

OPERATING PROCEDURES
OF THE
ONTARIO CANOLA RECOMMENDING COMMITTEE

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1.0 INTRODUCTION

This document outlines the pre-registration testing system protocol and evaluation process for the Ontario Canola Recommending Committee (OCRC) which is recognized as a Recommending Committee by the Variety Registration Office (VRO) of the Canadian Food Inspection Agency (CFIA). The OCRC evaluates candidate varieties of spring canola and winter canola for merit as a part of pre-registration requirements and makes recommendations for registration to the VRO for Ontario, province of Canada. The procedures for variety testing are documented and reviewed annually by the OCRC, and are available to the public, upon request to the Secretary of the committee (for eligibility criteria, see Appendix 2).

As required by the *Seeds Regulations* paragraphs 65.1 (1) (e) and (2) (c), each Recommending Committee shall function transparently and deal with varieties in a fair and consistent manner.

1.1 Legislation and Authority

The *Seeds Act* is the legislative authority for the *Seeds Regulations*. In section 65.1 of the *Seeds Regulations* (Appendix I) there is a provision for the Minister of Agriculture and Agri-Food to approve crop-specific variety registration recommending committees. The purpose of each recommending committee is to establish and administer protocols for testing varieties of crop kinds listed in Parts I (e.g. canola) and II of Schedule III of the *Seeds Regulations*, to determine the merit of varieties of crop kinds listed in Part I and, subsequently, to make registration recommendations to the Registrar, VRO. In practice, the Minister's authority to approve each recommending committee is delegated to the Registrar (currently the National Manager, Seed Section, CFIA).

These committees are integral to the variety registration system in Canada and serve to provide expertise and guidance to the Registrar.

1.2 Role of the Variety Registration Office

The VRO reviews and approves each committee's operating procedures document annually. Any changes to this document require approval by the committee members and subsequent approval by the VRO. The VRO issues an annual approval letter, signed by the Registrar on behalf of the Minister to each variety recommending committee in Canada. This letter recognizes the committee as the sole authority in that region to provide variety registration recommendations to the VRO for the year.

The VRO has regulatory oversight of the recommending committees to ensure that the committees are functioning transparently and that varieties are dealt with in a fair and consistent manner, in accordance with the approved committee operating procedures and in compliance with the *Seeds Regulations*. The VRO provides guidance on the requirements of the *Seeds Act* and the *Seeds Regulations* to all the recommending committees as required. The committees provide their expertise and advice to the VRO, and this is considered by the Registrar in rendering a decision on variety registrations.

The VRO (the Registrar) is also the 'court of last resort' for stakeholders taking issue with the compliance of the recommending committees with the Operating Procedures, or the *Seeds Regulations*, the first step being to contact the committee itself with the grievance.

The list of all current, recognized recommending committees can be found on the CFIA website at: <http://www.inspection.gc.ca/plants/variety-registration/registration-procedures/recommending->

2.0 THE ONTARIO CANOLA RECOMMENDING COMMITTEE

2.1 Mandate, Objectives, Roles and Responsibilities

The mandate of the OCRC as a recommending committee is:

- to determine merit¹ criteria to be used in evaluating candidate varieties (as defined in the *Seeds Regulations*),
- to establish practical and science-based test protocols and approve test data,
- to develop a written procedures manual, and
- to evaluate trial summaries to determine the merit of candidate varieties of crop kinds for which they are recognized.

The OCRC has no registration recommending authority outside the province of Ontario, Canada for which it is recognized.

The objective of the OCRC is to recommend to the VRO candidate varieties of all types of spring canola and winter canola, for registration based on merit and in accordance with the approved committee operating procedures.

The role of the Ontario Canola Recommending Committee (OCRC) is to act as the recommending committee for canola variety registration in Ontario.

As a CFIA recognized recommending committee, the OCRC's tasks include:

- Understanding and following the *Seeds Act* and CFIA guidelines regarding registration of canola varieties
- Setting variety registration protocols and minimum standards for support of registration such as agronomic performance, quality, disease reaction, and check varieties
- Evaluating sponsor generated and supplied data to determine adherence to protocols
- Advising CFIA on merit based candidate variety recommendations;
 - To support or not support a candidate variety for registration in Ontario, or
 - To support or not support a national registration for a candidate variety

2.2 Membership

The OCRC is comprised of representatives from the agricultural research and/or service branches or divisions of the federal and provincial governments; university researchers; and organizations representing growers, seed companies, end-users, crop advisors, or other stakeholders in the canola sector (see 2.2.1).

All costs associated with membership on the OCRC are to be covered by the member's organization (i.e. travel, meals, accommodation, etc.).

¹ "merit" means, with respect to a variety, that the variety is equal or superior to appropriate reference varieties with regard to any single characteristic or combination of characteristics that renders the variety beneficial for a particular use in a specific area of Canada.

All other individuals with a valid interest in the canola sector may attend committee meetings as non-voting observers, with permission of the Chair.

The voting representatives are named by the respective organization and are recognized by the committee. The term of membership for a voting member is three years and may be renewed upon a simple majority vote of the OCRC.

The Chair and Secretary of OCRC are elected by the voting membership at the Annual Meeting from among the general membership of the committee. The term of office is 2 years and may be renewed upon a simple majority vote of the OCRC.

2.2.1 Voting Member Institutions

For members' names and contact information, see Appendix 3. Each voting member institution has one vote on the committee.

