
CANADIAN REGULATIONS AND PROCEDURES FOR PEDIGREED SEED CROP PRODUCTION



Canadian Seed Growers' Association **Circular 6** © 2005

Revision 1.12-2017

February 1, 2017

This revised version 1.12-2017 of the *Canadian Regulations and Procedures for Pedigreed Seed Crop Production — Circular 6* supersedes all previous versions.

Active seed growers and crop certificate assignees will be advised of changes in these regulations.

The official version of *Canadian Regulations and Procedures for Pedigreed Seed Crop Production — Circular 6* is maintained at the CSGA's website: www.seedgrowers.ca. This version is published for convenient reference.

QUICK REFERENCE SUMMARY
**MAJOR SEED CROPS AND SPECIFIC SECTION REQUIREMENTS
IN CIRCULAR 6**

CROP	SECTION	PEDIGREED CLASS
Bean	03 12	except Select plots Select plots
Canola, Rapeseed, Mustard		
Hybrid	05	except Foundation plots
Other	04	except Foundation plots
All	13	Foundation plots
Cereals (e.g. Barley, Oats, Wheat)	02 12	except Select Plots Select plots
Corn		
Hybrid	08	
Open-pollinated	09	
Flax	02 12	except Select plots Select plots
Forage Grasses	06	
Forage Legumes	07	
Industrial Hemp	10 11	except Foundation plots Foundation plots
Other Crops	14	
Pea	03 12	except Select plots Select plots
Pulse Crops (e.g. Lentils)	03 12	except Select plots Select plots
Soybean	03 12	except Select plots Select plots
Sunflower	16 13	except Foundation plots Foundation plots

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CANADIAN SEED GROWERS' ASSOCIATION



CANADIAN REGULATIONS AND PROCEDURES FOR PEDIGREED SEED CROP PRODUCTION – CIRCULAR 6

RECORD OF AMENDMENTS

Amendments to the *Canadian Regulations and Procedures for Pedigreed Seed Crop Production* will be issued as required. Amendments will be numbered and dated. Please ensure the amendments outlined below have been inserted. If any amended pages are missing, contact the CSGA or download pages from the CSGA website (www.seedgrowers.ca). Remove obsolete pages.

Amendment Number & Date	Description of Amendment (Section/Sub-section Number(s), page number(s), etc.)	Entered by:
01-20050509	Sections 4.4.2, 6.4.6, 12.4.3.	
01.1-20060201	Sections: 0-1, 0-3, 0-11, 1.7.1, 1.7.4, 1.7.7, 2 (In this Sec.), 2.2.2a), 2.2.5, 2.4.4, 3.3.7, 4.3.3, 5.5.5f), 9.1.2, 9.2.1, 9.2.2, 11.6.1b), 12 (In this Sec.), 12.4.2, 12.4.3, Appendix A.5.	
01.2-20070201	Sections: 0-1, 2 (In this Sec.), 2.2.2a), 2.2.5, 4.4.1b), 4.4.4, 4.5.4, 5.5.1b), 5.5.5, 5.6.2, 8.5.1a), 13.6.1b), 13.6.4, 13.8.3.	
01.3-20080201	Sections: 0-1, 0-3, 0-4, 0-5, 0-11, 0-12, 1.9.1, 1.17.7, 1.21.3, 2 (In this Sec.), 2.2.5, 2.5.1, 3.2.5, 3.2.6, 3.4.2, 6.5.5, 10.4.4, 11.2.8, 11.2.9, 11.3.4, 11.3.5, 11.6.2, 11.6.4, 12(In this Sec.), 12.2.10, 12.2.11, 12.3.9, 12.3.10, 12.4.3, 13.2.10, 13.2.11, 13.3.5, 13.3.6, Sec. 14, Sec. 17, Sec. 19, Appendix A, A-1, A-15, Appendix C, C-10.	
01.4-20090201	Sections: 0-1, 0-4, 0-5, 0-10, 0-11, 0-12, 1.12.3, 2.2.5, 2.4.2, 4.4.2, 5.5.2, 12.4.3, 12.6.2, 12.6.4, 13.6.1, 13.6.4, Sec. 14, Appendix A: A.14 on A-1 and A-15.	
01.5-20100201	Sections: 0-1, 0-2, 0-3, 0-4, 0-5, 0-11, 0-12, 1.5.1, 1.12.3, 1.16.3, 1.17.4, 1.17.6, 1.21.3, 2.2.5, 3.1.4, 3.2.2, 3.3.5, 4.4.1, 4.4.4, 4.5.4, 5.5.1, 5.5.5, 5.6.2, 6.2.2, 6.4.6, 7 (In this Sec.), 7.2.2, 7.4.5, 7.5.3, 10.4.4, 11.6.4, 12 (In this Sec.), 12.3, 12.4.3, 12.5.7, 13.6.1, 13.6.4, 13.8.3, Sec. 14, Sec. 16, Appendix A: A.11 A.14 on A-1 and A-15, Appendix C: C-5, C-6, C-12.	

