirements in Part IV, *Seeds Regulations* be outcome based?
- Are there any requirements for labelling in the current *Seeds Regulations* that could be incorporated by reference?
- Could the variety information with respect to gene editing and other genetic modifications appear on the official seed tag, labelled on the package or should this information be accessible in a database so it is known prior to purchasing seed as this information is required for individuals to source seed to meet specific market requirements, e.g., organic declaration requirements?
- Should variety information provided in seed guides be accessible in one spot if there are challenges to accessing this information in the future?
- How could information requirements help streamline the process to grade and demote pedigreed seed?

Opportunities for improvement:

Based on the recommendations in each topic, the Task Team identified three major opportunities for improvement:

- 1. Increase transparency and access to information on a seed lot and for varieties**
- 2. Streamline processes and information requirements**
- 3. Ability to adapt labelling requirements to changes within the seed sector**

In addition to the Task Team recommendations, the Task Team discussed the following overarching opportunities for improvement to consider during the Seed-RM process:

- Increase transparency and access to information of non-conformances and non-compliances with the frequency of occurrence to be publicly available to help promote compliance and awareness.
- There should be further consultation with impacted regulated stakeholders when considering crop, commodity and import specific information and labelling requirement changes.
- There should be initiatives to increase education, awareness and knowledge to promote compliance and consistency in the seed program.

Appendix 1: Task Team Topic Reports submitted to the Seed Regulatory Modernization Working Group

The Information (including records and labelling) Task Team Topics were discussed over multiple meetings and the options and recommendations reports were approved by the Task Team to be submitted to the Seed-RM WG.

The options and recommendations reports are comprised of background in the current system, considerations addressing improvements and gaps in the current system, options, rationale for the option, pros/benefits and cons/risks for each option, discussion and recommendations. The topics will appear in the following order:

- Topic 1 - Grade Names
- Topic 2 - Information Requirements at the Time of Sale
- Topic 3 – Digitalization
- Topic 4 – QR Codes on the Official Label
- Topic 5 – Variety Names
- Topic 6 – Varietal Blends
- Topic 7 – Mixtures
- Topic 8 – Imported Seed Requirements

Topic 1 – Grade Names

The main purpose of the *Seeds Act and Regulations* is to protect farmers from using seed of low quality and from fraud. Canada's seed grading system:

- establishes minimum physical purity and germination standards for seeds;
- conveys information to consumers in a simple fashion (i.e., grade names);
- presents the standards in a comprehensive format (i.e., Grade Tables); and
- facilitates domestic seed trade

The Grade Tables set out the minimum standards for weed seeds, other crop seeds, some seed borne diseases, and germination for seed of most crop kinds sold in Canada. The *Seeds Regulations* also set out additional seed standards, prohibitions and allowances such as seed must not contain prohibited noxious weed seeds and only pedigreed seed can be sold with a pedigreed grade name. Seed of kinds listed in the Grade Tables must be sold by grade name; the exception is vegetable species which may be sold without a grade name if labelled with the germination percentage.

Seed of crop kinds not listed in the Grade Tables must meet minimum weed seed and other crop seed standards of the appropriate Grade Table based on seed size of that crop kind; standards for germination and seed borne diseases do not apply to these crop kinds. These crop kinds may not be sold by grade name since not all of the standards applicable to the grade name will have been tested for (e.g. germination). Seeds of crop kinds not listed in the Grade Tables must be labelled with the name and address of the seller, packager or labeler along with the name of the crop kind and variety if applicable (i.e. pedigreed seed).

Canada pedigreed grade names are seed certification statements that represent a process throughout which assurance and verification of pedigreed status and seed standards occurs at multiple stages. Grade names are a combination of pedigreed status (determined by the cycle of seed multiplication and application of CSGA's varietal purity standards to crop inspection results) and numerical grade (determined by analysis of seed samples for seed quality characteristics).

After seed crop certification and prior to sale, all Canada pedigreed seed must be:

- processed by an Approved Conditioner or by the grower of the seed on his/her own premises;
- tested for mechanical purity by an accredited grader or seed analyst;
- tested for germination by an officially recognized laboratory;
- graded by an accredited grader; and
- labelled according to the Regulations.

In terms of application of grade names, anyone may apply non-pedigreed grade names (e.g., Common No. 1, Common No. 2) to non-pedigreed seed. However, only accredited graders may apply the Canada pedigreed grade name to pedigreed seed.

Seed offered for sale in Canada is required to meet the standards of the labelled grade name at the time of sale. A purchaser may request purity and germination information listed in section 18 from a vendor within 1 year of purchase and the vendor is required to provide this information in writing within 30 days of the request.

Should Canada continue to use grade names to convey information on seed quality or should Canada switch to a truth in labelling system where the information related to purity and germination be labelled on the seed tags? Could it be flexible similar to what is currently allowed for vegetable seed where seed can either be sold on the basis of grade or by labelling with test results for germination?

Recommendations from previous task teams linked to this topic

Seed Standards and Grade Tables Task Team

- Grade Tables should continue to exist for pedigreed grade standards.
- CFIA should explore having only one Common grade standard per Grade Table and eliminating the Common No.2 standard. (This recommendation to be forwarded to the Common Seed Task Team)

Seed Testing Task Team

- Simplify the seed standards whether they remain as Grade Tables or are replaced as minimum standards. (There was interest in keeping the grade name and looking at the use of QR codes for additional information).

Common Seed Task Team

- The Task Team did not reach a qualified consensus concerning the common seed grade name requirements.

Option 1: Continue to use grade names for pedigreed seed. For non-pedigreed seed, grade names (i.e. Common No.1) can be used on seed lots processed by Registered Seed Establishments (RSE) and graded by an accredited grader. Except for vegetable seeds in Grade Tables XVI-XX, non-pedigreed seed intended for sale that is not processed by an RSE and graded by an accredited grader, the seed lot must be labelled with the purity and germination information described in Section 18 of the *Seeds Regulations*.

Rationale: Registered Seed Establishments have quality management systems and personnel who have been trained in sampling, testing and applying grade names. This option still allows sellers outside of the RSE system to sell seed but they would have to label the seed with purity and germination information obtained from an accredited seed laboratory.

Pros/Benefits:

- Conveys information to consumers in a simple fashion
- Establishes minimum physical purity and germination standards for seeds
- Presents the standards in a comprehensive format (i.e., Grade Tables)
- Grade names simplify the transactions for seed companies who are booking sales/invoicing well in advance of delivery
- Uses an established quality assurance system when applying grade names to pedigreed and non-pedigreed seed
- Vegetable seed industry continues to use their current system

Cons/Risks:

- The process of assigning grade names can be inflexible when it comes to demoting pedigreed seed and on imported pedigreed seed
- A grade name by itself does not show all of the information such as what weed species may be present in the seed lot

Option 2: Continue to use grade names but require additional information such as weed seeds to be provided at the time of delivery/pick up. Vegetable seeds in Grade Tables XVI-XX would continue to use the current labelling requirements.

Rationale: This option informs buyers that the standards have been met by labelling the seed lot with the grade name and would provide additional information about the seed quality.

Pros/Benefits:

- Conveys information to consumers in a simple fashion
- Establishes minimum physical purity and germination standards for seeds
- Presents the standards in a comprehensive format (i.e. Grade Tables)
- Provides additional information to buyers on what weed species are present in the seed lot
- No changes to current labelling requirements for vegetable seed

Cons/Risks:

- The process of assigning grade names can be inflexible when it comes to demoting pedigreed seed and on imported pedigreed seed
- Putting purity and germination information on the official label would be cumbersome

- Depending on the mechanism, there could be undue impacts on the distribution of seed and timing of delivery.
- Logistics may become more complicated.

Option 3: Status Quo. Continue with the current system with no changes.

Rationale: The current system establishes minimum standards and grade names are an effective way of communicating that those standards have been met.

Pros/Benefits:

- Conveys information to consumers in a simple fashion
- Establishes minimum physical purity and germination standards for seeds
- Presents the standards in a comprehensive format (i.e., Grade Tables)
- Grade names simplify the transactions for seed companies who are booking sales/invoicing well in advance of delivery

Cons/Risks:

- A grade name by itself does not show all of the information such as what weed species may be present in the seed lot
- The process of assigning grade names can be inflexible when it comes to demoting pedigreed seed and on imported pedigreed seed
- Common grade names can be applied by personnel who may not have any training in sampling, testing and applying grade names

Option 4: Continue to use grade names but allow imported pedigreed seed lots to be labelled with the mechanical purity and germination information described in Section 18 of the *Seeds Regulations*. Standards within the applicable grade table must still be met when sold in Canada (i.e. Foundation status seed must meet the Foundation standards in the applicable Grade Table).

Rationale: Provides some flexibility on labelling imported pedigreed seed while still maintaining the standards within the grade tables.

Pros/Benefits:

- Seed companies could still choose to use grade names on imported seed
- Seed lots will still have to meet the standards of the applicable grade table

Cons/Risks:

- Potential for inconsistency
- Potential for confusion as to whether standards have been met

- Unintended consequences – This option was based on seed coming from countries that have certification systems which could be considered similar to Canada (i.e. Association of Official Seed Certification Agencies such as the United States). There may be unforeseen issues for seed being imported from other countries

Option 5: Remove grade names and change to a truth in labelling system

Rationale: The United States uses a truth in labelling system so there would be potential for harmonization.

Pros/Benefits:

- The standards in Schedule I (grade tables) would still be in place
- Provides specific information to buyers about the seed lot

Cons/Risks:

- Potential for confusion as to whether standards have been met
- Potentially more complicated for seed companies who are booking sales/invoicing well in advance of delivery
- Challenges related to fitting all of the information on an official label
- Changing germination information on carryover seed would add extra costs (i.e. Having to retag with new germination information)

Option 6: Allow seed lots (domestic and imported) to either be sold using grade names or to be labelled with the mechanical purity and germination information described in Section 18 of the *Seeds Regulations*. Standards within the applicable grade table must still be met (i.e. Foundation status seed must meet the Foundation standards in the applicable Grade Table).

Rationale: Provides some flexibility on labelling seed lots while still maintaining the standards within the grade tables. This would be somewhat similar to the regulations for vegetable seed but would include labelling seed lots with both purity and germination information

Pros/Benefits:

- Seed companies can choose to sell seed using grade names or label the seed with the purity and germination information described in Section 18
- Seed lots will still have to meet the standards of the applicable grade table

Cons/Risks:

- Potential for inconsistency
- Potential for confusion as to whether standards have been met

DISCUSSION

The Chair started the discussion by asking if the grade name was a sufficient way of conveying the seed quality information about a seed lot or is there other information that is needed? Are there challenges around the use of grade names that should be addressed?

There was general consensus that grade names are an effective way of informing the customer that the minimum standards have been met for a particular seed lot. There was recognition that pedigreed grade names are seed certification statements supported by a quality management system. However, it was also recognized that non-pedigreed grade names (i.e. Common No.1) were not necessarily supported by a quality management system. Although some non-pedigreed seed being sold will be processed by a Registered Seed Establishments (RSE) and handled by personnel who have been trained in sampling, testing and applying grade names, it was acknowledged that there is non-pedigreed seed being sold that is handled outside of a quality management system. This led to discussion around when grade names should be allowed to be used on a seed lot. Based on this discussion, the task team developed Option 1 where grade names could only be used on seed (pedigreed and non-pedigreed) that has been processed by an RSE. This option still allows sellers outside of the RSE system to sell seed but they would have to label the seed with purity and germination information obtained from an accredited seed laboratory. There were concerns raised in regards to how this may impact the vegetable seed industry since most vegetable seed sold in Canada is non-pedigreed, handled outside of the RSE system and is sold in small packages. There was agreement from task team members that vegetable seed should continue to operate under the current system. The task team explored ideas around providing additional information to customers which led to the development of Option 2. Producers who are purchasing seed would like to know information such as what weed seeds are present in the seed lot at the time of sale. In particular, farmers who purchase forage seed would find this information valuable because there may be certain species they don't want in the seed lot. For example, there could be two species that are in the same class in the *Weed Seeds Order* (i.e. secondary noxious), the farmer does not want a particular species but would be okay with other species. It was acknowledged that there is an onus to disclose physical purity and the focus should be on the mechanism and timing. This led to discussion regarding the *Seeds Regulations* where a purchaser may request purity and germination information listed in section 18 from a vendor within 1 year of purchase and the vendor is required to provide this information in writing within 30 days of the request. There was agreement that with the technology that is available today, this subsection of the *Seeds Regulations* is outdated. Since the next two topics are Information Requirements at the Time of Sale and Digitalization of Information, this option could be explored in more detail in those topics. It will be important to understand the mechanism and timing in order to minimize any negative impacts on the distribution of seed and timing of delivery.

With respect to the question about whether there are challenges around the use of grade names that should be addressed, there was discussion indicating that assigning grade names

can be inflexible at times such as when demoting pedigreed seed to a lower seed class (Foundation to Certified) and on imported pedigreed seed. There was agreement that discussion around demotion could be explored in more detail in future topics since there are questions related to the pedigreed seed declaration in Topic 2 and Topic 3.

For imported pedigreed seed, there was also discussion on whether it would be better to explore the challenges around using grade names under this topic or under the Imports topic. Based on the discussion, Option 4 was developed but there was an understanding that it may warrant further discussion under the Import topic in order to fully understand the impact if the task team were to recommend this option. Further discussions in the other topics may identify unintended consequences.

Task team members recognized that Options 1-4 and Option 6 all continue to use grade names and that the task team could potentially recommend a combination of these options since they are not mutually exclusive. Although there is support for using grade names, task team members thought that a fifth option involving eliminating grade names and switching to a truth in labelling system should be examined in order to cover the full range of potential options. Based on the discussion, task team members did not indicate support for switching to a truth in labelling system.

Task team members agreed that grade names should continue to be used to convey information on the minimum purity and germination standards. There was also agreement on improving access to information under Section 18 of the *Seeds Regulations* (30 days does not seem reasonable given today's technology). Option 1 received qualified consensus with the majority of both regulated members and impacted/implicated members supporting this option. There was interest in Option 2 however it did not receive qualified consensus. A majority of the regulated members had concerns about the wording and it was recognized that this was being further discussed under Topic 2. Some task team members expressed interest in Options 4 and 6, however neither option received majority support from either regulated members or impacted/implicated members. Options 3 and 5 did not receive support from any of the task team members.

RECOMMENDATIONS:

- 1) Continue to use grade names for pedigreed seed. For non-pedigreed seed, grade names (i.e. Common No.1) can be used on seed lots processed by Registered Seed Establishments (RSE) and graded by an accredited grader. Except for vegetable seeds in Grade Tables XVI-XX and other miscellaneous seeds, non-pedigreed seed intended for sale that is not processed by an RSE and graded by an accredited grader, the seed lot must be labelled with the purity and germination information described in Section 18 of the *Seeds Regulations*.**

- 2) Modernize Section 18 with respect to supplying purity and germination information to the purchaser within an appropriate timeframe significantly less than 30 days.**

Topic 2 – Information Requirements at the Time of Sale

Section [2](#) of the *Seeds Act* defines *sell* which includes agree to sell, or offer, keep, expose, transmit, send, convey or deliver for sale, or agree to exchange or to dispose of to any person in any manner for a consideration. As per subsection [3\(1\)](#) of the *Seeds Act*, except as provided by the regulations, no person shall:

- sell seed unless the seed conforms to the standard and is marked and packed and the package is labelled as prescribed in the regulations; or
- sell or advertise for sale seed of a variety that is not registered as prescribed by the regulations.

The *Seeds Act* further defines a package and a label. A *package* includes a sack, bag, barrel, case or any other container in which seed is placed or packed. Whereas, a *label* includes any legend, word, mark, symbol or design applied or attached to, included in, belonging to or accompanying any seed or package.

Subsection [3\(2\)](#) of the *Seeds Act* prohibits the sale of all seed under a grade name or designation closely resembling a grade name unless it meets the requirements for the prescribed grade, has been graded and inspected, is marked, packed and the package is labelled as per the *Seeds Regulations*.

The labelling requirements for both pedigreed and non-pedigreed seed are listed in sections [15 to 21](#) of the *Seeds Regulations* and include:

- seed must be labelled conspicuously, legibly and indelibly in one or both official languages
- no misleading or incorrect information or mark
- font requirements or placements that do not emphasize or obscure required labelling information
- no brand or mark that could be interpreted as a variety name
- when a grade may be applied
- units of measurement
- germination percent on substandard foundation, registered or certified pedigreed seed
- variety names and percentage of each variety in a varietal blend
- noxious weed seeds, other weed seeds, other crop kinds, percent germination and test completed with the exception of when seed is graded and the information is provided upon request
- net quantity on a package
- seed [lot designation](#)
- for seed graded with a Canada Foundation or Canada Registered grade name the [lot number](#) includes the pedigreed seed declaration
- precautionary statement when treated with a pest control product (must appear in both official languages)

- indicate that the registration of the variety is restricted, if subject to regional variety registration restrictions

To label seed with the requirements in section [18](#), *Seeds Regulations*, it must be tested as per section [11](#) of the *Seeds Regulations*. The labelling requirements for Schedule I seed crops includes: name and number of noxious weed seeds, name and number of other weed seeds, the number of seeds of other crops, the percent germination and the date the test is completed. For non-Schedule I seed crops, the germination and test date when completed is not required. Furthermore, there is an exemption in as per subsection [18\(3\)](#) unless the seed is graded with a 'Canada Foundation Substandard (Purity)' pedigreed grade name from the labelling requirements in subsections 18(1) and 18(2), if a purchaser requests this information for purity and germination from the seller/vendor within 1 year of the of seed then the seller/vendor must supply this information in writing, within 30 days of the request. Seed must meet the standards for the labelled grade name at the time of sale in Canada.

As per subsection [22\(1\)](#), non-pedigreed seed is exempt from the labelling requirements in sections 23 to 31 when the seed is grown, sold and delivered by a producer on the producer's premises for seeding by a purchaser and if the producer does not advertise the seed for sale. Subsection [22\(2\)](#) provides an exemption where imported seed may be exempt from the labelling requirements, with the exception of pest control product information, when it is imported into Canada but must meet all applicable labelling requirements before it is sold in Canada.

There are specific requirements in sections [23 to 31](#) for seeds of field crops; cereal mixtures; forages; forage mixtures; lawn grass and turf seed; lawn grass and turf mixtures, ground cover mixtures; flowers, herbs, roots, vegetables and other miscellaneous seed; and specialty seed. Information on labelling and records requirements for seed mixtures and varietal blends will be further discussed in the Information (records and labelling) Task Team's topics on Varietal Blends and Mixtures.

As per subsection [5\(5\)](#), vegetables, roots and herbs seeds may be sold with a grade name (e.g., Canada No.1 or Common No.1) and without conforming to the germination standards in section 6 if the seed is labelled according to section [30](#). Furthermore, subsection [5\(3\)](#) exempts seed labelled for the purposes of conditioning (i.e., [condition](#) means to prepare by cleaning, processing, packing, treating or changing in any other manner the nature of a seed lot) to be sold without conforming to the standards and requirements in sections 6 and 23 to 31 of the *Seeds Regulations*.

Seed labelled for export purposes is exempt under subsection [5\(2\)](#) may be exported from Canada without conforming to the standards and requirements in sections 6, 7, 9, 10, 16, 18, 19, subsections 20(5), sections 21 and 23 to 31 of the *Seeds Regulations*.

The *Seeds Regulations* defines an [official tag](#) as a label either issued or approved by the CFIA to be applied to seed having [pedigreed status](#). Official seed tags are issued by the CFIA. An official

tag should be labelled with the following information as per sections [33 to 36](#) of the *Seeds Regulations* with the exception of a Canada Substandard grade. The information requirements in subsections [33\(2\)](#), [34\(2\)](#), [35\(2\)](#) and [36\(2\)](#) for domestic, inter-agency, unregistered and pedigreed status official tags is captured in the following table.

Information Required	Domestic	Inter-agency	Unregistered	Pedigreed Status
Name of kind or species of seed	X	X	X	X
Name of the grade of seed	X	X	X	X
Variety name or the names of the varieties in a PPTM varietal blend	X	X	X	X
Lot number	X	X	X	
Crop certificate number	X		X*	X
State or country of the official certifying agency applicable to seed <u>not</u> grown in Canada		X	X**	
Pedigreed reference number of the official certifying agency applicable to seed <u>not</u> grown in Canada		X	X**	

*not applicable to seed produced from a seed crop grown and certified outside of Canada

**not applicable to seed produced from a seed crop grown and certified in Canada

In addition to the information listed in the table above, a crop certificate number is not required to appear on the domestic tag in the case of:

- a mixture set out in Tables III, XIII or XIV of Schedule I; or
- a blend of two or more original seed lots of certified status, whether the same variety or a plant pest tolerance management (PPTM) varietal blend, the two-digit seed year designation followed by the word “BLEND” should appear as the crop certificate number (e.g., 21-BLEND).

