PRAIRIE RECOMMENDING COMMITTEE FOR PULSE AND SPECIAL CROPS

Operating Procedures

Amended February 28, 2019

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1. TERMS OF REFERENCE

The Prairie Recommending Committee for Pulse and Special Crops (PRCPSC) also referred to as the "Committee" is responsible to provide a recommendation for registration based on testing and evaluation of merit of pulse and special crop candidate cultivars in Western Canada. Please refer to Appendix 1 for Recommending Committee Ministerial Delegated Authority under the Seeds Regulations and Appendix 2 for Eligibility Requirements for Variety Registration also under the Seeds Regulations.

The PRCPSC core mandate:

a) To define the merit for Pulse and Special Crops in Canada.
b) To establish test protocols for the assessment of merit of potential cultivars of pulse and special crops.
c) To assess the merit of candidate varieties.
d) To make recommendations, based on merit to the Variety Registration Office.

Other Roles of the PRCPSC:

a) To act as a forum in the exchange of information relevant to the development of improved cultivars of pulse and special crops in Western Canada.
b) To provide crop sector specific regional information and advice to regulators.

The Committee's Roles and Responsibilities:

PRCPSC must put in place procedures and processes to ensure **fair**, **transparent**, and **consistent** determination of merit for varieties of peas, field beans, faba beans, lentils, and buckwheat, and design test protocols. In addition, the committee's role in determining the merit of a candidate variety is to foster innovation in the crop while mitigating the risk of registering varieties lacking in merit and to provide increased value to the crop sector.

The committee will balance the value of: accelerated time to market, encouraging crop innovation, and the rapid improvement of the crop versus the value of ensuring varieties with clear benefit (based on precision of prediction) are recommended for registration.

The overall effect of the committee's requirements and processes on Canada's international competitiveness in that crop also will be considered. A balance will be struck between fostering innovation, determining the merit of a variety and keeping the market risk tolerable. The categories of and number of merit criteria should be reviewed on a regular basis with these considerations in mind.

2. COMMITTEE STRUCTURE AND MEMBERSHIP

2.1 Structure and Operation

The PRCPSC consists of an Executive and three Evaluation Teams that are responsible for the assessment of agronomic performance, disease resistance and end-use quality.

- *Executive Committee:*
  - Chair and Secretary/Treasurer
  - Evaluation Team Chairs

- Evaluation Teams
  - Breeding and Agronomy (ETA)
  - Disease (ETD)
  - Quality (ETQ)

2.2 Membership

Membership:

The officially recognized recommending committee consists solely of members who vote to make variety registration recommendations to the Variety Registration Office (VRO). In accordance with paragraphs **65.1** (1) (a) and (b) of the *Seeds Regulations*, the committee will have the knowledge and expertise required to establish and administer testing protocols and to determine the merit of varieties of that species, kind, or type of crop for the specific region(s). The recommending committee members are often selected from a larger crop expert advisory group which constitutes a pool of expertise for the recommending committee to draw on, as required.

The committee will reflect the full value chain of crop-specific stakeholders: individuals actively engaged in the crop specific variety development, production, processing, marketing, and seed trade of varieties and are residents of Canada. Anyone with expertise and a keen interest in the pulse industry in Canada may become a member.

- **Variety/Trait Developer and Assessor** representation (this includes plant breeders, agronomists, pathologists, entomologists, molecular geneticists, and business leaders with expertise in one or more aspects of the specific crop),

- **Producer** representation (representatives chosen by crop specific producer and seed grower organizations)

- **End User** representation (includes the seed trade representatives chosen by; for example, a miller's organization, grain traders' organization representing domestic and export markets (marketers) for the specific crop, processors).

Equal representation is by broad-based grouping, and designated by stakeholder value chain organizations within those groups as opposed to individuals (e.g., the Variety/Trait Developer group may, in order to meet the requirements of the MOPs, have designated organizations represented on the committee such as a breeder from the Canadian Seed Trade Association (CSTA) Plant Breeders' committee or a domestic miller chosen by the Canadian Millers Association, etc.). **In this circumstance it is these organizations that will nominate their own representatives for this designated position on the committee.** In the event that a representative from a member organization is unable to attend, an alternative representative chosen by their member organization may fill in for them as a voting member. The committee will keep a complete list of members, their affiliation and subcommittee association. The committee may elect to have subject matter experts (from outside the committee) present, by

request as required, to provide detailed expert input related to the merit assessment of varieties being considered.

The identification, affiliation and area of expertise of the committee members will be provided to the VRO and to the committee membership: the name of the person, title on the committee, expertise criteria (e.g., agronomy, pathology, quality, milling, processing, exporting/marketing etc.), and title in his/her organization, identification of their organization, and contact information.

Committee members will discuss changes to the operating procedures, including governance and the setting of future goals for merit in the crop, with the entire crop expert advisory group present at the meeting to obtain consensus. Committee members will then vote on any subsequent changes.

Committee members will serve on the committee for a maximum term of three years; however, they can let their name stand to be voted in for subsequent terms. The existing committee votes on the upcoming changes to its membership via a simple majority (if representation by organization is part of the committee structure then this is simply a procedural function to ratify already appointed new members).

There are three types of membership within the PRCPSC:

- Full Members (voting privileges)
- Ex officio Members (non-voting)
- Associate Members (non-voting)

All new members are nominated by a voting member of the PRCPSC and are approved by majority vote of the committee. Individuals interested or otherwise involved with the process, may attend the meetings (please see section 2.5 Observers).

2.2.1 Full (Voting) Members

It is expected that members will vote impartially and attend the annual meeting regularly.

2.2.2 Ex officio Members

In addition to the full voting members, the Canadian Grain Commission (CGC), the Canadian Seed Growers' Association (CSGA), the Canadian Seed Trade Association (CSTA), and the CFIA Variety Registration Office will all be eligible to have an *ex officio* (non-voting) seat on the committee. The CFIA-VRO and the CGC being federal regulatory agencies will not have a voting representative on recommending committees. The CFIA-VRO has a regulatory mandate to exercise oversight of the PRCPSC and has oversight of Canada's Seed Certification System. The CGC has regulatory oversight of the grain industry in Canada. The CSGA is Canada's field crop certification body and has regulatory authority to for setting field crop production standards for certified seed as well as varietal purity standards in Canada.

2.2.3 Associate (Non-Voting) Members

Includes any and all parties interested in pulse and special crop registration in Western Canada and includes but is not restricted to: Agriculture and Agri-Food Canada administrators,

Provincial Government administrators, University administrators or business managers whose organizations are active in cultivar production, development or evaluation. Associate Members do not have voting privileges but can express their views during Committee and Evaluation Team meetings. The Associate Membership occurs through Committee approval.

2.3 PRCPSC Executive

The PRCPSC Executive consists of the PRCPSC Chair and Secretary/Treasurer and the Chairs of each Evaluation Team (who are voting members). The individual executive members are chosen from the list of voting members of the Committee. All positions are for a three-year, renewable term and commence on April 1.

In circumstances where a Chair is unavailable to act in the official capacity of the position, the secretary will assume the role of chair and a temporary secretary appointed. Where the Secretary is unavailable, the Chair will appoint a temporary Secretary from among the membership of the Committee.

2.4 Meetings

The PRCPSC normally meets annually in February at a location determined at the previous meeting. The Executive meets during these meetings and as necessary for business related to PRCPSC operations.

Meetings are open to all interested parties. Committee or Evaluation Teams may, by a majority vote, create 'in camera' portions of meetings as necessary.

The normal sequence for the February annual meeting is as follows (logistics may result in changes):

- Executive Committee
- Evaluation Teams meet as necessary
- Crop Coordinators of each crop discuss registration trial procedures with interested parties
- Entire Committee
- Executive Committee

Extra-ordinary meetings may be called on 30 days notice or less upon the consensus of the membership. Normal quorum restrictions, as documented in section 3.1.3, apply to extra-ordinary meetings. The request for an email vote is considered an extra-ordinary meeting.

2.5 Observers

Meetings are open to all interested parties, including the press. All observers must make a request to the Chair to attend meetings and are to be identified at the start of the meetings.

3. THE REGISTRATION PROCESS

3.1 Recommendation for Full Registration

Before a candidate cultivar can be registered, it must have a recommendation from a

recognized recommending committee, such as the PRCPSC. Recommendations to support a candidate cultivar are made on the basis of merit information provided to the Committee via the registration trials and evaluation by the Evaluation Teams.

The PRCPSC will make its decision regarding the support of a candidate for registration solely based on the merit of the candidate. The PRCPSC defines merit for each crop kind it evaluates. This is documented in the operating procedures. A candidate has merit when, considering all traits within the merit definition, it has the potential to be equal to or superior to the appropriate check cultivar(s). The appropriate check cultivars are decided upon by the committee and documented in the operating system manual. The number of years, locations, checks, fees and conduct of trials are included in the individual Registration Trial Guidelines.

The sponsor will provide a “Request for Support of Registration” and a written summary to the Committee members no later than the Monday, one week prior to the start of annual PRCPSC meeting. The Committee may refuse to consider a request on the grounds of late circulation, illegibility or inaccuracy.

3.1.1 The Set aside rule

The variety proponent can request that the committee set aside the rules to consider the overall merit of a variety that otherwise has failed to meet the standard in one or more required characteristics. They are, in effect, asking for a judgment call on the part of the committee. The rationale for such action and the record of the empowering vote will form part of the recorded decision.