Amendment Number & Date	Description of Amendment (Section/Sub-section Number(s), page number(s), etc.)	Entered by:
01.6-20110201	Sections: 0-1, 0-2, 0-4, 0-6, 0-7, 0-8, 0-9, 0-10, 0-11, 0-12, 0-13, 0-14, 0-15, 0-16, 0-17, 0-18, 0-19, 0-20, 3.1.4, 6.1.1, 6.1.2, 7.1.1, 7.1.2, 7.4.4, 8.5.1, 12.4.3, 12.6.1, 12.6.2, Sec. 14 on 14-1, 14.4.5.1, 14.5.4.3, Section 14.11, Section 14.12, Appendix A: A.15 on A-1 and A-15, Appendix C: C-5, C-6.	
01.7-20120201	Sections: 0-1, 0-4, 0-6, 0-12, 2.2.5, 3.4.1, 6.5.7, 7.5.6, 12.4.3, Sec. 14 on 14-1, Section 14.4, Section 14.7, Section 14.13, Appendix A: A.16, A.17 on A-1 and A-15, A-2, A-3, A-4, Appendix C: C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16	
01.8-20130201	Sections: 0-1, 0-4, 0-6, 1-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 4-1, 4-2, 4-3, 4-4, 4-5, 12-5, 12-6, 12-7, 12-8, 12-9, 12-10, 12-11, 12-12, 12-13, 13-1, 13-4, 13-5, 13-6, 13-7, 13-8, 13-9, 13-10, 13-11, 14.4-2, 14.4-3, 18-1, Appendix A : A-1, A-2, A-3, A-4, A-16, Appendix C: C-1, C-2, C-15, C-16	
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01-12-20170201	Sections : 0-1, 0-6, 0-12, 0-13, 2-8, 3-5, 10-1, 10-2, 10-3, 10-4, 10-5, 11-2, 11-3, 11-4, 11-5, 11-6, 11-8	

SEED CROP CERTIFICATION

Seed crop certification is a program of planned production, record keeping, unbiased inspections, and rigid standards to ensure the production of high quality, variety specific seed. Whether by traditional means or with the use of biotechnology, plant breeders continue to produce superior varieties of field crops. By overseeing production of seed crops, CSGA provides the vital link between plant breeders and farmers who benefit from these advances. Certified seed is derived from a seed crop that has been issued a CSGA crop certificate, is labelled with an official blue Certified tag (or bulk pedigreed certificate) and graded with a Canada pedigreed grade name when sold in Canada. The blue Certified tag is a symbol of the high quality standards of certification assuring dependable performance.

Certification is a limited generation concept whereby variety specific characteristics are maintained. New varieties developed by plant breeders are increased to supply farmers with seed of superior performance.

BREEDER SEED PLOTS → **FOUNDATION SEED** → **CERTIFIED SEED** → **GRAIN**

Breeder Seed is developed and maintained by the CSGA-recognized plant breeders of public research institutions and private companies.

Foundation Seed is the first generation for most open-pollinated crops, and second generation for most self-pollinated crops, produced from Breeder seed and rogued for off-types to meet variety descriptions and strict Foundation purity standards.

Certified Seed is the first generation for most open-pollinated crops, and second generation for most self-pollinated crops, produced from Foundation seed by CSGA seed growers for sale to farmers to use in planting their commercial grain acreage.

