
APPENDIX C

GLOSSARY

AOSA – Association of Official Seed Analysts. Membership is composed of seed analysts in Canada and the United States.

AOSCA – Association of Official Seed Certifying Agencies. Membership composed of the CSGA, CFIA, New Zealand and most certification agencies from states of the U.S. Refer to Appendix B.

ASTA – American Seed Trade Association.

Acute – Having a sharp (and rather abrupt) point.

After-harvest cultivation – Any discing or ploughing of the land after harvesting the soybean crop which will incorporate soybean seed from the crop residue into the soil so that subsequent deterioration will prevent the seed from volunteering in the following crop.

Age of Stand – The number of years during which a perennial crop may be offered for pedigree from one planting. The first seed crop is considered the first year in which a seed crop would normally be harvested, irrespective of time or method of planting. Each calendar year thereafter is considered a seed crop year.

Aleurone – The layer of high protein cells surrounding storage cells of the endosperm; it secretes hydrolytic enzymes for digesting food reserves.

Annual – The type of plant that normally starts from seed, produces flowers, sets seed and then dies within one growing season.

Anther – The sac-like structure of the male part (stamen) of a flower in which the pollen is formed. There are normally two lobes which dehisce at anthesis and allow the pollen to disperse.

Anthesis – The flowering stage when the anthers burst, pollen is shed and the stigma is ready to receive the dispersed pollen.

Apomixis – The development of seed without the sexual fusion of an egg and a sperm cell.

Appeal – Refers to the process whereby a seed grower may request the CSGA to reconsider the status of an inspected crop based on factors not given on the *Report of Crop Inspection*. The Appeals Committee of the CSGA Board of Directors reviews the case and recommends a decision to the CSGA Board of Directors. All cases brought to the Appeals Committee are considered anonymously and without bias.

Application for Crop Inspection (Form 100) – The form on which seed growers apply to the CSGA to request their crops be inspected. Details of the form include field identification, variety and kind, acreage, pedigree of seed sown, previous crop history, date seeded, crop location and farm map, and crop certificate assignment.

Asexual reproduction – Reproduction by vegetative means without fusion of two sexual cells.

Associate Member of CSGA – See Member, Associate Member of CSGA.

Associate Plant Breeder – A person recognized by the CSGA Plant Breeders' Committee and approved by the CSGA to produce Breeder seed or inbreds for hybrid corn production under the supervision of a fully qualified and recognized Plant Breeder.

Auricles – Clasp ing appendages arising at the junction of the leaf blade with the sheath (e.g., Barley auricles are large and clasping).

Authorization to Assign a Crop Certificate (Form 179) – The form signed by both grower and another party (e.g., contractor) which authorizes the CSGA to issue a Crop Certificate to the other party instead of to the grower of the crop.

Authorized Seed Crop Inspection Service – A program that has been authorized by the CFIA (Seed Section National Manager) and the CSGA to conduct pedigreed seed crop inspections.

Authorized Seed Crop Inspector – An official and/or licensed seed crop inspector as prescribed by the scope of the Quality System Procedure for that activity.

Authorized Establishment – See Registered Seed Establishment (RSE)

Backcross, backcross method – Pollen of the hybrid used on either parent or pollen from either parent used on the hybrid produces a backcross generation.

Bacterial blight – A plant disease spread by bacteria which causes death of leaves, spotting of bean pods and discoloration of seed.

Basic seed – A class of seed designated by OECD as the progeny of Pre-Basic seed. Normally this is considered equivalent to Foundation class seed in Canada and is used to produce Certified class seed.

Biennial – A crop kind that normally produces only vegetative growth the first growing season, overwinters then produces a seed crop after which the plant dies. The plant requires two years to complete its life cycle.

Bran – The outer layers of a cereal grain removed in milling, consisting of the pericarp, the testa and an aleurone layer.

Brand – A legal trademark registered by a company or distributor for its exclusive use in marketing a product.

Breeder – See Plant Breeder.