- Chair (as needed to break a tie)
- Ontario Canola Growers' Association (OCGA)
- Ontario Soil and Crop Improvement Association (OSCIA)
- Ontario Seed Growers Association (OSGA)
- Canadian Seed Trade Association (CSTA)
- Ontario Certified Crop Advisor Association
- Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
- Agriculture & Agri-Food Canada Research centres (AAFC)
- University of Guelph (Research)
- Canadian Oilseed Processors Association
- Canola Testing Coordinator

2.2.2 Ex Officio Members (non-voting)

- Canadian Food Inspection Agency
- Canadian Grain Commission

2.2.3 Eligibility for Membership

Additional members that represent a sector of the value chain or area of expertise not currently represented on OCRC may be added to the committee via a simple majority vote.

An organization may apply for membership on the OCRC by submitting a written request to the Secretary of the OCRC, outlining the area of expertise/interest of the organization, why it believes that area of interest is not currently represented on the OCRC and why it believes that it is the organization best suited to represent that area of interest on OCRC.

2.3 Meetings

The OCRC regularly meets in January of each year. Other meetings may be held as required and may be conducted by conference call or via internet/email. In the absence of the Chair, the Past Chair shall preside.

All interested parties are welcome to attend and participate in meetings of the OCRC at the discretion of the meeting chair.

2.4 Voting Procedures

Fifty percent attendance of the voting committee membership constitutes a quorum. Only designated voting committee members may vote. In the absence of a member organization's named representative, another member of that organization may be granted voting privileges for that meeting. Over fifty percent of the voting members present must vote in the affirmative for a motion to be carried. A secret ballot may be requested by any member for any motion, with approval of a majority of the members present.

2.5 Voting Options

There are only three possible voting options for committee members:

- 1) To **support** (the motion),
- 2) To **object** to (the motion) or, rarely,
- 3) To **abstain** from voting.

Abstaining is only appropriate if there is a real or perceived conflict of interest. A lack of suitable data is not a valid reason for abstaining from voting on variety recommendations.

2.6 Waiving of Rules

The OCRC may in its wisdom choose to set aside the existing rules for merit assessment for a specific variety where the overall merit of the variety is being considered. A simple majority vote is required to suspend or waive rules.

Applicants can request that the committee set aside the rules to consider the merit of a variety that otherwise has failed to meet the standard for one or more required characteristics. The OCRC may take the vote on a variety-by-variety basis or they may choose to group all such varieties together and take a single vote for the group. For this to proceed, a simple majority vote must be held to set aside the rules. The committee will then hear the applicant's request (a presentation of the attributes of the variety and why it should be considered) followed by a registration recommendation vote based on a simple majority.

2.7 Conflict of interest (with respect to voting on the committee)

If a variety sponsor believes that a conflict of interest is responsible for their variety not being recommended by the committee, their recourse is to file an appeal with the committee and present their case on potential conflicts affecting the support decision (see also Section 7.0: Appeals).

3.0 SPRING CANOLA EVALUATION PROCEDURES

3.1 Sponsors

Candidate canola variety must be submitted and supported through a Canadian sponsor such as a Canadian public institution, Canadian university, a resident of Canada or an organization or business

based in Canada involved in an agricultural endeavour.

3.2 Valid Trial Locations

OCRC does not coordinate trials to evaluate spring canola cultivars. OCRC will consider candidate spring canola cultivars for support of registration using data provided by the variety sponsor from valid private or public trials. Private trials may be conducted by the variety sponsor or a qualified third party variety testing service. Data will be accepted from valid trials within Ontario only. Relevant additional data may be considered on an ad hoc basis.

To be eligible for support for registration and recommendation, an entry must be tested for at least two crop years. A minimum of 4 station-years of valid data are required with at least 2 station-years of valid data from each crop year. Decisions on registration will be based on the performance of entries averaged over all valid test locations and years.

3.3 “Plants With Novel Traits” Varieties

A PNT (Plant with Novel Trait) must be approved for unconfined release and exempt from stewardship before being planted in registration trials and before support for registration can be considered.

When a request is made for OCRC support for registration of a variety carrying a PNT, the sponsor must inform the OCRC at the time of request for support that the variety is a PNT and also reveal the modified trait to the Committee. In the event that this information is considered business confidential, the sponsor can request a confidential disclosure to a subset of the OCRC to review the candidate. All other requirements for registration support must be met as outlined below.

3.4 Check Varieties

OCRC reserves the right to determine the appropriate check(s) to be used in making comparisons. Candidate lines will be compared with the check varieties that were designated by the OCRC when the candidate was first tested in registration trials. The check varieties for candidate lines first entered in 2017 will be Pioneer 45H29 and Bayer 5440.

3.5 General Guidelines for Private Tests

- a) Companies must notify the Canola Testing Coordinator of their intent to conduct registration trials by March 15 of the year in which the trial is planted. Companies may collaborate in conducting private trials.
- b) The total number of candidate entries that may be included in these trials is limited to 30, plus check varieties. All applicable check varieties must be included in the private trials (see section 3.3).
- c) Companies are responsible for collecting the appropriate field and seed data, analyzing and submitting the results to the Canola Testing Coordinator by November 30 of the year in which the trial was harvested.

- d) A maximum of ten entries may be carried forward into the second year of testing during any one year. For consideration for support for registration, the two years of private data will be averaged over the total number of station-years. A data processing fee (Appendix 4) will be payable, to OCRC, for each entry to be considered for support for registration to cover the cost of maintaining and preparing data for the committee.
- e) The company or institution agrees that all data from valid trials will be used in making comparisons for the purpose of supporting an entry for registration. Data from approved, inspected trials can be discarded if the CV exceeds the acceptable standard or in consultation with the Canola Testing Coordinator. The company will choose which entries are to be carried forward and are responsible for compiling data in support of registration, which is to be submitted to the Canola Testing Coordinator by December 31 prior to the OCRC meeting at which the candidate line will be considered.

3.6 Testing Methods, Experimental Design and Management

Test sites are to be managed using accepted agronomic practices and the utmost care should be taken to ensure successful tests.