For most self-pollinated crops, Select plots are the first generation from Breeder seed and Registered crops are the first generation from Foundation seed. Most open-pollinated crops are produced in Foundation plots.

Seed crop certification is performed for CSGA seed growers and processors dedicated to taking the extra steps necessary in planting, harvesting, handling, storage, and conditioning to produce Certified seed.

FOREWORD

The Canadian Seed Growers' Association (CSGA) is recognized by the federal *Seeds Act and Regulations* as the official Canadian pedigreering agency responsible for prescribing varietal purity standards and certifying seed crops of all agricultural crops, with the exception of potatoes. The Association came into being in 1904, when both President and Secretary were officials from the federal Department of Agriculture. It was not until 1923 that the first non-government employee took over as Secretary, and not until 1925 was the office of President filled by other than a federal government officer. In 1926, the Association elected its first grower President.

The *Canadian Regulations and Procedures for Pedigreed Seed Crop Production*, as prepared by the CSGA, represent the collective experience of federal, university and provincial research and regulatory specialists and representatives of the seed trade assisted by the practical experience of seed growers.

Changes in methods and operations have taken place over the years, but the aims and objectives of the CSGA – to improve pedigreed seed production and usage – have not changed. The co-regulatory relationship with the inspection branch of the Department of Agriculture, now the Canadian Food Inspection Agency (CFIA), has continued over the years on a partnership basis. The CSGA also works closely with the Research Branch of Agriculture and Agri-Food Canada, the agricultural faculties of universities throughout the country, provincial ministries of agriculture, the Canadian Seed Institute (CSI), the Canadian Seed Trade Association (CSTA), the Commercial Seed Analysts Association of Canada (CSAAC), the Association of Official Seed Certifying Agencies (AOSCA), the Organisation for Economic Cooperation and Development (OECD) Seed Schemes, and many other related organizations.

The CSGA's affairs are conducted by a President and a 24-member Board of Directors. Fourteen directors are active growers elected by the general membership, and nine are appointed by Provincial Ministers of Agriculture. The CSGA is located in Ottawa under the supervision of the Executive Director, who is also a director of the Association.

Provision is made for the formation of provincial or regional organizations affiliated with the CSGA. These provincial organizations are not authorized to issue crop certificates or to act in any way as pedigreering agencies. They act as a liaison between seed growers and the national Association, and conduct promotional and extension programs on a provincial basis.

The CSGA assures Breeder seed quality through its *Canadian Regulations and Procedures for the Production of Breeder Seed Crops*, which include requirements for professional recognition of Breeders, audited Quality Management Systems, and seedlot testing for compliance with federal seed grade standards.

Most self-pollinated crops are pedigreed through five classes: Breeder, Select, Foundation, Registered and Certified. Most open-pollinated crops are pedigreed through three classes: Breeder, Foundation and Certified.

Varietal purity is maintained by limits on generations or multiplications as well as pedigreed classes, parent seed pedigree verification, restrictions on previous land use, isolation distance, impurities, seed crop inspections and other regulations established by the CSGA. Perennial crops are also subject to limits on the age of stand or number of crops eligible for pedigreed status.

Breeder, Select, Foundation and Registered seed are principally multiplication classes. Certified seed – the terminal pedigreed class – is the seed recommended for commercial crop production.

The pedigreering of seed and seed crops ensures varietal purity. This is especially important to maintain yield, quality, disease resistance and the other distinguishing characteristics of a variety.

From its office in Ottawa and through Certified seed growers, government representatives, and the seed trade across the country, the CSGA has worked since 1904 to ensure the supply of high quality seed for crop production.

OBJECTIVES

The objectives of the Canadian Seed Growers' Association are:

- To ensure, and certify to, the varietal purity of seed crops produced by its members and to maintain the pedigree thereof.
- To identify, and certify to, for purposes other than further pedigreeing, the varietal purity of seed crops produced from superior propagating material.
- To encourage the development and introduction of superior varieties and strains of plants.
- To develop programs which expand the use of pedigreed seed.
- Generally to contribute to the establishment and maintenance of high standards in yield and quality of agricultural crops.
- To co-operate with other agencies which have an interest in seed production, promotion and distribution in Canada and abroad.
- To coordinate the endeavors of pedigreed seed growers with those of plant breeders and commercial crop producers.