The CSGA issues Breeder and Select pedigreed status tags. There are no official tags for non-pedigreed seed (i.e., common seed) in Canada but this seed must meet the applicable labelling requirements for the seed being sold.

Section [10](#) of the *Seeds Regulations* lists the requirements for the use of variety names on seed sold in Canada. There are restrictions on the use of variety names for specific types of crop kinds and species of non-pedigreed seed listed in [Schedule II](#) of the *Seeds Regulations*. The Seed Certification and Common Seed Task Team covered the requirements for the use of variety names and there is a separate topic on information will be deferred to the Variety Names for the Information (records and labelling) Task Team Topic.

Varieties of [Schedule III](#) listed seed crop kinds, types and species must be registered to be imported into or sold in Canada. The advertising exemptions for Schedule III seed crops in section [38](#) are applicable when a variety has been reviewed by a recommending committee, an application for the registration has been received by the Registrar and the advertising indicates registration is pending. Therefore, common seed listed in Schedule III must be derived from a registered variety or going through the registration process in order to be advertised for sale in Canada.

Farm-saved seed for own-use is not subject to the *Seeds Regulations*, however, common seed subject to the *Seeds Regulations* could, if not subject to other requirements (e.g., Plant Breeders Rights, stewardship or intellectual property limitations, etc.), be later sold from farm-saved seed crop production.

The following gaps and/or issues were discussed when considering the options:

- What information should be provided when seed is sold as per the definition in the *Seeds Act*?
 - What type of information should be a minimum requirement and listed in the *Seeds Regulations*?
 - What information should be available at the time of sale for the customer (e.g., clarification on organic certified seed, pesticide/seed treatment labelling information, breeding methods/technologies, labelling of disease susceptibility/resistance traits, etc.)?
 - Should this be a requirement in the regulations or should it be voluntary information?
 - Should these be individual labelling requirements in the regulations or listed in the description of variety (DoV)?
 - Should information on additional quality tests like vigour and disease presence where there is not a regulatory standard be an information requirement at the time of sale?
 - What information does the regulator require for pedigreed and non-pedigreed seed sold in Canada?
 - Should this be a requirement in the regulations?
 - What information throughout the entire process should be required in the *Seeds Regulations* for seed sold, imported to and exported from Canada?
 - How much information could be available on a label and on the CFIA official label/tags for pedigreed seed?
 - As technology advances (e.g., use of QR codes), should this information be required to be provided if it does not need to be marked on a package?
 - Should this information be required at the time of sale, optional/voluntary information supplied by the seller or available upon request by the purchaser? If available upon request, does

there need to be a timeframe in the regulations similar to section 18?

- Should the design and size of the official tag be different if more information is required?
 - Is there any information in the regulations that could be removed as it could be non-official or voluntary information provided by a seller?
 - Is there an opportunity for incorporation by reference?
 - What could the timeframes in section 18 be modernized to be?
 - How quick could the information flow?
- Are there any exemptions that should be reviewed to be removed or common practices that should be added that are not clear they are exempt?
 - Should subsection 22(1), non-pedigreed seed farm to farm sales be reviewed?
 - Are there any common practices for farm to farm sales where information should be required or exempt from the *Seeds Regulations* (e.g., sale of 'bin run' non-pedigreed seed prior to cleaning/conditioning, etc.)?
 - Are there any downstream unintended consequences with grain classifications or under UPOV and Plant Breeders' Rights?
- Are the advertising requirements adequate and should they remain in the regulations?
- Is there a way to streamline processes for grading and downgrading seed offered for sale in Canada?
 - What should the requirements for downgrading to a lower pedigreed seed class be?
- Should the labelling requirements for varieties subject to regional restrictions in section 21 be clarified?
- Should the information on the pedigreed seed declaration be required to be submitted to the CFIA?

Option 1: Maintain the current requirements for information provided at the time of sale.

Rationale: There is flexibility in the current system to use other documents as part of the labelling information instead of all the information being marked/labelled on the bag. The current requirements are adaptable to allow information to be provided in alternate formats. There are databases, catalogues, field guides, industry standards above the minimum requirements listed in the *Seeds Regulations* for providing further voluntary information.

Pros/Benefits:

- A certified status blue tag graded with a Canada Certified grade name conveys that the minimum varietal purity standards and the standards listed in Schedule I have been met.
- Information for purity and germination is available to be provided upon request but it is not required at the time of sale if the seed has been graded.

- A seller may provide more voluntary information than required in the regulations at the time of sale.
- If a gene edited variety does not trigger the requirements for a 'novel food', varieties may be voluntarily listed in the publicly available [Canadian Variety Transparency Database](#) maintained by Seeds Canada.
- Information is already available in disease guides and seed guides for disease resistance and various leaf diseases.
- There are crop specific industry best practices where more information is already labelled/provided in addition to the minimum information required in the *Seeds Regulations*.
 - As technology evolves, information is easier to access and be provided digitally through databases, QR codes, company web-sites, etc. with the flexibility to be provided without being marked on the package.
- An individual has the opportunity to request additional voluntary information to be provided to them before purchasing seed.
 - Potentially already a best practice depending on the seed and end-use as individuals decide to only purchase seed if a disease or vigour test is provided for a seed lot.
- Voluntary declarations for laboratory testing would not subject seed laboratories to additional oversight, proficiency testing, costs and downstream costs of testing services since they would not have to become accredited.
 - If required to build trust into the tests, there is flexibility in the current system to develop voluntary industry guidelines for disease and vigour testing in seed lots.
- Seed Catalogs are available to access additional variety specific information.
 - Provides additional information as specific varietal traits may vary between growing regions.
- Pre-variety registration testing information may be publicly available in company guides, catalogs, seed guides, etc. for new varieties going through the variety registration process.
- Seed sold by a grade name may reduce s re-labelling seed lots that have been retested to ensure the minimum germination standards meet the labelled grade instead of requiring the actual percent germination on a seed lot.
- Purity and germination information in section 18, *Seeds Regulations* is available upon request within 1 year of purchasing the seed when graded and the seller is required to provide this information in writing within 30 days of the request.

Cons/Risks:

- The 30 day timeframe for the information requirements in section 18, *Seeds Regulations* is too long.
- Producers would like to know if there are specific weed seeds present before they purchase a seed lot.

- Similarly, a producer may like to know the actual weed seed count and germination results of a seed lot in addition to knowing the grade indicating that the minimum standards have been met.
- There is no requirement in the *Seeds Regulations* to provide additional quality testing information like vigour and the presence of diseases not listed in the *Seeds Regulations*.
- Crop specific traits linked to a variety like breeding method, disease susceptibility or resistance, etc. may not be publically available.
- There may be on-farm, regional, provincial or other additional crop specific weed seed biosecurity concerns (e.g., palmer amaranth in forage seed) for a producer that are not labelled as a seed lot is required to meet the grade standards based on the federal [Weed Seeds Order](#) classifications.
- It may be difficult or unknown where to find variety specific information in seed catalogs, in different guides or in different databases.
- It is not mandatory to list a gene edited variety in the transparency database to help ensure this information is publicly accessible.
- Increased variability between non-standardized test results (e.g., vigour, etc.) between individuals and laboratories performing the test(s).
 - Potentially could increase incorrect or misleading information or marks labelled for a seed lot if not all the information like the individual or laboratory performing the testing is not provided.
 - Individuals may not know that some of the seed tests are not standardized and results may vary based on who conducts the testing.

Option 2: Descriptions of varieties (DoVs) should be publicly accessible.

Rationale: This will enable specific traits and breeding methods linked to seed varieties to be publicly accessible and increase transparency for these varietal traits. Variety specific information including pest tolerance information, performance information, breeding methods/technologies, etc. to increase transparency would be required to be available in the variety's DoV.

Pros/Benefits:

- Information available for a purchaser to make an informed decision on variety specific traits based on the end-use market.
- Allows individuals to access information to know which varieties they could purchase based on specific breeding methods/technologies if required.
- Individuals are able to access this information prior to visiting a retailer or purchasing seed onsite to target varieties with known traits for their operation.
- Information would be publicly accessible for the required variety traits in a DoV.
- As technology evolves, information is easier to access and be provided digitally through databases, QR codes, company web-sites, etc. with the flexibility to be provided without being marked on the package.

- Knowing the disease resistance of a variety could help promote stewardship practices and determine if the use of specific pesticides would be required or not.
- Potentially could provide information to organic growers without having to get an affidavit signed by a seed grower.
- Potential to provide all the variety specific information in one place without going to multiple sources.

Cons/Risks:

- Recommending committees for Part I, Schedule III seed crops kinds, types and species have different requirements in different regions which may impact the information available for different traits.
- Pest resistance information may not be beneficial as it is a snapshot in time and in a particular region that is subject to change over time.
- It may be difficult to accurately represent diseases resistance traits as a disease may adapt or new races emerge and the original disease resistance trait may no longer be effective.
- Potentially increase costs to determine characteristics if they are not currently required to be provided on a DoV.
- Increase potential work to have the information publicly accessible to provide information and keep this information up to date for specific traits as required.
- Some variety specific trait information may be redundant if this information is already available elsewhere to the public from agronomic trials, listings in the transparency database, etc.
- Only specific information may be of interest and not the entire description from plant seedling to maturity to seed characteristics of a variety.
- Breeding method/technology may not solve the issues if the requirement is to know if a variety was conventionally bred or not.
- Some information may be considered confidential and would not be able to be provided.
- Disease resistance for varieties should be defined by the value-chain and may have different requirements in different areas depending on disease presence, variety performance, and quality trait expression across different regions and provinces in Canada.
- Disease resistance ratings in a DoV may vary depending on the environmental conditions and disease presence in different regions.
- Agronomic traits vary from area to area and varieties may perform differently in other regions.
- Variety registration trials are not always performance trails and may not be as robust as agronomic trials.
- If the information is not available at the time of sale, it may be difficult for an individual to make an informed decision.

- Not all crop kinds are subject to variety registration or the same variety performance trials.
- Depending on the crop kind, the reference varieties for registration may no longer be commercially used.

Option 3: The variety's breeding method/ technology must be provided on the official pedigreed seed tag.

Rationale: This will increase transparency for the breeding method/technology to be required to be labelled on an official pedigreed seed tag. This will be a mandatory requirement to help verify if the seed is eligible to meet genetically modified organisms (GMO) free end-markets, including organic certification.

Pros/Benefits:

- Mandatory requirement to identify the breeding method/technology on the official tag to identify if the variety of pedigreed seed would be eligible to be sold in organic and GMO free markets.
- Information is provided to organic growers without having to get an affidavit signed by a seed grower.
- Increases transparency on the breeding method/technology used on a pedigreed seed lot.

Cons/Risks:

- This information is variety specific and should be known prior to the sale of the seed in a database or seed catalog.
 - If the variety and this information is already known then it would be redundant if it is available publicly.
- This should be more of a question for the organic certification bodies on why can't the information currently available regarding breeding methods satisfy their requirement for a non-GMO signed affidavit instead of adding additional information on the pedigreed seed tag.
- Increases the information and clutter on the official tag when the variety is already listed.
- Depending on the biology of the plant and surrounding isolation distances, there is the potential of gene transfer through pollen from a GMO variety into the grain or seed produced from a non-GMO variety.
- It may take a while to phase in this requirement over a couple years before all pedigreed seed is labelled with this information on the tag.
- Increasing information on an official tag could potentially increase costs into the certification system to ensure the information is able to be certified and verified when it is labelled on an official pedigreed seed tag.

- There could be potential confidentiality issues depending on the statement to convey the breeding method/technology marked on the official tag.
- An official tag is only for pedigreed seed and would not encompass non-pedigreed seed labelling requirements.

Option 4: In addition to using grade names, the purity and the most recent germination information in section 18 must be provided when requested after the seed lot is known to meet the grade standards.

Rationale: With advances in technology, the information is more readily accessible to individuals wanting to know the additional purity and/or germination information for a specific seed lot. This information is required to label seed in Schedule I (i.e., Grade Tables) with a grade name or be labelled as per section 30 of the *Seeds Regulations* and would be available if requested. 30 days is outdated and can be too long for an individual requesting information.

Pros/Benefits:

- Grade name is provided to ensure all the minimum standards have been met.
- Purity information is available for individuals to know the weeds and other crop kinds that may have been present in the representative sample of the seed lot to determine the grade.
- May help mitigate the biosecurity risks for introducing and spreading weed seeds on-farm or to other regions if this information is provided.
- A copy of the grading report or a seed analysis certificate (SAC) may be available prior to the seed being purchased when requested with the most recent germination test results.
- Knowing the actual percent germination may help with adjusting seeding rates in the field.
- As technology evolves, information is easier to access and be provided digitally through databases, QR codes, company web-sties, etc. with the flexibility to be provided without being marked on the package.
- Information available prior to purchase enables individuals to purchase and manage seed that is best fit for their operation and the end-use of the seed or grain produced.
- Allows flexibility to have the information available without being marked on a package or tag.

Cons/Risks:

- Information is required to be provided only if it is requested.
 - Individuals may want to have this information available without having to request it.
 - Individuals may not be aware that a seller is required to provide this information upon request.

- Additional quality information for vigour, disease testing, thousand kernel weights, etc. are not required to be provided since they are not part of the grading standards or labelling requirements in section 30 of the *Seeds Regulations*.
- May increase costs of relabeling for germination or updating information sources since it is constantly tested throughout the seed life-cycle prior to sale to ensure it meets the minimum standards for the labelled grade name.

Option 5: Additional seed quality testing information where there are no standards in the *Seeds Regulations* (e.g., vigour, other diseases, etc.) should be mandatory information required to be available upon request in the regulations.

Rationale: There are different requirements for facilities and individuals requiring additional quality tests to ensure they are able to manage and mitigate the risk of spreading diseases like blackleg, ascochyta, clubroot, fusarium, crop specific viruses, etc. when storing, handling, processing and purchasing seed. Knowing the vigour and seed size may also help with knowing the seeding rates and how to manage the seed lots. There is flexibility to provide the information on a label as part of a seed analysis certificate without having to mark this information on a package.

Pros/Benefits:

- Test results for thousand kernel weights, diseases and vigour including the laboratory that tested the seed must be provided when it is requested.
- Increase the information available to the individual purchasing seed to help facilitate planning of their seeding operations.
- As technology evolves, information is easier to access and be provided digitally through databases, QR codes, company web-sties, etc. with the flexibility to be provided without being marked on the package.
- Knowing the presence of specific disease of concern for a crop kind by testing the seed lot could help a producer/farmer manage pesticide uses and other forms of control to promote stewardship practices.
- Flexibility to provide information without it being marked on the package.
- Potentially promotes good agronomic practices when this information is known.

Cons/Risks:

- Test results for vigour are subjective since there is no standard test method that a laboratory is required to use.
- Increase inconsistencies in test results for any seed quality testing (e.g., disease not listed in the regulations, vigour, etc.) that is not standardized and subject to being accredited by the CFIA.
- Potentially increase costs for laboratories to become accredited and overseen to conduct vigour and specific disease tests if this is a mandatory requirement.

- Potentially could increase the cost of vigour and disease testing services if a seed laboratory is required to be accredited.
- There could be crop specific unintended consequences based on other factors like seed coating that may have to be accounted for if the labelling requirements are too prescriptive.
- Potentially will increase costs of all seed sales between farmers, including non-pedigreed seed when it is not advertised for sale.
- Even though some laboratories could be ISO/IEC: 1705 recognized, it is still unknown which laboratories offer disease testing services and under what conditions testing is conducted.
- Disease pressures and specific concerns differ from one region to another as there may be different disease pressures to consider.
- If it is not labelled, an individual may not know they are able to request this information to be available.
- Removes the flexibility for an individual to sell seed or select a laboratory to provide testing services if the information is mandatory and laboratories are required to become accredited.
- Potentially increase burden making this information mandatory by adding additional requirements and increasing costs to a process that is already customer driven.
- If the information is mandatory and the testing is not standardized there is a risk that the seller could appear to label a seed lot with incorrect or misleading information when it is sold since the results may vary by the testing methods.

Option 6: Ambulatory incorporation by reference (IBR) of the labelling requirements.

Rationale: As regulatory standards are developed this would allow for labelling requirements to be added into an ambulatory IBR document. Crop specific requirements could be removed from the *Seeds Regulations* and moved into an IBR document to increase flexibility to adapt labelling requirements in a more timely manner. The crop specific value-chain stakeholders could provide input on requirements for those specific labelling requirements. Proposed changes to the IBR document would be consulted on prior to making a change. An ambulatory IBR document would also be able to accommodate adding labelling requirements if new standard testing is available or remove requirements as technology evolves and this information may no longer be required. The basic labelling requirements for all seed sold would continue to remain in the *Seeds Regulations*. The CFIA would be responsible (i.e., hold the pen) for the IBR document.

Pros/Benefits:

- Increases the flexibility to add labelling requirements for testing for quality tests like vigour that do not have standards or a standardized testing method.

- Potential to be industry driven to determine if there are crop/industry specific requirements and standards already being done and if these should be subject to regulation in an ambulatory IBR document.
- Provides flexibility to for additional labelling requirements if new standards are introduced into other IBR documents or the *Seeds Regulations* in the future.
- Requires a consultation to provide feedback on proposed changes.
- Increases the flexibility to review and update requirements more frequently if required.

Cons/Risks:

- There could be crop specific unintended consequences based on other factors like seed coating that may have to be accounted for if the labelling requirements are too prescriptive.
- Too many changes may be difficult to keep up on if the IBR requirements are not phased into force.

DISCUSSION

The Task Team members discussed the downstream impact of bin run seed on the grain classification system and the use of a variety name when delivering seed to the elevator. There were concerns on the use of variety names on non-pedigreed seed (i.e., common seed and bin run before it was cleaned) brought forward by the Task Team members. It was mentioned that the verbal use of a variety name was not restricted in the *Seeds Regulations* if it was provided at the time of sale on non-pedigreed seed. It was also mentioned that it may be more difficult to declare a farm to farm sale of non-pedigreed seed for a higher grain grade classification at the elevator. Clarification was provided that the grain system requires a declaration of the variety used and grain may enter the system at the lowest grade classifications (e.g., feed classes) when a variety is delivered where the variety is either 1-not known or 2-not registered in Canada. In order for the grain to be accepted for a higher classification it must meet the standards and requirements at the time of delivery and the variety must be known to declare it at the grain elevator to be eligible for the grain grade classification. There was a question asked about how many successive generations of farm-saved wheat seed not subject to the *Seeds Regulations* produced from certified status seed would be able to meet higher grain classifications? It was mentioned that the varietal purity status of certified wheat is greater than 99.9% in the field at the time of seed crop inspection and it may vary on the type of farming practices, environmental pressures, etc. to ensure farm saved seed would meet a higher grain grade classification. The use of variety names will be further discussed during the Information (records and labelling) Variety Names task team topic.

During the discussion, the members mentioned how could the regulations facilitate the flow of information and if there was a way to simplify the process, including what information is required by the regulator. The availability and flow of information could potentially be simplified with advances in technology such as linking to websites, using QR codes, referencing

databases, potential of digital tags and labels, information portals, etc. to reduce transcribing errors, increase accessibility and transparency of information throughout the process. It was suggested that the CSGA SeedCert platform could be extended to capture pedigreed seed information and there could be a potential to timestamp information to ensure the most recent information for a seed lot is available. Simplifying the flow of information, including information required by the regulator, and digital technology such as QR codes will be further discussed during the Information (records and labelling) Digitalization and QR Codes on the Official Label task team topics.

It was mentioned that the 0067 bulk certified seed tags have additional information requirements when compared to the official seed tags on sealed packages of pedigreed seed lots. There was a consideration brought forward if all the official seed tags should be aligned with the same information regardless if the pedigreed seed lot is sealed in packages or bulk. It was also mentioned that mini-tote bulk bags could be interpreted to use either a 0067 bulk seed tag or seal the package and use the other official seed tag.

The Task Team discussed that education is a critical tool to raise awareness of requirements, information availability, standardized versus non-standardized testing for vigour and other diseases not listed in the *Seeds Regulations*, definitions, etc. It was mentioned that terms should be further defined and known where to access this information to help provide and use consistent information. There was a suggestion that organizations should reach out to be aware of the availability of information and help further educate their membership on where to find/access information. This would increase consistency and potentially compliance by educating individuals on the requirements, resources available, etc.

The Task Team discussed the importance to standardize quality test methods like vigour, etc. to increase reliability and consistency of the test results. It was suggested that the standardization process could either be part of the CFIA accreditation process or potentially be part of a voluntary industry initiative for laboratories to be listed using the industry approved standard method outside to the CFIA accreditation process.

There was a consideration for a phase in approach for regulated parties depending on the amount of new information that would be required in the *Seeds Regulations*.

For option 1 to maintain the current requirements for information provided at the time of sale was discussed by the Task Team. It was mentioned that there was value in the current system but the timeframe for 30 days is outdated and needs to be changed. The majority of the regulated members and the majority of the impacted/implicated members support maintaining the majority of the current system with updating the 30 day timeframe in subsection 18(3) of the *Seeds Regulations*.