The committee may take the vote on a variety by variety basis or they may choose to lump all such varieties together and take a single vote for the group. It is up to the committee. For this to proceed, a simple majority vote must be held to set aside the rules. The committee then hears 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.

Recommendations to support the registration of a candidate cultivar are in effect for two years from April 1, following the annual meeting where the support was given (in agreement with the *Seeds Regulations*). An additional 6 months of support can be granted, at the request of the sponsor, via a letter to CFIA from the Secretary of the Committee. If more than 2.5 years have elapsed, the sponsor must make an application for the renewal of support, which must then be presented to the Committee for its decision.

3.1.2 Role of the Evaluation Team

Each Evaluation Team (Breeding & Agronomy, Disease, and Quality) will consider the merit of candidate cultivars proposed for registration. The recommendation arising from this evaluation, and its basis, will be provided verbally to the Committee at the time of candidate deliberations by each Evaluation Team Chair, on the basis of the established guidelines documented under 3.1.3.1 of these guidelines. It is expected that the Disease and Quality Evaluation Teams will meet as necessary to discuss changes to the Evaluation Team recommendation guidelines and to elect a Chair.

3.1.3 Role of the Committee

The purpose of the Committee is to provide a recommendation to either “support” or “do not support” the committee’s recommendation to CFIA for registration of a candidate cultivar of pulse and special crops, based on their assessment of merit of the variety.

It is the responsibility of the Committee Secretary to inform the Variety Registration Office, Canadian Food Inspection Agency, in writing, of the decision of the Committee with copies to the sponsor, and Committee Chair. The recommendation of the Disease and Quality Evaluation Teams will also be provided a summary to the sponsor and to the Variety Registration Office.

3.1.4 Voting Procedures

Voting is valid only when a quorum is present. The quorum for the Committee and its Evaluation Teams shall be fifty percent of the voting members. It is expected that all members will vote impartially.

Voting for registration recommendation of candidate cultivars is by secret ballot. Votes are collected by a committee designated scrutineer and recorded. The results are read out to the committee and accepted. Following acceptance, a motion will be made to destroy the ballots and the committee will approve this. All other voting is done by show of hands unless otherwise requested. The Chair is allowed to actively participate in the discussions and is entitled to vote. A simple majority will constitute a positive recommendation. In the event of a tie, the Chair’s vote will be used to break the tie.

In extra-ordinary circumstances (eg. Maintaining Quorum) and at the discretion of the pertinent Chair, votes may be conducted using regular mail, facsimile or electronic mail. The quorum for this type of vote shall be a response from fifty percent of the voting members.

3.1.4.1 Conflict of Interest and Voting

In general, a conflict of interest may arise if the impartiality of a member could be undermined due to a conflict between their self or professional interest and the public interest.

Conflict of interest is minimized by instituting automated procedures for variety evaluation (a pre-set, clearly written set of specific merit criteria that, if met in its entirety, will result in the variety being added to a list of similarly qualified varieties to be recommended automatically by a single procedural vote of the committee).

There is the potential for a conflict of interest to occur within the committees if a voting member derives direct benefit from the outcome of the vote and determines that he or she is in a position of undue influence with regard to the variety. The choice of abstaining from the vote is left up to the individual voting member, in accordance with the code of ethics of the committee. It is recognized that a voting member may derive benefit from the outcome of a vote but that he or she is capable of acting impartially and professionally on behalf of their constituency when it comes to voting. It is also recognized that having a committee of crop-sector experts voting on variety recommendations means that voting members will occasionally have a vested interest in one or more of the varieties coming up for the vote. This is a feature of all variety registration recommending committees in Canada where voting on an individual variety occurs. For more information on conflict of interest, see Appendix C of this document.

If a variety proponent 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. Once completed, should this process and/or its outcome prove unsatisfactory to the variety proponent based on the guidance and principles outlined in the MOPs, they have recourse to present their grievance to the Registrar (the VRO). The rationale for the grievance along with any available factual evidence should be submitted. The final decision on the eligibility of the variety for registration under the *Seeds Regulations* will rest with the Registrar. It should be noted that this is anticipated to be a rare occurrence as it has been in the past.

3.1.4.2 Evaluation Team Votes

The Evaluation Team Chairs will decide on the recommendation on the basis of the following guidelines:

- Support: the candidate's total merit for the traits being considered are equal to or better than the designated check cultivar.

- Object: the candidate's attributes have not met the merit requirement set out for that candidate.

- Abstain: abstentions are only expected in the case of an openly declared conflict of interest.

3.1.4.3 Recommending Committee Votes

At the Committee level, members will consider the overall attributes of the candidate (the balance of agronomic, disease and quality traits) based on information provided by the registration trials and interpretation of the data by the Disease and Quality Evaluation Teams. Candidates meeting all the minimum merit criteria will be recommended for registration.

For candidates with deficiencies in one or more characteristics where this may be compensated for by strength in another, e.g.: lower yield for earlier maturity, lower yield for higher quality at the proponent's request, the committee will vote to set aside the rules by a simple majority and deliberate the overall merit of a variety Here, a judgment call is required by the committee. It is recognized that certain quality related regulatory requirements are not subject to such trade-offs.

Reports from the Disease and Quality Evaluation Teams will be presented to the registration recommending committee, orally, by the Chair or the Chair's designate of each of these Evaluation Teams. A motion to support the registration of the candidate cultivar follows. The case for support is then presented by the breeder or designate. Following discussion, all members (including the proposer, if an eligible voting member) will cast a vote.

Votes are cast in three categories (Support, Do Not Support, Abstain) based on the data supplied. Members are reminded that at Committee deliberations, abstentions are expected only in the case of an openly declared conflict of interest.

If erroneous data or omission of pertinent data is used as a basis of decision, the sponsor may call for a re-vote. This request must be in writing with an explanation and a new supporting document. The Chair and Secretary will determine in consultation with the Executive if there was an omission or error and if this information may have changed the original decision. If so,

the Committee will be informed and a re-vote will be conducted. If the PRCPSC meetings have concluded, the vote will be carried out using regular mail, facsimile or electronic mail.

Any disagreement with interpretation of procedure will be raised at the Committee meeting and settled by a majority vote.

3.2 Appeal of Committee Recommendation

If the sponsor wishes to contest the decision of the Committee, a written application must be directed to the Chair of the PRCPSC. Candidate variety proponents are eligible to object to the committee's decision on the basis of: 1) procedural errors by the committee (including conflict of interest) and/or 2) on the basis of erroneous data having been used by the committee, and/or 3) on the basis of a personal bias on the part of one or more committee members having resulted in a negative outcome. The appeal application shall indicate the basis of the appeal and include a copy of the data package prepared for the line in question. If the PRCPSC meeting is still in session, the appellant (sponsor) shall be given the opportunity to present their case personally to the Appeal Committee of the PRCPSC, a five-member group made up of three voting members of the PRCPSC: the Chair of the PRCPSC and the chairs of the Disease and Quality Evaluation Teams of the PRCPSC; and two additional members - one selected by the appellant and one selected by the Chair of the PRCPSC. The two additional members have to be chosen from the membership of the PRCPSC. The chair of the Appeal Committee will be the chair of the PRCPSC. The appellant cannot be a member of the Appeal Committee. If the Chair of the PRCPSC is the appellant, then the Secretary will become the Chair. If either of the Chairs of the Evaluation Teams is the Appellant, then the Chair of the PRCPSC shall choose another member from that particular Evaluation Team, to be on the Appeal Committee. Following presentation of the arguments, the appellant will withdraw and a vote will be conducted. There will be a non-refundable $100 fee for this level of appeal. If the appeal is lodged after the PRCPSC meeting has adjourned, the appellant will make the case in writing through the PRCPSC Chair, with the vote of the Appeal Committee being conducted by regular mail, facsimile or electronic mail. There will be a non-refundable $200 fee for this level of appeal. The fee is to offset any costs associated with the appeal, and will be reimbursed if a procedure error was the cause of the appeal. In either case, the decision will be based on a simple majority of the five members on the Appeal Committee. The appellant will be informed of the decision and its rationale in writing within 30 days.

In the event that a stakeholder identifies a situation where the RC has failed to live up to the spirit or the letter of the MOPs guidance document, they have recourse to present the issue with a detailed explanation to the Chief, VRO or to 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 MOPs directly with the PRCPSC. The purpose will be to bring the committee into compliance as soon as possible and to correct any wrongs that may have been committed.

One of the roles of the VRO is to monitor RC 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 MOPs, the office will work directly with the committee to find a solution to bring the committee back into compliance in a timely manner. This is part of the oversight role of the CFIA in the variety registration system. We anticipate this situation to be a very rare occurrence.

3.3 Recommendation for Interim Registration

An interim registration is normally granted for either of two reasons:

- production of grain or other commodity for market acceptability tests; or
- Rapid introduction of innovative material where there is a need in the market (e.g. – new high disease tolerance where the market is suffering due to that disease)).

An interim registration has all the rights of full registration, but for a specified period of time only. The committee can recommend an interim registration to CFIA, initially for a period of up to three years. An interim registration may be renewed for additional periods, to a maximum total life of five years based on renewed requests to the committee for a recommendation of an extension of the interim registration to CFIA.

Recommendation procedures are the same as with full registration (section 3.1) with the exception that the decision to register can, at the discretion of the committee, be made on the basis of a minimum of one year's variety registration trial data (as per the *Seeds Regulations*).