INFORMATION AND CONTACTS

Canadian Seed Growers' Association

For more information on CSGA requirements, contact:

Mailing Address:

Canadian Seed Growers' Association
P.O. Box 8455
Ottawa, Ontario
Canada K1G 3T1

Telephone: (613) 236-0497

Fax: (613) 563-7855

Courier Address:

Canadian Seed Growers' Association
202-240 Catherine Street
Ottawa, Ontario
Canada K2P 2G8

Website: www.seedgrowers.ca

A complete list of CSGA office staff is available from the CSGA's website at:

www.seedgrowers.ca/contact-us/

Canadian Food Inspection Agency

Enquiries relating to enforcement of the federal *Seeds Regulations* should be directed to seed inspection staff at the Canadian Food Inspection Agency (CFIA). A complete list of CFIA office contact information is available at: www.inspection.gc.ca



Canadian Food
Inspection Agency

Agence canadienne
d'inspection des aliments

CANADIAN FOOD INSPECTION AGENCY (CFIA) Central Offices for Seed Inspection		
District	Address	Phone/Fax
Alberta North	8403 Coronet Road NW Edmonton, AB T6E 4N7	Tel: (780) 395-6700 Fax: (780) 395-6792
Alberta South	3605-14 Avenue North Lethbridge, AB T1H 6P7	Tel: (403) 382-3122 Fax: (403) 382-3148
Saskatchewan	421 Downey Rd.- Room 201 Saskatoon, SK S7N 4L8	Tel: (306) 385-4949 Fax: (306) 385-4942
Manitoba	269 Main Street- Room 613 Winnipeg, MB R3C 1B2	Tel: (204) 479-6624 Fax: (204) 259-1331
Ontario	174 Stone Road West Guelph, ON N1G 4S9	Tel: (226) 217-8555 Fax: (226) 217-8495
Quebec	2954 boul. Laurier, Suite 100 Quebec, QC G1V 5C7	Tel: (418) 648-7373 Ext. 139 Fax: (418) 648-4792
Atlantic	Box 6088, 5th Floor, 1081 Main St. Moncton, NB E1C 8R2	Tel: (506) 777-3939 Fax: (506) 777-3942
CFIA Headquarters		
Ottawa	Seed Section Canadian Food Inspection Agency 59 Camelot Drive Ottawa, ON K1A 0Y9	Tel: 1-800-442-2342 (613) 773-2342 Fax: (613) 773-7261 SeedSemence@inspection.gc.ca

SECRETARIES OF CSGA PROVINCIAL AND REGIONAL BRANCHES AND ASSOCIATIONS		
Name	Address	Phone/Fax
BRITISH COLUMBIA Vacant		
ALBERTA Kelly Chambers	Seed Industry Partnership 5030 - 50 St. Lacombe, AB T4L 1W8	Tel: (403) 325-0081 Fax: (866) 798-1826 Email: kelly@seedalberta.ca
SASKATCHEWAN Dave Akister	10 - 41 West Broadway Yorkton, SK S3N 0L6	Tel: (306) 786-6266 Fax: (306) 783-2211 Email: saskseed@sasktel.net
MANITOBA Jennifer Seward	Box 1910 Carman, MB R0G 0J0	Tel: (204) 745-6274 Fax: (204) 745-6282 Email: jennifer.seward@seedmanitoba.ca
ONTARIO Harold Rudy	1 Stone Rd. West Guelph, ON N1G 4Y2	Tel: (519)826-4214/800-265-9751 Fax: (519) 826-4224 Email: harold.rudy@ontariosoilcrop.org
QUEBEC Jean Dumont	3800 boul. Casavant Ouest St. Hyacinthe, PQ J2S 8E3	Tel: (450) 774-9154, ext. 5213 Fax: (450) 778-3797 Email: jdumont@upa.qc.ca
MARITIMES Daniel Savoie	Regional Crop Development Officer Agriculture & Aquaculture P.O. Box 5001 Grand-Falls, N.B. E3Z 1G1	Tel: (506)-473-7755 Fax: (506)-473-6641 Email: daniel.savoie@gnb.ca