During the option 2 discussion on the availability of the description of varieties (DoVs), the Task Team mentioned that there may be requirements for different information to be publicly accessible depending if it was a regulator, seed crop inspector, seed grower, producer/farmer,

etc. accessing this information. It was discussed if this type of information should be on the actual package or made available in a database or other document. Individuals buying seed may be looking for performance information from their specific growing area related to specific traits which may vary on a nationally and within a province. There was a suggestion brought forward on a variety profile database which will be further discussed in the digitalization topic. It was suggested that the information breeding methodology/technology information would fit better in the DoV versus on an official seed tag. There was a concern brought forward about business confidentiality that should be explored depending on how the information is supplied publicly on a breeding method/technology used to develop a variety. . It was suggested that the information coming out of provincial trials and guides may be more relevant and would not necessarily need to be on the tag or in a DoV. There was support from some task team members but not a majority of either stakeholder group (i.e., regulated and impacted/implicated) members for putting this option forward.

The Task Team members discussed option 3 on the variety's breeding method/ technology must be provided on the official pedigreed seed tag. This option was put forward for discussion based on a resolution presented to the Task Team to require the breeding method/ technology to be mandatory information provided on the official pedigreed seed tag. It was mentioned that this information should be known before an individual purchases seed and may be better suited in a database or the DoV. The majority of the Task Team members from both stakeholder groups did not support this option.

Option 4 where in addition to using grade names, the purity and/or the most recent germination information in section 18 must be provided when requested after the seed lot is known to meet the grade standards was discussed by the Task Team. There was a concern brought forward on the broad definition of 'sell' in the *Seeds Act* as it encompasses many different activities including sale contracts when the standards may not be known until later in the grading process. It was suggested that this information would be available once a seed lot would be assessed to meet the standards to assign a grade name. It was mentioned that this option should be linked to the sale trigger somehow when the regulations are drafted with caveats or exemptions to address the concerns with the broad term of 'sell'. It was suggested if this could be linked to taking possession of the seed lot purchased or prior to purchase somehow. There was a consideration brought forward that if the seller is not able to provide the information upon request then should there be a timeframe like no later than 5 business days in the *Seeds Regulations*. The majority of the impacted/implicated members and majority of the regulated members supported recommending this option as it updates the 30 day requirement.

The Task Team discussed option 5 on additional seed quality testing information where there are no standards in the *Seeds Regulations* (e.g., vigour, other diseases, etc.) should be mandatory information required to be available upon request in the regulations. It was suggested if the testing is not standardized then it should be a voluntary requirement but the individual or laboratory who tested the seed should be identified or potentially declared. It was mentioned with digitalization it would be easier to provide information to individuals

purchasing seed and should be mandatory to be provided even if the testing is not standardized. It was mentioned that this should also be voluntary as it is customer driven and varies between crop kinds, on-farm practices, regions, etc. The majority of the Task Team members from both stakeholder groups did not support this option.

During the option 6 discussion on ambulatory incorporation by reference (IBR) of the labelling requirements it was mentioned that there should be a further education component on the IBR process proposed changes, consultation and implementation. It was mentioned that the crop specific commodity value-chain stakeholders should be responsible for proposing changes impacting their sectors. It was mentioned that the IBR document could also provide direction for the information that would be required for a regulator as well to provide flexibility to update outside of the regulations. It was suggested that crop specific information should be left up to the different crop specific value-chain stakeholders to determine outside of regulations. It was suggested that the regulations should remain basic for all crop kinds and the crop specific labelling requirements should be removed and placed in an accessory document. It was mentioned that the CFIA should be responsible (i.e., 'hold the pen') on the IBR document. The majority of the impacted/implicated members and the majority of the regulated members supported having the CFIA hold the pen on an ambulatory IBR document for labelling requirements outside of the regulations.

RECOMMENDATIONS:

- 1) The Task Team reached a qualified consensus to significantly shorten the 30 day timeframe in subsection 18(3) of the *Seeds Regulations* when the purity and/or germination information is requested by a potential purchaser as this information would be available as soon as a seed lot is known to meet the grade name standards.**
- 2) The Task Team reached a qualified consensus to have an ambulatory IBR document to provide flexibility for crop specific labelling requirements and to incorporate additional labelling requirements in the future. The Task Team recommends that the CFIA would be responsible for this ambulatory IBR document.**
- 3) As an overall recommendation, the Task Team recommends that there should be further education on the standards and the requirements in the *Seeds Regulations*.**
- 4) The CFIA should further explore the legal limitations to publicly provide information around the breeding method/technique that does not trigger a PNT authorization but the variety has been genetically modified (e.g., gene edited, etc.).**

Topic 3 – Digitalization

Section [2](#) of the *Seeds Act* defines ‘document’ to mean *anything on which information that is capable of being understood by a person, or read by a computer or other device, is recorded or marked*. The *Seeds Act* also defines a ‘label’ to include *any legend, word, mark, symbol or design applied or attached to, included in, belonging to or accompanying any seed or package*.

Throughout the [Seeds Regulations](#) there are requirements for information to be provided in writing or written, to forms (e.g., pedigreed seed declaration, etc.), to declarations, for information to be signed, when to supply information to the Agency (i.e., the CFIA), etc. Furthermore, the seed testing requirements for an acceptable seed analysis certificate and labelling are prescribed in the *Seeds Regulations* for both pedigreed and non-pedigreed seed. The seed certification system is based on traceability to ensure the varietal purity of pedigreed seed sold in Canada. Examples of the information required to ensure the traceability throughout the seed certification process to maintain and verify the varietal purity standards have been met may include but are not limited to:

- Proof of varietal eligibility
- Variety registration, if listed in Schedule III
- Documented quality systems for Breeder seed requirements and oversight
- Proof to verify the pedigreed status of the seed source such as official seed tags/labels
- Reports for seed crop inspection
- Seed crop certificates
- Signed grower declaration of seed harvested
- Disposition records of the seed lots
- Pedigreed seed declarations
- Document quality systems to ensure varietal purity for registered seed establishments and oversight
 - Includes information for handling, sampling, seed certificates of analysis, grading, etc.
- Document quality systems for alternative service delivery (ASD) of pedigreed seed crop inspection and oversight
- ASD licenses, accreditations and registrations including the requirements (e.g., evaluations of people, evaluation audits, etc.)
- Official seed tags/labels

In a [digital age](#), the Government of Canada is committed to [digital government innovation](#) to use modern and emerging technologies to deliver better digital services to Canadians. The government also recognizes [security of online government services](#) and the [use of digital signatures](#), [digital credentials](#), [public key infrastructure management](#), etc.. In the [Canadian Food Inspection Agency \(CFIA\) 2025 Framework](#), the CFIA is continuing to develop and deploy

more digital services across all business lines (food, animal and plant) through its ongoing investments in modernizing its applications and increasing the availability of self-service options through [My CFIA](#), the Agency's trusted portal to access CFIA services. It is also advancing work to make more and more permissions available online such as select pre-market approvals, import permits and export certificates. These shifts will allow regulated parties to request services in a more streamlined and modern way. The CFIA also recognizes the rapid growth of online services, web-based applications and mobile communications, all of which are revolutionizing how businesses and individuals interact with the world around them. This raises stakeholder expectations for end-to-end digital services and easy-to-find, easy-to-understand government information.

Currently, seed stakeholders may be required to provide information to the CFIA and receive information from the CFIA via email, mail, registered mail, in-person, through the MyCFIA portal, on the CFIA web-page, etc. and potentially follow-up with different individuals within the CFIA, etc. Depending on the requirements, seed stakeholders may need to follow-up with the CFIA and/or outside of the Agency with the Canadian Seed Growers' Association (CSGA), Seeds Canada, etc. for information. Internally, CFIA staff may be accessing and capturing information in different formats, databases, etc. for registering varieties; handling multiplication agreements; licensing, registering and accrediting individuals, businesses, establishments, laboratories and analysts; carrying out inspections; accessing lab results, oversight information, etc..

The CFIA is the National Designated Authority (NDA) responsible for the implementation and administration of the OECD Seed Schemes in Canada. The OECD is in the process of developing a Seed Lot Traceability Hub (Seed Hub) for all countries to enter their OECD seed lot data. From a recent OECD document: *"The Seed Hub is a centralized platform that connects all the National Designated Authorities (NDA's) together, significantly improving the exchange and validation of information (seed lot information, variety descriptions, etc.). The Seed Hub would allow integrations with existing legacy systems and provide a web-based platform for those not able to connect. In addition, the Seed Hub also enables creating new value-added services such as Digital Seed Tags and validation tools."*

The CFIA is evaluating the use of its Digital Service Delivery Platform (DSDP) for delivery of various aspects of the CFIA's seed programs (e.g., licencing of seed crop inspectors, export certification, etc.). In the seed program, the CFIA has recently digitalized the process of variety registration using DSDP. The CFIA is also exploring how to transfer the information from DSDP to update the [database of varieties of crop kinds registered in Canada](#) in a more timely manner. In addition, digitalization of the process for establishing multiplication agreements for the multiplication of Canadian seed abroad will also be delivered by DSDP in the future.

In paragraph [4\(1\)\(a.1\) of the *Seeds Act*](#) the Canadian Seed Growers' Association (CSGA) has the authority with respect to grades requiring varietal purity, to determine the varietal purity of the seed crop and establishing those seed crop standards. The CSGA has developed a digital end-to-end seed crop certification digital platform known as SeedCert. For pedigreed seed crop inspection, the CFIA shares specific information on descriptions of varieties from their internal DSDP platform with the CSGA to be available in the SeedCert platform for seed crop inspectors. Previously, the CFIA was able to transfer this information to the CSGA using a different process. The CSGA has implemented QR codes on seed crop certificates issued to pedigreed seed growers. The CSGA is continuing to pilot the use of QR codes on their Breeder and Select tags to test the foundations of QR based technology. The SeedCert platform provides seed crop inspectors (official and licensed) the ability to access CFIA descriptions of varieties for pedigreed seed crops, Seed Grower applications, submit seed crop reports, etc. in one platform. For example, the CFIA is able to transfer specific variety data from DSDP to the CSGA who converts this information into to a readable (i.e., PDF format) description of variety in SeedCert providing inspectors a single digital platform to access this information. The CFIA pays for limited access to SeedCert services: 1) as a regulator, to access information related to oversight activities for authorized seed crop inspection services and licensed seed crop inspectors; and 2) as a delivery service, to access information for direct delivery of pedigreed seed crop inspection to submit seed crop inspection reports to the CSGA. Authorized Seed Crop Inspection Services also pay an annual fee for limited access to the system to conduct crop inspection activities.

As the conformity verification body, Seeds Canada (formerly the Canadian Seed Institute) maintains a listing of [registered seed establishments](#) (RSEs) and [accredited seed laboratories](#) in Canada; it is publicly online. In addition, Seeds Canada maintains an internal database of RSEs with their different scopes and licensed personnel that the CFIA is able to access. Seeds Canada works with the CFIA to update this information when licences and registrations are issued, revoked or cancelled this database. Furthermore, RSEs are able to access documents (e.g., technical manuals and other related documents) from Seeds Canada through a secure [document library](#) log in or by contacting Seeds Canada.

Seeds Canada provides information to CFIA about the oversight of laboratories and RSEs as per their conformity verification body agreement which includes a summary of major and critical non-conformances identified during audits. Depending on the non-conformance, the CFIA may be required to follow-up if there are non-compliances identified with the laboratory or RSE directly. The CFIA has the regulatory authority to follow-up on regulatory requirements, non-compliances and enforce the *Seeds Regulations*, not the conformity verification body.

The following gaps and/or issues were discussed when considering the options:

- What information should be made available in the *Seeds Regulations* to allow for flexibility to move to a digital format?

- Is there a way to increase flexibility in different processes for information to be available instead of requiring specific forms, documents, etc. to be completed?
- If so, what information is required by the regulator to be available to ensure traceability and accountability?
- Should a single window format be explored for all seed or only pedigreed seed?
 - What concerns would you have about ownership of data?
 - Could this be an extension of the CSGA SeedCert platform?
 - Should single window be limited to 'linking' to official government information, thus ensuring that government manages the data and has ownership?
 - Should a single window also link to other databases outside the scope of seed regulatory modernization (Seed-RM)? Examples of lists and databases outside the scope of Seed-RM that are available to the public include: the [CFIA database for plants with novel traits \(PNTs\) approved in Canada](#), the CFIA [Automated Import Reference System \(AIRS\)](#), Health Canada's [table of completed novel food safety assessments](#), Health Canada's [list of non-novel products of plants](#), Seeds Canada's [Canadian variety transparency database](#), Seeds Canada's [Plant Breeder's Rights database](#), etc.
- Should there be a separate variety profile database outside of existing databases linking information together?
- What should be digitalized to keep us competitive globally and align with international obligations for seed?
- How could the information on the purity for weed seeds and breeding techniques/methods be digitally available for an individual purchasing seed?

Option 1: Maintain the current system (i.e., status quo).

Rationale: There is flexibility in the current system to provide information in a digital format for registered seed establishments (RSEs) and accredited laboratories that are required to operate under an approved quality management system (QMS). The conformity verification body (i.e., Seeds Canada) audits RSEs to verify if a RSE is conforming to their submitted quality manual and notifies the CFIA of major and critical non-conformances observed during an audit. There is flexibility for a RSE and accredited lab to digitize their systems based on their business and customers' demands. A seller or retailer is able to provide information on a QR code marked on a package or on a label that is either attached to a package or accompanying the seed lot. There are multiple databases and sources of information publicly available for disease trials, registered varieties, PNT's, voluntary transparency database, etc.

Pros/Benefits:

- RSEs are required to operate under their approved quality manual and subject to audits by the conformity verification body.
- An auditor or CFIA inspector is able to verify information that a RSE is required to maintain.
- Flexibility to add a QR code onto a package or label for a customer to access information (e.g., weed seeds if found during the purity analysis) in the current system.
- Continues to ensure the traceability of pedigreed seed throughout the seed certification system.
- A seller may provide more voluntary information than required in the regulations at the time of sale.
- If a gene edited variety does not trigger the requirements for a 'novel food', varieties may be voluntary listed in the publicly available [Canadian Variety Transparency Database](#) maintained by Seeds Canada.
- Information is already available in disease guides and seed guides for disease resistance and various leaf diseases.
- There are crop specific industry best practices where more information is already labelled/provided in addition to the minimum information required in the *Seeds Regulations*.
 - As technology evolves, information is easier to access and be provided digitally through databases, QR codes, company web-sites, etc. with the flexibility to be provided without being marked on the package.

Cons/Risks:

- Information is stored in multiple locations under different quality systems which may increase inconsistencies between different RSEs.
- Information is not readily available to the CFIA who may conduct additional monitoring activities (e.g., sampling and domestic inspections) to ensure compliance in addition to the oversight audit activities conducted by the conformity verification body.
- The process for a bulk storage facility (BSF) to downgrade seed is subject to interpretation where some graders will require a BSF to submit another sample to downgrade a pedigreed seed lot to a lower pedigreed status.
- It is difficult for the CFIA to know the amount of potential fraud there is or isn't in the current seed certification system.
- It may be difficult or unknown where to find variety specific information in seed catalogs, different guides or different databases.
- It is not mandatory to list a gene edited variety in the transparency database to help ensure this information is publicly accessible.
- The processes could be streamlined to remove some of the redundancy in the current system.

Option 2: Update the regulations to remove references to specific documents, forms, etc. if this information is available under a CFIA approved quality management system with oversight by the conformity verification body and/or the CFIA to maintain registrations, accreditations, licences, etc.

Rationale: This would provide flexibility to streamline the required information to be available under a quality management system instead of on specific forms/documents. Information could be digitized internally to include the quantity of seed harvested from a crop issued a pedigreed seed crop certificate, the amount of seed cleaned and further conditioned, the purity and germination information, seed lot designation, the pedigreed seed grade name applied to the seed lot, tag inventory, etc. to ensure traceability. This information would be accessible to the auditor and the CFIA available upon request.

Pros/Benefits:

- Provides flexibility for a RSE to maintain information without prescribing the format or documents/forms to be maintained and available by the RSE.
- There is flexibility to clarify the process for a BSF to downgrade pedigreed seed if information is provided to clarify which grade standards could be met in a policy or approved manual.
- RSEs are required to operate under their approved quality manual and subject to audits by the conformity verification body.
- An auditor or CFIA inspector is able to verify the required information that a RSE must maintain to ensure the integrity and traceability of a seed lot.
- Flexibility to add a QR code onto a package or label for a customer to access information (e.g., weed seeds if found in the purity analysis).
- Continues to ensure the traceability and integrity of pedigreed seed within the certification system.
- A seller may provide more voluntary information than required in the regulations at the time of sale.
- If a gene edited variety does not trigger the requirements for a 'novel food', varieties may be voluntary listed in the publicly available [Canadian Variety Transparency Database](#) maintained by Seeds Canada.
- Information is already available in disease guides and seed guides for disease resistance and various leaf diseases.
- There are crop specific industry best practices where more information is already labelled/provided in addition to the minimum information required in the *Seeds Regulations*.
 - As technology evolves, information is easier to access and be provided digitally through databases, QR codes, company web-sites, etc. with the flexibility to be provided without being marked on the package.
- Flexibility to adapt the information requirements based on the RSE's scope(s), i.e., if it is an approved conditioner, bulk storage facility or both.

- Increases the potential flexibility for a RSE to streamline and internally digitalize their quality system to ensure traceability of pedigreed seed in the certification system.

Cons/Risks:

- Information is stored in multiple locations under different quality systems which may increase inconsistencies between different RSEs.
- The information is not readily available to the CFIA who may conduct additional monitoring activities (e.g., sampling and domestic inspections) to ensure compliance in addition to the oversight audit activities of a conformity verification body.
- It would be difficult for the CFIA to know the amount of potential fraud there is or isn't in the seed certification system.
- It may be difficult or unknown where to find variety specific information in seed catalogs, different guides or different databases.
- It is not mandatory to list a gene edited variety in the transparency database to help ensure this information is publicly accessible.
- If required forms or documents are not used there is a possibility that this could increase traceability gaps into the certification system if the information on these forms/documents are not required to be available.

Option 3: Require the information on the [pedigreed seed declaration](#) to be digitally submitted to the regulator.

Rationale: The [Seeds Act](#) was updated to enable information and documents to be submitted to the Minister or an inspector as per paragraph 4(1)(j.1). The information on the pedigreed seed declaration is currently required to be completed within 30 days after the seed lot is conditioned or graded for seed of pedigreed status as per paragraph [93\(4\)\(a\)](#) of the *Seeds Regulations*. If required, the updated authority allows the for requirements to be made in the regulations on the type of information that should be submitted to the regulator. To apply a pedigreed seed grade name a grower would still be required to provide the information in paragraph [13\(1\)\(c\)](#) of the *Seeds Regulations*.

Pros/Benefits:

- Potentially reduce fraudulent pedigreed seed sales as this information would be easily accessible for the regulator.
- The germination and purity information would be required to be submitted to ensure the pedigreed seed status of the lot and grade name has been met.
- Potentially increases the RSE's confidence that the correct official pedigreed seed tag is applied to a seed lot when this information is captured and traceable.
- Allows the regulator to know the amount of seed that is certified under an official pedigreed seed tag.
- Provides flexibility to modernize oversight activities and potentially reduce some of the audit requirements if this information is submitted to the regulator.

- May reduce the amount of paper and record storage requirements if this information is submitted to the regulator in a digital format.
- Further promotes the completion of this information if it is required to be submitted by a RSE.
- Potential for a purchaser to receive information for weed seed purity content sooner if it is required to be digitally submitted.
- Information would be supplied to the regulator in a consistent format.
- Create flexibility for a grader to select the pedigreed seed statuses the seed lot may meet for a BSF to select which grade name(s) could be applied to the tag for a pedigreed seed lot.
- Increases the potential to link a crop certificate between different approved conditioners and bulk storage facilities if the information is submitted.
- Potential to align with other seed certification jurisdictions where this information is provided to the regulator.
- Potential to update this information with new testing and grading information as required.
- May increase the ability for the regulator to monitor weed seeds and identify emerging trends, issues or problems.

Cons/Risks:

- This information is already captured in the current system by RSEs to maintain as part of their quality program and audited by the conformity verification body (i.e., Seeds Canada).
- Concerns with the information on seed quantities potentially being accessible to more than just the regulator.
- Depending on the RSE, not all the fields maybe relevant and the information may need to be modified/filtered based on each seed lot.
- If the system does not link the pedigreed seed lot information somehow to the seed crop certificate, it may be difficult to link multiple pedigreed seed declarations throughout the system if different RSEs are cleaning, treating, storing, etc. the pedigreed seed from the same crop certificate that may generate different pedigreed seed lots.
- Weed seed information is required to be provided by the seller not by the regulator and may not be available unless the seller is able to provide permissions to access this information digitally or if this information is available in a database or website that is not hosted by the regulator.
- Potentially increase costs to reduce cyber security risks for information digitally submitted to the regulator.
- Increased costs to develop, maintain and improve a digital system to submit information to the regulator.