3.4 Contract Registration

Contract Registration is available for candidate cultivars where biochemical or biophysical characteristics distinguish them from the majority of registered cultivars of the same kind or species. Further, it must be shown, through a scientific process that these characteristics have the potential to cause an adverse affect (harm) on the identity of other registered cultivars or the progeny thereof may be detrimental to human health or the safety of the environment. Thus, to qualify for Contract Registration, the owner/sponsor of the cultivar must demonstrate the possibility of industry harm if granted an unrestricted registration (the “harm trigger”). Contract registration is only a possibility for varieties which may cause harm based on the scientific assessment of the quality, agronomics and disease reaction of the variety, not based on socio-economic factors.

Contract registration is not to be used as a substitute for traditional forms of registration (full or interim) in situations where the Committee has objected to the registration of the candidate cultivar 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. In this case, an extra-ordinary meeting of the Contract Registration Committee (CRC) of the PSCPRC may be required to consider the case and determine if the required scientific conditions for Contract Registration have been met.

Contract Registration may be requested a full registration or as an interim - registration for an initial period of up to three years, with a maximum total life of five years. Renewal of Interim Contract Registration requires the recommendation of the appropriate CRC to the Variety Registration Office.

3.5 Application for Registration

Applications for registration of the recommended candidate should be submitted on the *Variety Registration Application Form* available from the Variety Registration Office, or from the Variety Registration Office web site:
http://www.inspection.gc.ca/plants/variety-registration/registration-procedures/eng/1299176130568/1299176203043

The application, along with supporting documentation, the fees form with payment information,

the objective descriptions form (ODF), and a representative reference seed sample of the variety is to be sent to:

Variety Registration Office
c/o PASO (Pre-Market Applications Submission Office)
59 Camelot Drive
Ottawa, ON, K1A 0Y9
e-mail: paso-bpdpm@Canada.ca
Telephone: 1-855-212-7695Facsimile: 613-773-7115

For further information, refer to the most recent publication of the *"Procedures for the Registration of Crop Varieties in Canada",* which is available on the CFIA Variety Registration Office website

CFIA Variety Registration Contact Information:

Mr. Mark Forhan
A/Chief
mark.forhan@Canada.ca
Tel: (613) 773-7148

Ms. Sima Vyas
Variety Registration Officer
sima.vyas2@Canada.ca
Tel: (613) 773-7151

4. CONDUCT OF CO-OPERATIVE & OTHER REGISTRATION TRIALS

4.1 General Conduct of Trials

The conduct of registration trials is the jurisdiction of the PRCPSC. Registration trials are replicated multi-location yield tests and other ancillary tests as may be sanctioned by the Committee. The official co-operative tests will include the word 'registration' in their names, to clarify the function of these tests. The purpose of the registration trials is to provide data for evaluation by the Committee and Evaluation Teams. The operation of the registration trials is the responsibility of the co-operators in the test, subject to the approval of the Committee. Co-operators are those scientists, field trial managers and sponsors who agree to conduct the registration trials. The over-riding principle is the use of the democratic principle in all Committee decisions.

Test co-ordinators are appointed by the co-operators in the test, subject to approval by the Committee. Co-ordinators are responsible, at the direction of the co-operators, for deciding on admission of new entries, general co-ordination of the test, for compiling and analyzing the data, and for preparation and distribution of an annual report. A current list of coordinators can be found in the crop specific procedures.

Claims relating to candidate cultivars based on data generated outside of the co-operative registration trial system must be substantiated (data interpreted) in writing by relevant experts, groups or associations. Procedures leading towards such claims must be sanctioned by such

relevant individual or body and accepted by the Committee prior to testing for registration.

As a general principle the following guidelines apply for co-operative registration trials:

a) Locations: Locations are determined by the test co-operators. They may be conducted by the private or public sector and are chosen to represent areas of adaptation for the crop.

b) Acceptance of entries for testing: As a general principle, six station years of data from the area of its intended commercial production, along with that of appropriate check cultivars, are required for entry in co-operative tests. An entry must meet the minimum criteria for quality, disease resistance and agronomic performance. Requirements for specific crops can be obtained from the test co-ordinator. Transgenic material must meet field testing requirements (unconfined environmental release requirements of the Canadian Food Inspection Agency) for such material before acceptance into co-operative registration tests. An organization wishing to obtain registration trial data on a variety with only a confined environmental release can set up its own private registration trial. The Committee's registration trial guidelines must be followed as to the number of years, locations, checks, and conduct of trials. The procedures leading up the production of private registration trial data must be accepted by the Committee prior to the planting of any field trials. The co-operative registration trial co-ordinator or their designate should be given access to the private trial sites. The data from the private registration trials must be made available to the Committee on an annual basis according to the timelines of the appropriate crop registration guidelines.

c) Limits on entry numbers: Every attempt is made to accept all qualified entries. However, resource restrictions require limits to be imposed. Acceptance is determined by the cooperators, subject to approval by the Committee.

d) Security of entries: Test co-ordinators and co-operators will take reasonable precautions to ensure the security of entries and will not distribute seed for purposes other than registration testing without the consent of the owner.

e) Check varieties: Check varieties must be approved by the recommending committee and represent specific classes, types and adaptation. Check varieties are normally the best commercially available cultivars for each class or type. In some instances, checks are chosen to provide a basis of comparison for quality or disease evaluation. Candidate cultivars will be compared to the appropriate check of their class at the time of consideration. Note, this may not be the same check as the one used when the line was entered into test. The check cultivars will be reviewed annually. The candidate will not be compared to other lines in the test for registration recommending purposes.

f) Disposition of entries: The owner of a line can withdraw it at any time. Lines are retained in the registration trials based on the request of the owner and the approval of the cooperators. A line will only be kept in trials for a year beyond the minimum testing requirement upon agreement of the Committee.

g) Fees: The PRCPSC may establish a fee structure and a mechanism for handling the fees to ensure that they are applied to the costs of operating the tests. Such fees are subject to annual review. Contact the test co-ordinator for details.

h) Condition of acceptance of a candidate cultivar for testing: It shall be a condition of

acceptance of a candidate cultivar for testing, that the party submitting the candidate cultivar agrees that the testing and evaluation procedures used by the PRCPSC are appropriate and that these testing and evaluation procedures, however defined, shall not justify an appeal of the Committee decision.

i) Limitation of liability: It shall be a condition of acceptance of a candidate cultivar for testing that the party submitting the candidate cultivar acknowledges that neither the PRCPSC nor its members and agents shall in any way be liable for any error or omission occurring as a result of the testing and evaluation process.

Operating procedures for specific crops or crop categories can be found as appendices in this document.

4.2 Appeal of Refusal of Entry to Trials

If a sponsor has been refused entry into the registration trials for one or more entries and wishes to contest the decision of the trial co-ordinators, the matter should be brought up for discussion at the PRCPSC meeting. The PRCPSC must approve the decisions of the trial co-ordinators at the February meeting. If the sponsor is not satisfied by the decision of the PRCPSC, a written application must be directed to the Chair of the PRCPSC, and received before March 1 following. This application shall indicate the basis of the appeal and include a copy of the data package prepared for the line in question. If the PRCPSC meeting is still in session, the appellant (sponsor) shall be given the opportunity to present their case personally to the Co-op Entry Appeal Committee of the PRCPSC, which is made up of the chair of the PRCPSC; the chairs of the Disease and Quality Evaluation Teams of the PRCPSC; the trial co-ordinator and one additional member - selected by the appellant from the voting membership of the PRCPSC. The chair of the Appeal Committee will be the chair of the PRCPSC. The appellant cannot be a member of the Appeal Committee. If the Chair of the PRCPSC is the appellant, then the Secretary will become the Chair. If either of the Chairs of the Evaluation Teams is the Appellant, then the Chair of the PRCPSC shall chose another member from that particular Evaluation Team, to be on the Appeal Committee. Following presentation of the arguments, the appellant will withdraw and a vote will be conducted. There will be a non-refundable $100 fee for this level of appeal. If the appeal is lodged after the PRCPSC meeting has adjourned, the appellant will make the case in writing through the PRCPSC Chair, with the vote of the Appeal Committee being conducted by facsimile or electronic mail. There will be a non-refundable $200 fee for this level of appeal. In either case, the decision will be based on a simple majority of the five members on the Appeal Committee. The appellant will be informed of the decision and its rationale in writing within 10 days.

Appendix 1: (From CFIA Model Operating Procedures, 2017)

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

1. 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;

2. 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;

3. 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;

4. 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;

5. 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

6. 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

1. 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;

2. 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;

3. 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

4. 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.

Appendix 2: Eligibility Requirements for Variety Registration (From CFIA Model Operating Procedures, 2017).

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

1. the variety has merit;
2. the variety has been tested in accordance with the testing protocols of a recommending committee;
3. the recommending committee has made a recommendation respecting registration of the variety;
4. the variety or its progeny is not detrimental to human or animal health and safety or the environment when grown and used as intended;
5. the representative reference sample of the variety does not contain off-types or impurities in excess of the Association's standards for varietal purity;
6. the variety meets the standards for varietal purity established by the Association or these Regulations for a variety of that species, kind or type;
7. the variety is distinguishable from all other varieties that were or currently are registered in Canada;
8. the variety name is not a registered trademark in respect of the variety;
9. the variety name is not likely to mislead a purchaser with respect to the composition, genetic origin or utility of the variety;
10. the variety name is not likely to be confused with the name of a variety that was or currently is registered;
11. the variety name is not likely to offend the public;
12. no false statement or falsified document and no misleading or incorrect information have been submitted in support of the application for registration; and
13. 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.