FIRST STEPS TO PRODUCING A PEDIGREED SEED CROP

1. Obtain the information you require, such as:
 - *Canadian Regulations and Procedures for the Production of Pedigreed Seed Crops – Circular 6.*
 - *Application for Seed Crop Certification and CSGA Membership Application/Renewal Form.*
 - Fee schedule for current crop year.
 - Contact information for seed crop inspection services.
 - The CSGA calendar of application deadline dates and events.
 - Variety descriptions of the varieties you intend to produce.
 - *Rogues and Roguing* manual.
 - *Forage Production* manual (if producing forage crops for seed).

Samples and explanations of documents are provided in Appendix A.

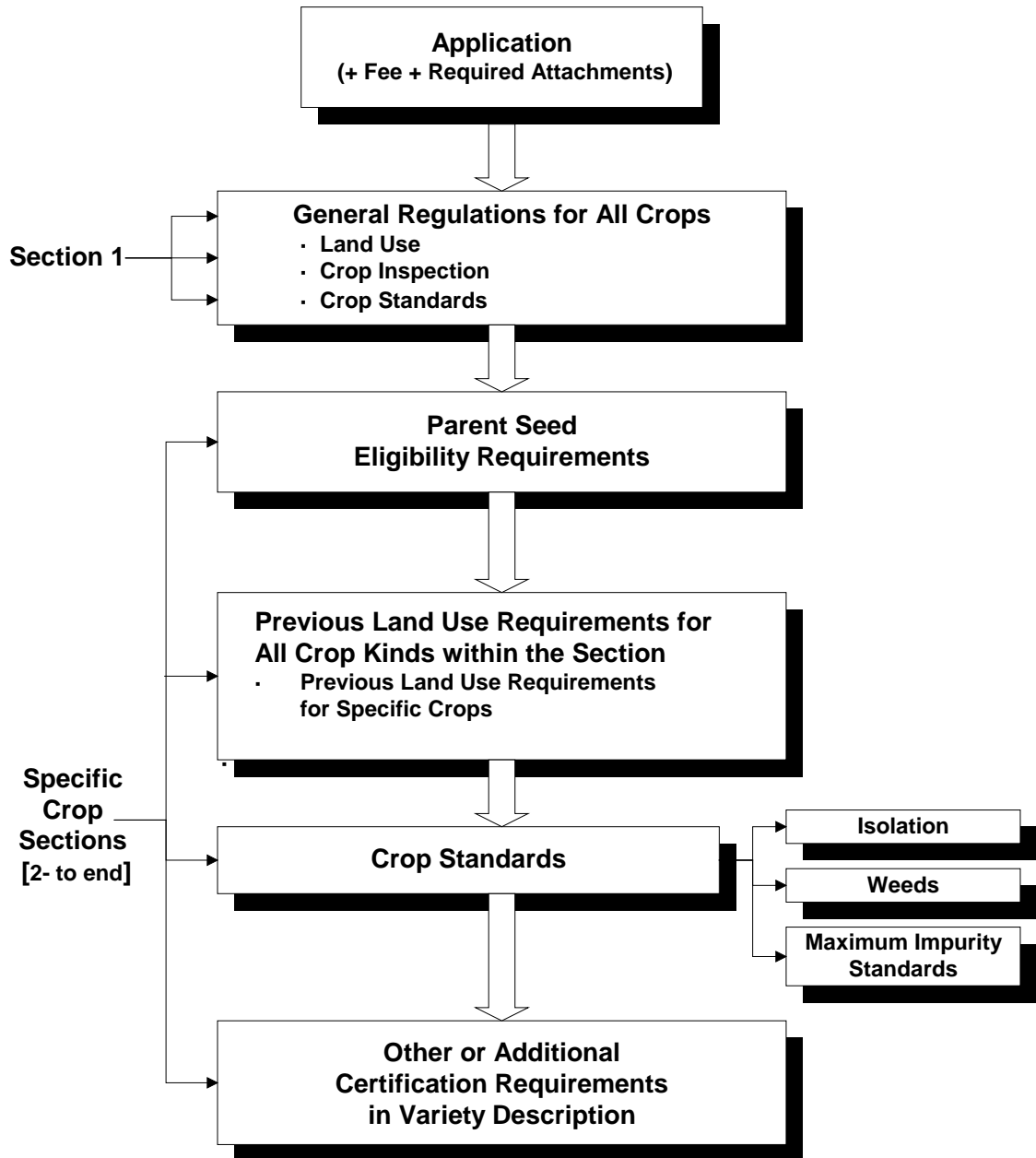
2. Purchase pedigreed seed of Foundation or Registered class.