Option 4: Automate the grading process to determine the appropriate pedigreed grade names that could be assigned to a seed lot.

Rationale: As technology continues to evolve, the grading process could be streamlined by using the required information to determine the pedigreed seed grade. This information could still be required to be verified by an accredited grader.

Pros/Benefits:

- Potentially simplify the grading process for accredited graders to determine the pedigreed grade name to assign to a seed lot.
- This information is already required in the current system and could mitigate the risk of assigning an incorrect pedigreed grade name to a pedigreed seed lot.
- Potentially help with the process of demoting pedigreed seed.
- This may be an evergreen process where the information from the most recent laboratory analysis could be pulled into a system for access to the most recent information in real-time to verify a grade name.
- Potential to digitize this information for sellers to be able to provide the purity and/or germination results requested by a potential purchaser in a more timely manner.
- Assist the RSE in maintaining up-to-date grading information for pedigreed seed lots.

Cons/Risks:

- This may only be accessible to those grading pedigreed seed but not non-pedigreed seed.
- Increased costs to develop, maintain and improve a digital system.
- Potentially increase costs to mitigate cyber security risks in a digital system.

Option 5: Digitize the seed certification process for pedigreed seed into a single window by expanding the CSGA's SeedCert platform.

Rationale: Information for all seed certification activities would be available in one digital platform creating an end-to-end single window seed certification system. The CSGA would not be subject to the same regulatory scope requirements as the CFIA and could potential add other value added services outside of seed certification in the future.

Pros/Benefits:

- Provide a digital platform for seed growers and RSEs that may not have access to information technology that is available to larger companies.
- Only required information would be shared with the system.
- There is a possibility for data to be 'dumped' into SeedCert for those with an established information technology system to reduce data entry into a single window.
- Potentially reduce fraudulent pedigreed seed sales as this information would be easily accessible for the regulator.

- The germination and purity information would be required to be submitted to ensure the pedigreed seed status of the lot and grade name has been met.
- Potentially increases the RSE's confidence that the correct official pedigreed seed tag is applied to a seed lot when this information is captured and traceable.
- Allows the regulator to know the amount of seed that is certified under an official pedigreed seed tag.
- Provides flexibility to modernize oversight activities and potentially reduce some of the audit requirements if this information is submitted to the regulator.
- May reduce the amount of paper and record storage requirements if this information is submitted into a single window digital platform.
- Streamlines information requirement to maintain traceability of a pedigreed seed lot.
- Further promotes the completion of information if it required to be submitted and accessible to the regulator.
- Potential for a purchaser to receive information for weed seed purity content sooner if it is required to be digitally submitted and access is provided by the seller.
- Information would be supplied to the regulator in a consistent format.
- Create flexibility for a grader to select the pedigreed seed statuses the seed lot may meet for a BSF to select which grade name(s) could be applied to the tag for a pedigreed seed lot.
- Increases the potential to link a crop certificate between different approved conditioners and bulk storage facilities in a single window database.
- Potentially able to link digital tags easier into the seed certification system.
- Potential to digitize the process to reduce the number of steps and redundancy in the certification system such as grading reports, tag inventories, record maintenance, etc. to ensure traceability of a pedigreed seed lot.
- Potentially simplify the grading process for accredited graders to determine the pedigreed grade name to assign to a seed lot.
- Increases flexibility on processes to trace and potentially demote pedigreed seed within the certification system.
- This information is already required in the current system and could mitigate the risk of assigning an incorrect pedigreed grade name to a seed lot.
- Potential for other value added services in the future, for example mapping the weed seed occurrence anonymously from the grading information captured in the database.
- Increases risk based versus randomly targeted inspections and sample monitoring when the information is available to the regulator.
- There is potential for artificial intelligence to identify non-compliances which could help facilitate oversight activities.
- Potential to provide different levels of system access depending whether it is the regulator, seed grower, RSE, seller, potential purchaser, etc.
- Information on a pedigreed seed lot could potentially be linked to a QR code with information updated in real-time if it is linked to and permission is provided to access this information in the single window platform.

- May increase the ability for the regulator to monitor weed seeds and identify emerging trends, issues or problems.
- Potential for a seed seller to input voluntary information into the single window that they would like to share with potential buyers.

Cons/Risks:

- This information is already captured in the current system by RSEs to maintain as part of their quality program and audited by the conformity verification body (i.e., Seeds Canada).
- Increased costs to develop, maintain and improve a digital single window system.
- It is unknown how much this system will cost and how it will be funded.
- Unknown whether there would be support from the government to move forward with a single window digital platform partnership.
- There may not be any value added for some companies with sophisticated internal digital systems that are already able to link the required information, to verify information is correct and the appropriate official seed tag is applied to the pedigreed seed lot.
- It is unknown what type of information would be required from seed growers, RSE's, etc. who already have invested into their internal digital systems and if there is interoperability of transferring information to mitigate duplication of information into separate systems.
- May not be any value for printing official tags for those RSEs that already have tag licenses.
- Concerns on the privacy of information and concerns with the security of accessing specific information by different parties besides the regulator.
- Potential increased costs to mitigate cyber security risks in a single window digital platform.

Option 6: Create a digital variety profile platform.

Rationale: Establishes a platform to access variety information in one place. Information may include variety registrations, specific traits, data from regional variety trials, variety registration trial information, plants with novel traits (PNTs), transparency database information, *Plant Breeders' Rights* (PBR), etc.

Pros/Benefits:

- Provide a single point to access variety specific information related to traits, performance (if available), variety registration, PNTs, gene edited, etc.
- Potential to list varieties acceptable for organic markets without having to complete an affidavit.
- This could be established by a body working with the government to publicly provide this information.

- Potential to link to performance data for specific regional disease, insect and/or other agronomic trails for specific varieties.
- Potential for a company to add voluntary information on the agronomy of a variety.
- May be easier to access and find information if it is available in one platform.
- May be able to identify market access for specific varieties.

Cons/Risks:

- It could be unknown who would be responsible for the accuracy of the information in the variety platform if there is too much information provided and pulled from different resources.
- May be difficult to find information if there is too much information is provided in a format that is not easy to filter or search.
- Information on regional variety trials may be more beneficial from the different regional resources to avoid potential confusion if everything is linked in one platform.

DISCUSSION

The use of QR codes to access purity information related to weed seeds was brought forward as a considerations. It was mentioned that QR codes could be used in the current system on a label or marked on the package to provide voluntary information related to a seed lot. Furthermore, it was mentioned that farmers want to access the weed seed information when looking to purchase a seed lot and it was suggested that the use of QR codes could make accessing this information easier. The Task Team will further discuss availability of information via QR codes during the QR codes on the Official Label topic.

It was mentioned that digitalization may not necessarily change the current system as there will continue to be oversight audits and monitoring inspections to confirm compliance. The current system tends to work but there should be ongoing continuous improvements to address potential gaps in the certification system based on factors like staff turnover, oversight, frequency of audits and monitoring activities, identification of potential compliance issues, etc. to help mitigate the occurrence of non-compliances. It was suggested that the use of artificial intelligence with the digitalization of processes may help increase education and awareness of regulatory requirements to reduce potential non-compliances in the future. The system should be streamlined and the use of digital tools would help facilitate this process. The Task Team discussed that the process to demote pedigreed seed could be streamlined through digitization and the system could change how information is conveyed if it is traceable in a digital platform. It was suggested that the crop certificate number itself could change in the future, if required and based on CSGA consultation, to help with the demotion of pedigreed seed when it is being graded.

In general, it was mentioned that there should be a consideration to have money available to fund the development, maintenance and continuous improvement for any digital tools, platforms, etc. to ensure systems continue to improve, evolve and work well.

The Task Team members did not support recommending option 1 to maintain the current system (i.e., status quo).

Option 2 to update the regulations to remove reference to specific documents, forms, etc. if this information is available under a CFIA approved quality management system with oversight by the conformity verification body and/or the CFIA to maintain registrations, accreditations, licences, etc. was discussed by the Task Team. It was mentioned that even though the [Seeds Regulations](#) defines *pedigreed seed declaration* to mean *the form supplied by the Agency relating to the declaration of processing of seed of pedigreed status* that paragraph [93\(4\)\(a\)](#) references a pedigreed seed declaration with sufficient information including the name of the grower, the crop certificate number, quantity of seed and official tag use could be confusing. It was suggested with the authority of subsection [4\(i.1\)](#) of the *Seeds Act* it may be easier to update the *Seeds Regulations* to reference a quality management system approved by the Agency for traceability in the seed certification system. It was suggested that this would maintain the flexibility that RSEs and seed growers are used to having with the current system and allows those to adopt technologies into their own systems. There was a qualified consensus to recommend this option by the Task Team as the majority of the impacted/ implicated members, regulated members, other government members and the Chair supported recommending this option.

The Task Team discussed option 3 to require the information on the pedigreed seed declaration to be digitally submitted to the regulator. It was suggested that this option could possibly be combined with option 2 and/or option 5. The majority of the Task Team members supported this option but there wasn't a qualified consensus as the regulated members were split and did not have a majority supporting this option. The majority of the impacted/implicated members, half the other government members and the Chair supported recommending this option; and half of the regulated members either supported recommending this option or combining option 3 with options 2 or 5 and supported recommending option 2 and/or 5.

During the discussion on option 4 to automate the grading process to determine the appropriate pedigreed grade names that could be assigned to a seed lot, it was mentioned that this could be a tool used but still would require an accredited grader to verify the accuracy of the information. It was suggested that this could be beneficial to implement into a system for those who are able to do so as technology evolves and may not be universal. It was mentioned if it is automated it should still be reviewed to ensure it is correct, for example with the Prairie Grain Development Committee (PGDC) they have automated some of the processes when recommending seed varieties for registration. PGDC has been able to verify the automation process to ensure the results remain accurate. It was suggested that automation could be another digital tool to help streamline the system. There was also a consideration brought forward that the process to demote pedigreed seed graded to meet a higher pedigreed grade

name standard should be streamlined. The majority of the regulated members supported recommending this option.

The Task Team discussed option 5 to digitize the seed certification process for pedigreed seed into a single window by expanding the CSGA's SeedCert platform. It was mentioned that this would have more of an impact on the seed industry and does not tend to have a direct impact on farmers/producers. Furthermore, it was mentioned that digitalizing the seed lot information is important and there would be a positive impact having this information in a single window platform. The majority of the Task Team members supported this option but there wasn't a qualified consensus as the regulated members were split and did not have a majority supporting this option. The majority of the impacted/implicated members, half of the regulated members, half the other government members and the Chair supported recommending this option.

Option 6 to create a digital variety profile platform was discussed by the Task Team. There was a concern that option 6 may be trying to encompass too much variety information in one place. It was mentioned that specific aspects may be valuable to amalgamate into a platform for the information that is currently located in multiple places like the transparency database, variety registration database, Plant Breeders' Rights, plants with novel traits, etc. but it should not try to be all encompassing. It was suggested that this initiative could be driven and led by the seed sector when the value of a digital platform becomes more clear. It was also suggested that producers may still be interested in this type of platform when looking to purchase seed and there could be value in consulting broader on this digital platform. It was mentioned that there seems to be an assumption that seed guides will continue to provide variety information but the seed guides are an ongoing task that has become tougher to maintain and there should not be an assumption that they will continue in the future. It was suggested that this information should be updated in real-time if possible since the external [CFIA variety registration database](#) has not been updated since 2022. The Task Team did not support recommending this option but there were members that found value in having a digital variety platform to access some of the information that is currently available in one place.

RECOMMENDATIONS:

- 1) The Task Team reached a qualified consensus to recommend option 2 to update the regulations to remove reference to specific documents, forms, etc. if this information is available under a CFIA approved quality management system with oversight by the conformity verification body and/or the CFIA to maintain registrations, accreditations, licences, etc.**
- 2) The majority of the Task Team members, including the Chair, supported recommending the following two options but did not reach a qualified consensus as the regulated members were split (neither majority nor minority) on recommending these options:**

- a. **Option 3 to require the information on the pedigreed seed declaration to be digitally submitted to the regulator. The majority of the impacted/implicated members and half the other government members recommended this option, whereas half of the regulated members either supported recommending this option or combining this option with options 2 or 5.**
 - b. **Option 5 to digitize the seed certification process for pedigreed seed into a single window by expanding the CSGA's SeedCert platform. The majority of the impacted/implicated members, half of the regulated members and half the other government members recommended this option.**
- 3) The Task Team supports streamlining the process for a Bulk Storage Facility (BSF) to be able to downgrade pedigreed seed. The majority of the regulated members thought there was value in option 4 as a digital tool to help streamline the grading process.**
- 4) The majority of the Task Team members only supported aspects of option 6 to create a variety platform which could be driven by the seed sector. Considering there is information in multiple locations and the potential that seed guides may not continue in the future, the Task Team members thought there was value in having variety information accessible in real-time and in one location for registered varieties, PNTs, PBR, information from the transparency database (i.e. gene edited varieties), etc. and information from seed guides if they are no longer available.**
- 5) The Task Team members recommends that there should be funds continually allocated for the development, maintenance and continuous improvement of any digital seed platforms to ensure continuous improvement of digital platforms, be able to remain competitive as technology evolves and the digital systems work well. It appears that digitization could bring cost savings into the seed system but will require ongoing funding to support digital platforms.**

Topic 4 – QR Codes on the Official Tag

All pedigreed seed (Foundation, Registered, Certified) when sold in Canada must be labelled with an official certification tag/label. These are issued or approved by the CFIA or, in the case of imported seed, by the official certifying agency in the foreign country. Seed in sealed (fastened) containers is labelled with an official tag while seed that is sold and delivered in bulk may have a bulk pedigreed seed statement issued in respect of the seed. As an alternative to tags being supplied by CFIA, the CFIA also authorizes companies to print official tags pursuant to a contract. Currently, forty-two companies are authorized to print official tags for their seed.

Except where seed is labelled with a Canada Substandard grade name, an official tag shall only contain the information required pursuant to sections 33 to 36 which includes the following:

- Name of kind or species of seed;
- Name of the grade of the seed (for species listed in the Grade Tables);
- Variety name of the seed, or in the case of PPTM varietal blend, the names of the varieties in the blend;
- Crop certificate; and
- Lot number

For seed that is not graded, the official tag shall only include:

- Name of kind or species of seed;
- Variety name
- Crop certificate number
- Pedigreed status of the seed

A domestic tag refers to an official tag for seed that is derived from a crop grown in Canada and inter-agency tags are affixed to packages of seed derived in whole or in part from a crop not grown and conditioned in Canada.

For Breeder and Select seed, the CSGA issues Breeder and Select pedigreed status tags. Breeder seed must be tagged or labelled with a crop certificate number and the tag or label must be signed by the Plant Breeder or their representative. Although the use of CSGA tags is preferred, a Recognized Plant Breeder may use their own tags. The tags shall include the name of the variety, the name of the crop kind, the Breeder seed crop certificate number, the lot number (if applicable) and the net weight. Select tags are issued to seed growers eligible to produce Select seed and must meet the grading and conditioning requirements in the *Seeds Regulations* for a Canada Foundation pedigreed grade name. Select tags must include the name of the crop kind, name of the variety, crop certificate number, lot number and the net weight.

There are no official tags for non-pedigreed seed (i.e. common seed) in Canada, however, the seed must meet the applicable labelling requirements. Required information is generally put on either the company tag or package.

Additional information about a seed lot (both pedigreed and non-pedigreed) can also be put on a seed seller's own tag or packaging. Technology, such as QR codes, is now being used by some seed companies to share additional information about the seed such as purity, germination, seedling vigor, disease and thousand kernel weight.

International organizations such as the Organization for Economic Cooperation and Development (OECD) and some countries are exploring the use of QR codes on official tags in order to increase the integrity of their certification programs. By incorporating a QR code on official seed tags, customers can scan it to validate the legitimacy of the seed and get additional data, which could include germination reports, certificates of analysis and other seed quality information. As part of their digitization project, OECD will be running a pilot related to digital seed tags with the goal of being able to demonstrate that a National Designated Authority (CFIA is Canada's Designated Authority for OECD) can verify an incoming seed in real-time and test whether end-users can interact with the digital seed tag to verify their seed.

This is technology that CSGA has been testing for the last number of years. The QR code on CSGA's Breeder and Select tags as well as on their crop certificates has allowed them to test the foundations of the QR code based technology that allows them to validate documents out of their system.

Previous feedback from stakeholders indicated an interest in the use of QR codes for labelling and whether QR codes should be part of the official tag/label. Both the Seed Standards task team and the Seed Testing task team recommended that the Labelling, Records and Information task team should explore this topic further. The Seed Export task team also discussed the potential use of QR codes on OECD tags as part of the OECD Digitization Project.

Should QR codes become part of the official tag/label? For OECD export only? Domestic only? Both?

Currently QR codes on a company label/package can provide extra information beyond what is required in the *Seeds Regulations*. Would the use of QR codes in an official manner impact a seed company's flexibility in how they currently use QR codes?

Option 1: QR code required to appear on the official tag in addition to the mandatory information being printed on the official tag.

Rationale: The QR code on the official tag could ensure the validity and control of the official tag issued for pedigreed seed. Furthermore, there may be the potential for a seller to link to other required information (e.g., purity and germination results) and voluntary information (e.g. vigor, disease, thousand kernel weight etc) through this QR code. Mandatory information listed in sub-section 33(2) of the *Seeds Regulations* would still be printed on the tag.

Pros/Benefits:

- QR code could be encrypted and scanned to verify the validity of the pedigreed seed tag.
 - Potentially increase the control of seed tags issued.
 - Mitigate the potential of fraudulent pedigreed seed sale if QR code is able to validate the pedigreed seed lot.
- Potentially could link to information in a database or to a company site.
- Still allows buyers to see the required information (i.e crop kind, variety, grade name etc) on the tag without having to use the QR code since not all buyers may be able to or will want to use this technology.
- Other voluntary information regarding the seed lot in addition to the information required by the *Seeds Regulations* could potentially be accessed through the QR code.

Cons/Risks:

- Digital information would be through a third party so there a risk that sellers could lose that direct connection to the buyer in dealing with any questions or complaints.
- Potential for confusion between voluntary information and information required by the *Seeds Regulations* if the QR code is on a CFIA official tag but links to information which is not part of the official seed certification system.
- Potential challenges around integrating with existing legacy systems used by seed companies
- Concerns around security of information and associated costs, including costs involved in developing and maintaining a secure system but also liability costs if a problem occurs.
- Potential for unintended consequences such as additional costs to Registered Seed Establishments to upload information
- Potential for information in the QR code to conflict with information printed on the official tag which would lead to confusion as to which information should be used.

Option 2: QR code required to appear on the official tag instead of the mandatory information being printed on the official tag.

Rationale: As technology evolves, QR codes are more commonly used and information is accessible from mobile devices. The information on the official pedigreed seed tag would be made accessible only through a QR code instead of the required information having to be printed or written on the official tag. There would be the potential for a seller to link to other required information (e.g., purity and germination results) and voluntary information (e.g. vigor, disease, thousand kernel weight etc.) through this QR code. Mandatory information listed in sub-section 33(2) of the *Seeds Regulations* would not be printed on the tag which may make printing tags easier.

Pros/Benefits:

- QR code could be encrypted and scanned to verify the validity of the pedigreed seed tag.
 - Potentially increase the control of seed tags issued.
 - Mitigate the potential of fraudulent pedigreed seed sale if QR code is able to validate the pedigreed seed lot.
- Potentially decrease transcription errors.
- Decrease printing error or issues.
- Potentially would eliminate having to physically re-label a seed lot.
- Potentially could link to information that could be available in a database or company site.

Cons/Risks:

- Digital information would be through a third party so there a risk that sellers could lose that direct connection to the buyer in dealing with any questions or complaints.
- Buyers who do not use technology would not have easy access to the seed lot information
- Potential for confusion between voluntary information and information required by the *Seeds Regulations* if the QR code is on a CFIA official tag but links to information which is not part of the official seed certification system.
- Potential challenges around integrating with existing legacy systems used by seed companies
- Concerns around security of information and associated costs, including costs involved in developing and maintaining a secure system but also liability costs if a problem occurs.
- Potential for unintended consequences such as additional costs to Registered Seed Establishments to upload information

Option 3: QR code is voluntary and can appear on a label or marked on a package (i.e., status quo).

Rationale: This would support the current requirements where a QR code could be placed on a label or marked on a package by a seller to provide additional information (e.g., weed seeds if found in purity analysis) related to the seed lot.

Pros/Benefits:

- Provides the ability for a potential buyer to access information in real-time from seed companies who have chosen to use this technology.
- Potentially could link to information in a database or to a company site.
- Provides seed sellers with the choice as to whether they want to use QR codes or some other method of providing information about the seed lot.

- Provides flexibility for seed companies to use their own digital systems which are customized to their operations.

Cons/Risks:

- The technology may not be available for all seed lots since some seed sellers may choose not to use QR codes.
- Would not be able to verify the validity of the pedigreed seed tag digitally.