Breeder seed – Seed recognized by the CSGA as being seed of a variety (cultivar) that has been produced by a recognized plant breeder, or a plant breeder responsible for the maintenance of the variety, under conditions which have ensured that the specific traits of the variety have been maintained. It is the source for the initial and recurring increases of seed for the pedigreed classes.

Breeder Seed Crop Regulations – See *Canadian Regulations and Procedures for Production of Breeder Seed Crops*.

Breeders' Rights – See Plant Breeders' Rights.

Broadleaf – Used in weed terminology to designate a group of non-grasslike plants.

Bulk method – A plant breeding system of growing segregating generations of self-pollinating crops in a randomly mixed block. Seed for the next generation may be obtained by mass selection or a random sample. Individual selection for specific plants is not conducted until the F₆ (sixth generation) or later generations.

CFIA – Canadian Food Inspection Agency.

CSAAC – Commercial Seed Analysts Association of Canada.

CSGA – Canadian Seed Growers' Association.

CSI – Canadian Seed Institute.

CSTA – Canadian Seed Trade Association.

Canada Seeds Act and Regulations – The Canadian legislation that covers all pedigreed seed certification. The official version is available from the CFIA website.

Canadian Regulations and Procedures for Production of Breeder Seed Crops – The CSGA's requirements for professional recognition for Plant Breeders and for certification of Breeder status seed crops.

Canola – Cultivars of *Brassica napus*, *Brassica rapa* and *Brassica juncea* with specified low erucic acid and low glucosinolate content in the seed.

Cell – The basic structural unit of living organisms. The plant cell is comprised of protoplasm enclosed, in plants, in a cell wall. The protoplasm consists of a nucleus and cytoplasm which contains plastids and other small bodies. Cells may contain a cavity filled with starches, salts, sugars or other substances.

Cereal grains – Grasses (monocotyledons) cultivated primarily for their edible seeds or grains.

Certified seed – The approved progeny of Breeder, Select, Foundation or Registered seed produced by seed growers and so managed to maintain varietal identity and purity. It is the class of seed recommended for commercial crop production. The seed is graded by CFIA accredited graders, usually at Registered Seed Establishments under the federal *Seeds Act and Regulations*.

Chaff – Fragments of straw including the glume and hull removed from cereal grains in harvesting or processing.

Character, characteristic – An identifiable hereditary property of a variety, such as the specific component for flower colour, a morphological detail or resistance to a specific disease.

Circular 6 – The designation commonly used for this publication entitled, *Canadian Regulations and Procedures for Pedigreed Crop Production*, published by the CSGA.

Class (of seed and seed crop) – Refers to the generations of pedigreed seed and seed crops, such as Breeder, Select, Foundation, Registered and Certified which have met the standards prescribed by recognized seed and seed crop certification agencies.

Companion crop – A crop grown in association with a forage seeding to act as a cover crop, usually to suppress weeds. If different crop kinds, not difficult to separate, are grown in association and are harvested as one crop, each species may be considered for pedigree, provided each is inspected as an individual field unit.

Composite variety – A plant population in which at least 70% of progeny result from cross of the parent lines.

Conditioning of seed – A term used to describe the cleaning of seed, usually to improve mechanical purity.

Corn – *Zea mays* or Indian Corn, Sweet Corn, Popcorn, Field Corn and Hybrid Corn.

Cotyledon – Seed leaves of the embryo which are usually thickened for storage of food reserves and may serve as true foliage leaves.

Crop Certificate – A document issued by the CSGA which certifies that the crops identified have met the CSGA standards for the class of crop designated. A person authorized by the CSGA or the CFIA must complete the reverse side of the Crop Certificate at the time of grading and labelling the pedigreed seed. It may be assigned to another party by providing the CSGA with a completed *Authorization to Assign a Crop Certificate*.

Crop rotation – Growing of crops in a regularly scheduled sequence on the same land area, as contrasted to continuous culture of one crop or the growing of different crops in haphazard order.

Cross-pollinate – Fertilization by pollen from another plant. Cross fertilization.

Cultivar – A variety of a cultivated crop. See Variety.