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

1. 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

2. 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 3: List of Crops under the jurisdiction of Prairie Recommending Committee for Pulse and Special Crops

Buckwheat
Fababean (small seeded)
Field Bean (white and coloured)
Lentil (grain type)
Pea (field)

APPENDIX 4: Data Release Policy

Operating Procedures used by the PRCPSC will be publicly available.

The PRCPSC minutes will be bound into a separate report for distribution to each committee member and variety proponent. Included in this report will be the recommendation and voting results (Evaluation Teams and Committee, respectively) for each candidate cultivar considered. Be advised, that all information contained is considered confidential until the candidate cultivar is registered. The report will not include meeting minutes of the Evaluation Teams.

Confidentiality of RC Test Data

Variety merit assessment test data either provided to the RC or generated via a co-operative test system is to be treated as confidential data of the variety developer to be used for the sole purpose of determining merit of the variety and making a recommendation to the VRO. Its use is restricted to this function only. Any other use requires that express permission is obtained from the variety developer prior to registration. If the candidate variety is recommended and if it becomes registered, the test data that accompanies the registration will become public domain. Data on check varieties or registered varieties in any of the registration trials will be considered public domain.

Reports of the Committee will only be available to voting members of the committee. A disclaimer indicating the restricted distribution of the report and limitations of the data will be included on the first page of each document. Developers, owners and marketing institutions may use the data for their lines without request for permission. Comparisons may only be made with check cultivars in the trials in which the candidate was evaluated.

Only data for candidates supported for registration and are currently registered may be used in “provincial government variety guides” without request for permission. Data on candidates supported for registration but which are not registered yet is proprietary and any use of it will require getting it from the variety proponent. The committee cannot release this information prior to registration.

Disclaimer to be published with the PRCPSC minutes:

"The data contained in this document is proprietary and has been generated solely for the express purpose of evaluating the merit of candidate cultivars under the authority of the *Seeds Regulations*. The data on these candidate cultivars is private data of the variety proponent until the variety is registered. Any use of that data prior to registration requires the express consent of the variety proponent in question. Upon registration the data becomes public domain. The information contained herein may not be reproduced, published or disseminated in any form other than in its entirety, without the express written consent of the PRCPSC Chair.

The data contained in this document are collected from several sources. The PRCPSC does not guarantee the veracity of subsets of these data.

The members/experts of the PRCPSC evaluate the merit of genotypes/cultivars using a pool of performance parameters collected over several years and multiple locations. Any subset of these data cannot be considered a reliable indication of overall merit.

Requests for permission to use portions of this document must be forwarded, in writing, to the PRCPSC Chair."

Guidelines to the Chair in granting permission to use portions of the PRCPSC data:

a) Permission to use data subsets will be refused in situations where, in the considered opinion of the Chair, the data will be presented in a misleading manner.

b) The data for the checks is considered public domain and a request for use will be approved unless it conflicts with point (a).

c) The use of data specific to entries may be approved with the express written consent of the relevant breeder/sponsor.

d) The Chair, in granting permission to use the data, will consider and respect information that is proprietary.

APPENDIX 5: Conflict of Interest Guidelines

The PRCPSC has as one of its mandates, the responsibility "to advise on the merit of lines in test and make recommendations for registration to the Variety Registration Office of Canadian Food Inspection Agency." While members are expected to vote impartially, abstaining from a vote is appropriate when sound ethical judgement indicates a 'Conflict of Interest'.

According to Dr. Michael McDonald, Director of the Centre for Applied Ethics at the University of British Columbia, a Conflict of Interest arises when an individual acting in an official capacity (public official, employee, professional, etc.) has private or personal interests sufficient to appear to influence the objective exercise of their duties. Conflicts of Interest interfere with professional responsibilities by clouding objective, professional judgement.

There are three key elements in defining a Conflict of Interest:

- Private or personal interest: The pursuit of private or personal interests does not create a conflict of interest unless it occurs during the exercise of official capacity.

- Exercise of official capacity: Duties and obligations that are part of an office or official capacity must prevail over private or personal interests.

- Responsibility to use objective professional judgement: Professionals are expected to provide sound, objective and independent advice. Factors that interfere (or appear likely to interfere) with professional objectivity are a matter of legitimate concern to those who rely on this advice.

In addition to ***actual*** Conflicts of Interest, ***apparent*** and ***potential*** conflicts should be avoided.

- Apparent Conflict of Interest: a situation in which a reasonable person would believe that the professional's judgement is likely to be compromised.

- Potential Conflict of Interest: a situation that could develop into an actual conflict of interest.

The key in discovering a personal Conflict of Interest is to determine if the situation is likely to interfere, or appears to interfere, with the independent judgement expected in performing your official duties. Trust is the core issue. Conflicts of Interest involve an abuse (actual or potential) of the trust that people have in professionals. In addition to direct damage to particular clients and employers, Conflicts of Interest injure the entire profession by reducing the confidence that people have in professionals.

An excellent diagnostic tool is the "trust test": *Would relevant others (employer, clients, colleagues, general public) trust my judgement if they knew I was in this situation?*

When a personal Conflict of Interest is recognized, the ethical responses are:

- Reveal your private interest to the relevant parties.
- Remove yourself from the decision making process or advice-giving role.

APPENDIX 6: Pea Coop Guidelines

Procedures for Evaluation and Recommendation for Registration of Cultivars of Field Pea for Western Canada, 2019

In order for a field pea cultivar to be registered by the Canadian Food Inspection Agency (CFIA), a recommendation of support for registration must be obtained from the Prairie Recommending Committee Pulse and Special Crops (PRCPSC). To obtain that recommendation the candidate cultivar must be evaluated in the Field Pea Co-operative Registration Test (Pea Co-op Test) for a minimum of two years. In order to be evaluated in these trials the sponsor of the candidate cultivar must apply to the test coordinator to enter the candidate cultivar into those trials.

Requirements for entry into the Field Pea Cooperative Test
The Pea Co-op Tests consists of Co-op Test A and B, as well as Co-op Test B (short season). All entries must be resistant to powdery mildew. The following information must be provided to the test coordinator: name of entry, name of sponsor, name of breeding institution, cotyledon

colour, the maturity of the candidate cultivar relative to a current check cultivar (to assist in grouping candidate cultivars into Co-op Test A, B the year in the coop test, i.e. the 1st year or 2nd year Pea Co-op Test, and whether the cooking test is requested. The maximum size of the Pea Co-op Tests is 36 entries including checks. The amount of seed required is 40,000 germinating seeds with no seed treatment applied. Without sponsor and breeding institution information the cultivar will not be entered.

Field Pea Cooperative Registration Test Procedures

Ten sites will receive funding for Co-op A, Co-op B, and one site (Fort St. John) will receive co-op B. Additional co-operators who request to grow the test without funding may do so at the discretion of the coordinator. Data obtained from non-paid sites will be incorporated into the report in the same manner as paid sites. For sites abandoned before harvest, the test Co-operators and the test coordinator will determine the proportion of work completed at that time and payment will be prorated on that basis.

Two years of testing are required. A third year of testing may be conducted at the expense of the sponsor. Candidate cultivars can be withdrawn at the beginning of any test year at the discretion of the sponsor. The tests are arranged in a randomized complete block or lattice design with three replicates.

Agronomic data typically collected include % plant stand, leaf type, vine length, pre-harvest lodging score, days to maturity and seed yield. Typical maximum acceptable coefficient of variation (CV) for seed yield is 15, however, discretion is allowed the test coordinator to accept trials with somewhat greater CV under exceptional circumstances, for example, in rare seasons where adverse environmental conditions cause many of the tests to have CV greater than 15. Typical minimum acceptable trial site mean yield is 1500 kg/ha, however, discretion is allowed the test coordinator to accept trials with somewhat lower mean yield, for example, in seasons with widespread drought that depresses yield.

Disease data collected typically include mycosphaerella blight, powdery mildew, and Fusarium root rot. In recent years these assessments were made at AAFC, Morden, MB, and at University of Saskatchewan, Saskatoon, SK, but starting in 2017, the Morden site was replaced by AAFC, Lethbridge site. In future years, Aphanomyces root rot may also be assessed.

Quality data typically collected include:

a) On all entries: cotyledon and seed coat color, seed weight, seed shape at a minimum of eight locations, crude protein concentration at a minimum four locations, and seed coat breakage at a minimum of four locations.
b) On green cotyledon entries: green color bleaching score, and green color intensity score at a minimum of six locations.
c) Cooking quality is an optional test at the discretion of the variety sponsor. The cooking test is conducted at the Crop Development Centre, University of Saskatchewan.

Check cultivars are determined annually by the PRCPSC. Entries are compared to the same set of checks for all years of Cooperative Testing. Checks are replaced when a better performing cultivar is registered in that class, and is grown on a wide scale commercially, or is anticipated to be grown on a wide scale within a year or two.

For Co-op C, all plots are desiccated and then harvested when the designated check variety is mature. In order to facilitate the operations of applying desiccants and harvesting, sufficient space should be given between the Co-op A, Co-op B and Co-op C tests.

All tests are managed and harvested according to sound agronomic practices for field pea in western Canada as outlined in provincial pulse grower manuals. Typically, the trials are planted as part of a four-year crop rotation and follow a cereal crop or chem-fallow season. The coordinator, all cooperators, and the PRCPSC will strictly adhere to the professional code of ethics as developed by the PGDC.

Inspection of coop trials
The cooperative trials are open for inspection by variety sponsors, PRCPSC members, and CFIA staff. If concerns are detected they should be communicated to the site cooperator and the test coordinator.