DISCUSSION

Under the present system, there are some seed companies that already use QR codes on their own label to provide information about a seed lot to their customers. There was general agreement among task team members that QR codes can be useful because it allows seed sellers to share a lot more information with their customers about a seed lot and buyers can access this information in real-time. Task team members acknowledged that there is flexibility under the current seed system for a seed company to create and use their own digital systems which are customized to their operation.

In addition to being able to provide a large amount of information about a seed lot, QR codes are also being viewed as a potential way of confirming the certification of a pedigreed seed lot. A presentation on the work being done at OECD with respect to digital seed tags was delivered to the task team by Doug Miller, Executive Director – Canadian Seed Growers' Association. Under OECD, the goal of digital seed tags is to allow for a National Designated Authority to be able to verify an incoming seed lot in real time in addition to end-users being able to interact with the digital seed tag to verify their seed. CSGA is currently conducting a research pilot to test the feasibility of their digitally enhanced seed tags. The QR code on CSGA's Breeder and Select tags as well as on their crop certificates has allowed them to test the foundations of the QR code based technology that is encrypted and secure and allows them to validate documents out of their system. CSGA could potentially expand their Breeder and Select QR code pilot project to other pedigreed status official seed tags. Other future opportunities anticipated by CSGA include sharing lab test results, variety descriptions, Plant Breeders Rights status in addition to other information that may be of interest to buyers and sellers.

Task team members had questions regarding the potential costs of developing and maintaining a digital system as well as questions on the potential savings. There were concerns raised regarding housing all of the information and the need for coordination and collaboration among businesses and organizations. There were also concerns around the security of information and there was recognition from task team members that not all sellers and customers have access to technology to read QR codes. The main driver of having a QR code on official tags is to verify the tags and certification of the seed lot. However, there was general agreement that if we were to move to digital seed tags, information supplied by the QR code should also include both information required by the *Seeds Regulations* (e.g. purity,

germination) as well as voluntary information (e.g vigor, disease test results, thousand kernel weight, etc.) that would be useful to the customer. However, some task team members expressed caution about doing too many things all at once and that a slower stepwise approach should be considered.

There was recognition that Options 1 and 2 are dependent on development of a single window digital platform for seed certification. This raised a question as to what might happen with respect to voluntary information if QR codes on official tags are dependent on a single window digital platform. Seed buyers have indicated that they would like to get as much information on seed quality as they can and also have stated they want to get that information prior to purchase. However, it was acknowledged that QR codes on official tags or on company labels/packages does not provide buyers with that information prior to purchasing the seed.

Some task team members expressed caution about doing too many things all at once because there are a lot of unknowns about how this process would work. Although there is general agreement that technology is a great path forward, is there a possibility of unintended consequences such as extra costs for Registered Seed Establishments to upload the information if QR codes were mandatory. Some task team members also had concerns around security of information and associated costs, including costs involved in developing and maintaining a secure system but also liability costs if a problem occurs. For Option 1, there was an additional concern regarding the potential for information in the QR code to conflict with information printed on the official tag which would lead to confusion as to which information should be used.

The task team was reminded about the OECD Seed Schemes Digitization Project which is examining how digital tools can be incorporated into OECD labelling and certification to help National Designated Authorities with seed lot identification and traceability. Although there is potential for sharing the other information that buyers would like to have this would not be the main purpose of a digital system. It was acknowledged based on previous information presented to the task team that CFIA is not going to maintain a digital system where sellers can share information with buyers.

There was discussion as to whether there should be a fourth option that would be similar to Option 1 but where the QR code on the official tag could only contain information needed to verify the tag and certification of the seed lot. In this case, the QR code could not include or link to other information such as purity and germination results or to voluntary information such as vigor.

There was agreement among task team members that digital tools such as QR codes can be valuable for both the seed sector and its customers. However, some task team members preferred that the use of QR codes remain flexible and allow seed sellers to decide how and when to use them while other task team members wanted to see QR codes move towards becoming mandatory on official tags. Some task team members preferred Option 1 while

others preferred Option 3. Neither option achieved qualified consensus. Option 2 did not receive support from any of the task team members. Although there wasn't a consensus on a preferred option, there was general agreement that options around digital technology should continue to be explored by the seed sector.

RECOMMENDATIONS:

- 1. Regardless of whether QR codes were to become part of the official tag or not, the required information in sub-section 33(2) of the *Seeds Regulations* should continue to be printed on the official tag.**
- 2. CFIA and the seed sector should continue to examine ideas and potential opportunities around the use of QR codes and digital seed tags.**

Topic 5 – Variety Names

Variety names identify seed and grain products throughout the value-chain. Marketing seed by the correct variety name is an internationally recognized way to ensure new crop genetics and their variety specific characteristics provide benefits to all participants in the crop production value-chain. The inappropriate use of a variety name can be misleading, resulting in unexpected crop performance, inaccurate delivery of grain declarations by producers, impact the expected performance of the crop, potentially negatively impact revenue anticipated by the farmer, affect the reputation of the variety causing potential future harm for the seller and variety developer. Pedigreed seed sold in Canada must meet a varietal purity standard (i.e., issued a seed crop certificate) whereas, non-pedigreed seed is not subject to this requirement.

Section [10](#) of the *Seeds Regulations* lists the requirements for the use of variety names. Variety names are not allowed to be used on any label, package, invoice, circular, advertisement or otherwise be represented as a specified variety unless the seed is of that variety. Furthermore, there are restrictions on using or allowing the use of a modified or qualified variety name.

Variety names shall not be used on crop kinds and species listed in [Schedule II](#) of the *Seeds Regulations* unless:

- the seed is graded with a Canada pedigreed grade name and labelled under sections [32 to 37](#) when sold;
- for a mixture or varietal blend it was made by an approved conditioner under [Part IV](#) and all the seed named as a variety is of pedigreed status; or if it was imported, accompanied by a certificate of an official certifying agency confirming all of the seed named as a variety is of pedigreed status; or
- if the seed is a vegetable-type variety.

Therefore, non-pedigreed seed of crop kinds and species listed in Schedule II, *Seeds Regulations* may not be labelled, advertised or sold with a variety name. However, variety names may be used on non-pedigreed seed of vegetable-type varieties and on crop kinds and species that are not listed in Schedule II.

The labelling requirements in subsection [24\(2\)](#) restricts the use of variety names on Common No.1 and Common No.2 on cereal mixtures. Furthermore, no label shall have any incorrect or misleading information, show any brand name or mark that might be construed as the name of a variety (paragraphs [15\(2\)\(b\)](#) and [15\(2\)\(c\)](#)).

There are restrictions on using trademarks as part of the variety name for species and crop kinds listed in [Schedule III](#) of the *Seeds Regulations*. Section [67.1](#) states that *the variety name is not a registered trademark in respect of the variety* for seed subject to variety registration in Canada. Furthermore, subsection [74\(f\)](#) provides the Registrar, which is the CFIA, the authority to cancel a variety if the variety name becomes a registered trademark after the variety has

been registered in Canada. Prefixes may be used as part of a variety name under the following conditions:

- the prefix is not trademarked
- the prefix is not a prohibited or official mark
- the variety is registered with the prefix as part of the variety name

If a company has a brand name that they wish to use in advertising in association with a registered variety name, this is acceptable providing the brand name is conspicuously and legibly identified as a brand name. For example, if a company has a brand called "DMX" and a variety registered under the name "1234", the company can advertise the variety using one of the following methods: "DMX™ 1234", "DMX® 1234" or "DMX Brand 1234". It is not acceptable to advertise the variety as DMX1234 or DMX 1234. For the purposes of labelling official pedigreed seed tags with variety names, only the name by which the variety is registered, i.e. "1234", can be used.

Pedigreed and non-pedigreed seed may be sold with a brand or mark in Canada as long as it meets the labelling requirements and is not represented as part of the variety name.

Paragraph [40\(1\)\(a\)](#) requires the variety name of seed for all kinds, species and varieties subject to registration under Part III, other than non-pedigreed seed of forage crops, to be provided on a statement for each seed lot imported into Canada.

The following gaps and/or issues were discussed when considering the options:

- Should there continue to be specific restrictions on the use of variety names for non-pedigreed seed?
 - Note the following recommendations from previous Task Teams:
 - [Seed Certification](#): There was a qualified consensus to keep restrictions on the use of variety names and incorporate by reference Schedule II.
 - [Common Seed](#): There was no qualified consensus. Two different options were supported: 1- keep restrictions on the use of variety names and keep Schedule II in the *Seeds Regulations*; and 2- restrict the use of variety names but allow the use of variety names through a verification system that ensures a degree of varietal purity.
- Should there be additional restrictions or further exemptions on the use of variety names?
 - If a pedigreed seed crop meets the varietal purity standards and is issued a crop certificate but does not meet the grade name standards should it be able to be sold as non-pedigreed seed with a variety name?
 - If so, what information should be required to use a variety name of the non-pedigreed seed lot?
 - Is this required with the use of substandard pedigreed tags when a lot does not meet the grade name standard?

- Should specific traits be linked to variety names or should non-pedigreed seed be able to advertise traits?
- When purchasing seed, is it clear that the brand is separate from the variety name?
- Should non-pedigreed forage seed be required to have a variety name listed at the time of import similar to other crop kinds, species and types subject to variety registration?

Option 1: Develop a varietal verification system for non-pedigreed seed derived from pedigreed seed that allows the use of a variety name on non-pedigreed seed crops listed in Schedule II.

Rationale: Non-pedigreed seed would only be eligible if it was derived from a pedigreed seed source to provide a baseline varietal purity standard on the parent seed entering this system. There could be a process in place for different value-chains to determine crop-by-crop specific requirements to ensure a level of varietal identity is determined prior to using a variety name on non-pedigreed seed. This would allow for another generation or more after certified pedigreed seed production for non-pedigreed seed to be sold or advertised by a variety name outside of the seed certification system. This would only be applicable to seed crops in Schedule II and continue to exempt the use of variety names on vegetable-type and other seed crops not listed in Schedule II.

Pros/Benefits:

- Ensures the varietal identity of non-pedigreed seed to use a variety name that links to variety specific characteristics when non-pedigreed seed is sold and advertised in Canada.
- This could potentially enable royalties to be collected based on seed sales of a verified variety to help fund variety development in Canada.
- Provides an option to identify the variety of non-pedigreed seed in times of seed shortages or if there are issues with pedigreed seed production to sell and advertise a variety by name.
- This system could provide flexibility to use different technologies as they evolve to identify the variety such as the use biochemical and molecular techniques (BMTs), artificial intelligence and high quality digital photography, etc.

Cons/Risks:

- May increase costs of non-pedigreed seed sold in Canada.
- Increases complexity by introducing a new classification system of seed in Canada.
- Unknown if the seed standards for purity of other crop kinds and weed seeds would align with the Certified or Common grade name standards.
- Potentially could impact the grain export market if grain produced from a verified variety seed class' varietal identification standards do not align with the grain classification standards.

- This may introduce grain with lower varietal purity standards that currently receive a lower grain class (e.g. a feed class of wheat) being declared for a higher grain class (e.g. a food class of wheat) with lower grain quality standards at the elevator.
- Inconsistent test results on BMT testing methods, including DNA testing methods, as there are no oversight requirements and proficiency testing requirements by non-government laboratories offering these services.
 - Increase costs for laboratories to become accredited for BMT methods and subject to additional oversight requirements.
- May be difficult to implement at this time if varietal identity testing methods are not reliable, repeatable and verifiable.
- The threshold/minimum standard for varietal identity is unknown and testing methods may not account for varieties reverting back to parental breeding lines.
- This could increase the workload for a producer/farmer selling common seed who would like to sell non-pedigreed seed with a variety name.

Option 2: Keep the current requirements and exemptions as is for the use of variety names on non-pedigreed seed sold, advertised and imported into Canada listed in Schedule II.

Rationale: Continue with the current restrictions and exemptions on the use of variety names for non-pedigreed seed sold, advertised and imported into Canada. This is a seed crop specific approach where it is listed in Schedule II of the *Seeds Regulations* or potentially a document incorporated by reference to clearly identify the restricted seed crops.

Pros/Benefits:

- Allows the use of crop types (e.g., maple type of peas) to be used for non-pedigreed seed which may be affiliated with specific end-use markets.
- Restricting the use of variety names promotes the use of certified seed when a producer/farmer is looking for specific traits/genetics and to ship grain to specific end-use markets.
- Seed brands are required to be clearly identified and trademarks are not allowed to be used as part of a variety name which makes a variety name free to be used for pedigreed seed in Canada.
- Field varietal purity standards are high for certified status pedigreed seed to ensure that the genetics/traits affiliated with a variety name is present when the seed is issued a seed crop certificate.
- The responsibility is on the seed seller advertising or labelling a trait on non-pedigreed seed and the trait is not affiliated with a variety when it is offered for sale.
- There is a list of seed crops that restricts the use of variety names on non-pedigreed seed (with the exception of vegetable-types) to provide clarification on which seed crops are subject to the use of variety name restrictions.

- Reduces confusion without requiring knowledge on the biology of crop kinds, e.g., forages, that may cross-pollinate which could impact the varietal purity of the seed with every year/generation of non-pedigreed seed production.
- A company may sell and advertise non-pedigreed seed (e.g., soybeans in Ontario) under a brand if the seed crop looks good in the field.
- The restrictions on the use of variety names for non-pedigreed seed do not apply to farm-saved seed until it is offered for sale or on non-pedigreed seed exported from Canada.

Cons/Risks:

- If a seller advertises or labels non-pedigreed seed with a specific trait there is a risk that this trait may not perform since non-pedigreed seed is not subject to meeting a varietal purity standard.
- It may be confusing when crop types affiliated with specific end-use traits are used for non-pedigreed seed instead of a variety name.
- There may be confusion in advertisements or listings in seed guides when a prefix is part of the registered variety name or when it is a trademark.
- Potentially could have a negative financial impact when there are royalties affiliated with Plant Breeder's Rights (PBR) or intellectual property rights for seed crops listed in Schedule II as it could be unknown if a variety is being sold as non-pedigreed seed subject to the restrictions on the use of variety names.

Option 3: Allow unrestricted use of variety names for non-pedigreed seed derived from pedigreed seed for a single variety that has a varietal purity or varietal identity above a defined standard.

Rationale: Simplify the regulations by removing Schedule II variety name restrictions on non-pedigreed seed. In order to use a variety name on a single variety of non-pedigreed seed, including common seed, Canada could establish a standard similar to the United States (US) where the single variety cannot be less than 95%. Seed should be required to be labelled differently if the single variety is not present in the non-pedigreed seed lot meeting a defined single variety standard (e.g., in the US it cannot be less than 95% of a single variety).

Pros/Benefits:

- This could help declare the class of grain being declared at the elevator.
- The use of a variety name would be based on a established standard for a single variety present in a non-pedigreed seed lot offered and advertised for sale.
- Simplifies the regulations by removing Schedule II.

Cons/Risks:

- This would decrease the amount of certified seed used in Canada.

- If the single variety standard does not align with the grain class standards there could be issues with the quality of the grain or declaring an incorrect class at the elevator.
- It is unknown if the 95% cut-off should be used in Canada, if the same standard should be for all non-pedigreed seed crops or if there should be a seed crop specific single variety standard.
- It is unknown if this could increase requirements for labelling non-pedigreed seed when the seed lot has less than the established single variety standard (e.g., less than 95% in the US it is labelled as a seed mixture).
- May increase confusion if a company licenses out their variety lines to multiple places which could increase the occurrence of the same variety of seed in the market being sold and advertised under multiple brands.
- Potentially increase cost for the government to develop a new system to fund plant breeding similar to Australia, if pedigreed seed is sold at lower volumes or no longer sold as certified status seed.
- There may not be interest to invest funding by the government or seed industry in the future on variety development, research for producers, etc.
- Impact investments into the regional variety trials as there is no government funding and these trials rely on companies to put forward new varieties that they pay for testing to develop a decision making tool for those to use a variety by name.
 - If the variety is being purchased and funds are not generated to go back to the variety holder then this system will fall apart.
- Increase costs of the seed certification system for the remaining users if companies exit the seed certification system to brand and advertise seed instead of selling certified seed in Canada.
- Jeopardizes the viability and costs of services such as seed crop inspection to support seed certification in Canada.

DISCUSSION

The Task Team members discussed some of the confusion around branding, when to use prefixes as part of a variety name and traits that are affiliated with types and sub-types of specific crop kinds. It was mentioned that the type of seed may be used as it is not a variety name. There was also clarification provided that a brand is trademarked, whereas a variety is not and the variety name is free to be used on pedigreed seed. It was suggested that branding issues should also be considered when importing seed into Canada and could be further discussed by the Task Team as part of the Imported Seed Requirements Topic.

The Task Team discussed cross-pollinating crop kinds and the use of variety names. It was mentioned there should be restrictions on the use of variety names for these crop kinds since every generation after certified pedigreed seed increases the chances of the crop cross-pollination and having different traits/genetics in the seed crop than the registered variety (if subject to variety registration). It was mentioned that non-pedigreed seed of cross-pollinating

crop kinds could potentially be considered a 'non-variety' as it would no longer meet the definition of a [variety](#) in the *Seeds Regulations*. Furthermore, paragraph [3\(1\)\(b\)](#) of the *Seeds Act* mentions except as provide by the regulations, that no person shall sell, advertise or import seed of a variety that is not registered. This could potentially complicate the seed regulatory framework but still should be considered when discussing the use of variety names by the Task Team.

It was mentioned that in the United States (US) if seed is not at least a minimum of 95% of the variety then it is labelled as a mixture. In Canada, the field varietal purity standards for certified status seed is at least 99% and usually higher depending on the seed crop. Since non-pedigreed seed is linked to pedigreed seed, the first generation of non-pedigreed seed produced from certified status seed would still be higher than the US standard of 95% for that single variety. Depending on the seed crop and number of generations after certified seed, non-pedigreed seed produced and sold in Canada from certified status seed could still be above 95% for a single variety.

It was mentioned that livestock producers tend to look at ways to reduce costs and purchase common forage seed mixtures of grasses and legumes. When traits are associated with specific types or sub-types of seed crops it helps them determine which mixture or blend of common seed to purchase when the variety name is restricted or when there are species within the forage mixture with a high potential to cross-pollinate.

The Task Team discussed the unintended consequences related to funding variety development for each option. Plant Breeders' Rights (PBR) on a variety was brought forward as one way to help fund variety development since the royalties owed on the sale of seed are linked to the variety itself which is easier to identify when there is a variety name used. PBR is outside the scope of seed regulatory modernization but was discussed as there were potential unintended consequences.

During the Task Team discussion on option 1 to develop a varietal verification system for non-pedigreed seed derived from pedigreed seed that allows the use of a variety name on non-pedigreed seed crops listed in Schedule II, there was a concern brought forward on who would be monitoring the system and verifying additional testing. The Task Team members did not support recommending this option.

Option 2 to keep the current requirements and exemptions as is for the use of variety names on non-pedigreed seed sold, advertised and imported into Canada listed in Schedule II was discussed by the Task Team. The Chair, one other government member, the majority of the regulated members and majority of the impacted/implicated members supported recommending this option. This resulted in a qualified consensus to recommend option 2 by the Task Team.

There was one impacted/implicated member and one other government member who supported recommending option 3 to allow unrestricted use of variety names for non-

pedigreed seed derived from pedigreed seed for a single variety that has a varietal purity or varietal identity above a defined standard.

RECOMMENDATIONS:

- 1. There was a qualified consensus to recommend option 2 to keep the current requirements and exemptions as is for the use of variety names on non-pedigreed seed sold, advertised and imported into Canada listed in Schedule II.**

Topic 6 – Varietal Blends

One of the aspects that makes Grade Tables VIII – XII different from the rest of the Grade Tables is the inclusion of varietal blend grade names. In order for a seed lot to qualify for a varietal blend grade name, the seed of each component variety must be of pedigreed status and is blended by an Approved Conditioner. The purity and germinations standards for varietal blend grade names are the same as those for a Canada Certified grade name within that Grade Table. However, seed is no longer considered to be of pedigreed status once the varieties have been blended. Varietal blend grade names differentiate this type of seed lot from seed lots graded with Common No. 1 or No. 2 grade names. Seed lots with a varietal blend grade name shall be labelled with the variety names and percentage on the package. Official tags are not used for seed lots with a varietal blend grade name.

The *Seeds Regulations* also allow for Plant Pest Tolerance Management (PPTM) varietal blends. A PPTM varietal blend is a varietal blend for plant pest tolerance management that is intended to maintain the efficacy of a pest tolerance characteristic. A PPTM varietal blend of kinds or species set out in any of Tables I to II.1 and IV to VII of Schedule I can be graded with a Canada pedigreed grade name (i.e., wheat midge tolerant varietal blends, corn pest tolerant varietal blends) using the official tags as prescribed in Sections 32 to 37.

Currently, if pedigreed seed is blended by an AC but is neither a PPTM nor within one of the Tables (VIII-XII) with a varietal blend grade name then it would be required to be sold with a Common grade name (e.g. Common #1, Common #2).