- The test site should provide uniform growing conditions so as to reduce the level of test variability. Tests should be oriented so as to minimize the effect of any site variability.
- Yield tests will be conducted in 6- or 8- row plots with approximately 25 or 18 cm, respectively, between rows.
- A minimum of 2 border rows must be planted on each side of the test area.
- Tests should use a randomized complete block design with a minimum of four replications.
- Tests should be planted as early as conditions permit at a seeding rate of 80 to 140 viable seeds/m².
- Pest infestations that threaten the viability of the trial should be controlled using registered pesticides applied according to label recommendations.
- Plot lengths and harvesting methods will be left to the personnel conducting the tests.
- The entire plot is to be harvested, and swathing and/or harvest date recorded for each site.

3.7 Inspection of Test Sites

The private test sites will be inspected prior to maturity by a representative or designate of OCRC, to ensure trial quality and compliance in accordance with the OCRC protocols. Only data from inspected trials will be accepted. Companies must provide the Canola Testing Coordinator with the location of private registration trials to be inspected and a list of entries by June 15th of the year in which the trial is grown.

The inspector will be reimbursed for his/her expenses plus a \$50.00 honorarium by the host company. The inspector may choose to have his/her payment made to OCRC and deposited to his/her account.

Test site sponsors should notify the Canola Testing Coordinator in writing or by email of any problems with individual tests as soon as they are observed.

3.8 Data Collection

Agronomic data will be collected as appropriate and will include:

- flowering date
- plant height at maturity
- maturity date (when 25% of the seeds are not green)
- swathing date (where applicable)
- harvest date
- lodging
- blackleg ratings
- disease and insect ratings
- moisture content at harvest
- yield adjusted to 8.5 % moisture
- any management challenges including weeds, insects or diseases should be shared in the trial summary

Quality determinations will include:

- 1000-seed weight
- percent green seed
- percent brown seed
- oil content of the seed
- protein content of the seed
- free fatty acid content of the oil

Erucic acid may be measured on seed prior to planting at the discretion of OCRC. Glucosinolate content will be measured for varieties to be supported for registration, using samples composited across replications.

3.9 Valid Tests

Trials must attain a yield CV of $\leq 20\%$ to be considered valid. Replications not representative of the trial may be eliminated at the discretion of OCRC. However, a trial must have at least 2 valid replications to be acceptable.

3.10 Quality Testing

All measurements of seed characteristics and quality parameters must be conducted using procedures approved by the Canadian Grain Commission.

<http://www.grainscanada.gc.ca/oilseeds-oleagineux/method-methode/omtm-mmao-eng.htm>

Quality measurements will be made by the Department of Plant Agriculture, University of Guelph, on samples composited over replications within each test. If quality data are submitted from laboratories other than the University of Guelph, those laboratories must be certified under the Canadian Grain Commission, Grain Research Laboratory certification scheme.

Quality analyses will be conducted on lines to continue into a second year of testing and on lines to be considered for support for registration, and on checks from these trials. Samples will be analyzed for 1000-seed weight, green and brown seed percent, oil and protein content, and free fatty acid content. Erucic acid and glucosinolate levels will be tested only on varieties to be considered for support of registration.

A 100-gram composite sample (bulked over replications) of seed from each trial for each entry to be tested and each check variety must be sent to the Canola Testing Coordinator by Oct. 1.

3.11 Fees

For the fee schedule, see Appendix 4.

3.12 Support for Registration

a) Number of Trials Required

An entry must be tested for at least two (2) years, with a minimum of four (4) valid tests during that period and at least two (2) valid tests in each year to be eligible for support for registration by OCRC.

b) Yield and Quality Standards

To be supported for registration, entries must meet canola standards. An entry must not have characteristics that could potentially harm the Ontario canola industry.

Entries will be compared with the spring canola check cultivars. To be supported for registration by the Committee an entry must:

- Be equal to, or better than, the average of the checks in yield
- Have less than 0.3% erucic acid in the oil and less than 12 micromoles total glucosinolates per gram of seed at 8.5 % moisture
- Have an average oil content on a dry whole seed basis no less than 2.0% below the mean of the checks
- Have an average oil plus protein content no less than 2.5% below the mean of the checks, where protein content is expressed as a percent of dry oil-free meal at 8.5% moisture
- Have a free fatty acid (FFA) content, expressed as a percent of total oil, no higher than 130% of the mean of the checks at 8.5% moisture

All comparisons are made based on the mean of all valid location-years, except for FFA content. For FFA content, each year is weighted equally, regardless of the number of locations per year.

4.0 WINTER CANOLA EVALUATION PROCEDURE

4.1 Sponsors

Candidate canola variety must be submitted and supported through a Canadian sponsor such as a Canadian public institution, Canadian university, a resident of Canada or an organization or business based in Canada involved in an agricultural endeavour.

4.2 Valid Trial Locations

OCRC does not coordinate trials to evaluate winter canola cultivars. OCRC will consider candidate winter canola candidates for support of registration using data provided by the variety sponsor from valid private or public trials. Private trials may be conducted by the variety sponsor or a qualified third party variety testing service. Data will be accepted from valid trials in Ontario, Quebec, Atlantic Canada and US states adjacent to the Great Lakes provided that such trials were conducted in Plant Hardiness Zone 5b or colder

as per USDA zone designations.

To be eligible for support for registration and recommendation, an entry must be tested for at least two crop years. A minimum of 4 station-years of data are required with at least 2 station-years of data from each crop year. Decisions on registration will be based on the performance of entries averaged over all valid test locations.

4.3 “Plant with Novel Traits” Varieties

A PNT (Plant with Novel Trait) must be approved for unconfined release and exempt from stewardship before being planted in registration trials and before support for registration can be considered.