Cytoplasm – The contents of a cell between the nucleus and the cell wall. In reproduction the cytoplasmic constituents from the female parent become part of the cytoplasm of the offspring. There may be a transfer of traits determined by factors contained in the cytoplasm not associated with chromosomes.

Damping-off – A disease of seeds and young seedlings caused by fungi, usually occurring at the post-emergence stage.

Defoliant – A chemical or method of treatment causing the leaves of a plant to drop off or abscise and the seeds remain attached.

Detassel – To remove the tassel or pollen producing organ at the top of the monoecious plant, usually in hybrid corn production before pollen is released.

Dicotyledonous (dicot) – Refers to plants which have two seed leaves in the seed and leaf veins that are branched.

Double-cross hybrid – The first generation progeny of a cross between two single cross hybrids.

Ecovar™ (ecological variety) – A seed source of a plant species that can be licensed and that is the result of merging plant collections from a diversity of populations and environments within an ecozone with the objective of providing a diverse commercial seed source.

Electrophoresis – The movement of colloidal particles through a fluid under the action of an electric field.

Emasculation – Removal of anthers from a flower before pollen is shed to prevent self pollination.

Embryo – The rudimentary plant within the seed.

Endosperm – Food storage material in the seed.

Enzymes – Substance produced from a gene that controls or regulates cell functions and hence the entire organism. It may catalyze and initiate a biochemical reaction.

F1 – The first generation progeny from a cross. The first filial generation.

FIS – *Federation International des Semences*, an international federation of the seed trade.

Fatuoid – A common mutant found in Oat crops. Sometimes called a False Wild Oat. It usually has heavier protruding black awns distinguishable at maturity.

Federal Seeds Act and Regulations – See *Canada Seeds Act and Regulations*.

Floret – The stamens, pistil and lodiculae enclosed by the lemma and palea.

Forages – Plants grown primarily for livestock feed and in which nearly all the top growth is harvested.

Form 43A – *Application for Plant Breeder Recognition* (Appendix A.3 of Breeder Seed Crop Regulations)

Form 43 – *Application for Breeder Seed Crop Certificate* (Appendix A.1 of Breeder Seed Crop Regulations).

Form 45 – *Breeder Seed Demotion Application*

Form 50 – *Report of Plot Production* (Appendix A.3 of Circular 6).

Form 100 – *Application for Crop Inspection* (Appendix A.1 of Circular 6).

Form 101 – *Land Use Verification – Prior to Planting* (Appendix A.9 of Circular 6).

Form 154 – *Application to Commence Probation Plot Production* (Appendix A.6 of Circular 6).

Form 179 – *Authorization to Assign a Crop Certificate* (Appendix A.4 of Circular 6).

Form 179A – *Annual Authorization to Assign a Crop Certificate* (Appendix A.4 of Circular 6).

Form 180 – *Declaration of Percent Hybrid Seed* (Appendix A.10 of Circular 6).

Form 182 – *Refuge Declaration*.

Form 200 – *Appeal Application* (Appendix A.8 of Circular 6).

Form 300 – *Variety Certification Eligibility Application*.

Foundation seed – The approved progeny of Breeder or Select seed produced by seed growers authorized by the CSGA for the production of seed of this class, and which has been so managed to maintain its specific varietal identity and purity. The seed is graded by a person authorized by the CFIA. Foundation is the highest official pedigreed class of seed of commerce.

Foundation plot grower – A seed grower approved by the CSGA to produce Foundation class seed plots, such as plots of Canola, Rapeseed, Mustard, Oilseed Radish and Industrial Hemp. This person has completed a three-year probationary period in plot production after three recent years of pedigreed seed production.

Foundation single cross – A single cross used in the production of a double-cross, a three-way cross or a top cross.

Fungi – Microscopic plants consisting of a vegetative structure called a mycelium, lacking chlorophyll and conductive tissue and reproduced by spores.

Fusiform – A plant's seed head spike that is widest in the middle and tapers to both its tip and base.

Gene – The unit of inheritance composed of DNA forming part of a chromosome, which controls the transmission and development of inherited characteristics. Its effect is generally conditioned by its interaction with other genes, the cytoplasm and environmental factors.