Previous task teams noted that the purity and germination standards for the varietal blend grade names in Grade Tables VIII-XII are exactly the same as the Canada Certified No. 1 and No. 2 grade names. It was recognized that the intent was to differentiate this seed from other non-pedigreed seed graded with Common No.1 or No. 2 grade names, however, it was felt that this could be done possibly through labelling. There was general consensus that the varietal blend grade names should be removed from Grade Tables VIII-XII. There was discussion about whether there is interest in non-PPTM varietal blends for other crop kinds besides the ones listed in Grade Tables VIII –XII.

This led to further discussion around how the seed should be labelled, especially with respect to the grade name. Similar to PPTM varietal blends, previous task teams felt there was a possibility that existing Canada Certified grade names could be used. Based on this discussion, there was general consensus to have CFIA explore options to use the Certified grade names for non-PPTM varietal blends and to include other information on the label to indicate it was a varietal blend.

Varietal blends of pedigreed seed would be able to be mixed into a certified seed lot for all species and crop kinds issued a crop certificate. The pedigreed seed varieties in the blend must be mixed by an AC with a quality management system overseen by a conformity verification body under the RSE program to ensure traceability and identity of each variety sold as certified seed in the varietal blend. The varietal blend would still have to meet the standards and requirements for the crop kind being sold to apply a blue certified seed tag. This would increase flexibility to adapt to market, technology, quality, disease and environmental (e.g. climate change) trends allowing producers and sellers to select for different varietal traits as certified seed is required to meet a varietal purity standard for each separate variety prior to blending.

Should CFIA change the *Seeds* Regulations to allow for grading and labelling options for non-PPTM Varietal Blends using the existing Canada Certified grade names?

Should this be allowed for all crop kinds within the Grade Tables or should it be restricted to specific Grade Tables (i.e. Tables VIII-XII).

Are there any gaps in the current system with respect to traceability that would need to be addressed if the *Seeds* Regulations were changed to allow non-PPTM Varietal Blends to use Canada Certified grade names?

What other information, if any, would be needed to be on a label for non-PPTM varietal blends?

Is there crop specific information that would need to part of the label? For example, Section 23 states “in the case of seed corn that is a blend of two or more varieties, except for PPTM varietal blends, the name and percentage of each of the component varieties and either the approximate Corn Heat Unit rating or the designation “early”, “medium” or “late”, as appropriate”. Is this type of information necessary?

Although the Certified (blue) tag is used for PPTM varietal blends, should there be a separate official tag for non-PPTM varietal blends or would the existing Certified (blue) tag work?

Should CFIA consider changing the *Seeds* Regulations to allow for the use of PPTM Varietal Blends for all crop kinds rather than limiting it to Tables I to II.1 and IV to VII.

Option 1: Continue with the current system – Status Quo

Rationale: Under the current system, the varietal blend grade names for Grade Tables VIII-XII make a distinction between blends that are derived from pedigreed seed versus non-pedigreed seed. The current system also allows for PPTM blends for crop kinds in Grade Tables I-II.1 and IV- VII to be labelled with pedigreed grade names and pedigreed seed tags.

Pros/Benefits:

- Blends of pedigreed seed in Grade Tables VIII-XII are allowed to be labelled with the variety names
- Blends of pedigreed seed in Grade Tables VIII-XII are distinguished from non-pedigreed seed by using the Varietal Blend Grade Name (i.e. Varietal Blend No. 1, Varietal Blend No. 2)
- PPTM blends are allowed to use pedigreed grade names
- PPTM blends are allowed to use pedigreed seed tags

Cons/Risks:

- PPTM blends are restricted to only a few Grade Tables
- Non-PPTM blends of pedigreed seed are not allowed to have pedigreed grade names
- Non-PPTM blends of pedigreed seed are not allowed to use pedigreed seed tags
- Although the Varietal Blend grade names are meant to distinguish a pedigreed seed blend from non-pedigreed seed, the extra grade names increases the number of standards found in Grade Tables VIII-XII.
- Different labelling requirements depending on the Grade Table and whether it is a PPTM or non PPTM blend can make it confusing and complex to sell varietal blends.

Option 2: For non-PPTM varietal blends of pedigreed seed for all Grade Tables, the seed lot would be labelled with a Certified grade name using the Certified blue tag similar to PPTM varietal blends

Rationale: This would allow non-PPTM varietal blends of pedigreed seed for all Grade Tables to be labelled with a Certified Grade name. The blend would be considered one seed lot with one lot number and would be labelled with both variety names. This would be a similar process to how PPTM varietal blends are labelled under the current system. Some seed buyers want to be able to show they bought pedigreed seed but under the current system non-PPTM varietal blends cannot be given a pedigreed grade name and cannot be labelled with Certified tags.

Pros/Benefits:

- Non-PPTM varietal blends of pedigreed seed would be allowed to use Certified grade names for crop kinds in all Grade Tables
- Non-PPTM varietal blends of pedigreed seed would be allowed to use Certified seed tags
- Labelling requirements of non-PPTM varietal blends would be the same as the requirements for PPTM varietal blends which would make labelling requirements of blends simpler.

- Eliminates the need for varietal blend grade names in Grade Tables VIII-XII which simplifies the Grade Tables by reducing the number of grade names

Cons/Risks:

- Would need to have blend records for each blended seed lot which could lead to a lot of extra paperwork if the seller is customizing blends to each buyer's specification.
- Difficult for the regulator to monitor and test these type of products and evaluate the accuracy of the label
- Non PPTM varietal blends can be composed of more than two varieties since there is no limit to the number of varieties in a blend. It would be difficult to fit the variety names on the blue Certified tag

Option 3: For non-PPTM varietal blends for all Grade Tables, allow the seller to provide a Certified blue tag for each variety instead of one tag with multiple variety names on it.

Rationale: This option would show that the two varieties in the blend came from pedigreed seed lots that were graded with a Certified grade name. This would give seed sellers some flexibility to customize blends to each customer's specific order at the time of pick up.

Pros/Benefits:

- Allows for the use of Certified grade name
- Allows for the use of Certified seed tags
- Potentially would not need a new seed lot number which may simplify paperwork

Cons/Risks:

- May be confusing if the labelling requirements are different compared to other types of blends (i.e. PPTM blends)
- Difficult for the regulator to monitor and test these type of products and evaluate the accuracy of the label
- Non-PPTM varietal blends can potentially be composed of more than just two varieties. Multiple tags on the bag would be confusing.
- There are physical limitations to the number of tags that could fit on a package.

Option 4: Expand the varietal blend grade names and labelling requirements currently being used for Grade Tables VIII-XII to all Grade Tables.

Rationale: In order for a seed lot to qualify for a varietal blend grade name, the seed of each component variety must be of pedigreed status and is blended by an Approved Conditioner.

Varietal blend grade names differentiate this type of seed lot from seed lots graded with Common No. 1 or No. 2 grade names. Seed lots with a varietal blend grade name shall be labelled with the variety names and percentage on the package.

Pros/Benefits:

- Blends of pedigreed seed in all Grade Tables would be allowed to be labelled with the variety names
- Blends of pedigreed seed in all Grade Tables would be distinct from non-pedigreed seed by using the Varietal Blend Grade Name (i.e. Varietal Blend No. 1, Varietal Blend No. 2)

Risks/Cons:

- This would increase the number of grade names in the Grade Tables
- This option still does not allow for official Certified tags to be used which is what some buyers are most interested in when purchasing a blend

Option 5: Develop an official tag for non-PPTM varietal blends similar to the green pedigreed mixture tag.

Rationale: An official tag for non-PPTM varietal blends would identify that the blended seed came from pedigreed seed but would also distinguish it from pedigreed seed that would be tagged with the blue Certified tag. PPTM blends would continue to use the blue certified tag.

Pros/Benefits

- Allows the seller to use an official tag specifically designed for non-PPTM varietal blends of pedigreed seed.
- If designed similar to the green mixture tag it would have the space to put multiple varieties and corresponding percentages on it.
- Allows for the use of the Certified grade name
- Distinguishes non-PPTM varietal blends from PPTM varietal blends

Cons/Risks

- Adds to an already large inventory of different types of official pedigreed seed tags

Option 6: Use the existing green mixture tag (CFIA0038) for non-PPTM varietal blends.

Rationale: Rather than create a new type of official tag for non-PPTM varietal blends, this option would use an existing official tag that is currently being used for pedigreed mixtures since this tag already has the space to put multiple varieties and corresponding percentages on it. PPTM blends would continue to use the blue certified tag.

Pros/Benefits:

- Uses an existing official tag rather than creating a new official tag
- Allows the seller to use an official tag that would have the space to put multiple varieties and corresponding percentages on it.
- Allows for the use of the Certified grade name
- Distinguishes non-PPTM varietal blends from PPTM varietal blends

Cons/Risks:

- Since this option is using an existing tag that was meant for mixtures, it could potentially create some confusion between blends and mixtures

DISCUSSION

Currently, there appears to be an increasing demand for blends that serve agronomic purposes that are specific to a customer's situation and there is a desire from those customers to be able to show that the blend was from pedigreed seed. Soybeans, in particular, seems to be a crop kind where customers are wanting blends for agronomic reasons such as mixing a high yield variety with a drought tolerant variety or mixing a high yielding variety with another variety that has better disease resistance. Another example where there is interest in varietal blends is mixing hybrid rye with an open pollinated variety which helps protect the crop from ergot infestation.

Under the present system, the regulations around varietal blends are very prescriptive and there are different labelling requirements depending on the crop kinds involved and whether it is a PPTM blend or a non-PPTM blend. Should Canada move towards a system where the customer is provided with the information that they need to make an informed choice and the seller is creating and maintaining records that proves that the seed they are selling meets the requirements.

One possible option (Option 2) would be to allow non-PPTM varietal blends of pedigreed seed for all Grade Tables to be labelled with a Certified Grade name. The blend would be considered one seed lot with one lot number and the Certified tag would be labelled with both variety names. Blend records would need to be linked to the seed lot number. This would be a similar process to how PPTM varietal blends are labelled under the current system. There was recognition that there is a difference between non-PPTM blends where the customer chooses the type of blend (i.e. selects the varieties they want) versus PPTM blends which have predetermined varieties and specific ratios. For example, in the case of varietal blends for midge tolerant wheat, the CSGA will hold a crop certificate until a testing report from an authorized lab indicating the ratio of the 2 different varieties are submitted to confirm if the blend is within the range specified by the Plant Breeder for that pedigreed status. In this example it has to be proven and submitted to the CSGA who will issue a crop certificate only if it meets the specifications set by the Plant Breeder.

One of the trends that the seed sector is noticing is that the blends are having to be made much closer to the time of sale and pick up which led to the development of a third option. In some cases the customer has the equipment to receive each variety in separate compartments. In this case, two separate Certified tags representing each variety is given to the customer. In other cases, the customer does not have the equipment to receive the varieties separately so both varieties are dumped together. Should consideration be given to allow the seller to provide the Certified tag representing each variety. Is it necessary, in this case, to have to create a new seed lot number and create a blend record or is it just as traceable to provide the customer with a tag for each variety in this specific scenario. There were concerns about using the blue Certified tag in this way because the pedigreed seed system is about varietal purity. The blue tag has an image and brand that is synonymous with varietal purity that is backed up by quality management systems and detailed record keeping. It was also pointed out that non-PPTM varietal blends may have a demand for more than two varieties, an example was provided where a particular blend was made from six varieties. In addition to the physical limitations of having multiple Certified tags on a bag, it could also be confusing particularly without adequate blend records.

There was general agreement among task team members that the blue Certified tag's image centers around varietal purity and that this image must be protected. The task team discussed the potential of a fifth option where a new official tag would be created for non-PPTM varietal blends which would make it visually distinct from the blue Certified tag. For example, there is currently an official tag for mixtures (multiple crop kinds) of pedigreed seed that is green in color which distinguishes it from the blue Certified tag. The tag is also designed in such a way to allow for multiple crop kinds and corresponding percentages to be put on the tag. This type of design could potentially work for non-PPTM varietal blends and a unique tag color could make it stand out as a varietal blend. It was acknowledged that the green tag is not used very often and that creating an official tag for varietal blends will add to an already large inventory of CFIA official tags, however, there would be some potential benefits to having an official tag for non-PPTM varietal blends.

A sixth option was developed where non-PPTM varietal blends would use the green mixture tag (CFIA 0038). Rather than creating a new official tag for non-PPTM varietal blends, consideration should be given to using the green mixtures tag since this tag already has the space to put multiple varieties and corresponding percentages on it. This is similar to the approach taken by OECD with their green mixtures tag where it applies to both a mixture of crop kinds as well as to varietal blends. Another potential suggestion was to use the blue Certified tag when only two varieties make up the non-PPTM varietal blend and use the green mixture tag when more than two varieties make up the blend.

Options 1 to 4 did not receive any support from task team members. The task team, particularly members from the seed sector, expressed concerns about using the blue certified tag as described in Options 2 and 3. In addition to protecting the image of the blue Certified tag in

general, the task team also felt that it was important to distinguish PPTM varietal blends from non-PPTM varietal blends because there are additional requirements that must be met by PPTM varietal blends. Although there was a question as to whether PPTM blends should also use a distinct tag, the majority felt that the blue Certified tag was more appropriate for PPTM varietal blends.

Task team members supported the idea of having an official tag for non-PPTM blends that made it distinct from pedigreed seed labelled with a blue Certified tag but also having a tag that was designed to provide the space needed to put multiple varieties on it. Both Option 5 and Option 6 met those two criteria. Although there was interest in Option 5 from some task team members, Option 6 received qualified consensus with the majority of both regulated members and impacted/implicated members supporting this option.

RECOMMENDATIONS:

- 1. Use the existing green mixture tag (CFIA 0038) for non-PPTM varietal blends.**

Topic 7 – Mixtures

A seed mixture is defined as containing two or more crop kinds or species. The standards for purity and germination for mixtures are stated in Tables III (Cereal Mixtures), XIII (Forage Mixtures), XIV (Lawn Mixtures), and XV (Ground Cover Mixtures). A varietal blend contains seed of two or more varieties of a single crop kind or species whereas a mixture contains seed of two or more crop kinds or species.

Cereal Mixtures (Table III) and Forage Mixtures (Table XIII) may only contain kinds or species listed in Schedule I. Lawn Mixtures (Table XIV) may contain kinds or species listed in Schedule I and may also contain other kinds of grasses not listed in Schedule I, as long as those kinds are indicated on the label. Ground Cover Mixtures (Table XV) may contain kinds or species listed in Schedule I and not listed in Schedule I.

Special Exemption for Lawn and Turf Mixtures in Table XIV

Despite the above, Table XIV has a special exemption in Part II, Group C, for the inclusion of seed of a kind or species of grass only, that is not listed in Schedule I. In the case of a lawn or turf mixture which contains one or more species of grass not listed in Schedule I, the mixture must meet the standards set out in Table XIV - Part I, including the germination standards.

Germination standards

As per subsection 6(1) of the *Seeds Regulations* (the Regulations), crop kinds or species listed in Schedule I, whether they are components of a mixture or a single species or crop kind, must meet the germination standards of the Table in which they appear. Crop kinds or species not listed in Schedule I are not required to meet germination standards (except for Table XIV Part II, Group C species), but must still meet purity standards.

Labelling of Graded Seed Mixtures

All packages of seed are subject to the labelling requirements set out in section 18 of the Regulations. That is, the label must indicate the name and number or percentage of noxious weed seeds and other weed seeds per unit weight (and the percentage germination where applicable), or the vendor supplies this information within 30 days of any request received from any purchaser.

- Seed mixtures graded as cereal mixtures according to Table III must be labelled according to section 24 of the Regulations.
- Seed mixtures graded as forage mixtures according to Table XIII must be labelled according to section 26 of the Regulations

- Seed mixtures graded as lawn seed mixtures according to Table XIV must be labelled according to section 27 of the Regulations.
- Seed mixtures graded as ground cover mixtures according to Table XV must be labelled according to section 29 of the Regulations.

Required information that is the same among all four types of mixtures include:

- the name and address of the seller, packager or labeler
- the name of the grade of seed

The required information related to crop kind and variety names is slightly different between the four types of mixtures as described below:

Cereal Mixtures

- the name and percentage by weight of each kind or species of seed in the mixture;
- the variety name of each variety of seed in the mixture, if applicable.

Forage Seed Mixtures

- the name and percentage of each kind or species — and of each variety, if applicable — of seed that singly constitutes 3% or more by weight or, in the case of sweet clover, 1% or more by weight, of the mixture;
- the percentage by weight of the kinds or species of seed of the mixture not stated on the label pursuant to paragraph (c) preceded by the words “other kinds”; and
- in the case of alfalfa and red clover seed that is imported, the country of origin of production and, if from the United States, the state of origin of production, and the percentage included in the mixture.
- Notwithstanding paragraph (1)(d), the label may show the name and percentage of each kind or species of seed in a package that singly constitutes one per cent or more by weight of the mixture.

Lawn Grass and Turf Grass Mixtures

- if the package contains more than 5 kg of seed, the name of each kind or species — and of each variety, if applicable — of seed that constitutes
 - five per cent or more by weight of the mixture,
 - three per cent or more by weight of the mixture, in the case of bentgrasses, or
 - two per cent or more by weight of the mixture, in the case of white clover.

Ground Cover Mixtures

- the name of each kind or species of seed
 - that constitutes five per cent or more by weight of the mixture, or
 - that is listed in any provincial legislation as a noxious or restricted weed, where the seller, packager or labeller has the information referred to in subparagraph (i) and supplies the information in writing to purchasers on request.

Labelling of Seed Mixtures containing multiple crop kinds that are listed in Schedule I but not specified in a single Table

Seed mixtures containing crop kinds or species listed in Schedule I, but where the mixture is not specified in either of Table III, XIII, XIV or XV must be labelled according to section 30 of the Regulations and cannot be labelled with a grade name unless they are labelled with a Ground Cover Mixture grade name and labelled according to section 29.

Labelling of Seed Mixtures containing one or more components which are not listed in Schedule I

All mixtures of seed containing one or more components not listed in Schedule I must be labelled according to section 30 of the Regulations and cannot be labelled with a grade name unless they are labelled with a Ground Cover Mixture grade name and labelled according to section 29.

Should the labelling requirements for mixtures be the same for the four types of mixtures or should there continue to be different requirements?

Are there any issues in the current *Seeds Regulations* with respect to the requirements for labelling, records, transparency, traceability and information availability for mixtures?

Option 1: Continue with the current system – Status Quo

Rationale: The current system has specific labelling requirements for four types of mixtures (cereal, forage, lawn/turf, ground cover). The *Seeds Regulations* also have specific labelling requirements for any mixtures that fall outside of the four types of mixtures listed in the Grade Tables.

Pros/Benefits:

- Having different labelling requirements for different types of mixtures may address specific needs by a particular sector
- Sellers like being able to give a name to a particular type of mixture (i.e lawn mixture)

Cons/Risks:

- Under the current system, the number of crop kinds that would be eligible to be part of a cereal mixture or part of a forage mixture is too limited
- Some of the specific labelling requirements for forage mixtures and Lawn/Turf grass mixtures might be outdated.
- Having different labelling requirements for different types of mixtures may be confusing
- Labelling requirements for any mixtures that fall outside of the four types of mixtures listed in the Grade Tables may not provide an adequate amount of information. For example, mixtures that would fall under Section 30 of the *Seeds Regulations* are not required to label the percentages of each component in the mixture.

Option 2: Expand the list of crop kinds currently in Schedule I that are allowed to be labelled as a cereal mixture. Expand the list of crop kinds currently in Schedule I that are allowed to be labelled as a forage mixture.

Rationale: Buyers are interested in using different crop kinds for cereal and forage mixtures. By allowing more crop kinds to be labelled as a cereal mixture and as a forage mixture, this will provide more flexibility to sellers and buyers.

Pros/Benefits:

- More crop kinds to choose from for a cereal mixture
- More crop kinds to choose from for a forage mixture

Cons/Risks:

- Does not include crop kinds outside of the Grade Tables (Schedule I)

Option 3: Create another Grade Table and specific labelling requirements for mixtures that don't fall under one of the existing types of mixtures (cereal, forage, lawn/turf, ground cover)

Rationale: Provides standards and specific labelling requirements for mixtures that are not covered by one of the four existing mixtures in the Grade Tables.

Pros/Benefits:

- May provide more clarity around the standards and labelling requirements to be used for mixtures that don't fall under one of the existing mixture tables.

Cons/Risks:

- Increases the number of Grade Tables

Option 4: Move labelling requirements that are specific/unique to a type of mixture (i.e forage mixture) into a document that is incorporated by reference.

Rationale: This would provide flexibility for changing labelling requirements that are specific to a type of mixture. In particular, if there are changes to the standards of a mixture listed in the Grade Tables then there may need to be a corresponding change made to the labelling requirements.