When a request is made for OCRC support for registration of a variety carrying a PNT, the sponsor must inform the OCRC at the time of request for support that the variety is a PNT and also reveal the modified trait to the Committee. In the event that this information is considered business confidential, the sponsor can request a confidential disclosure to a subset of the OCRC to review the candidate. All other requirements for registration support must be met as outlined below.

4.4 Check Varieties

Tests will include currently registered winter canola cultivars to be used as checks. Any winter canola variety that is currently registered in Canada may be used as the check. Candidate lines will be compared with the same check variety in all years of the trials.

4.5 General Guidelines for Private Tests

- a) Companies must notify the Canola Testing Coordinator of their intent to conduct registration trials by August 15 of the year in which the trial is planted. Companies may collaborate in conducting private trials.
- b) The total number of entries in these trials is limited to 30 plus check varieties. At least one winter canola check variety must be included in the trials.
- c) Companies are responsible for collecting the appropriate field and seed data, analyzing and submitting the results to the Canola Testing Coordinator by November 30 of the year in which the trial was harvested.
- d) A maximum of ten entries may be carried forward into the second year of testing during any one year. For consideration for support for registration, the two years of private data will be averaged over the total number of station-years. A data-processing fee (Appendix 4) will be payable to OCRC, for each entry to be considered for support for registration to cover the cost of maintaining and preparing the data for the committee.
- e) The company or institution agrees that all data from valid trials will be used in making comparisons for the purpose of supporting an entry for registration. Data from approved, inspected trials can be discarded if the CV exceeds the acceptable standard or in consultation with the Canola Testing Coordinator. The company will choose which entries are to be carried forward and are responsible for compiling data in support of registration, which is to be submitted

to the Canola Testing Coordinator by December 31 prior to the OCRC meeting at which the candidate line will be considered.

4.6 Testing Methods, Experimental Design and Management

Test sites are to be managed using accepted agronomic practices and the utmost care should be taken to ensure successful tests.

- The test site should provide uniform growing conditions so as to reduce the level of variability. Tests should be oriented so as to minimize the effect of any site variability.
- Yield tests will be conducted in 6- or 8-row plots with approximately 25 or 18 cm, respectively, between rows.
- A minimum of 2 border rows must be planted on each side of the test area.
- Tests should use a randomized complete design with a minimum of four replications.
- Tests should be planted at a seeding rate of 80 to 140 viable seeds/m².
- Pest infestations that threaten the viability of the trial should be controlled using registered pesticides applied according to label recommendations.
- Plot lengths and harvesting methods will be left to the personnel conducting the tests.
- The entire plot is to be harvested, and swathing and/or harvest date recorded for each site.

4.7 Inspection of Test Sites

The private test sites within Ontario will be inspected prior to maturity by a representative or designate of OCRC, to ensure that they have been managed in accordance with the OCRC protocols and will fairly evaluate the candidate varieties. Test sites outside of Ontario will be inspected by a representative of the OCRC or an individual appointed by the OCRC. Only data from trials that have been inspected will be accepted. Companies must provide the Canola Testing Coordinator with the location of private registration trials to be inspected and a list of entries by May 1st of the year in which the trial is harvested.

The inspector will be reimbursed for his/her expenses plus a \$50.00 honorarium by the host company. The inspector may choose to have his/her payment made to OCRC and deposited to his/her account.

Test site operators should notify the Canola Testing Coordinator in writing of any problems with individual tests as soon as they are observed.

4.8 Data Collection

Agronomic data will be collected as appropriate and will include:

- winter survival
- flowering date
- plant height at maturity
- maturity date (when 25% of the seeds are not green)
- swathing date (where applicable)
- harvest date
- lodging
- blackleg ratings
- disease and insect ratings
- moisture content at harvest
- yield adjusted to 8.5 % moisture

- any management challenges including weeds, insects or diseases should be shared in the trial summary

Quality determinations will include:

- 1000-seed weight
- percent green seed
- percent brown seed
- oil content of the seed
- protein content of the seed
- free fatty acid content of the oil

Erucic acid may be measured on seed prior to planting at the discretion of OCRC. Glucosinolates will be measured for varieties to be supported for registration, using samples composited across replications.

4.9 Valid Tests

Trials must attain a yield CV of $\leq 20\%$ to be considered valid. Replications not representative of the trial may be eliminated at the discretion of OCRC. However, a trial must have at least 2 valid replications to be considered acceptable.

4.10 Quality Testing

All measurements of seed characteristics and quality parameters must be conducted using procedures approved by the Canadian Grain Commission.

<http://www.grainscanada.gc.ca/oilseeds-oleagineux/method-methode/omtm-mmao-eng.htm>

Quality measurements will be made by the Department of Plant Agriculture, University of Guelph, on samples composited over replications within each test. If quality data are submitted from laboratories other than the University of Guelph, those laboratories must be certified under the Canadian Grain Commission, Grain Research Laboratory certification scheme.

Quality analyses will be conducted on lines to continue into a second year of testing and on lines to be considered for support for registration, and on checks from these trials. Samples will be analyzed for 1000-seed weight, green and brown seed percent, oil and protein content, and free fatty acid content. Erucic acid and glucosinolate levels will be tested only on varieties to be considered for support of registration.

A 100-gram composite sample (bulked over replications) of seed from each trial for each entry to be tested and each check variety must be sent to the Canola Testing Coordinator by Oct. 1.

4.11 Fees

For the fee schedule, see Appendix 4.

4.12 Support for Registration

a) Number of Trials Required

An entry must be tested for at least two (2) years, with a minimum of four (4) valid tests during that period and at least two (2) valid tests in each year to be eligible for support for registration by

OCRC.

b) Yield and Quality Standards

To be supported for registration, entries must meet canola standards. An entry must not have characteristics that could potentially harm the Ontario canola industry. Special consideration will be given to entries that exhibit significant improvement in winter survival or blackleg resistance.

