CANADIAN REGULATIONS AND PROCEDURES FOR PEDIGREED SEED CROP PRODUCTION



Canadian Seed Growers' Association Circular 6 © 2005

Revision 1.14-2019

February 1, 2019

This revised version 1.14-2019 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 Other All	05 04 13	except Foundation plots except Foundation plots Foundation plots
Cereals (e.g. Barley, Oats, Wheat)	02 12	except Select Plots Select plots
Corn Hybrid Open-pollinated	08 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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3	Foundation, Registered and Certified Production of Bean, Chickpea, Fababean, Lentil, Lupin, Pea, and Soybean
4	Certified Production of Canola, Mustard, Radish , and Rapeseed (including spring and winter varieties)
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Introduction

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.	

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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	
01.9-20140201	Sections: 0-1, 0-3, 0-4, 0-6, 0-11, 0-12, 0-13, 0-14, 0-17, 0-18, 1-1, 1-2, 1-3, 1-4, 1-7, 1-8, 2-1, 2-3, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10, 3-3, 5-4, 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8, 12-9, 12-10, 12-11, 12-12, 12-13,14.10-1, 14.10-2, Appendix A: A-1, A-2, A-3, A-6, A-7, A-8, A-11, A-12, A-13, A-16, Appendix C: C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, Appendix D: D-1, D-3	
01-10-20150201	Sections: 0-1, 0-3, 0-4, 0-6, 0-13, 0-14, 0-17, 0-18, 1-1, 1-2, 1-5, 1-7, 3-4, 4-1, 4-2, 4-3, 4-4, 4-5, 5-2, 5-3, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 8-4, 11-5, 11-8, 12-2, 12-5, 12-10, 13-1, 13-2, 13-3, 13-4, 13-5, 13-6, 13-7, 13-8, 13-9, 13-10, 13-11, Sec. 14 on 14-1, 14.14-1, 14.14-2, 18-2, 18-3, Appendix A: A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, A-16 Appendix C: C-1, C-2, C-4, C-5, C-7, C-9, C-10, C-11, C-13, C-14	
01-11-20160201	Sections: 0-1, 0-3, 0-4, 0-6, 0-12, 0-13, 0-19, 1-2, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 3-1, 3-2, 3-3, 3-4, 3-5, 4-4, 5-3, 6-8, 7-4, 10-3, 11-5, 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8, 12-9, 12-10, 12-11, 12-12, 12-13, 12-14, 12-15, 13-5, 13-10, 14.1-2, 14.1.2-2, 14.2-1, 14.2-2, 14.3-2, 14.4-3, 14.5-2, 14.6-2, 14.7-2, 14.8-2, 14.9-2, 14.10-2, 14.11-2, 14.12-3, 14.13-2, 14.14-2, 15-2, 16.1-2, 16.2-1, 16.2-2, 17-2, 19-2, 19-3, 19-4, Appendix A: A-1 to A-14, Appendix B: B-1, B-2, Appendix C: C-2, C-5 to C-14	
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	

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01-14-20190201	Sections: 0 (all pages), 1 (all pages), 2A (new), 4 (all pages), 5 (all pages), 10 (all pages), 11 (all pages), 12–14, 12A (new), 13 (all pages)	

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 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 or Select 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 or Registered seed by CSGA seed growers for sale to farmers for the production of commercial crops.

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 authorized by the federal *Seeds Act* and the *Seeds Regulations* as the Canadian 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 coregulatory relationship with the Canadian Food Inspection Agency (CFIA), has continued over the years on a partnership basis. The CSGA also works closely with the Science and Technology 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 is governed 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 and managed by an 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 pedigreeing 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 quality 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 seed 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 pedigreeing of seed and seed crops ensures varietal identity and 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.

MISSION, VISION, VALUES, OBJECTIVES

OUR MISSION

Represent and support our members, advance the seed industry and with our partners, deliver and promote a flexible, responsive, and cost effective seed certification system in Canada.

OUR VISION

The CSGA is an innovative, science-based organization committed to supporting a competitive Canadian agriculture sector as a respected global leader in seed quality assurance and genetic traceability.

OUR VALUES

Responsibility, Integrity, Accountability, Transparency, Collaboration, and Respect

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.

Canadian Seed Growers' Association

202-240 Catherine Street

Ottawa, Ontario

Canada K2P 2G8

INFORMATION AND CONTACTS

Canadian Seed Growers' Association

For more information on CSGA requirements, contact:

Mailing Address: Courier Address:

Canadian Seed Growers' Association

P.O. Box 8455 Ottawa, Ontario Canada K1G 3T1

Telephone: (613) 236-0497 Website: www.seedgrowers.ca

Fax: (613) 563-7855

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

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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 Laurie Hayes	10 - 41 West Broadway Yorkton, SK S3N 0L6	Tel: (306) 786-6266 Fax: (306) 242-1542 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		
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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 Pedigreed Seed Crop Production Circular 6.
 - Application for CSGA Seed Crop Certification and CSGA Membership Application/Renewal Form.
 - The Application Support Document which includes application deadline dates and a list of fees.
 - Contact information for seed crop inspection services.
 - Variety descriptions of the varieties you intend to produce.
 - Rogues and Roguing manual.