Generation – The designation for multiplication generations, in the Native Plant Certification program, which replaces pedigreed class names. For example, Generation 1 (G1) is equivalent to Breeder status and Generation 2 (G2) is equivalent to Foundation status in the Source Identified and Selected classes of pre-variety germplasm certification.

Genetic code – The means of storing genetic information as sequences of nucleotide bases in the chromosomal DNA.

Genetic engineering – The deliberate modification of an organism's characteristics by manipulation of DNA and transformation of certain genes.

Genotype – The genetic composition of the plant.

Germination – The resumption of growth by the embryo and development of a young plant from seed.

Germplasm – Refers to plant materials that serve as a basis of crop improvement or a reservoir of genes for research. The total hereditary makeup of organisms that determines the hereditary properties of an organism.

Glume – Two bracts found at the base of a grass or cereal spikelet.

Grower – See Seed grower.

Haploid – A term indicating one-half the normal diploid complement of chromosomes.

Haploid method – A plant breeding method for obtaining embryos with half the chromosome number followed by a doubling, usually using colchicines, to produce a homozygous plant.

Hard seed – A seed which is dormant due to the nature of its seed coat which is impervious to either water or oxygen or both.

Head – An inflorescence in which the floral units on the peduncle are tightly clustered surrounded with a group of flower-like bracts called an involucre, e.g., sunflower.

Herbicide – A chemical toxic to plants.

Heterosis – See Hybrid vigour.

Heterozygous – Refers to not breeding true for a specific hereditary characteristic, usually determined by both dominant and recessive alleles. Plants may be heterozygous for some characteristics and homozygous for others.

Hilum – The scar remaining on the seed (ovule) at the place of its detachment from the seed stalk (funiculus).

Homozygous – Refers to breeding true for a specific hereditary characteristic, usually by identical alleles.

Honorary Life Member of CSGA – A person, who is not a grower member of the CSGA, elected by the membership of the CSGA to receive this award in recognition of distinguished service to the CSGA and Canadian agriculture.

Hooded – Refers to awns on glumes that terminate in various wing-like structures.

Hull – The outer covering of a seed which may be removed freely as in Wheat or adhere as in Barley.

Hybrid – The first generation progeny of a cross between two different plants of the same species often resulting in a plant that is more vigorous and productive than either parent.

Hybrid vigour – The increase in vigour of hybrids over their parental inbred types, also known as heterosis.

Hypocotyl – The part of the embryo axis between the cotyledons and the primary root which gives rise to the stalk of the young plant.

ICIA – International Crop Improvement Association. Former name of the Association of Official Seed Certifying Agencies (AOSCA).

ISTA – International Seed Testing Association.

In vitro – Conducted outside a living organism (in contrast to in vivo).

Inbred – A relatively true breeding strain resulting from several successive generations of controlled self fertilization or back-crossing to a recurrent parent with selection or its equivalent.

Identity Preserved (IP) – Programs that segregate commercial crops, usually by variety or group of varieties, for delivery to markets with variety-specific applications. IP program requirements usually include the planting of Certified seed. Separate from pedigreed seed crop certification, CSGA's IP program since 1973 has supported the development of IP programs for many other growers and companies.

Increase – To multiply a quantity of parent seed through a generation of production.

Inflorescence – The arrangement of flowers of a plant such as umbel, raceme, spike, tassel and panicle.

Inspection – The act of inspecting a pedigreed seed crop by an inspector authorized to report to the CSGA on the condition of the seed crop offered for pedigreed status. The inspector reports on varietal impurities, difficult to separate other crop kinds, isolation, objectionable weed content, previous land use and the pedigree of the parent seed planted.

Inspector – A person designated under the authority of the federal *Seeds Act and Regulations* or other person authorized by the CSGA as an inspector of seed crops.

Intellectual property protection (IPP) – The legal measures, such as patents, Plant Breeders' Rights, trademarks, contracts and licenses, usually developed to ensure adequate returns on investment in the development of a new technology.