Entries will be compared with the winter canola check cultivar. To be supported for registration by the Committee an entry must:

- be equal to, or better than the appropriate check in yield
- have similar lodging resistance
- be no more than 5% below the check in % winter survival
- have a blackleg rating no higher than the check, based on a scale of 0 (none) to 4 (75 to 100% of plants severely affected by basal cankers)
- have less than 0.3% erucic acid in the oil and less than 12 micromoles total glucosinolates per gram of seed at 8.5 % moisture
- be no more than 1.0% below the check in oil (whole seed basis) and no more than 1.5% below the check in oil plus protein content, where protein content is expressed as a percent of the oil free meal at 8.5% moisture

5.0 REGISTRATION

5.1 Registration Options

Once an entry is supported by OCRC for registration, the sponsoring individual or organization is free to seek registration from the Variety Registration Office of the Canadian Food Inspection Agency in Ottawa. A sponsor may delay application for registration because of a lack of seed supplies.

Registration may be deferred for up to two (2) years from the time support for registration is granted by OCRC. If a line/variety is not registered within these two years, support will be withdrawn and the line/variety will be removed from further testing.

5.2 Registration Categories

The committee has three primary registration options to consider when recommending a variety:

- (1) National registration (non restrictive)
- (2) Interim registration (restrictive)
- (3) Contract registration (restrictive)

Based on the result of the trials, the committee will provide recommendations to the CFIA as follows:

- That they ‘support’ or ‘do not support’ candidate varieties for registration
- That they ‘object’ or ‘do not object’ to the National registration of a variety: Some varieties of certain crop kinds (e.g., wheat) may be desirable in one region but could be deemed to be a threat to crop production in other regions. In this case, the VRO consults recommending committees other than the committee that supported the variety to see if they object or do not object to the National registration of the variety being recommended.

5.2.1 National Registration (non restrictive)

Candidate varieties which have merit, as determined by the committee, will be recommended for registration. By default, all variety recommendations from a recommending committee are for National registration. After the committee's recommendation and during the variety registration process, other regional committees that exist for that same crop kind will be contacted to see if they have any objection to the National registration of the variety. An objection by another recommending committee (same crop, different region) can only be based on the candidate variety being assessed as a potential harm to a given crop sector in a given region of Canada (e.g., due to disease susceptibility or to significantly inferior end use characteristics).

The sponsor or company responsibility for National registration is to supply all merit data to the OCRC for registration support, including quality and disease data where applicable, organization of tests and site inspections. Sponsors must submit support requests to coordinator by December 31. Proof of ownership (or marketing rights) must be made available to the OCRC if the candidate cultivar was not bred by the sponsor.

The OCRC responsibility for National registration is the designation of agronomic, disease and quality check cultivars and site inspectors, approval of test protocol, designation of number of quality determinations needed for quality support and voting on support requests.

5.2.2 Interim Registration (restrictive)

The committee may consider a recommendation for Interim registration in situations where, after a minimum of one year of testing, the data indicates that a candidate has sufficient merit that it may be eligible for registration. This provision is intended to be used in situations such as:

- (a) Where a variety proponent brings forward an innovative variety with (a) valuable characteristic(s) not necessarily captured in the merit assessment, viewed as being of benefit to the crop sector and worth bringing to the market quickly. It may be slightly deficient in one or more merit characteristics but its attributes outweigh its deficiencies. Normally such a variety would be considered for interim registration and concurrent (continued) testing for the purposes of full registration;
- (b) Where a variety demonstrates outstanding merit after the one year of testing. The committee has the option, if they deem it appropriate, of considering the variety for interim registration and further, concurrent testing for the purposes of full registration; and
- (c) Where a variety is brought forward that is deficient in one or more merit criteria, but the proponent has evidence (presented to the committee) of commercial interest in an identity preserved (IP) production program between the developer and an end user (this can be a tool to allow a variety to establish a niche market in a closed loop system).

Interim registrations are typically recommended for three years initially and would normally involve a condition of generating new data to be brought back to the committee during that time frame in order to support either a request for recommendation of National registration or a request for extension of the Interim registration up to a total maximum of 5 years.

The registrant has the option of coming back to the committee and making a request for an extension of

Interim registration for an additional one or two years but the total cannot exceed five years. The registrant does this by submitting the full data package to the committee including data collected since registration. Interim registrations expire after their designated term.

Reference: **68.** (2) (a), *Seed Regulations*

(2) The Registrar shall make the registration of a variety subject to the following terms and conditions, where applicable:

(a) in the case of a variety of a species, kind or type of crop that is listed in Part I or II of Schedule III, if a minimum of one year of testing demonstrates that the variety may be eligible for registration but that further testing is required before a final decision can be rendered, the registration shall be limited to an initial period of not more than three years that shall be extended on written request by the applicant if eligibility for registration continues to be demonstrated, but under no circumstances shall the total duration of the registration exceed five years.

The sponsor or company responsibility for Interim registration is to supply all merit data to the OCRC for registration support, including quality and disease data where applicable, organization of tests and site inspections. Sponsors must submit support requests to the coordinator by December 31. Proof of ownership (or marketing rights) must be made available to the OCRC if the candidate cultivar was not bred by the sponsor.

The OCRC responsibility for Interim registration is the designation of agronomic, disease and quality check cultivars and site inspectors, approval of test protocol, designation of number of quality determinations needed for quality support and voting on support requests.