Submission of data for support for registration
The test coordinator will provide a standardized data package for all sponsors of final year entries in the test. This package will also be distributed to all members of the PRCPSC at least one week prior to the annual meetings of the PRSPSC. The data submitted by variety sponsors requesting support for registration may also include other pertinent supplementary data. The PRCPSC will judge the acceptability of the supplementary data.

The principle of merit is used by the members of the PRCPSC in their decision regarding the support of a candidate cultivar for registration. Candidate cultivars must meet the following standards.

A) For yellow and green pea candidates
1. Powdery mildew resistance
2. Grain yield at least 103% of the mean of the cotyledon colour checks
3. Lodging rating not significantly less than the mean of the cotyledon colour checks

B) For yellow pea candidates
4. Crude protein concentration not significantly less than the mean of the yellow cotyledon checks

Additional data collected for other traits will be presented for information purposes to the PRCPSC. A candidate with a deficiency in 2, 3, or 4 above could be offset by superior performance in one or two of 2, 3, or 4, or in one or more of the traits presented for information. Once a candidate cultivar has been supported for registration, both the sponsor and the secretary of the PRCPSC shall submit the data summaries, along with copies of letters of support from the PRCPSC to the Canadian Food Inspection Agency-Variety Registration Office.

Fees established by the PRCPSC will be charged for the inclusion of entries into the Pea Co-op Test. This fee will be ratified annually by the PRCPSC. The coordinator of the Field Pea Cooperative Registration Test is required to collect and distribute fees according to the coop trial guidelines.

A. Field Pea Cooperative Test Coordinator
Dr. Tom Warkentin
Crop Development Centre
University of Saskatchewan
51 Campus Drive
Saskatoon, Sk. S7N 5A8
Tel: 306-966-2371

email: tom.warkentin@usask.ca

B. Check Cultivars
Co-op A, Co-op B:
2019 checks for 1st year entries:
Yellow pea: CDC Amarillo and AAC Lacombe
Green pea: CDC Limerick and CDC Greenwater

C. Paid sites in 2019
Manitoba:
Brandon, MB (Co-op A, B)

Saskatchewan:
Indian Head, SK (Co-op A, B)
Melfort, SK (Co-op A, B)
Limerick, SK (Co-op A, B)
Saskatoon, SK (Co-op A, B)
Scott, SK (Co-op A, B)
Swift Current, SK (Co-op A, B)

Alberta:
Barrhead, AB (Co-op A, B)
Lacombe, AB (Co-op A, B)
Brooks (Co-op A, B)

British Columbia:
Fort St. John, BC (Co-op B only)

Note: The number of sites per province approximately reflects the area in field pea production in western Canada. To facilitate year-to-year comparisons at individual sites, it is recommended that, if possible, these sites remain constant over the years.

D. Volunteer sites in 2019
Kamsack, SK
St. Albert, AB
Vegreville, AB

E. Fees ($ Cdn/entry/year) for 2019-2020

Component	2016	2017	2018	2019
Test coordination	415	435	457	480
Agronomic	1103	1158	1216	1277
Pathology	110	116	122	128
Quality	168	176	185	194
Cooking (optional)	110	116	122	128
Total	1906	2001	2101	2206

* The agronomic portion will be divided by the total number of plots at all test sites, and distributed to each test site based on the total number of plots grown at any particular site. Plots of check varieties are not paid.

E. Summary of Deadlines:
Due date for intention to enter the Field Pea Co-operative Test: **February 15, 2019**
Due date for seed delivery to coordinator: **March 15, 2019**

Seeds to be delivered to:
Jaret Horner
Plant Sciences Dept.
University of Saskatchewan
Saskatoon, Sk. S7N 5A8
Tel: 306-966-1216
Fax: 306-975-0456
Email: jaret.horner@usask.ca

Amount of seed required: 40,000 germinating seeds; no seed treatment.

Due date for fee payment: May 1, 2019. An invoice will be sent to each variety sponsor. Make cheque payable to “University of Saskatchewan” and mail it to the test coordinator. **Due date for agronomic data and composite seed samples** provided by Co-operators to coordinator: **September 30, 2019**. Preliminary yield data will be distributed by the coordinator to sponsors by **October 15, 2019**. Disease evaluation report will be delivered to the coordinator by **December 1, 2019**. **Due date for complete Co-operative Test report**: **January 31, 2020.**

APPENDIX 7: Lentil Coop Guidelines

Procedures for Evaluation and Recommendation for Registration of Cultivars of Lentil for Western Canada February 27, 2019

In order for a lentil cultivar to be registered by the Canadian Food Inspection Agency (CFIA) of Agriculture and Agri-Food Canada, a recommendation of support for registration must be obtained from the Prairie Registration Committee for Pulse and Special Crops (PRCPSC). To obtain that recommendation the candidate cultivar must normally be evaluated and meet standards in the Lentil Registration Recommendation Trial (LRRT) for a minimum of two years. In order to be evaluated in these trials the sponsor of the candidate cultivar must obtain permission to enter the candidate cultivar into those trials.

Requirements for entry into the Lentil Registration Recommendation Trial:
The following information must be provided to the test coordinator: name of entry, name of sponsor, name of breeding institution, seed weight, market class and the maturity of the candidate cultivar relative to a current check cultivar. All entries are required to have improved levels of ascochyta blight resistance in comparison older cultivars like Eston.

The structure and composition of registration trials is flexible from year to year depending on availability of seed, and special characteristics of entries (for example, tolerance to imidazolinone tolerance) and availability of appropriate checks.

The maximum size of a LRRT is 36 entries including checks. Trials will consist of lentil check cultivars and breeding lines with imidazolinone herbicide tolerance (more than 90% of lentil crops in Canada are tolerant to this herbicide. If necessary, additional trials will be designed specifically for specific herbicides. CDC Maxim is the standard check cultivar in all trials – additional checks will be added based on market class. Greenhouse confirmation of imidazolinone tolerance is sufficient to demonstrate herbicide tolerance. The amount of seed required is up to 35,000 germinating seeds with no seed treatment, but may vary annually depending on the size of the trial and number of locations based on a minimum of three replications per site.

Lentil Registration Recommendation Trial Procedures:
Data are reported for all sites based on acceptable CV of 18% for yield. Trials are normally grown under dryland conditions, and may be irrigated for disease screening purposes if appropriate. The number of sites will vary depending on the location and the participation of co-operators. No fees are charged for entering the trials. Trial managers receive no compensation. Anyone wishing to grow the trial without funding may do so at the discretion of the coordinator, depending availability of seed and cooperator experience/capability of growing and managing lentils. Two years of testing are a minimum requirement for registration under normal circumstances. Trials are arranged in a randomized complete block design with three replicates. At least one appropriate check is assigned to each market class represented in the trial, with CDC Maxim as a common check in all trials. The number of locations may vary from year to year based on land availability, weather conditions, appropriateness of location, industry developments and availability of collaborators. Granular inoculants will be applied at the time of sowing. Normal row spacing is 3 or 4 rows spaced at 30 cm. Typical locations in Saskatchewan include Elrose, Wilkie, Rosthern, Saskatoon, Floral, Limerick, Lucky Lake, Moose Jaw, Outlook, and in Alberta - Brooks, and Bow Island. Irrigated or dryland inoculated disease sites, if

available, will normally be grown at greenhouse or polyhouse facilities of the University of Saskatchewan, and/or with additional sites possible in the Saskatoon region.
Growing season data collected at each site will ideally include days to flower, plant height, days to maturity, days to maturity, lodging, disease development as required/appropriate, shattering (if appropriate), and herbicide damage/herbicide tolerance (if appropriate). Post-harvest determinations will include seed yield for all sites, and for other selected sites, seed weight and other appropriate marketing characteristics such as seed diameter and thickness distributions, seed coat colour, seed coat pattern, and cotyledon colour. If field conditions result in disease development, disease reactions (for example anthracnose, stemphylium blight, root rot) will be recorded if possible and affordable. Acceptable coefficient of variation (CV) for seed yield is 16%. Sites with CV for seed yield in the range of 16-20% may be omitted at the discretion of the coordinator.

Disease reaction data will be collected, if appropriate, for ascochyta blight (plant and or seed ratings), anthracnose, and stemphylium blight. DNA marker-assisted screening is encouraged if robust published protocols are affordable and available for use. If appropriate, disease data will be recorded for field trials at inoculated and irrigated sites near Saskatoon, SK. Post-harvest seed infection data may be recorded and included. Disease reactions may also be recorded based on indoor screening of a subset of advanced lines if resources are available. Disease reactions for other field diseases may also be included in evaluation reports if conditions are favourable for development of other diseases such as sclerotinia, botrytis, stemphylium blight, fusarium wilt, and Aphanomyces root rot. Quality data collected includes seed coat colour, cotyledon colour, seed weight, and for some market classes, diameter and thickness separation of seeds over roundhole and slotted screens. Other post-harvest quality data may be collected at the discretion of the coordinator. Check cultivars for representative market classes of lentil are determined annually by the PRCPSC and the trial coordinator. Entries are compared to checks for all years of the LRRT. Checks are normally replaced when a better performing cultivar is registered in a specific appropriate market class. All tests are managed and harvested according to standard and sound agronomic and scientific practices as appropriate for each test site. The professional code of ethics developed by the PRCPSC will be strictly adhered to by the coordinator, trial managers, and the PRCPSC. In cases where herbicide tolerant lentil breeding lines are evaluated, trial protocols may be amended at the discretion of the coordinator, or appropriate additional trials may be designed, provided that suitable check cultivars are used in the trials.