Interagency tags – Labels or tags applied to pedigreed seed moving from one country or state to another. Pedigreed seed brought into Canada for resale is usually labelled with Interagency tags.

ISO – International Standards Organization.

Isolation Requirements – The distance required to isolate pedigreed seed crops from other crops which may be a source of pollen or seed contamination. Used by most seed certification agencies as one of the requirements to maintain varietal purity of pedigreed seed crops.

Kernel – The seed or grain.

Labels – Issued by the CFIA, breeding institutions or the CSGA to identify the variety, pedigree identity and class of a seed lot. Sometimes called "tags."

Land use inspection – An official inspection of a non-pedigreed crop to determine the degree of contamination in the crop which may pose a varietal purity problem in a pedigreed seed crop planned to be grown on the same land the following crop season.

Legume – A plant which is a member of the *Leguminosae* family having the characteristic of forming nitrogen-fixing nodules on roots and also have dry, dehiscent multiseeded pods.

Lemma – The lower or dorsal bract of a grass spikelet enclosing the caryopsis. In Wheat it is readily removed at harvesting, but usually adheres in Barley and Oats.

Lesion – A localized spot of diseased tissue (spots, cankers, blisters, scabs).

Ligule – A membranous fringe on the inner side of a leaf at the top of the sheath; arises from the junction of the leaf blade and the leaf sheath in many grasses.

Licensed Seed Crop Inspector – An individual who has been licensed to conduct pedigreed seed crop inspection for an authorized seed crop inspection service.

Lodging – The displacement of the stems of crops from an upright position.

Male sterility – An inherited factor, useful in hybrid seed production; prevents viable pollen from being produced.

Mechanical purity – Refers to the degree of freedom of a seed lot from seeds of other crop kinds, weed seeds and inert matter.

Member: Affiliate Member of CSGA – Any person, partnership, or organization wishing to support the objectives of the Association, that are not otherwise Regular or Associate members, and who pay the applicable fees.

Member: Associate Member of CSGA – Any person, partnership, or organization actively engaged in work closely affecting the improvement and production of pedigreed seed that are elected as Associate Members by majority vote at a regular meeting of members.

Member: Regular Member of CSGA – Any person, partnership or organization producing or undertaking the production of pedigreed seed may become a Regular Member of the CSGA by applying for inspection of crops planted with parent seed eligible for certifying and paying the applicable fees.

Monocotyledon – Refers to plants with single seed leaf at the first node of the lead shoot or stem.

Monoculture – The production of a single species, often the same cultivar, over a wide geographical area.

Morphology – The form, structure and development of plants.

Multiline – A composite (blend) population of several genetically related lines of a self-pollinated crop.

Mutagen – Substance which causes or induces genetic changes or mutations.

Mutant – A plant that differs from its normal or parent strain by virtue of an altered genetic characteristic.

Mutation – A sudden heritable variation that results from changes in a gene or genes.

Native Plant Certification (NPC) – A voluntary quality control process provided by the CSGA for native plant seed identification. Although legally separate from pedigreed seed crop certification, similar CSGA documents and procedures are used to verify the origin, of collection or production, of native plant reproductive materials which have not been released as a variety. The CSGA's NPC program documents the identity of plant material and verifies that it is from a designated geographic location (Source Identified class) or selected for specific characteristics (Selected class).

Nicking – Synchronization of the receptivity of the male sterile plant to the maximum pollen load of the pollinator for cross pollination in hybrid seed production.

Non-Pedigreed crop – A crop for which a crop certificate has not been issued or recognized by the CSGA.

Norm (as applies to plant description) – The description of the characteristics of a variety as supplied by the Breeder. Also known as a variety description.

Novel traits – See Plants with novel traits.

Noxious weed – A weed or plant that is considered undesirable and so categorized by the Canada *Seeds Act*.

OECD – The Organization for Economic Co-operation and Development, an international agency which, among other things, has developed specifications, procedures and standards for international seed certification among member countries. Refer to Appendix B.

Official Seed Crop Inspector – A CFIA employee who is qualified to conduct pedigreed seed crop inspection.

Off type – Plants in a seed field which deviate in one or more characteristics from the official description of the variety.