This seed may be purchased in bags or in bulk. The bagged seed must be tagged with official tags. Pedigreed seed purchased in bulk must be accompanied by official pedigree documentation supplied by the seller. The tags and/or documentation must be kept to present to the authorized seed crop inspector and the CSGA on request. This is proof of the pedigree of the seed you sow. A copy of the mechanical purity and germination analysis certificate should also be available to you for this seed.

3. Make sure that the seed is sown on land meeting the requirements of the regulations. Isolate the crop according to requirements.
4. The *Application for Seed Crop Certification and CSGA Membership Application/Renewal Form* must be completed and received by the CSGA before the prescribed deadline dates on the CSGA calendar. Fees must accompany the application.
5. The crop must be rogued throughout the growing season to remove plants of other varieties, off-types, difficult-to-separate other crop kinds, as well as objectionable weeds.
6. **Do not harvest the crop until you are positive that the crop has been inspected by an inspector licensed by the CFIA.**

The inspector provides you with a report of crop inspection. This report is used by the CSGA to appraise the crop and determine its eligibility for certification.

Summary of CSGA Requirements for Seed Crop Certification Circular 6



PROCEDURES FOR THE PRODUCTION OF PEDIGREED SEED CROPS

This portion of the manual explains the general procedures for the production and certification of a pedigreed seed crop.

There are three stages in the production and identification of pedigreed seed. The first is the production of a pedigreed seed crop. If all the requirements for this are met, the CSGA issues a crop certificate. This certifies that the crop meets the requirements for varietal purity and crop standards and shows the pedigreed status (Breeder, Select, Foundation, Registered, Certified) for which the seed is eligible. The second stage is the careful harvesting, handling, conditioning and storage of the seed to preserve purity and quality. The third stage is inspection of the seed to determine its eligibility for a grade under the federal *Seeds Act and Regulations*. Factors in this are germination, freedom from weed seeds and other crop kinds and general quality. If, from this inspection, the seed qualifies for an official grade, the grader, accredited by the CFIA, authorizes printing of official labels confirming the class of seed and the grade. For pedigreed seed handled in bulk, Bulk Storage Facilities, registered by the CFIA, may also issue a certificate which guarantees that the seed meets grading requirements.

Regulations

Growers should study the CSGA regulations in this manual and plan their operations to comply with them. The official current version of the *Canadian Regulations and Procedures for Pedigreed Seed Crop Production* is maintained at: www.seedgrowers.ca. If there are questions as to correct procedures, the grower should contact the CSGA for clarification.

Land Requirements

To produce pedigreed seed crops, land is chosen which meets requirements with respect to previous crops and isolation, as outlined in the regulations for each crop kind. Certain crops grown in previous years may render the land unacceptable for pedigreed seed production of some crops in following years. It is necessary to plan ahead and to keep accurate records of crops grown on land in previous years.

Seed Requirements

The seed used must be of a class eligible to produce an additional class of pedigreed seed (e.g., Certified seed cannot normally be used for pedigreed seed production). These classes are specified in the regulations. In cereals, for example, while a grower wishing to produce Certified seed may normally sow Registered, Certified seed may also be produced from Select or Foundation.

The grower must retain documents to prove the class of seed planted. This document is the *Crop Certificate* if the grower produced the seed. If purchased seed was sown, the documents are the official seed labels which were attached to the bags and/or bulk seed certification documents. The crop certificate and/or all labels are to be retained and available to the inspector when the crop is inspected. The CSGA may also require the grower to forward one or more of the labels to the CSGA.