Inspection of trials:
The trials are open for inspection by variety sponsors, PRCPSC members, and CFIA staff. If concerns arise in terms of specific trial site management, weather problems or unexpected biological events and/or weather events, these should be communicated to trial managers and the test coordinator as soon as possible during the growing season.

Submission of data for support for registration:
The test coordinator will provide a summarized data package, when appropriate, for all sponsors of final year entries in the trials. This package must be distributed to all members of the PRCPSC, and the CFIA Variety Registration Office for arrival at least one week prior to the annual meetings of the PRCPSC. The data submitted may include other pertinent supplementary data available, for example, additional information on herbicide tolerance, disease reaction, quality or marketing characteristics.

Acceptability of any supplementary data will be determined by the PRCPSC membership. The principle of merit is used by the members of the PRCPSC in their decision regarding the support of a candidate for registration. The candidate cultivar must demonstrate merit when compared to the check and other registered cultivars. A candidate has merit when, considering all traits including agronomic performance, disease reaction and end-use suitability, its overall performance is equal to or better than the check cultivars with which the candidate has been compared during the two years of testing. It is recognized that certain criteria are mandatory for certain regions or market classes and that minor deficiencies in certain parameters may be outweighed by advantages in others. A candidate cultivar may be supported for registration based on performance advantage in a particular agroecological zone of Canada and need not excel across the whole region. Once a candidate cultivar has been supported for registration, both the sponsor and the secretary of the PRCPSC shall submit the data summaries, along with copies of letters of support from the PRCPSC to the CFIA-Variety Registration Office, Agriculture and Agri-Food Canada, Ottawa. If the coordinator establishes a fee structure, the fee will be charged for all entries in the trial except check cultivars. This fee will be ratified annually by the PRCPSC. The coordinator will use the fee to prepare trials, to obtain disease reactions, to conduct quality evaluation, analyse data, and to prepare and to distribute test results.

APPENDIX (as of 2019)

A. Lentil Registration Recommendation Trial Coordination and Management

Dr. Albert Vandenberg Crop Development Centre University of Saskatchewan 51 Campus Drive Saskatoon, SK Phone: 306-966-8786 Fax: 306-966-5015 email: vandenberg@usask.ca
Trial agronomy management contact: Jaret Horner, 306-966-1216.

B. Check Cultivars

2015 checks for first and second year entries, if required by market class:

Coop A: CDC Maxim (small red), CDC Impala (extra small red), CDC KR-2 (large red) , CDC SB-4 (Spanish brown), CDC Imvincible (small green), CDC QG-3 (green cotyledon); CDC Greenstar (large green)

C. Summary of Deadlines:

Due date for intention to enter the Lentil Registration Recommendation Trial: **March 1.** Due date for seed delivery to co-ordinator: **March 15** -Amount of seed required: **35,000 germinating seeds; no seed treatment**.

APPENDIX 8: Dry Bean Coop Guidelines

Requirements for Registration of a Dry Bean Cultivar for Production in Western Canada Updated March 2019

1. Introduction

Dry bean (field bean) candidate cultivar to be registered by the Variety Registration Office, Canadian Food Inspection Agency (CFIA) must obtain a recommendation of support for registration from the Prairie Recommending Committee for Pulse and Special Crops (PRCPSC). The candidate cultivar must be evaluated and meet the merit standards in one of the four Prairie Dry Bean Cooperative Registration Trials.

The four Prairie Dry Bean Cooperative Registration Trials include (see Appendix DB-A):

1. Short Season Wide Row Irrigated Dry Bean Cooperative Registration Trial (SSWRI)

2. Short Season Narrow Row Dry Bean Cooperative Registration Trial (SSNR)
3. Long Season Wide Row Dry Bean Cooperative Registration Trial (LSWR)
4. Long Season Narrow Row Dry Bean Cooperative Registration Trial (LSNR)

In the **wide row** trials, entries are grown at conventional plant densities and row widths (e.g. 60 to 75 cm) whereas in the **narrow row** trials, entries are grown at high population densities in narrow rows (e.g. 18-30 cm). Procedures for all four sets are identical unless specified. In order to be evaluated in these trials, the sponsor of the candidate cultivar must obtain permission from the respective trials coordinator to enter the candidate into the trials.

2. Entrance Requirements

The maximum number of entries per sponsoring company or institution is reviewed annually by the co-operators. At present, **no fees** are charged for entries in the official cooperative registration trials. The potential need for fees may change in the future and will be discussed at the Bean Workers Meeting of PRCPSC.

Preliminary data from field trials are required prior to entry into the Prairie Dry Bean Cooperative Registration Trials. Supplementary descriptive information such as bean type, relative maturity, seed weight and disease reaction should accompany the application form. Any special attributes that require unusual testing procedures should be reported to the trial coordinator in order to adjust testing methods wherever feasible. Lines may be entered in the trials by a Canadian public institution or through a private sector Canadian breeder, sponsor or breeder's agent. Lines entered from outside Canada, require prior communication by the authorized individual in the 'breeding company' to the respective trials coordinator. **Requests for entering dry bean lines in the trials from a sponsor or a company that does not own the lines must be accompanied by a written consent from the developer (breeder).** Lines tested and deemed to have merit will be eligible for registration in Canada. Sponsor can withdraw their entries after first year in the cooperative registration trials.

Basic requirements of the four cooperative trials include:

1. Short Season Wide Row Irrigated Dry Bean Cooperative Registration Trial
   - Market classes may include pinto, great northern, black, pink, red, yellow, navy, cranberry and kidney (dark red, light red and white) bean.

2. Short Season Narrow Row Bean Cooperative Registration Trial
   - All entries for these trials must be upright or have a narrow profile.
   - Market classes may include pinto, great northern, navy, black, pink, small red, yellow and others.

3. Long Season Wide Row Bean Cooperative Registration Trial
   - Market classes may include navy, pinto, black, kidney (white, light red and dark red), cranberry, pink, small red, great northern and manteca.

4. Long Season Narrow Row Bean Cooperative Registration Trial
   - All entries for these trials must be upright or have a narrow profile.
   - Market classes may include navy, pinto, black, kidney (white, light red and dark red), cranberry, pink, small red, great northern and manteca.

3. Seed Requirement

Disease-free seeds are required each year. Amounts of seed to send to the respective coordinators are:

1. Short Season Wide Row Irrigated Dry Bean Cooperative Registration Trial (5 sites): 9,000 untreated seeds per entry (includes 1,700 untreated seeds for White Mould testing and 120 untreated seeds for Anthracnose testing)

2. Short Season Narrow Row Dry Bean Cooperative Registration Trial (8 sites): 9,500 untreated seeds per entry (includes 1,700 untreated seeds for White Mould testing and 120 untreated seeds for Anthracnose testing)

3. Long Season Wide Row Dry Bean Cooperative Registration Trial (4 sites): 10,000 untreated seeds per entry (includes 1,700 untreated seeds for White Mould testing and 120 untreated seeds for Anthracnose testing)

4. Long Season Narrow Row Dry Bean Cooperative Registration Trial (4 sites): 10,000 untreated seeds per entry (includes 1,700 untreated seeds for White Mould testing and 120 untreated seeds for Anthracnose testing)

Firm list of entries must reach coordinators by the **third Friday of March**. Untreated seeds must be received by the co-coordinator by the **third Friday of April**. A germination of **85%** will be assumed unless other information is provided by the seed supplier.

4. Trial Management

The Prairie Dry Bean Cooperative Registration Trials are conducted by co-operators at various locations across the southern Canadian Prairies (Appendix DB-A). Lattice or randomized complete block designs are used for the trials. All trials are replicated three or four times. Data presentation, where possible, will use a Nested model (by market class or group of similarly-sized market classes).

Plots have a minimum of two rows with 60-75 cm between rows (wide row trials) or four rows with 18-30 cm between rows (narrow row trials). Minimum row length is 3.7 m. Assuming a germination of 85%, the co-operator adjusts the number of seeds needed per row in order to achieve a population density of 20 to 25 plants m^{-2} (wide row) or 35 to 45 plants m^{-2} (narrow row). Individual trial management is left to the co-operator who must notify the co-coordinator on whether the trial was directly harvested or was pulled and then threshed. Efforts are made to have narrow row trials directly combined (or swathed and combined) and wide row trials undercut. Entries in both long season wide row and long season narrow row trials are direct combined.

Check cultivars are chosen by the coordinators in consultation with the cooperators (Appendix DB-B). One or more check cultivars per market class of dry bean may be used. Checks are registered cultivars and ideally exhibit above average performance. If no cultivars are registered in a given class, the best cultivars available, to the opinion of the coordinators and cooperators, are used for comparison. Checks designated in the year that a candidate is first entered in the trials will be recommended for use in making decisions regarding support for registration of that candidate cultivar. The list of designated check cultivars is reviewed annually, and revised as needed with the objective of encouraging improved performance.

The coordinator is responsible for randomization and supplying field sheets electronically, and the appropriate amount of untreated seeds per entry and the necessary documentation to all cooperators by **May 10**.

Agronomic data collected at each location may include (essential data are marked with an *): days to flowering, *days to maturity, plant height (cm), canopy height, *pod clearance (% of total pods above 5 cm above ground in narrow row trials only), shattering (1 = no shattering to 5 = 100% shattered), *lodging (1 = upright to 5 = flat), *seed yield (g/plot), *seed weight (mg). At one site, overseen by the respective coordinator, seed quality (1 = good to 5 = poor) based on seed coat color and hilum color may be recorded. *Growth habit (Type I = determinate bush, II = indeterminate bush and III = indeterminate prostrate) will be recorded for one replication at a location. Disease data in the trials may be recorded as these may be relevant in a particular year and site.