Open pollinated – Seed produced as a result of natural pollination as opposed to hybrid seed produced as a result of a controlled pollination.

Open pollinated variety – A heterogeneous cultivar resulting from a cross-pollinated crop allowed to inter-pollinate freely during seed production (as opposed to a controlled crossed pollination).

Other crop seed – One of the four components of a seed purity test and usually refers to the number of seeds of other crop kinds in the seed sample being tested.

Outcross – The plant resulting from pollen of a different variety of the same species.

Parent or stock seed – Seed used to produce a crop eligible for pedigreed status.

Partnership – The CSGA may establish a partnership record for the production of pedigreed seed restricted to those members who are actively participating in a single farm unit and may include contractual employees or shareholders.

Pathogen – Any organism capable of causing disease in a host or range of hosts.

Pedigreed class or status – See Class.

Pedigreed crop – A crop for which the CSGA, based on a crop inspection report and compliance with all certification requirements, has issued a crop certificate which indicates that the crop has been granted Breeder, Select, Foundation, Registered or Certified crop status.

Pedigreed seed – Seed is recognized as having pedigreed status when derived from a pedigreed crop. Seed originating outside of Canada must be certified by a foreign certification agency recognized by the CFIA before being considered pedigreed seed in Canada.

Pedigreed graded seed – Pedigreed seed meeting the grade requirements of the federal *Seeds Act and Regulations*.

Perennial – A plant that produces vegetative growth each year without replanting.

Perfect flower – A flower having both staminate (male) and pistillate (female) organs.

Phenotype – A set of observable characteristics of an individual or group usually determined by genotype and environment.

Plant Breeder – For pedigreed seed production, a plant breeder is any person recognized as such by the Plant Breeders' Committee of the CSGA and the CSGA Board of Directors and who is knowledgeable in the principles and practices of plant breeding and related disciplines and actively engaged in the selection and synthesis of superior varieties, production and maintenance of cultivars true to identity and purity.

Plant Breeders' Rights (PBR) – Canadian legislation, enacted in 1990, that allows Plant Breeders to legally protect their new varieties of plants, for up to 18 years, through exclusive rights respecting multiplication and sale; provides a legal basis for compensation for the use of a cultivar by others. Similar legislation is known as Plant Variety Protection (PVP) in the U.S. and UPOV Convention in the European Union. Refer to Appendix B.

Plant breeding – An organized effort to produce progressively better adapted plants.

Plant Breeding Station – An institution or facility where varieties are developed and Breeder seed is produced and maintained.

Plant with novel traits (PNT) – A plant variety or genotype, with characteristics that demonstrate neither familiarity nor substantial equivalence to those present in a distinct, stable population of a cultivated species of seed in Canada, that has been intentionally selected, created or introduced into a population of that species through a specific genetic change.

Pollen – The cells that are borne in the anthers of flowers and contain the male generative cells.

Pollen parent – The parent that furnishes the pollen which fertilizes the ovules of the other parent in the production of seed.

Pollination – The process by which pollen is transferred from an anther to the stigmatic surface of the pistil of a flower.

Pre-Basic seed – An OECD class of pedigreed seed which is considered in Canada as equivalent to Breeder seed and is used for the production of Basic seed or Foundation seed.

Pre-Variety Germplasm – The category of AOSCA certification standards used for the collections and selections of plants, usually perennial native forage grasses, legumes and forbs, that are not sufficiently distinct, uniform or stable to be certified as varieties. In Canada, separate from pedigreed seed crop certification, these standards are used in the CSGA's Native Plant Certification (NPC) program for Source Identified and Selected class seed crop certification.

Progeny – Offspring or plants grown from seed.

Prohibited noxious weed – A weed or plant that is considered so undesirable that it is categorized as Prohibited Noxious (Class 1) in the Weed Seeds Order of the Canada Seeds Act.

Pubescent – Describing a hairy covering.

Quality Management System (QMS) – The clearly defined and documented quality standards, procedures and responsibilities for an organization.