Pros/Benefits:

- Provides flexibility to change labelling requirements if there are changes to standards introduced through other IBR documents
- Potential to be industry driven to determine if there is mixture/industry specific labelling requirements
- Increases the ability to review and update requirements if needed.

Cons/Risks:

- Creating an IBR document that describes labelling for every possible type of mixture may make mixtures more complex rather than simplify them.

Option 5: Require individual components to meet the standards within their respective Grade Tables and remove the specific types of mixtures (cereal, forage, lawn/turf, ground cover) from the Grade Tables. Labelling of mixtures would switch to a truth in labelling system.

Rationale: Under this option, individual components would have to be assigned a grade name within their respective grade table before being allowed to be put into a mixture. Labelling of the mixture itself would become a truth in labelling system which would provide flexibility to the marketplace to determine the combination of crop kinds going into a mixture.

Pros/Benefits:

- Reduces the number of Grade Tables
- Provides some additional flexibility in determining crop kind combinations going into a mixture
- Potentially would provide more information on mixtures that currently fall outside of the four mixtures in the Grade Tables

Cons/Risks:

- Would require detailed records for the mixture which is currently only required by Registered Seed Establishments. Facilities that are not registered under Part IV of the *Seeds Regulations* are not subject to the record keeping that would be needed for this option
- Potential unintended consequences for certain types of mixtures such as lawn/turf grass mixtures if there are no restrictions on the types of crop kinds allowed to be used.

- Standards for individual components tend to be higher than the standards in the mixture tables which could result in some crop kinds not having any market. For example grasses and small legumes don't have an alternate market like grains and oilseeds when they don't meet seed standards.

DISCUSSION

The Chair started the discussion by noting that there appears to be an increasing demand for mixtures that don't quite fit with the current requirements in order to be labelled as either a cereal or a forage mixture. As an example, livestock producers are looking at many different things such as improving the soil which may involve having crop kinds in mixtures that typically would not have been included in the past. A suggestion was made that if we are looking at keeping the defined mixtures (cereals, forages, lawn, ground cover) then consideration should be given to expanding the list of crop kinds that are eligible to be part of each specific mixture. It was noted that similar to blends, mixtures are becoming more specific to a customer's situation. There was general agreement that the existing four types of mixtures in the Grade Tables are not covering everything in terms of the combination of crop kinds that buyers are interested in at the present time.

It was recognized that one of the goals of modernizing the *Seeds Regulations* is to come up with recommendations that enable flexibility and agility for the seed sector to be able to respond to customer demands while at the same time ensuring that accurate information is available to the customer. In addition, it was suggested that specific sectors would be in a better position to identify their needs which led to the development of the option on moving labelling requirements on mixtures to a document that is incorporated by reference.

Another option, that could potentially provide flexibility, is to require individual components to meet the standards within their respective Grade Tables and remove the specific types of mixtures (cereal, forage, lawn/turf, ground cover) from the Grade Tables. Labelling of the mixture itself would become a truth in labelling system which would provide flexibility to the marketplace to determine the combination of crop kinds going into a mixture. It was acknowledged that this option would rely on detailed records for the mixture and seed quality testing results from the individual components in order to accurately label the final mixture. It was pointed out that facilities that are not registered under Part IV of the *Seeds Regulations* are not subject to the record keeping requirements which could lead to some mixtures not providing accurate information to the buyer. There were also questions about what this option might mean in terms of naming mixtures. For example, there would need to be requirements for the types of crop kinds allowed to go into a lawn mixture.

Based on the above discussion, it was suggested that an IBR document could get into some of these descriptive details which could be adjusted as new types of mixtures come along over time. In addition to providing this flexibility, an IBR document would allow for specific sectors to

identify their needs. However, there were questions on whether this meant that an IBR document would have to be constantly edited to address changing demands for mixtures. Would this make it more complex rather than simplify mixtures? It was pointed out that the *Seeds Regulations* currently have specific labelling requirements for any mixtures that fall outside of the four types of mixtures listed in the Grade Tables. The task team acknowledged that the current system does have specific labelling requirements for any mixture that falls outside of the four types of mixtures, however it may be a question of whether the current system provides an adequate amount of information.

A majority of task team members liked Option 4 because they felt that it would allow for an opportunity for further discussion with other stakeholders who buy and sell the different types of mixtures. Some task team members also liked Option 5 providing that changes were made to the *Seeds Regulations* about having adequate records for mixtures by facilities that are not Registered Seed Establishments. There was also a concern raised about the individual components having to meet the standards within their respective grade table. There was interest from one task team member in continuing with the current system (Option 1). Although a majority of regulated members supported Option 4, impacted/implicated members were split so there was not a qualified consensus for any of the options.

A common theme between Option 4 and Option 5 was providing flexibility to mixtures and corresponding labelling requirements. Task team members also acknowledged the importance of having records when it comes to mixtures not only by Registered Seed Establishments but also by facilities that are not registered. There may be a need for further education around the regulations for mixtures due to their complex nature in order to ensure requirements such as including the crop kinds on the mixture label are being followed by all facilities that sell mixtures.

RECOMMENDATIONS:

- 1. Consideration should be given to providing additional flexibility to mixtures and corresponding labelling requirements after consulting with the stakeholders involved in mixtures.**
- 2. Records must be kept by facilities involved in producing mixtures, including facilities that are not Registered Seed Establishments.**

Topic 8 – Imported Seed Requirements

Importing pedigreed and non-pedigreed seed into Canada as per subsections [\(40\)\(1\)](#), [40\(2\)](#) and [40\(3\)](#) requires the following information:

- An acceptable **seed certificate analysis** as per paragraph [11\(1\)\(b\)](#)
 - exemptions from providing an acceptable seed analysis certificate at the time of import are in subsection [40\(5\)](#) and [40\(6\)](#)
- A **signed declaration** with the following:
 - the name of the kind or species of the seed;
 - the quantity of seed;
 - variety name of the seed for all kinds, species and varieties subject to variety registration other than non-pedigreed seed of forage crops;
 - name and address of the exporter;
 - name, address and telephone number of the importer;
 - county of origin of where the seed was grown; and
 - the intended end use of the imported seed.
- For an Authorized Importer, their registered seed establishment (RSE) number
- The end use for seed is required to verify if the seed would meet the import exemptions for variety registration of a crop kind listed in [Schedule III](#) as per section [41](#)

This information is used by the CFIA Import Conformity Assessment (ICA) office or a RSE registered by the CFIA as an authorized importer (AI) to verify if the seed meets the requirements of the *Seeds Regulations*. With the exception of an AI's RSE number, all non-AI's must provide this information at the time of import for a seed lot unless the seed lot is exempt under subsection [40\(5\)](#). Small lots are exempt under paragraphs 40(5)(b) and 40(5)(c) and defines small lots based on the following:

- if the seed lot weighs 5 kg or less, in the case of seed of the kinds or species set out in any of Tables I to VI and XVI to XVIII to Schedule I, or seeds of similar size or herb seeds; or
- if the seed lot weighs 500 g or less, in the case of seed of the kinds or species set out in any of Tables VII to XII to Schedule I, or seeds of similar size.

Additional information is required for a RSE participating on the AI program. The AI is on a QMS program which is overseen by the conformity verification body, Seeds Canada. The Seeds Canada (i.e., formerly CSI) Technical Manual 2.4 describes the information that may be required by a RSE participating on the AI program. The RSE's AI number must be provided at the time of import and the information required in the signed declaration must be provided to the CFIA within 30 days of import as per subsection [40\(7\)](#). An AI must have an accredited seed import conformity assessor (SICA) under the appropriate scope to verify if the seed meets the requirements of the *Seeds Regulations*.

As per subsections [40\(4\)](#) and [40\(7\)](#) packages are required to remain separate and intact in their original packages until a notice of import conformity has been issued by the CFIA or a SICA for an AI indicating that the seed meets the requirements of the *Seeds Regulations*. The import process requirements and authorized importers were previously discussed in another task team.

As per section [22\(2\)](#) of the *Seeds Regulations*, seed may be imported into Canada without meeting the labelling requirements in sections [15 to 19, 21](#) and [23 to 31](#) but must meet these requirements **prior** to being **sold** in Canada. Seed imported into Canada for the purpose of conditioning as per section [5\(3\)](#) is also exempt from the standards set out in sections [6](#) and [23 to 31](#). When imported seed is offered for sale in Canada it becomes subject to the labelling requirements, specific labelling requirements for imported seed and packages may include:

- Where the seed is produced, packaged and labelled in a country other than Canada has applied to it a label that shows the identity and principal place of business of the person in Canada for whom the seed was produced for resale, the identity and principal place of business of that person shall be preceded by the words “imported by” or “imported for”, unless the geographic origin of the seed is stated on the label.
- For seed corn, alfalfa, red clover, and forage mixtures containing alfalfa and red clover, the name of the country of origin of production, and if from the United States, the state of origin of production.
- For pedigreed seed that is packaged with seed derived in whole or in part from a crop not grown and conditioned in Canada and graded with a Canada pedigreed grade name shall be fastened and tagged with an inter-agency certification tag.
- For unregistered varieties of pedigreed seed (i.e., listed in Schedule III and subject to variety registration) graded with a Canada pedigreed grade and fastened with an unregistered variety tag, if the seed is derived from a crop not grown in Canada, the country or the state of the official certifying agency and the pedigreed reference number of that agency as per paragraph [35\(2\)\(f\)](#).

To be labelled with a Canadian pedigreed grade in Canada, imported pedigreed seed must meet the standards set out in subsection [13\(3\)](#) and requires a label to be issued or approved by an [official certifying agency](#) indicating that the seed is of pedigreed status. The *Seeds Regulations* defines an official certifying agency to mean *an organization in a foreign state that is empowered by the government of that state to certify seed crops and seed as to the varietal purity thereof where that state is a participating member of the Organisation for Economic Co-operation and Development (OECD) or a member of the Association of Official Seed Certifying Agencies (AOSCA)*. Imported pedigreed seed may be finally certified in Canada if it was imported as not finally certified seed under OECD or under an AOSCA transfer certificate to maintain pedigreed status.

Seed that is going to be graded with a Canada pedigreed grade name, with the exception of pedigreed corn seed, requires an [officially recognized test](#) as per paragraph [11\(1\)\(a\)](#) versus a [recognized standard method](#) as per paragraph [11\(1\)\(b\)](#). Besides being conducted according to a recognized standard method, an officially recognized test also requires an [officially recognized sample](#) to be tested by an [officially recognized laboratory](#) including an accredited grader for Table I to VI of [Schedule I](#) or seeds of similar size for impurities. Pedigreed corn may be graded as per paragraph 11(1)(b) using a recognized standard method issued by one of the entities listed in the sub-paragraphs. Seed must meet the standards for the labelled Canada pedigreed grade name when offered for sale in Canada.

To expedite grading of a foreign seed lot the CFIA [officially recognizes foreign seed testing laboratories](#) to issue a seed analysis certificate (SAC) that may be used by a CFIA accredited grader to establish a pedigreed grade name for seed lots destined to the Canadian market. Similarly, the CFIA accredits [US residents as graders with a GD scope](#) to label seed with a Canada pedigreed grade name prior to import instead of being graded by an accredited Canadian grader after the seed has been imported into Canada.

Imported pedigreed seed corn and non-pedigreed seed may be graded using an acceptable SAC as per paragraph [11\(1\)\(b\)](#) which is the same requirement for importing seed into Canada.

For pedigreed seed to be labelled with an inter-agency tag, the name of the [official seed certifying agency](#) is required. When pedigreed seed is offered for sale in Canada, every package of pedigreed seed derived in whole or in part (refer to [labeling of blended seed from 2 countries of production](#)) from a crop not grown and conditioned in Canada and graded with a Canada pedigreed grade name shall be fastened and tagged with an inter-agency certification tag as per section [34\(1\)](#) of the *Seeds Regulations*. Exemptions for the requirements of being tagged with an inter-agency certification tag are in subsections [34\(3\) and 34\(5\)](#), and sections [35 and 37](#) of the *Seeds Regulations*. US graders are not permitted to apply a Canada pedigreed official seed tag but the tags from the official state certifying agency are not required to be replaced with an inter-agency certification tag in order to be sold in Canada. If a Canada pedigreed grade name is applied to seed prior to importing seed into Canada then the Canada pedigreed grade name and the accredited grader number must appear on a label attached to or printed directly on each seed package as prescribed in paragraph [34\(5\)\(c\)](#).

The Import Task Team recommendations are available in the executive summary [here](#) for consideration during the discussion.

The following gaps and/or issues were discussed when considering the options:

- What information should be required to be provided in the Seeds Regulations at the time of Import?
 - Should the information requirement on an import declaration be revised?

- Should there be a separate form if imported seed is pre-cleared and issues a conformity verification assessment to accompany the seed lot at the time of import?
 - Note: an acceptable foreign seed certificate will still be required for an imported seed lot to be provided for the seed to be pre-cleared.
- What information should be required to sell imported seed lots or seed lots partially blended with imported seed in Canada?
 - Should imported seed be labelled with 'Canada' as part of the grade name?
 - If no, should a seed lot with Canadian origin and imported seed blended together be labelled with 'Canada' as part of the grade name?
 - How could this impact seed like vegetables in small packets labelled with a Canada No.1 or Canada No.2 grade name?
 - Should an OECD or AOSCA imported pedigreed seed lot be allowed to be sold with the information as per section 18 of the *Seeds Regulations* labelled instead of using interagency pedigreed seed tags and labelling the seed with a pedigreed grade name if the lot is sealed and a grader confirms that it meets the standard for the pedigreed status for the grade?
 - How often does seed imported for further conditioning (e.g. applying a seed treatment, blending, repackaging, etc.) that it would be required to be resampled for as the original condition of the lot has changed?
 - How often is the foreign pedigreed seed being resold or seeded for own use by a pedigreed seed grower?
- How could the exchange of information between OECD and AOSCA for a foreign pedigreed seed source be improved to ensure pedigreed status of an imported seed lot sold in Canada?
 - What information would be required to ensure pedigreed seed status of a foreign seed lot imported into Canada?
- How could we mitigate weed seeds of concern (e.g., palmer amaranth, etc.) that is not classified as a prohibited noxious weed seed in the [Weed Seeds Order](#) and meets the standards to clear imported seed and grade it to meet a grade name standard to sell in Canada?

Option 1: Maintain the current information requirements to import and sell foreign seed in Canada.

Rationale: Seed lots imported are cleared by the information provided on the import declaration and an acceptable seed analysis certificate (SAC) provided at the time of importation or by a RSE with an authorized importer (AI) scope. AIs are on a quality program

and overseen by the conformity verification body, if they are found to be non-compliant the AI could lose this RSE scope and not be allowed to clear seed into Canada. Seed for propagation is subject to and must meet phytosanitary requirements prior to importing a seed lot into Canada. The current system aligns with the minimum requirements to sell seed domestically in Canada unless exempt under subsection [40\(5\)](#), *Seeds Regulations*. Seed that is exempt from requiring a seed analysis certificate (SAC) at the time of import still is required to be free from prohibited noxious weed seeds. All imported seed that will be sold in Canada must meet the standards and requirements in the *Seeds Regulations* even if it was exempt from requiring a SAC at the time of importation. For imported seed to be sold as pedigreed seed it must meet the seed crop standards and varietal purity standards of the official certifying agency (i.e., OECD or AOSCA) and be approved by the CSGA. It is the responsibility of the seller to ensure that all pedigreed seed, including imported pedigreed seed, is tested to meet the requirements and standards to be labelled with a Canada pedigreed grade name for seed to be sold in Canada. There are requirements for interagency or unregistered variety seed tags for imported pedigreed seed lots when seed is sold in Canada.

Pros/Benefits:

- Imported seed lots are required to be tested to meet the minimum requirements to sell seed in Canada.
- Seed program purity testing requirements are better designed to prevent the importation of weed seeds.
- Individuals clearing seed for an AI are required to be knowledgeable and pass an evaluation to become accredited by the CFIA to analyze foreign acceptable seed analysis certificated to clear imported seed.
- AIs are overseen by the conformity verification body based on their approved quality manual.

Cons/Risks:

- Imported small seed lots pose a risk for introducing undesirable plant species in Canada.
 - For example, small seed lots imported as bee mixtures or for urban home and garden could unintentionally spread weed seeds through wind, water pathways moving into the irrigation systems, etc. to where they could unintentionally impact agricultural land.
- The federal *Weed Seed Order* and regulated plant pests do not always align with other provincial or municipal jurisdictions and there isn't a mechanism in place for these members to know if the purity (if not exempt) or small seed lots (e.g. some seed sold as flowers, etc.) imported into Canada could potentially contain or be considered a weed seed regulated by a different level of government.

Option 2: Seed lots imported into Canada should not be required to meet a minimum germination standard to be cleared by the CFIA or an Authorized Importer.

Rationale: The purity for foreign weed seeds and other seed-borne crop kind diseases poses a potential risk if introduced to the Canadian environment and would still be required. The germination standard is exempt for vegetable, research, conditioning, non-Schedule I crop kinds, type and species when imported into Canada. Domestically, pedigreed seed may be sold with a sub-standard germination that is lower than the grade standard. Furthermore, domestically flowers, herbs, roots, vegetables, other miscellaneous seed including onion sets and multiplier onions may be labelled as per section [30](#) with a germination rate and date instead of meeting a grade if it is listed in Schedule I. The germination rate could still be provided to the importer upon request but does not need to meet a germination standard to clear imported seed. All imported seed that will be sold in Canada must meet the standards and requirements in the *Seeds Regulations* even if it was exempt from the germination requirement or a SAC at the time of importation.

Pros/Benefits:

- Purity testing for a seed lot has a short turn around time and is not a destructive test.
- Expedite the process to provide information on a foreign seed lot to be cleared if the importer does not have to wait on germination test results.
- Germination testing is a destructive test and longer than purity testing of seed.
 - Importers could wait up to 28 days for a germination test result.

Cons/Risks:

- Seed lots listed in Schedule I are subject to germination standards when seed is sold domestically in Canada.

Option 3: Small seed lots of 5 kg or less for large seeded crop kinds (such as peas, wheat, soybeans and corn) or is 500 g or less for small seeded crop kinds (such as alfalfa, tomato or canola) should be required to have a purity analysis prior to importation into Canada with the exemption of small lots for research.

Rationale: Canada's border is a line of defense for introducing foreign weed seeds and other seed-borne crop kind diseases that pose a potential risk if introduced to the Canadian environment. Small lots of seed sold in Canada are still required to meet the standards in the *Seeds Regulations*. With the increase of online sales, all small lots should be subject to the minimum purity standards to ensure the imported small lot meets the same requirements as small lots sold domestically in Canada. This will mitigate the importation of small lots currently exempt from a SAC to be subject to an import conformity assessment for purity based on an acceptable SAC. Not requiring a germination eliminates a destructive test where an exporter may request the submitted sample for purity back from a lab. Small lots of imported seed offered for sale in Canada must meet the standards and requirements in the *Seeds Regulations* even if it was exempt from requiring a germination at the time of importation. Canada could work with partners to develop a program to streamline the process for pre-clearing small foreign seed lots that were previously exempt to further facilitate trade while mitigating risk of potentially introducing foreign weed seeds that may be harmful to the Canadian environment.

Pros/Benefits:

- Allows for small lots of research seed to continue to be imported without requiring a SAC.
- Flexibility to develop programs (e.g., approved exporters, etc.) to help facilitate clearing small lots of seed based on purity requirements.
- Aligns the domestic requirements with import requirements.
- With advances in technology and the availability of tools it would be easier to share information to clear small lots.

Cons/Risks:

- If there are a high volume of small lots being imported for own-use this could cause delays clearing small lots in Canada.
- Potentially increase resources required to clear seed into Canada.
- Potentially prevent small lots of seed imported being for seed libraries, seed exchanges, small lots of heritage or heirloom varieties.

Option 4: Allow OECD and AOSCA pedigreed seed imported into Canada that is sealed and labelled with AOSCA and OECD tags to be sold in the original packages with the seed quality information provided in section 18 of the *Seeds Regulations* instead of re-tagging with an inter-agency tag and applying a Canada pedigreed grade name.

Rationale: Imported pedigreed seed must meet the OECD and AOSCA official certifying agencies' seed crop standards and varietal purity standards and be approved by the CSGA to be pedigreed seed in Canada. When imported pedigreed seed lots that are sealed and labelled with an OECD or AOSCA tag the varietal purity, varietal identity and the place of production is known. The seed lot would still require a seed analysis certificate for seed purity and germination test results. If these seed lots are offered for sale the information in section 18 of the *Seeds Regulations* for purity and germination would still be required to be provided. Seed lots that are imported and sealed in their original packaging would be able to be sold without relabeling with a Canada pedigreed seed grade name. Seed imported for conditioning (i.e., re-bagging, cleaning under a plant protection import permit, treating, etc.) would be required to be officially tested and graded by an accredited grader to be labelled and graded with a Canada pedigreed seed grade name if sold. Interagency tags would be applied to seed lots conditioned in Canada that are fastened with an official tag.