Application for Seed Crop Certification and CSGA Membership Application/Renewal Form

The grower decides on the land and seed to use and plants the crop. The grower completes an *Application for Seed Crop Certification* for each field* and one *CSGA Membership Application/Renewal Form* annually; (Appendix A.1a) and A.1b)). The grower must designate an *Authorized Seed Crop Inspection Service (ASCIS)* for each field* and, other than for CFIA inspections, pay crop inspection fees directly to that authorized inspection service. Applications from a partnership or corporation must be signed by a designated signing officer. The *Application for Seed Crop Certification* is submitted to CSGA by the Application Deadline Date for that crop kind. The *CSGA Membership Application/Renewal Form* is submitted annually to CSGA with the required fees for CSGA, for Branches, and for CFIA inspections when required.

* To maintain inspection integrity, fields should have separate applications and crop inspection reports if they are managed separately or are separated by large physical barriers or are clearly not contiguous or adjacent.

The *Application for Seed Crop Certification* for each field is forwarded by CSGA to the specific *Authorized Seed Crop Inspection Service (ASCIS)* designated by the grower. As long as the designated inspection service accepts the application, then that ASCIS contacts the grower and inspects the crop at the correct stage of crop maturity. If the designated inspection service (ASCIS) rejects the application, it is returned to the grower who re-submits the *Application for Seed Crop Certification* with a different inspection service designated.

The *Application for Seed Crop Certification and the CSGA Membership Application/Renewal Form* is available from the CSGA office and from the CSGA members' website at www.seedgrowers.ca. A list of *Authorized Seed Crop Inspection Services (ASCIS)*, Application Deadline Dates and Application Fee Worksheets are on the CSGA website: www.seedgrowers.ca, and also available from the CSGA office. Crops for which applications for crop certification are received by the CSGA after the deadline date may be inspected, but only when inspection resources are available.

Isolation, Roguing and Management

Isolation of seed crop fields, as required by the regulations, should be completed before crop inspection. Roguing must be done when impurities and off-types can be readily identified and before crop inspection. Failure to remove impurities and off-types could result in decline of the crop's pedigree certification. Weed control should be done using recommended control measures.

Crop Inspection and Crop Certificate

It is the grower's responsibility to:

- advise the designated inspection service prior to crop inspection if the crop is not to be certified;
- ensure that the crop has been inspected prior to cutting the crop.

A crop certificate will not be issued if a grower harvests or swaths the crop before inspection. The crop should be inspected at a stage of growth when varietal purity is best determined.

The grower should have available for the inspector all the necessary documents.

After the crop has been inspected, the inspector will complete a *Seed Crop Inspection Report*; a copy is forwarded to the CSGA and to the grower. If the CSGA determines, from its appraisal of this report, that the crop conforms to the required standards, a crop certificate may then be issued.

Assigning a Crop Certificate

The grower of a pedigreed seed crop may assign the crop certificate to an assignee (usually the vendor of the parent seed or vendor's designate). Assignment of a crop certificate to an assignee means that the grower has directed the CSGA to issue that crop certificate in the names of both the grower and the assignee, to send that crop certificate to the assignee and a notification of issuance to the grower and also to permit the assignee to access all CSGA certification records for that crop. Growers assign crop certificates to an assignee on the *Application for Seed Crop Certification*. The *Application for Seed Crop Certification* should be submitted to CSGA in the name of the grower.

Seed harvested from an assigned crop must be processed, graded and labeled according to the federal *Seeds Act and Regulations* before it can be sown for further pedigreed seed crop production by anyone other than the grower of the seed crop. (Refer to Section 1.19.)

Grower's Records

Records should be kept of all pedigreed seed planted and should include quantity of seed and acres planted as well as field identification. Parent seed records should include crop certificate and CSGA sequence numbers from the *Seed Crop Inspection Report* for a grower's own seed and, for purchased seed, crop certificate and seed certificate numbers from bag labels or bulk seed certification documents.