Quality System Procedures (QSP) – The activities involved in a specific sector of a quality management system as well as the roles and responsibilities of all parties involved. Examples related to the CSGA include the CFIA's Pedigreed Seed Crop Inspection Procedures, QSP 142.1, which is used to describe and audit the CSGA and the CFIA seed crop inspection requirements and references Specific Work Instructions (SWI) for different crop kinds.

Raceme – A type of flower cluster in which single-flowered pedicels are arranged along the sides of a flower shoot terminus. There is space along the shoot between the pedicels.

Radicle – A rudimentary root, the lower end of the hypocotyl of the embryo and the primary root of the seedling.

Referee Plant Breeder – A plant breeder recognized by the CSGA to make decisions on varietal identification of crops.

Registered seed – The approved progeny of Breeder, Select or Foundation seed produced by members of the CSGA and so managed to maintain specific varietal identity and purity. Registered seed is graded and labelled by persons authorized by the CFIA under the requirements of the federal *Seeds Act and Regulations*.

Registered Seed Establishment (RSE) – A seed cleaning establishment operated by seed growers or companies that has been accredited by the CFIA to grade and sell bulk or bagged pedigreed seed and which is audited by the Canadian Seed Institute (CSI) for compliance with the federal *Seeds Act and Regulations* and CSI standards.

Registration – The process, formerly known as licensing, whereby CFIA under the authority of the federal *Seeds Act and Regulations* and recommendations from committees established to make judgements on the acceptability of new varieties, prescribes which varieties may be sold by variety name in Canada.

Renovation or rejuvenation – The process of restoring productivity to plants growing in solid stands by cultivation, fertilization, reseeding or other methods.

Replications – Repetition of treatments or plots in experiments which allows for statistical analysis.

Report of Seed Crop Inspection – A form on which the crop inspector describes the crop offered for pedigreed status and which is appraised by the CSGA to determine if the crop as described meets the requirements of the CSGA's regulations (Appendix A.2 of Circular 6).

Responsible Plant Breeder – The plant breeder or breeding organization that is officially recognized as the maintainer of Breeder seed reference samples and production for a variety.

Robertson Associate – An award of recognition presented to a Regular Member of the CSGA for distinguished service to CSGA, as voted by the membership.

Rogues – Undesirable plants growing in a pedigreed seed crop. May arise as a result of a mutation, intercrossing, mechanical mixtures or cross pollination.

Roguing – Process of removing rogues, off-types, other crop kinds and undesirable plants from seed fields.

SCST – Society of Commercial Seed Technologists.

Sampling – The method by which a representative sample is taken from a seed lot to be used for analysis.

Sclerotia (sclerotium) – Compact mass of fungus hyphae usually with a black outer surface and white inside. May remain dormant for long periods and eventually gives rise to more fungus.

Seed grower (pedigreed) – An individual who applies for the inspection of a crop offered for pedigree, grows the crop in accordance with the *Canadian Regulations for Pedigreed Seed Crop Production* of the CSGA and who accepts full responsibility for the production and management of the seed crop and all related financial obligations.

Seedborne – Carried on or in seeds.

Seedcoat – The protective covering of a seed usually composed of inner and outer integuments. Also called the testa.

Seedling – A young plant grown from seed.

Seeds Regulations – See Federal *Seeds Act and Regulations*.

Selected – The seed certification class of pre-variety germplasm which provides third party assurance of identity, usually for perennial native forage grasses, legumes and forbs produced from selected parent populations with distinctive, identifiable characteristics or potential genetic improvement. Selected class seed labels, issued by the CSGA, identify the name assigned to the selection by the responsible Plant Breeder.

Select seed – The approved progeny of Breeder or Select seed produced in a manner by seed growers authorized by the CSGA to maintain its varietal identity and purity. Select seed may be produced from Select seed for a maximum of five multiplications from Breeder seed.

Select (Synthetic) – A CSGA category for a specific combination of seed lots from inspected Breeder or Foundation of Canola used in the production of a Certified seed crop.

Select plot grower – A seed grower who has been approved by the CSGA for the production of Select seed crops. This person has completed a three-year probationary period of plot production after three recent years of pedigreed seed crop production.