5.2.3 Contract Registration (restrictive)

Contract registration is available for candidate varieties where biochemical or biophysical characteristics distinguish them from the majority of registered varieties of the same kind or species. Further, it must be shown that these characteristics may cause **harm toward varieties registered for traditional commodity markets**. For example, high erucic acid rapeseed, although valuable, is a threat to the integrity of canola production. Another example is canola quality mustard as a threat to the integrity of mustard production. To qualify for Contract registration, the owner/sponsor of the variety must demonstrate the possibility of industry harm if granted an unrestricted registration. Contract registration is only a possibility for varieties that may cause harm based on agronomic performance, disease reaction or end-use quality, not based on socio-economic factors. The determination of whether a variety has the potential to cause harm is a scientific process where it is determined whether the variety has the potential to have an adverse effect on the identity of other registered varieties of that crop kind or if the variety or progeny thereof may be detrimental to human or animal health and safety of the environment. As a general rule, Contract registration is not to be used as a substitute for traditional forms of registration (National or Interim) in situations where the committee has objected to the registration of the candidate variety based on deficiency in merit. However, the committee may suggest that the candidate be considered for Contract registration where there is rationale to do so.

Reference: **68.** (2) (c) (i to iv) of the *Seed Regulations*

(c) where the biochemical or biophysical characteristics of a variety distinguish it from the majority of registered varieties of the same kind or species and it may have an adverse effect on the identity of those registered varieties, the registrant shall

- (i) establish and maintain a quality control system for the management of potentially adverse effects of the variety, including management responsibility, contract review, product identification and traceability, inspection, testing, control of nonconforming product, corrective and preventive actions, records and training of personnel,
- (ii) describe the quality control system in a document and submit the document and any subsequent amendments to that document to the Registrar for review and approval,
- (iii) implement the quality control system, and
- (iv) agree in writing, for the purpose of verifying compliance with subparagraph (iii), to provide the Registrar with information relating to the distribution, use and disposition of any seed of the variety or any progeny thereof.

Contract registration is used to allow the orderly and legal sale, in Ontario, of canola varieties with market related uniqueness, where the biochemical or biophysical characteristics of candidates distinguish them from the majority of registered varieties of the same kind or species AND where they would have adverse effects on the identity of those registered varieties. Sponsors may wish to use this category to register candidates that would pose harm to the marketplace if pursued in a non-restrictive manner. **Parts c), d) and e) of the support request below may be achieved in a confidential manner* as described in section f).**

- a) Identification and ownership: Sponsor must provide species, name or experimental number and proof of ownership or market rights if sponsor is not original breeder.
- b) Agronomic merit: Sponsor must provide data from four station-years of yield trials from a minimum of two years. All tests can be sponsor derived. Tests must include appropriate checks and, although comparative yields must be reported, no set yield level need be reached. All comparative data for measured traits must be reported.
- c) Uniqueness: Sponsor must state market related uniqueness.
- d) Market or end use: Sponsor must identify end user and show proof of end user's acceptance and intention to purchase seed or grain produced under contract. This demonstrates end user merit.
- e) Harm:
 - i. Sponsor must show harm that candidate would cause if registered in a non-restrictive manner.
 - ii. Sponsor must demonstrate a closed system of production and marketing to be followed that includes:
 - 1. Material sent to end user
 - 2. Material in excess of end user's requirements
 - 3. Material below end user's requirements
 - 4. Material retained for seed but in excess of requirements
- f) * **Confidentiality protocol:** Uniqueness, market or end use and harm sections of a contract registration request may be pursued in a confidential manner with the Confidentiality Subcommittee, made up of the Chair, Secretary and Canola Testing Coordinator. Decisions will be made by consensus.
- g) Request support dates: If confidentiality is requested, the sponsor must notify the chair and secretary of the OCRC at least three weeks prior to the January meetings. The Confidentiality Subcommittee will be organized and ready to accept the confidential sections at least two weeks prior to the January meetings by which time the sponsor must supply the required information. The OCRC voting members must receive the public part of the documentation at least one week prior to the January meeting as per sponsor responsibility.

NOTE: The variety registration office may have additional requirements to fulfill before contract registration is granted. Please consult VRO “Procedures for the Registration of Crop Varieties in Canada” at the following web address
<http://www.inspection.gc.ca/english/plaveg/variet/proced/procede.shtml>

5.3 Duration of Committee Support

Once a variety is supported by OCRC, the sponsoring individual or organization may apply to CFIA for registration. CFIA requirements to successfully register a variety can be found at
<http://www.inspection.gc.ca/english/plaveg/variet/vartoce.shtml>

Submission of registration to CFIA may be deferred for two (2) years after support from OCRC. After this date, committee support for the variety expires. The sponsor can request an extension to registration support to complete the application process to CFIA, if desired.

6.0 APPEALS

6.1 OCRC Appeals Procedure

A sponsor whose candidate variety has been rejected by the committee may appeal the decision after it has been shared with the industry. Contract and Special Consideration Registration Request Supports pursued in a confidential manner may be appealed in a similar manner.

Appeals may be based on:

1. an error of consequence was made in the data that was submitted
2. additional information is available
3. the accepted procedure in reviewing the data was not followed
4. other justifications for an appeal as accepted by the Committee

Notice of Appeal must be received within 10 days of receipt of the decisions. An Appeal Committee will be formed within 10 days of notification to the Canola Testing Coordinator of the Appeal. The Appeal Committee will consist of:

- one individual appointed by the OCRC
- one individual appointed by the applicant
- one individual acceptable to both parties

The written decision of the Appeal Committee will be final. The losing party in the Appeal will pay any expenses of the 3rd individual (i.e. the individual acceptable to OCRC and the plaintiff) associated with serving on the Appeals Committee.

6.2 Conflict Resolution

In the event that a stakeholder identifies a situation where the OCRC has failed to live up to the spirit or the letter of the Operating Procedures guidance document, they have recourse to present the issue with a detailed explanation to the Chief, VRO or the Registrar. The VRO has oversight in this area and the Registrar with delegated authority from the Minister of Agriculture and Agri-Food will address any

shortcomings, oversight or failure to act in accordance with the Operating Procedures directly with the OCRC. The purpose will be to bring the committee into compliance as soon as possible and to implement corrective actions.