Pros/Benefits:

- Expedite the process to sell imported pedigreed seed by reducing the burden of sampling, testing and grading the foreign seed lot to re-tag and apply a Canadian pedigreed grade name.
- An acceptable seed analysis certificate (SAC) is required to use a recognized standard method (i.e., Canadian Methods and Procedures for Testing Seed (M&P), *Rules for*

Testing Seed, published by the Association of Official Seed Analysts (AOSA) or *International Rules for Seed Testing*, published by the International Seed Testing Association (ISTA)) to accompany a seed lot imported into Canada.

- OECD seed lots with an attached OECD label are usually accompanied with an ISTA SAC providing the seed quality information (e.g., purity, germination, etc.).
- Potentially reduces confusion on the place of production when an imported seed lot does not use a Canada pedigreed grade name.
- May increase support to keep the 'Canada' as a brand for pedigreed seed produced and sold domestically in Canada.

Cons/Risks:

- Potentially could cause confusion with certified status pedigreed seed if producers are used to seeing a blue interagency tag.
- It is unknown how many importers use interagency tags to verify if seed is imported and further conditioned (e.g., treated, re-packaged, etc.) before it is sold or if it is imported in sealed packages ready for sale.
- There is the potential that a foreign SAC using AOSA rules may not align with how weed seed or other crop information are provided on a domestic SAC to accurately determine a Canada pedigreed grade name.
 - It may only list noxious weed seeds of concern and the rest by a percent instead of listing out all weed seed which may be of a concern to a seller (e.g., palmer amaranth, etc.).
- AOSCA members in the US are state dependant and the information may not always be conducted by an accredited seed lab.

Option 5: Develop and implement a digital platform to improve and streamline the information flow for clearing imported seed lots into Canada.

Rationale: The Canadian border is a line of defense and it is important to know that every seed lot coming across the border is subject to a purity analysis to ensure it is free of potential weed seeds. As technology advances there are tools available to develop systems for ensuring the results of the seed analysis are known prior to importing seed into Canada, there is the ability for a system to maintain records in a centralized platform that is searchable and available for imported seed. There are systems in other countries (e.g., United States) to have more confidence, there is more technology for digitalization of import information, it increases the ability to search required information, and there are technologies like QR codes to further share information, artificial intelligence learning approaches for Canada to move to a digital information system.

Pros/Benefits:

- Potentially increase traceability of seed lots imported into Canada.

- Increases the ability to trace lot numbers of small lots to ensure purity requirements have been met.
- Mitigates the risk of invasive and prohibited noxious weed seeds from online sales being imported into Canada.
- Potentially could reduce the time to clear imported seed lots.
- This could provide a foundation to implement other options for clearing seed in the future if information is streamlined in a digital platform and is accessible by CBSA.

Cons/Risks:

- It would not be able to target weed seeds of concern that naturally occur in the United States which could move across the Canadian border.

DISCUSSION

Background was provided that approximately 30 years ago, broad exemptions for small lots were initially put in place due to some limitations as it would be difficult for the government to manage and enforce the importation requirements at that time. It was mentioned that small lots for research purposes should continue to be exempt from requiring a seed analysis certificate (SAC). The Import Task Team also recommended that the term 'research' should be further defined.

It was mentioned that the appropriate stakeholder groups (e.g., flower, vegetable, lawn, etc.) should be consulted prior to changing any grade name requirements for imported non-pedigreed seed labelled with Canada No.1 and Canada No.2 grade name.

There was a suggestion to include a brand name at the time of import to help reduce confusion. It was mentioned that this may be difficult to do at the time of import as a company might brand seed differently in different countries which could further increase confusion.

There was clarification provided that OECD and AOSCA tags or labels provide assurances to the varietal identity, varietal purity and the place of origin on the production of the seed in the package. These tags or labels do not provide guarantees on the seed quality (e.g., physical purity for weed seeds and other crop kinds, germination, etc.) that could be provided on a seed analysis certificate or conveyed in a different manner. It was suggested that the CFIA should reach out to stakeholders actively importing pedigreed seed into Canada selling seed with interagency tags.

The Task Team discussed option 1 to maintain the current information requirements to import and sell foreign seed in Canada. During the discussion it was recognized that the other options were not mutually exclusive and supported improving the current systems for clearing and selling seed into Canada. The Task Team members did not support recommending this option.

Option 2 on seed lots imported into Canada should not be required to meet a minimum germination standard to be cleared by the CFIA or an Authorized Importer was discussed by the Task Team. There was a concern brought forward that this could put domestic seed sellers at a disadvantage if they are required to meet a standard when seed is sold domestically. It was mentioned that this would be buyer beware if they chose to import seed without requesting a germination test when importing seed for own use. It was also mentioned that imported seed is still required to meet a standard when it is sold in Canada and that this would help speed up the process to clear seed into Canada. The majority of the regulated members, one impacted/implicated member and the Chair supported recommending this option.

During the Task Team discussion on option 3 where small seed lots of 5 kg or less for large seeded crop kinds (such as peas, wheat, soybeans and corn) or is 500 g or less for small seeded crop kinds (such as alfalfa, tomato or canola) should be required to have a purity analysis to importing seed into Canada with the exemption of small lots for research, the importance of the research exemption was reinforced by some of the members. There was suggestion brought forward that there should also be a caveat for small lots of high generations for pedigreed seed production should continue to be exempt in addition to small lots for research purposes. It was mentioned that the implementation of option 5 should occur first to further enable a smooth transition implementing this small lot requirement. The Chair, one other government member, the majority of the regulated members and majority of the impacted/implicated members supported recommending this option. This resulted in a qualified consensus to recommend option 3 by the Task Team.

The Task Team discussed option 4 to allow OECD and AOSCA pedigreed seed imported into Canada that is sealed and labelled with AOSCA and OECD tags to be sold in the original packages with the seed quality information provided in section 18 of the *Seeds Regulations* instead of re-tagging with an inter-agency tag and applying a Canada pedigreed grade name. There was a consideration brought forward on whether Canada should have reciprocal agreements with other OECD or AOSCA member countries before changing our requirements. There was an example provided where Canada currently accepts a foreign tag from a European Union (EU) member country but the EU has a requirement for foreign seed to go through OECD requirements to certify the seed lot under OECD. Another member mentioned that it was important to protect Canadian seed systems as a priority versus reciprocity from other countries. It was mentioned that this would be more convenient for importing seed instead of re-tagging a foreign pedigreed seed lot if the information for the seed quality standards are confirmed and provided to a customer (e.g., on a seed analysis certificate (SAC), etc.) without being labelled with a Canada pedigreed grade name. The Canadian pedigreed grade name could be seen as a brand for Canadian seed and there was the suggestion of building a grade when it meets the standards. For example, seed could be labelled with a No.1 grade if the seed lot met the standards in the grade tables, the term 'Canada' would only be used in front of No.1 if the seed was produced in Canada, and for pedigreed seed it would have to meet the varietal purity pedigreed status. Therefore, seed imported into Canada like vegetable seed from the EU would be labelled as No.1 seed if it meets the quality requirements for a No.1 grade instead of being labelled with a Canada No.1 grade name. The majority of the regulated members, the majority

of the impacted/implicated member and the Chair supported recommending this option. This resulted in a qualified consensus to recommend option 4 by the Task Team.

During the discussion on option 5 to develop and implement a digital platform to improve and streamline the information flow for clearing imported seed lots into Canada, it was suggested that this option would help streamline the implementation of other options as it may take a while to develop and implement. It was suggested that option 5 does not require a regulatory change and could be worked on before the *Seeds Regulations* have gone to *Canada Gazette* to help implement the regulatory changes. It was mentioned that this would have to support the authorized imported (AI) program for clearing seed into Canada. It was suggested to look at aligning with the AI program and see what is being done with the MyCFIA account. The Chair, the majority of the other government members, the majority of the regulated members and majority of the impacted/implicated members supported recommending this option. This resulted in a qualified consensus to recommend option 5 by the Task Team.

RECOMMENDATIONS:

- 1. There was a qualified consensus to recommend option 3 where small seed lots of 5 kg or less for large seeded crop kinds (such as peas, wheat, soybeans and corn) or is 500 g or less for small seeded crop kinds (such as alfalfa, tomato or canola) should be required to have a purity analysis prior to importation into Canada with the exemption of small lots for research; the importance of the research exemption was reinforced by some of the members.**
- 2. There was a qualified consensus to recommend option 4 to allow OECD and AOSCA pedigreed seed imported into Canada that is sealed and labelled with AOSCA and OECD tags to be sold in the original packages with the seed quality information required by section 18 of the *Seeds Regulations* instead of re-tagging with an inter-agency tag and applying a Canada pedigreed grade name.**
- 3. There was a qualified consensus to recommend option 5 to develop and implement a digital platform to improve and streamline the information flow for clearing imported seed lots into Canada. Digitalization should complement and align with the authorized importer program. It was suggested that this option would help streamline the implementation of other options as it may take a while to develop and implement.**

Appendix 2: Task Team Members

Task Team Members	Sector Affiliation	Stakeholder Group
Chair: De. Keith Degenhardt	Seed Industry/ Producer Group	Regulated and Impacted/ Implicated
Co-chair: Cam Goff	Producer Group	Impacted/ Implicated
Clémentine Gombart replaced Jérôme-Antoine Brunelle	Producer Group	Impacted/ Implicated
Donovan Howden (Alternate: Erin Cote)	Producer Group	Impacted/ Implicated
Peter Boswall	Commodity/Value Chain Association	Impacted/ Implicated
Sebastien Dutrisac	Commodity/Value Chain Association	Impacted/ Implicated
Glenn Tait (Alternate: James Lokken)	Commodity/Value Chain Association	Impacted/ Implicated
Kent Hall*	Seed Industry	Regulated
Renee Hoyme (Alternate: Kelly Chambers)	Seed Grower	Regulated
Michael Scheffel (Alternate: Craig Riddell)	Seed Grower	Regulated
Ellen Sparry*	Seed Industry	Regulated
Peter Szentimrey	Seed Grower	Regulated
Will Wellborn*	Seed Industry	Regulated
Leigha Beckwith (Alternate: Tom Dixon)	Other Government	
Kris Wonitowy	Other Government	
Gord Berg	CFIA (Lead)	
Wilhelmina Drost	CFIA (Technical Advisor)	
Christina Rowan	CFIA (Technical Advisor)	
Marie Shank	CFIA (Lead)	

* Alternate for these individuals: Janalee Palmer

Appendix 3: Reference Documents

Information (includes records and labelling) Task Team Agendas

November 14, 2023 Agenda	CFIA_ACIA # 20111080.v1
November 20, 2023 Agenda	CFIA_ACIA # 20142174.v1
November 27, 2023 Agenda	CFIA_ACIA # 20172259.v1
December 4, 2023 Agenda	CFIA_ACIA # 20204041.v1
December 11, 2023 Agenda	CFIA_ACIA # 20241635.v1
December 18, 2023 Agenda	CFIA_ACIA # 20297263.v1
January 8, 2024 Agenda	CFIA_ACIA # 20384026.v1
January 15, 2024 Agenda	CFIA_ACIA # 20448475.v1
January 22, 2024 Agenda	CFIA_ACIA # 20495249.v1
January 29, 2024 Agenda	CFIA_ACIA # 20521315.v1A
February 5, 2024 Agenda	CFIA_ACIA # 20566445.v1
February 12, 2024 Agenda	CFIA_ACIA # 20619214.v1
February 26, 2024 Agenda	CFIA_ACIA # 20658935.v1
March 4, 2024 Agenda	CFIA_ACIA # 20722166.v1
March 11, 2024 Agenda	CFIA_ACIA # 20752520.v1
March 18, 2024 Agenda	CFIA_ACIA # 20795101.v1
March 25, 2024 Agenda	CFIA_ACIA # 20864501.v1
April 8, 2024 Agenda	CFIA_ACIA # 20895896.v1
April 15, 2024 Agenda	CFIA_ACIA # 20969230.v1
April 22, 2024 Agenda	CFIA_ACIA # 21034893.v1
April 29, 2024 Agenda	CFIA_ACIA # 21083929.v1

Information (includes records and labelling) Task Team Meeting Notes

November 14, 2023 Meeting Notes	CFIA_ACIA # 20151141.v1A
November 20, 2023 Meeting Notes	CFIA_ACIA # 20181564.v2
November 27, 2023 Meeting Notes	CFIA_ACIA # 20212987.v2A
December 4, 2023 Meeting Notes	CFIA_ACIA # 20245134.v2
December 11, 2023 Meeting Notes	CFIA_ACIA # 20300158.v2
December 18, 2023 Meeting Notes	CFIA_ACIA # 20355828.v1A
January 8, 2024 Meeting Notes	CFIA_ACIA # 20438512.v1
January 15, 2024 Meeting Notes	CFIA_ACIA # 20492567.v2
January 22, 2024 Meeting Notes	CFIA_ACIA # 20529714.v2A
January 29, 2024 Meeting Notes	CFIA_ACIA # 20570254.v1A
February 5, 2024 Meeting Notes	CFIA_ACIA # 20612895.v1A
February 12, 2024 Meeting Notes	CFIA_ACIA # 20655773.v1B
February 26, 2024 Meeting Notes	CFIA_ACIA # 20723039.v1
March 4, 2024 Meeting Notes	CFIA_ACIA # 20770505.v1

March 11, 2024 Meeting Notes	CFIA_ACIA # 20820617.v2
March 18, 2024 Meeting Notes	CFIA_ACIA # 20849819.v2
March 25, 2024 Meeting Notes	CFIA_ACIA # 20934249.v2
April 8, 2024 Meeting Notes	CFIA_ACIA # 20989281.v2
April 15, 2024 Meeting Notes	CFIA_ACIA # 21037833.v2
April 22, 2024 Meeting Notes	CFIA_ACIA # 21080291.v1
April 29, 2024 Meeting Notes	CFIA_ACIA # 21110771.v1

Information (includes records and labelling) Task Team Topic Outlines Documents

Topic 1 Grade Names	CFIA_ACIA # 19744200.v3
Topic 2 Information Requirements at the Time of Sale	CFIA_ACIA # 20127587.v1
Topic 3 Digitalization	CFIA_ACIA # 20152279.v1I
Topic 4 QR Codes on the Official Label	CFIA_ACIA # 19961987.v1
Topic 5 Variety Names	CFIA_ACIA # 20173162.v1B
Topic 6 Varietal Blends	CFIA_ACIA # 20187683.v1
Topic 7 Mixtures	CFIA_ACIA # 20193606.v1
Topic 8 Imported Seed Requirements	CFIA_ACIA # 20187673.v1C

Information (includes records and labelling) Task Team Topic Options and Recommendations Reports

Topic 1 Grade Names	CFIA_ACIA # 19744200.v7
Topic 2 Information Requirements at the Time of Sale	CFIA_ACIA # 20127587.v3B
Topic 3 Digitalization	CFIA_ACIA # 20152279.v3
Topic 4 QR Codes on the Official Label	CFIA_ACIA # 19961987.v4
Topic 5 Variety Names	CFIA_ACIA # 20173162.v2
Topic 6 Varietal Blends	CFIA_ACIA # 20187683.v5
Topic 7 Mixtures	CFIA_ACIA # 20193606.v5
Topic 8 Imported Seed Requirements	CFIA_ACIA # 20187673.v3

Other Support Documents

Seed Information (includes records and labelling) Background Paper	CFIA_ACIA # 20008007.v2B
Seed-RM Information Task Team: CONGRÈS UPA 2023_ TRANSPARENCE ET TRAÇABILITÉ DES TECHNOLOGIES	CFIA_ACIA # 20960023.v1
CFIA Digitalization: Presentation to Seed Industry 2023 January 27	CFIA_ACIA # 20482026.v1
SRM Information Task Team CSGA Presentation - February 2024	CFIA_ACIA # 20960031.v1

Canadian Food Inspection Agency Act

<https://laws-lois.justice.gc.ca/eng/acts/C-16.5/>

Seeds Act

<https://laws-lois.justice.gc.ca/eng/acts/S-8/>

Seeds Regulations

<https://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1400/index.html>

Weed Seeds Order, 2016

<https://laws-lois.justice.gc.ca/eng/regulations/SOR-2016-93/page-1.html>

CFIA Seed Regulatory Modernization

<https://inspection.canada.ca/plant-health/seeds/seed-regulatory-modernization/eng/1610723659167/1610723659636>

Organisation for Economic Co-operation and Development (OECD) Seed Schemes

<https://www.oecd.org/agriculture/seeds/rules-regulations/>

Association of Official Seed Certifying Agencies

<https://www.aosca.org/>

European Union (EU) Seed Directives

https://ec.europa.eu/food/plants/plant-reproductive-material/plant-variety-catalogues-databases-information-systems_en

CSGA Canadian Regulations and Procedures for Breeder Seed Crop Production

<https://seedgrowers.ca/seed-growers/breeder-seed-crops/>

CSGA Canadian Regulations and Procedures for Pedigreed Seed Crop Production

<https://seedgrowers.ca/seed-growers/requirements/>

Government in a Digital Age

<https://www.canada.ca/en/government/system/digital-government.html>

Digital Government Innovation

<https://www.canada.ca/en/government/system/digital-government/digital-government-innovations.html>

Security of Online Government Services

<https://www.canada.ca/en/government/system/digital-government/online-security-privacy.html>

Government of Canada Guidance on Using Electronic Signatures

<https://www.canada.ca/en/government/system/digital-government/online-security-privacy/government-canada-guidance-using-electronic-signatures.html>

Digital Credentials

<https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/digital-credentials.html>

Guideline on the Management of Public Key Infrastructure in the Government of Canada

<https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=20008>

CFIA 2020 Framework: Building for the Future

<https://inspection.canada.ca/about-the-cfia/cfia-2025/framework/eng/1634243898653/1634243899028>

My CFIA Account

<https://inspection.canada.ca/about-the-cfia/my-cfia-account/eng/1482204298243/1482204318353>

CFIA Varieties of Crop Kinds Registered in Canada

https://active.inspection.gc.ca/netapp/regvar/regvar_lookupe.aspx

Seeds Canada Registered Seed Establishments

<https://seeds-canada.ca/en/seed-resources/registered-seed-establishments/>

Seeds Canada Accredited Labs

<https://seeds-canada.ca/en/seed-resources/accredited-labs/>

Seeds Canada Document Libraries

<https://seeds-canada.ca/en/seed-resources/document-libraries/>

Seeds Canada Canadian Variety Transparency Database

<https://seeds-canada.ca/en/seed-resources/transparency-database/>

CFIA Plant with Novel Traits (PNT) and Novel Feeds from Plant Sources Approved in Canada

<https://active.inspection.gc.ca/netapp/plantnoveltraitpnt-vegecarnouvcn/pntvcne.aspx>

CFIA Automated Import Reference System (AIRS)

<https://inspection.canada.ca/importing-food-plants-or-animals/plant-and-plant-product-imports/airs/eng/1300127512994/1300127627409>

Health Canada Completed Safety Assessments of Novel Foods Including Genetically Modified (GM) Foods

<https://www.canada.ca/en/health-canada/services/food-nutrition/genetically-modified-foods-other-novel-foods/approved-products.html>

Health Canada List of Non-Novel Products of Plant Breeding for Food Use

<https://www.canada.ca/en/health-canada/services/food-nutrition/genetically-modified-foods-other-novel-foods/transparency-initiative/list-non-novel-products-plant-breeding-food-use.html>

Seeds Canada Database – Plant Breeders' Rights (PBR)

<https://seeds-canada.ca/pbr-database/>

CSGA Seed Regulatory Modernization-

<https://seedgrowers.ca/seed-regulatory-modernization/>

- **Main Administrator:** https://seedgrowers.ca/?sdm_process_download=1&download_id=21722

- **Digital Single Window:** https://seedgrowers.ca/?sdm_process_download=1&download_id=21727

CFIA Labelling of Blended Seed from 2 Countries of Production

<https://inspection.canada.ca/plant-health/seeds/seed-industry-advisories/labelling-of-blended-seed/eng/1379356101904/1380127434368>

CFIA Officially Recognized Foreign Seed Testing Laboratories

<https://inspection.canada.ca/plant-health/seeds/seed-testing-and-grading/recognized-foreign-labs/eng/1364270465298/1364270532571>

CFIA Seed Imports and United States Residents Accredited as Seed Graders

<https://inspection.canada.ca/plant-health/seeds/seed-imports/us-residents-accredited-as-seed-graders/eng/1347555378598/1347637762015>

CFIA Executive Summary of the Import Task Team Final Report

<https://inspection.canada.ca/plant-health/seeds/seed-regulatory-modernization/seed-imports-report/eng/1707138747011/1707138747386>

CFIA Executive Summary of the Seed Certification Task Team Final Report

<https://inspection.canada.ca/plant-health/seeds/seed-regulatory-modernization/seed-certification/eng/1675096027841/1675096028278>

CFIA Executive Summary of the Common Seed Task Team Final Report

<https://inspection.canada.ca/plant-health/seeds/seed-regulatory-modernization/common-seed-report/eng/1706921299525/1706921299885>