White mould screening in a disease nursery, in replicated trials may be carried out by AAFC-Lethbridge for entries in the SSWRI and SSNR Dry Bean Cooperative Registration Trials, and by AAFC-Morden for entries in the LSWR and LSNR Dry Bean Cooperative Registration Trials. The experimental design of the disease nursery is the same as the field trials with 4 to 6 replications. Dry bean genotypes are grown with narrow row spacing of 18 to 30 cm with irrigation in order to promote disease development. Plot area is also inoculated with sclerotia prior to planting. Disease incidence (percentage of infected plants) and severity (1 = healthy plants to 4 = lower part of main stem infected or dead plants) data will be provided by **December 15** to the respective trial coordinators for inclusion in the cooperative registration trial reports.

Anthracnose screening (indoors) may be carried out by Dr. Robert Conner at AAFC-Morden during the year, using the most common races of anthracnose. Anthracnose severity (0 = no symptoms on seedlings to 9 = 81% discolouration of the veins on the underside of the inoculated leaves) data will be provided by **December 15** to the respective trial coordinators for inclusion in the cooperative registration trial reports.

Quality data including percent hard seeds (after soaking and cooking), hydration coefficient (after soaking and blanching), percentage drained weight, appearance, clumping, texture and seed colour (before and after processing) of second and/or third year dry bean entries in the Registration Trials may be determined and data provided to the respective trial coordinators at least two weeks prior to the meeting for inclusion in the request for support for registration.

Data from individual trials will be submitted to the relevant trial coordinators by **December 15.** Information on the seeding and harvest date, number and length of rows (seeded and harvested), spacing between rows and plots, rate of seeding, area harvested, and fertilizers and herbicides applied are required. The coordinators analyse and summarize the data. Registration trials may be inspected for general adherence to good agronomic practice, during the growing-season by the coordinators or cooperators, aside from those conducting the specific trial(s). A trial is nonvalid, if the coefficient of variation for yield is greater than 20%, or if deemed visually unacceptable by the cooperator conducting the trial or a coordinator or cooperator inspecting the trial. Only valid data are included in the summaries. The summaries and comparisons are e-mailed to the Chair and Secretary of the PRCPSC for posting online and to candidate sponsor or breeder by the **end of January** in advance of the annual meeting in February/March.

5. Security of Entries

Breeding lines and cultivars not registered in Canada received from private or public sector plant breeders will be released only under conditions specified by the breeder or Canadian Breeder agent. The professional code of ethics as developed by the Cultivar Registration Recommending Committee will be strictly followed by all individuals involved in testing and the cultivar registration process. A copy of the Code of Ethics is attached (Appendix DB-C).

6. Support for Registration

A written summary of the data and the request for support for registration must be **sent via email to the Chair and Secretary of the PRCPSC at least one week prior** to the annual meeting of the PRCPSC or according to the deadlines set by the PRCPSC, for support of registration to be considered at that meeting. The PRCPSC makes recommendations for registration. Decisions on supporting cultivars for registration are made in February/March of each year by a majority vote in the PRCPSC. Decisions are based on results from the Prairie Dry Bean Cooperative Registration Trials.

In order to be eligible for support for registration,

1. An entry must be entered in one of the Prairie Dry Bean Cooperative Registration trials for at least two years. The entries will be assessed for seedling resistance to anthracnose in a greenhouse at AAFC-Morden. White mould incidence and severity will be assessed in a field disease nursery at AAFC-Lethbridge (SSWRI and SSNR entries) and AAFC-Morden (LSWR and LSNR entries).
2. Private data may be considered on a case-by-case basis. However, appropriate check cultivars must be used for comparing candidate cultivars. Please see Appendix DB-B for a list of check cultivars by market class.
3. Data from a minimum of eight locations over two years is needed for agronomic traits that are part of merit assessment (Table 1) in order to be eligible for support for registration.
4. All valid data must be included in the sponsor's request for support for registration document, and
5. In Table 1, the performance data of traits with a "+" must be equal-to or superior-to the designated check cultivars(s) of similar market class and maturity. In Table 2, traits with a "+" are to be reported as they may be of interest to growers, researchers and/or the industry. Traits with a "–" are not applicable for a test.
6.

Table 1. Traits for merit assessment.

Traits	Dry Bean Cooperative Registration Trial			
	Short Season Wide Row Irrigated	Short Season Narrow Row	Long Season Wide Row	Long Season Narrow Row
Growth Habit	–	–	–	–
Days to Flowering	–	–	–	–
Plant Height	–	–	–	–
Pod Height	–	–	–	–
Lodging	+	+	+	+
Days to Maturity	+	+	–	–
Seed Yield	+	+	+	+
1000-seed Weight	+	+	–	–
White Mould	–	–	–	–

Common Bacterial Blight	–	–	+	+
Anthracnose	–	–	–	–
Cooking Quality[a]	–	–	–	–
Canning Quality[b]	–	–	–	–

[a]Cooking quality traits include percentage hard seed, partially hydrated seed and hydration coefficient after soaking and after cooking.
[b]Canning quality traits include hydration coefficient after soaking and blanching, dry and processed seed colour, matting, appearance, percentage drain weight and texture.

Table 2. Traits to be reported in the Registration Trial report.

Traits	Dry Bean Cooperative Registration Trial			
	Short Season Wide Row Irrigated	Short Season Narrow Row	Long Season Wide Row	Long Season Narrow Row
Growth Habit	+	+	+	+
Days to Flowering	+	–	+	+
Plant Height	+	–	+	+
Pod Height	–	+	+	+
Lodging	+	+	+	+
Days to Maturity	+	+	+	+
Seed Yield	+	+	+	+
Seed Weight	+	+	+	+
White Mould	+	–	+	+
Common Bacterial Blight	+	–	+	+
Anthracnose	+	+	+	+
Cooking Quality[a]	+	–	–	–
Canning Quality[b]	+	–	–	–

[a]Cooking quality traits include percentage hard seed, partially hydrated seed and hydration coefficient after soaking and after cooking.
[b]Canning quality traits include hydration coefficient after soaking and blanching, dry and processed seed colour, matting, appearance, percentage drain weight and texture.

Under special circumstances, support for interim registration may be given for individual entries, where the circumstances would appear to merit these restrictions. Normally, support for full, unconditional registration is granted.

Once a candidate has been supported for registration, the sponsor may submit the data summaries, along with copies of letters of support from the PRCPSC to:

Variety Registration Office
c/o PASO (Pre-Market Applications Submission Office)
Canadian Food Inspection Agency
59 Camelot Drive
Ottawa, ON, K1A 0Y9
Telephone: (613) 773-7148
Facsimile: (613) 773-7144

Appendix DB-A: Prairie Dry Bean Cooperative Registration Trials: Coordinators and Trial Locations

Short Season Narrow Row Dr. Kirstin Bett Department of Plant Sciences University of Saskatchewan 51 Campus Drive Saskatoon, SK S7N 5A8 Tel: (306) 966-4947 Fax: (306) 966-5015 E-mail: kirstin.bett@usask.ca	**Long Season Wide Row and** **Long Season Narrow Row** Dr. Anfu Hou AAFC – Morden Research Centre Unit 100 – 101 Route 100 Morden, MB R6M 1Y5 Tel: (204) 822-7228 Fax: (204) 822-7207 E-mail: anfu.hou@agr.gc.ca
Short Season Wide Row Irrigated Dr. Parthiba Balasubramanian Agriculture and Agri-Food Canada Lethbridge Research Centre 5403 – 1st Avenue South, P.O. Box 3000 Lethbridge, AB T1J 4B1 Tel: (403) 317-2275 Fax: (403) 382-3156 E-mail: parthiba.balasubramanian@agr.gc.ca	

Trial Locations: Trial locations are reviewed annually by the co-operators. All entries of one of the cooperative registration trials are grown at all locations. Trials may be inspected (see Section 3. Trial Management). Proposed test sites are:

1. Short Season Wide Row Irrigated:
    - Bow Island, Vauxhall, Cranford, Fairfield and Lethbridge (AB)
2. Short Season Narrow Row:
    - Lethbridge (AB); Outlook, Rosthern, Saskatoon, Canora (SK); Minto (MB)
3. Long Season Wide Row and
4. Long Season Narrow Row
    - Morden, Winkler, Carman and Portage-la-Prairie (MB)

Appendix DB-B: Dry bean check cultivars for the four cooperative registration trials on the Prairies (2019).