One of the roles of the VRO is to monitor OCRC meetings and avoid this type of situation from the beginning. If the VRO observes actions or governance out of compliance with the letter and spirit of the Operating Procedures, the office will work directly with the committee to find a solution to bring the committee back into compliance in a timely manner.

Appendix 1: Authority provided under section 65.1 in the Seeds Regulations

RECOMMENDING COMMITTEES

65.1 (1) The Minister shall approve, for Canada or a region of Canada, a committee to establish and administer protocols for testing the varieties of a species, kind or type of crop listed in Part I of Schedule III, to determine the merit of the varieties and to make recommendations respecting their registration if

- (a) the members of the committee have the knowledge and expertise required to establish and administer testing protocols for varieties of that species, kind or type of crop;
- (b) the members of the committee have the knowledge and expertise required to determine the merit of the varieties of that species, kind or type of crop;
- (c) the testing protocols established by the committee are appropriate for that species, kind or type of crop, are practical and are based on scientific principles;
- (d) the procedures established by the committee for determining the merit of varieties of that species, kind or type of crop are appropriate for that purpose and are based on scientific principles;
- (e) the operating procedures established by the committee will ensure that its functioning is transparent and that varieties are dealt with in a fair and consistent manner; and
- (f) no other committee is approved as a recommending committee for that species, kind or type of crop for Canada or the region.

(2) The Minister shall approve, for Canada or a region of Canada, a committee to establish and administer protocols for testing the varieties of a species, kind or type of crop listed in Part II of Schedule III and to make recommendations respecting their registration if

- (a) the members of the committee have the knowledge and expertise required to establish and administer testing protocols for varieties of that species, kind or type of crop;
- (b) the testing protocols established by the committee are appropriate for that species, kind or type of crop, are practical and are based on scientific principles;
- (c) the operating procedures established by the committee will ensure that its functioning is transparent and that varieties are dealt with in a fair and consistent manner; and
- (d) no other committee is approved as a recommending committee for that species, kind or type of crop for Canada or the region.

(3) In carrying out its functions, a recommending committee must apply the testing protocols it has established, act in accordance with its operating procedures and, in the case of a committee approved under subsection (1), apply the procedures it has established to determine the merit of varieties.

(4) For the purposes of subsections 67(1) and 67.1(1), the recommendation of a recommending committee must be based on the following:

- (a) in the case of a species, kind or type of crop that is listed in Part I of Schedule III, the results of testing the variety in accordance with the relevant testing protocols and a determination of whether the variety has merit; and
- (b) in the case of a species, kind or type of crop that is listed in Part II of Schedule III, the results of testing the variety in accordance with the relevant testing protocols.

Appendix 2: Eligibility Requirements for Variety Registration

67.1 (1) A variety of a species, kind or type of crop that is listed in Part I of Schedule III is eligible for registration if

- (a) the variety has merit;
- (b) the variety has been tested in accordance with the testing protocols of a recommending committee;
- (c) the recommending committee has made a recommendation respecting registration of the variety;
- (d) the variety or its progeny is not detrimental to human or animal health and safety or the environment when grown and used as intended;
- (e) the representative reference sample of the variety does not contain off-types or impurities in excess of the Association's standards for varietal purity;
- (f) the variety meets the standards for varietal purity established by the Association or these Regulations for a variety of that species, kind or type;
- (g) the variety is distinguishable from all other varieties that were or currently are registered in Canada;
- (h) the variety name is not a registered trademark in respect of the variety;
- (i) the variety name is not likely to mislead a purchaser with respect to the composition, genetic origin or utility of the variety;
- (j) the variety name is not likely to be confused with the name of a variety that was or currently is registered;
- (k) the variety name is not likely to offend the public;
- (l) no false statement or falsified document and no misleading or incorrect information have been submitted in support of the application for registration; and
- (m) the information provided to the Registrar is sufficient to enable the variety to be evaluated.

(2) A variety of a species, kind or type of crop that is listed in Part II of Schedule III is eligible for registration if the requirements for eligibility set out in paragraphs (1) (b) to (m) are met.

(3) A variety of a species, kind or type of crop that is listed in Part III of Schedule III is eligible for registration if the requirements for eligibility set out in paragraphs (1) (d) to (m) are met.

Appendix 3: Executive of the OCRC

Chair: Albert Tenuta
University of Guelph, Ridgetown Campus, Agronomy Building
PO Box 400, 120 Main Street East N0P 2C0
Telephone: 519-674-1617
Fax: 519-674-1564
E-mail: albert.tenuta@ontario.ca

Secretary: Martin Harry
Phone: 519 657-6456
Email : mharry@secan.com

Canola Testing Coordinator: Meghan Moran
63 Lorne Ave E, Suite 2B
Stratford ON N5A 6S5
Phone: 519-546-1725
Fax: 519-273-5278
Email: meghan.moran@ontario.ca

Appendix 4: Testing and Data Handling Fees for 2017

Fees are payable to the Ontario Soybean and Canola Committee: Canola in Canadian funds, at Guelph, Ontario. The Harmonized Sales Tax (HST) is applicable to OCRC testing fees.

Fees are due within 30 days after the date of invoice. Interest on late payments will be charged at a rate of 2% per month from the date payable on the invoice.