Samples and explanations of documents are provided in Appendix A.

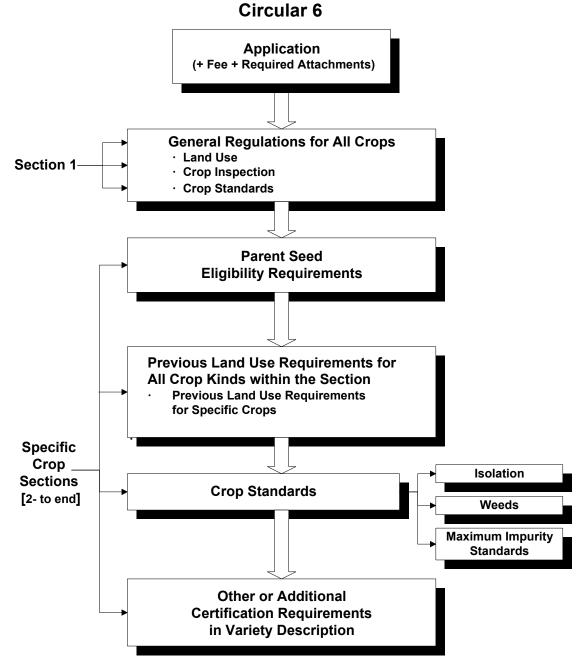
2. Purchase pedigreed seed of Foundation or Registered class.

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 CSGA 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 and, where required, difficult-to-separate other crop kinds and, weeds.
- 6. Do not harvest the crop until you are positive that the crop has been inspected by an authorized inspector.

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. The inspector cannot provide you with any anticipated decision of CSGA following the inspection of the crop.

Summary of CSGA Requirements for Seed Crop Certification



PROCEDURES FOR THE PRODUCTION OF PEDIGREED SEED CROPS

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 met the requirements for varietal purity and crop standards and shows the pedigreed status/class (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 sampling of the seed lot and testing to determine its eligibility for certification under the *Seeds Act*. Factors in this are germination, freedom from weed seeds and other crop kinds. If the seed qualifies a grader, accredited by the CFIA, can authorize printing of official labels confirming the class of seed. For pedigreed seed handled in bulk, Bulk Storage Facilities, registered by the CFIA, may issue a certificate which guarantees that the seed meets certification requirements.

Regulations

Growers should study the CSGA regulations 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 rules and procedures, the grower should contact the CSGA for clarification.

Previous Land Use Requirements

To produce pedigreed seed crops, the field must meet 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 field 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 fields in previous years.

Seed Requirements

The seed planted 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). 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 and quantity of seed planted. If purchased seed was sown, the documents are the official seed labels which were attached to the bags and/or bulk seed certification documents. If the growers produced the seed sown, the crop certificate is the required document. 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 CSGA Seed Crop Certification and CSGA Membership Application/Renewal Form

The grower completes an *Application for CSGA 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 CSGA 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. Contact CSGA if you are unsure if separate applications are required.

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

The Application for CSGA Seed Crop Certification and the CSGA Membership Application/Renewal Form are available from the CSGA office and from the CSGA members' area at www.seedgrowers.ca. An online ASCIS search tool and an Application Support Document including application deadline dates and fees 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 certification for the seed crop. 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 inspected for whatever reason;
- provide maps to identify where each field to be inspected is located
- ensure that the crop has been inspected prior to cutting the crop.
- have all the necessary documents available for the inspector

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

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 also to permit both the grower and the assignee to access all CSGA certification records for that crop. Growers assign crop certificates to an assignee on the *Application for CSGA Seed Crop Certification*. The *Application for CSGA 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 labelled according to the *Seeds 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 shall be kept of all pedigreed seed planted and shall include quantity of seed and area planted as well as field identification. Parent seed information includes crop certificate and CSGA crop sequence numbers from the *Seed Crop Inspection Report* for a grower's own seed and for purchased seed, crop certificate and seed lot numbers from official tags or bulk seed certification documents. In the case of imported seed, the seed lot will normally be labelled with official interagency labels and include a pedigree reference number for tracking purposes.

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

- Application for CSGA Seed Crop Certification and CSGA Membership Application/Renewal Form:
- crop inspection reports;
- crop certificates issued, unless the certificate was assigned to another party;
- 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 in previous years.

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 and varieties must be stored separately.

Grading and Labelling 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 labelled according to the *Seeds 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. Labels should remain on bags or containers of pedigreed seed until seeding time.

Reasons Why Crops are Declined Certification

CSGA records indicate that less than 2 percent of the crops that are inspected each year are declined certification 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.
- Off-types or Other Varieties in excess of the maximum impurity standard for the variety (e.g., awned types in an awnless variety of wheat). This may result from seed contamination, previous crops volunteering, poorly cleaned equipment or mixing of seed lots at seed processing or seeding. All seed crops should be intensively rogued throughout the growing season and prior to inspection. Official variety descriptions define the characteristics of a variety.
- **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 requirements, 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 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 certification be isolated from other crops which might be 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 Seeds Regulations.
- *Crop Cut before Inspection* results in an automatic decline of certification for the crop. Standing crops must be inspected to determine varietal purity by an authorized inspector.
- *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 certification. 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.2.3.)