Single-cross hybrid – The first generation of a cross between two specified inbred lines.

Source Identified (SI) – The seed certification class of pre-variety germplasm which provides third party assurance of geographic origin, usually for perennial native forage grasses, legumes and forbs produced from parent populations which have not been selected. Source Identified class seed labels, issued by the CSGA, identify the original geographic location, of the collection or production, that has been declared by the responsible Plant Breeder.

Specific Work Instructions (SWI) – The procedures required to implement specific requirements of a Quality System Procedure (QSP). Examples related to the CSGA include the CFIA's Field Corn Seed Crop Inspection Procedures, SWI 142.1.2-1 and Soybean Seed Crop Inspection Procedures, SWI 142.1.2-6.

Spike – A basic type of inflorescence in which the flowers arise along the rachis.

Spikelet – The unit of the grass flower which includes the two basal glumes subtending one to several florets.

Stamen – The part of the flower, bearing the male reproductive cells, composed of the anthers on a stigma (stalk).

Stigma – The upper part of the pistil that receives the pollen.

Stock or parent seed – Seed used to produce a crop eligible for pedigreed status.

Stolons (stoloniferous) – Plants with laterally creeping stems at or below the soil surface from which buds and new plants arise. Some bear tubers at their ends.

Strain or line – A term used to designate an improved selection of a variety.

Tassel – The flower cluster at the tip of monoecious plants, such as corn, comprised of pollen bearing flowers (staminate inflorescence).

Test weight – The weight of a specified volume of grain.

Three-way cross hybrid – The first generation of a cross between an inbred and a single-cross hybrid.

Top-cross hybrid – The first generation of a cross between an inbred line and an open pollinated variety.

Tramlines – Unseeded, equispaced tracks established in a field at seeding time to provide a pass in the field for tractors to use to aid in the application of chemicals and fertilizer.

Transgenic – Traditionally refers to having genetic material introduced from another species.

Trier – A hand manipulated probe for sampling seeds.

Variante – Any seed or plant which (a) is distinct within the variety but occurs naturally within the variety; (b) is stable and predictable with a degree of reliability compared to other varieties of the same kind, within known tolerances; and (c) is described as a variation in the official variety. It is not an off-type, and only considered an impurity if reported in excess of the acceptable level specified by the responsible Breeder.

Varietal purity – Trueness to type or variety.

Varietal-cross hybrid – The first generation of a cross between recognized stocks of two open pollinated varieties.

Variety (cultivar) – Denotes an assemblage of cultivated individual plants which is distinguished by characteristics (morphological, physiological, cytological, chemical or other) significant for the intended purpose and which retains its distinguishing characteristics when reproduced. Is uniform, stable and reproducible.

Variety description – Document in which the responsible Plant Breeder specifies the distinguishing characteristics of a variety.

Variety maintainer – A special status elite parent seed or Select/Foundation Plot seed grower recognized by the CSGA as eligible to produce Breeder, inbreds or hybrid seed under the supervision of a Plant Breeder recognized by the CSGA.

Vernalization – The exposure to certain conditions of cold temperature and photoperiod to seed and young plants which promotes floral induction without development of the plant especially with Winter Wheat or Winter Barley.

Vigour – The vitality or strength of germination especially under unfavourable conditions.

Volunteer plants – Unwanted plants growing from residual seeds from the previous crop.

Weed – Any plant in a place where it is a nuisance. Usually denotes uncultivated plants growing in fields.

Weed seed (percentage) – The percentage by weight of a seed lot which is composed of seeds of plants considered to be weeds.

Wheat – In the CSGA regulations, includes all kinds of Wheat (durum, spring and winter), as well as einkorn, emmer and spelt.

Winter annual – A plant that develops a seedling stage in the early fall, becomes vernalized over the winter and then produces vegetative and reproductive growth the following season.

Winter hardiness – Ability of a plant to withstand the conditions of a cold winter.

Zero Tillage – A system to improve soil conservation where the new crop is planted into the stubble of the previous crop with even less soil disturbance than with minimum tillage.