Treasurer for OCRC: Dr. Hugh Earl
Crop Science Building, University of Guelph.
50 Stone Rd E
Guelph ON N1G 2W1
Phone: 519-824-4120 ext. 58568
Fax: 519-763-8933
Email: hjearl@uoguelph.ca

Arrears

Any sponsor that is in arrears at the time of the January OCRC Variety Subcommittee meeting will not have their entry(ies) considered for support for registration

Trial Inspection Fees

The private trials will be inspected prior to maturity by a representative of OCRC to ensure quality. The inspector will bill the company, whose trials were inspected, \$50.00 per inspected site, plus HST; instruct the company to pay the billed amount to the Ontario Soybean and Canola Committee: Canola; and remit to the treasurer, along with a clear indication of the site, the inspection date and the inspector. Additional arrangements for expenses incurred in inspecting distant sites will be between the inspector and the sponsor.

Data Handling and Quality Testing Fees for Spring and Winter Canola

For entries in private trials that may be considered for support of registration, the fee is \$50 +HST per entry for handling data, plus \$60 + HST per sample submitted for quality analyses. These fees are payable by **Nov. 15** of the year in which the private trial is harvested.

One composite sample will be submitted by Oct. 1 for each check and each candidate line to be considered by OCRC, from each location-year of private testing. For example, the fees for two candidate lines plus one check at four location-years would be:

3 lines x 4 locations x \$60 = \$720 plus HST.

Appendix 5: SUMMARY OF IMPORTANT DATES

Important Dates for Spring Canola Evaluation

- March 15: Companies must notify the Canola Testing Coordinator of their intent to conduct registration trials.
- June 15: Companies must provide the Canola Testing Coordinator with the location of private registration trials to be inspected, a plot map of the trials including names of the candidate canola entries and check varieties.
- October 1: A 100-gram composite sample (bulked over replications) of harvested seed from each trial for each entry to be tested and each check variety must be sent to the Canola Testing Coordinator.
- November 15: Payment of data handling and qualities testing fees due to the OCRC.
- November 30: Data collected from field test sites due to the Canola Testing Coordinator.
- December 31: Companies must notify the Canola Testing Coordinator of which entries are to be carried forward for in request of support for registration and submit all data in support of registration (must have 2 years of data).
- January: Annual meeting of the Ontario Canola Recommending Committee, at which registration data is reviewed (usually the third week of January).

Important Dates for Winter Canola Evaluation

- August 15: Companies must notify the Canola Testing Coordinator of their intent to conduct registration trials.
- May 1: Companies must provide the Canola Testing Coordinator with the location of private registration trials to be inspected, a plot map of the trials including names of the candidate canola entries and check varieties.
- October 1: A 100-gram composite sample (bulked over replications) of harvested seed from each trial for each entry to be tested and each check variety must be sent to the Canola Testing Coordinator.
- November 15: Payment of data handling and qualities testing fees due to the OCRC.
- November 30: Data collected from field test sites due to the Canola Testing Coordinator.
- December 31: Companies must notify the Canola Testing Coordinator of which entries are to be carried forward for in request of support for registration and submit all data in support of registration (must have 2 years of data).
- January: Annual meeting of the Ontario Canola Recommending Committee, at which registration data is reviewed (usually the third week of January).

Appendix 6: SPRING CANOLA ENTRY FORM

Due March 15

Entered by (Canadian Sponsor): _____

NAME (Contact Person and Company): _____

ADDRESS: _____

PROVINCE: _____ POSTAL CODE: _____

PHONE #: _____ FAX #: _____

EMAIL: _____

NAME AND LOCATION OF BREEDING COMPANY:

Entry Name	Erucic Acid (%)	Glucosinolates $\mu\text{M/g}$	Hybrid (Y/N)	Herbicide Resistance Details
1.				
2.				
3.				
4.				
5.				

Note: **You must** indicate erucic acid and glucosinolate levels for entries submitted.

Return one copy by mail, fax or email by March 15 to:

Meghan Moran
OMAFRA
63 Lorne Ave E, Suite 2B,
Stratford ON N5A 6S5
meghan.moran@ontario.ca
Fax: 519-273-5278

Appendix 7: WINTER CANOLA ENTRY FORM

DUE AUGUST 15

Entered by (Canadian Sponsor): _____

NAME (Contact Person and Company): _____

ADDRESS: _____

PROVINCE: _____ POSTAL CODE: _____

PHONE #: _____ FAX #: _____

EMAIL: _____

NAME AND LOCATION OF BREEDING COMPANY:

	Entry Name	Other Designation(s)	Erucic Acid (%)	Glucosinlate $\mu\text{mol/g}$	Hybrid (Y/N)	Other Traits Details (e.g. herbicide tolerance, semidwarf)
1						
2						
3						
4						
5						

Note: **You must** indicate erucic acid and glucosinolate levels for entries submitted.

Return one copy by mail, fax or email by August 15 to:

Meghan Moran,
OMAFRA,
63 Lorne Ave E, Suite 2B,
Stratford ON N5A 6S5
meghan.moran@ontario.ca
Fax: 519-273-5278

Appendix 8: OCRC Inspection Checklist of Canola Cultivar Trials

Company:

Location:

GPS Coordinates:

This form must be completed and signed by the trial inspector.

1. Detailed county map showing location of field and plot locations were made available.
2. Randomization plot plan and individual plots identified.
3. Plot labels easily recognized and check varieties clearly identified in all replications.
4. Row lengths vary less than 5% across all test plots.
5. Row widths are uniform across all test plots.
6. If signs of stress, is it uniform within test plots with no gradients in the field.
7. Plant populations are within the range recommended in the OMAFRA Agronomy Guide, Publication 811.
8. Plant distribution within plots have uniform plant spacing with no gaps.
9. Trial has minimum of two border rows on each side.
10. Disease or insect pest damage presence.
11. Note additional comments on plot conditions and variables that may impact test.

I certify that I have personally inspected this trial and in my opinion will
(Please circle -) **Pass** , **Not Pass**, inspection.

Signed: Date:
(Inspector)