	Dry Bean Cooperative Registration Trial			
Market class	**SSWRI**	**SSNR**	**LSWR**	**LSNR**
Navy	Envoy	Envoy	Envoy T9905	Envoy T9905
Pinto	Island AAC Explorer	Island CDC WM-2	Windbreaker CDC WM-2	Windbreaker CDC WM-2
Black	AC Black Diamond	CDC Blackstrap	CDC Jet Eclipse	CDC Jet Eclipse
Great Northern	AAC Whitehorse	AAC Whitehorse	Beryl	Beryl
Small Red	AC Redbond	AC Redbond	AC Earlired	AC Earlired
Pink	Viva	Viva	Viva	Viva

Flor de Junio	-	CDC Ray	-	-
DRK	-	-	ROG802	ROG802
LRK	OAC Lyrik	-	Pink Panther	Pink Panther
WK	-	-	GTS 402	GTS 402
Cranberry	AAC Cranford	-	Etna	Etna
Yellow	AAC Y012	CDC Sol	CDC Sol	CDC Sol

SSWRI – Short Season Wide Row Irrigated Dry Bean Cooperative Registration Trial
SSNR – Short Season Narrow Row Dry Bean Cooperative Registration Trial
LSWR – Long Season Wide Row Dry Bean Cooperative Registration Trial
LSNR – Long Season Narrow Row Dry Bean Cooperative Registration Trial

Appendix DB-C: Code of Ethics, Security of Entries and Confidentiality of Test Data

1. The originating breeder, institution or company has rights to the germplasm. These rights are not waived with the distribution of seeds or plant material. A seed recipient is defined as an individual who directly contributes data for the trial in which the germplasm is being evaluated.

2. The owner/breeder, in distributing seed or other propagating material of the germplasm, grants permission for its use in trials under the recipient's control, and as a male parent for making crosses from which selection will be made. As a courtesy, it is suggested that the owner/breeder be notified of the intent to use the germplasm in crosses.

3. Seed stocks of entries in the registration trials may only be made with the written permission of the breeder.

Security of entries

All persons and institutions involved in conducting trials on behalf of the committee will agree to abide by a written "Code of Ethics" (including the Code of Ethics for Plants Breeders and Co-operators Conducting Variety Evaluation Trials in Canada and also including trial inspectors). The seed of candidate entries is **proprietary property** and should be handled with this in mind. Under no circumstances will seed submitted for these trials be redistributed in any manner other than for the purpose of conducting the registration trials, both cooperative and private.

Confidentiality of Test Data

Variety merit assessment test data either provided to the Recommending Committee or generated via a co-operative test system is to be treated as confidential data of the variety developer to be used for the sole purpose of determining merit of the variety and making a recommendation to the VRO. Its use is restricted to this function only. Any other use requires that express permission is obtained from the variety developer prior to registration. If the candidate variety is recommended and if it becomes registered, the test data that accompanies

the registration will become public domain. Data on check varieties or registered varieties in any of the registration trials will be considered public domain.

APPENDIX 9: Faba Bean Coop Guidelines

Western Canada Faba Bean Co-op Trial Guidelines
Trial Protocol for 2019

The trials will be organized and conducted as follows:

1. The Western Canada Faba Bean Co-op Trial (WCFBCT) system for support of registration Recommendations by the PRCPSC are based on a minimum of two years of testing to provide a minimum of 6 station years of performance data. The trial will be conducted at a minimum of 5 locations for 2 years or one year of WCFBCT testing and one other year of private testing (minimum of 3 locations). Target locations are 3 in Manitoba, 3 in Saskatchewan, and 3 in Alberta.

Check varieties proposed for 2019 are as follows:

Trial A: For zero-tannin (white-flowered) types. DL Rico and Snowbird

Trial B: For coloured flower types. Fabelle and DL Tesoro

2. Experimental Design: Randomized Complete Block Design (3) replicates
Sites: Minimum of 6 : 2 in MB, 2 in SK; 2 in AB
Number of entries: Plot plan including randomization to be sent before seeding
Plots size: Send seeder/plot dimensions to Co-op Trial Coordinator by March 31 to accommodate required seed numbers per plot per site.
Entries: Five kg of untreated seed of each entry to be sent to Co-op Trial Coordinator by March 31. Sponsor and breeding institution must be supplied or the entry will be removed from the test.
Background site information: a) General soil information; b) Precipitation

3. Data collection priorities:
1. Emergence – uniform plant emergence in each replicate. Make note of entries with low plant densities.
2. Flower date – time of 10% of plants with first open flower.
3. Plant height prior to harvest.
4. Maturity* at time of desiccation (early, medium and late) or swathing.
5. Seed yield in grams/plot (please send harvested plot size) and in kg/ha
6. Seed weight-1000 seeds in grams. 100 seeds, weight in grams X 10. (1) measurement per replicate.
7. Crude protein content may be analysed on second year entries if sufficient financial resources are available.
8. Lodging if environmental conditions are conducive.
9. Appropriate disease data with scoring system supplied in report for identifiable diseases that may occur, for example, chocolate spot (*Botrytis fabae*).
*Maturity of faba bean may be variable because of its indeterminate growth habit.

Staging on the basis of % change from green to black pod starting at the base of the plant may be useful as a guide to relative maturity. Observing the threshed grain sample for % immature green seeds may also be useful in determining relative maturity.

4. Data Analysis:
Normally only yield data with acceptable C.V. (less than 15%) will be considered valid..

5. Field Protocols
Seeding rate: A target plant population of 4 plants/ft2 or about 45 plants/m2
Seeding depth: 5 cm – 8 cm deep with seed entries.

6. Fees:

A fee of $650 dollars will be charged per entry. Invoices will be sent out May 1

Fertilizer application: Apply 12-51-0 fertilizer up to 35 kg/ha with seed. If higher rates are required, or in extreme dry soil conditions, apply as a side band if possible.
Seed treatments: None applied for coloured flower trials. Optional for white-flowered trials.

APPENDIX 10: Buckwheat Coop Guidelines

Procedures for Evaluation and Recommendation for Registration of Canadian Cultivars of Buckwheat for Western Canada

In order for a buckwheat cultivar to be registered by the Variety Registration Office, a recommendation of support for registration must be obtained from the Prairie Recommending Committee Pulse and Special Crops (PRCPSC). To obtain that recommendation the candidate cultivar must be evaluated and meet the merit requirements for buckwheat. The PRCPSC assesses merit by testing in the Buckwheat Coopertive Registration Tests, for a minimum of two years.

Submission of data for support for registration:
The data submitted for consideration for support for registration must include all data generated from all years in which the entry was included in the Buckwheat Co-operative Registration Tests in comparison with the designated check cultivar. When presenting a candidate for consideration for support for registration it must be compared to the designated check variety which was in place at the time of entry into the Co-operative Registration Test. The data submitted may also include other pertinent supplementary data available.

The PRCPSC will judge the acceptability of supplementary data. Under normal circumstances a candidate cultivar requires a minimum of two years of Registration Test data to be considered for support.

Assessed merit:

A yield increase of greater than checks
Unique plant habit which gives a large advantage over the normal (ie. semi-dwarf that drastically reduces lodging), Exceptionable disease resistance or insect resistance or exceptionable seed quality would be considered as unusual circumstances.

All relevant data, including screening and laboratory data judged to be acceptable and useful by the PRCPSC, may be used in support of registration in addition to official test data. When appropriate, grain quality market acceptability or pilot scale test data will be considered in support of registration.

A written summary of the data and the request for support for registration must be received by the PRCPSC prior to the annual meeting of the PRCPSC for support of registration to be considered at that meeting.

Once a candidate cultivar has been supported for registration, the PRCPSC, shall provide a copy of the data summaries, along with a letter of support from the PRCPSC. The owner of the line can then apply for variety registration:

Variety Registration Office

Canadian Food Inspection Agency
59 Camelot Drive
Ottawa, ON, K1A 0Y9
Telephone: (613) 773-7148
Facsimile: (613) 773-7144

Testing Fees:

A fee of $75 per plot has been established by the coordinator and Buckwheat Workers' Committee This fee will be ratified annually by the PRCPSC. The monies collected will be utilized by the coordinator to prepare Trials, obtain disease reactions, conduct quality evaluation, analyse data and to prepare and distribute test results.

The co-coordinator, all co-operators and the PRCPSC will strictly adhere to the professional code of ethics as developed by the PRCPSC.

I. Buckwheat Cooperative Test A as of February 28, 2008.

(A) Coordinator:
Dr. Clayton Campbell, Kade Research Ltd., 126 Southpark Street, Morden, MB R6M 1H1
phone: 204-822-7235; fax: 204-822-5960; email: kaderes@mts.net

(B) Check Cultivar:

Koma - 2008 first and second year Registration Test entries

(C) Test Sites:

Morden, Portage la Prairie, Bow Island and an additional site in western Canada

(D) Pathology
- Disease evaluations must be conducted under the supervision of a pathologist member of the PRCPSC.

- Any candidate cultivar to be licensed with a pesticide requirement can only be considered if the pesticide is registered for use in Canada.
- Total numbers of candidate cultivars will be limited to test facilities.
- Appropriate check cultivars must be included.

(E) Quality
- Quality evaluation requirements will remain the same as in the current Cooperative Registration
Test system.
- Total numbers of candidate cultivars will be limited to test facilities.
- Appropriate checks cultivars must be included.

CODE OF ETHICS

FOR PLANT BREEDERS AND CO-OPERATORS

CONDUCTING CULTIVAR REGISTRATION TRIALS IN CANADA
Please consider including the following, directly from the MOPS

Security of entries

The seed of candidate entries is **proprietary property** and should be handled with this in mind. Under no circumstances will seed submitted for these trials be redistributed in any manner other than for the purpose of conducting the registration trials, both cooperative and private.

Confidentiality of RC Test Data

Variety merit assessment test data either provided to the RC or generated via a co-operative test system is to be treated as confidential data of the variety developer to be used for the sole purpose of determining merit of the variety and making a recommendation to the VRO. Its use is restricted to this function only. Any other use requires that express permission is obtained from the variety developer prior to registration. If the candidate variety is recommended and if it becomes registered, the test data that accompanies the registration will become public domain. Data on check varieties or registered varieties in any of the registration trials will be considered public domain.