A grower should keep a complete file of the following documents:

- *Application for Seed Crop Certification and CSGA Membership Application/Renewal Form*;
- crop inspection reports;
- crop certificates issued, unless the certificate was assigned to another party;
- seed analysis certificates (purity and germination);
- pedigreed labels (tags) of parent seed planted;
- quantity of seed planted;
- year-to-year records of the grower's farm(s) showing:
 - all fields, with identification numbers;
 - the area of each field;
 - the kind and, if known, the variety of crop grown in each field or land use in that year;
 - on fields used for pedigreed seed production, the crop certificate number of the seed planted and the crop certificate number issued for each pedigreed seed crop produced.

Seed Equipment

All equipment used in the production, handling and processing of pedigreed seed, including seed planters and drills, combines, trucks and seed cleaning or processing equipment, must be cleaned thoroughly before use, particularly if it has been used previously for a different variety or kind of seed or grain. This is essential to prevent contamination.

Seed Storage

Seed from each field should be stored separately from all other fields in cleaned storage facilities. If a grower has more than one field of the same variety, and one field is rejected, all seed of that variety may be rejected for certification if the seed from other fields is stored with it. Seed of different kinds, varieties, or classes must be stored separately.

Grading and Labeling of Seed

Harvested seed for which a crop certificate has been issued is not considered as pedigreed seed eligible for sale with a variety name, unless it is processed, inspected, graded and labeled according to the federal *Seeds Act and Regulations*.

Maintaining the reliable reputation of pedigreed seed requires processing to very high quality standards. Processing to a lower standard involves potential purity risks and could damage the reputation for quality of pedigreed seed. Tags should remain on bags of pedigreed seed until seeding time.

Reasons Why Crops are Declined Pedigreed Status

CSGA records indicate that less than 2 percent of the crops that are inspected each year are declined pedigreed status for one or more of the following reasons:

- ***Other Crop Kinds in excess of the CSGA standards for difficult-to-separate crop kinds*** (e.g., barley plants in a wheat crop). This type of problem is usually the result of volunteer growth from a previous crop grown on the land or the improper cleaning of seeding equipment prior to sowing the field. All crops for pedigree should be intensively rogued throughout the growing season and prior to inspection. Official variety descriptions define the characteristics of a variety.
- ***Off-types or Other Varieties in excess of the maximum impurity standard for the variety*** (e.g., bearded types in a non-bearded variety). This may result from seed contamination, previous crops volunteering, poorly cleaned equipment or mixing of seed lots at seed processing or seeding. All crops for pedigree should be intensively rogued throughout the growing season and prior to inspection.
- ***Previous Land Use not conforming to the regulations*** (e.g., growing a seed crop on land which produced a commercial crop of the same crop kind the previous year). Some crop kinds, especially for plot production, require careful selection of land because of previous land use conditions, which may extend up to 5 prior years. Accurate land history records are essential.
- ***Very Weedy crops*** are declined because the excessive presence of weeds or other crops does not allow adequate inspection of the crop for varietal impurities and other crop kinds. Very weedy crops can also damage the quality reputation of pedigreed seed. For some crop kinds, there are specific weeds that must not be present, e.g., Cleavers Bedstraw or Wild Mustard in Canola/Rapeseed/Mustard crops and prohibited noxious weeds in all pedigreed seed crops.
- ***Insufficient Isolation*** of the crop. CSGA regulations require that crops for pedigree be isolated from other crops which might offer a source of varietal or mechanical contamination through cross-pollination or harvesting mistakes.
- ***Seed Planted not Eligible*** results from Certified seed being sown; seed of foreign origin for which pedigree cannot be established or seed not tagged or properly documented according to the federal *Seeds Act and Regulations*.
- ***Crop Cut before Inspection*** results in an automatic decline of pedigree to the crop. Standing crops must be inspected to determine varietal purity by an authorized inspector recognized by the CSGA.
- ***Age of Stand*** may be reason for demotion or decline of pedigree for perennial crops. Tables 6.4.6 and 7.4.5 prescribe the age of stand for grass and legume seed crops.

Demotion to a Lower Pedigree Class

Crops may also be demoted to a lower pedigree class if the problem is not sufficiently severe to cause a decline of pedigree. Before declining or demoting a crop, the CSGA carefully considers all information available. An appeal process for declines and demotions is available to provide new information to the CSGA (Refer to Section 1.9 and Appendix A.8.)