

---

## SECTION 2

---

### FOUNDATION, REGISTERED AND CERTIFIED PRODUCTION OF BARLEY, BUCKWHEAT, CANARYSEED, DURUM, FLAX, OAT, RYE, TRITICALE, AND WHEAT

---

In this Section:

- **Barley** includes spring and winter Barley.
- **Bean** includes field, garden, white, coloured, navy or dry edible type Bean.
- **Oat** includes covered and naked Oat.
- **Rye** includes spring and fall (winter) Rye.
- **Triticale** includes spring and winter Triticale.
- **Wheat** includes spring and winter Wheat, Einkorn, Emmer and Spelt (unless otherwise specified). **Durum** is not included.

Section 1, *Regulations for All Pedigreed Seed Crops*, together with the following, constitute the production regulations.

---

#### **2.1 SEED CLASSES AND GENERATIONS**

- 2.1.1 The number of official pedigreed classes is determined by the Breeder of the variety and are normally Foundation, Registered and Certified.
- a) Breeder: controlled by the Plant Breeder. No generation limit.
  - b) Select: normally 5 generations. Grown by accredited plot growers.
  - c) Foundation: one generation.
  - d) Registered: one generation.
  - e) Certified: one generation.
- 2.1.2 For Select and Probation plot production, refer to Section 12.
- 2.1.3 For those growers who are not accredited by the CSGA to grow Probation, Select or Foundation plots, and who plant crops with Breeder or Select seed, the CSGA reserves the right to determine the status of the crop and may issue a Registered or Certified crop certificate.

#### **2.2 LAND REQUIREMENTS**

- 2.2.1 Crops should not be planted on land where volunteer growth from a previous crop may cause contamination.
- 2.2.2 **Status granted to crops determined by the previous crop**
- a) Land requirements prevent production of a higher pedigreed status crop (of the same variety) than the pedigreed status of the crop produced on that land the previous year.
  - b) Breeder or Select seed of the same variety may be sown in two consecutive years on the same land and the crop will be eligible for Foundation status. The third and fourth consecutive crops of the same variety on the same land, if planted with Breeder, Select or Foundation seed, will be eligible for Registered status.
  - c) Foundation seed of the same variety may be sown in two consecutive years on the same land and the crop will be eligible for Registered status. The third and fourth consecutive crops of the same variety on the same land, if planted with Breeder, Select, Foundation or Registered seed, will be eligible for Certified status.

- d) Breeder, Select, Foundation or Registered seed of the same variety may be sown to produce a Certified seed crop on the same land for unlimited consecutive years.

### 2.2.3 “Land Use” Inspection

Non-pedigreed crops may be inspected to determine the eligibility of the land for pedigreed crop production the following year. Authorized seed crop inspectors conduct these inspections on request at the grower’s expense. Refer to Section 1.17.

### 2.2.4 “Land Use” Verification

If uncertain of the eligibility of land for pedigreed crop production, growers may submit to the CSGA a request for “Land Use Verification Prior to Planting.” Refer to Section 1.17 and Appendix A.9.

### 2.2.5 Specific Crop Land Requirements

The basic standards for all crops are set out in Section 1.17. In addition, the following apply to crops in this section:

**Table 2.2.5: Specific Crop Land Requirements**

<b>Inspected Crop</b>	<b>Must NOT be grown on land which:</b>
<b>Barley</b> (Spring and Winter) Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Barley.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Canaryseed, Flax, Safflower or Sunflower which followed a non-pedigreed crop of Barley 2 years prior or a different variety of Barley 2 years prior.</li> </ul>
<b>Barley</b> (Spring and Winter) Foundation and Registered	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Barley.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower which followed a non-pedigreed crop of Barley 2 years prior or a different variety of Barley 2 years prior.</li> </ul>
<b>Buckwheat</b> Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Buckwheat;</li> <li>- a crop of a different variety of Buckwheat.</li> </ul> </li> </ul>
<b>Buckwheat</b> Foundation and Registered	<ul style="list-style-type: none"> <li>• In either of the preceding 2 years produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Buckwheat;</li> <li>- a crop of a different variety of Buckwheat.</li> </ul> </li> </ul>
<b>Canaryseed</b> Foundation, Registered and Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Canaryseed;</li> <li>- a crop of a different variety of Canaryseed;</li> <li>- a crop of Flax.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Barley, Bean, Buckwheat, Durum, Fababean, Lentil, Lupin, Oat, Pea, Rye, Safflower, Soybean, Sunflower, Triticale or Wheat which followed a non-pedigreed crop of Canaryseed 2 years prior or a different variety of Canaryseed 2 years prior.</li> </ul>

**Table 2.2.5 (continued): Specific Crop Land Requirements**

<b>Inspected Crop</b>	<b>Must NOT be grown on land which:</b>
<b>Durum</b> Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Canaryseed, Durum, Oats, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Durum.</li> </ul> </li> </ul>
<b>Durum</b> Foundation and Registered	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Canaryseed, Durum, Oats, Rye or Triticale;</li> <li>- a crop of a different variety of Durum;</li> </ul> </li> <li>• In either of the preceding 2 years, produced a crop of Wheat;</li> <li>• In the previous year produced a non-pedigreed crop which followed a non-pedigreed crop of Durum 2 years prior or a different variety of Durum 2 years prior.</li> </ul>
<b>Flax</b> Foundation, Registered and Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Flax;</li> <li>- a crop of a different variety of Flax;</li> <li>- a crop of Canaryseed.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Barley, Bean, Buckwheat, Durum, Fababean, Lentil, Lupin, Oat, Pea, Rye, Safflower, Soybean, Sunflower, Triticale or Wheat which followed a non-pedigreed crop of Flax 2 years prior or a different variety of Flax 2 years prior.</li> </ul>
<b>Oat</b> Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Oat.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Canaryseed, Flax, Safflower or Sunflower which followed a non-pedigreed crop of Oat 2 years prior or a different variety of Oat 2 years prior.</li> </ul>
<b>Oat</b> Foundation and Registered	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Oat.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower which followed a non-pedigreed crop of Oat 2 years prior or a different variety of Oat 2 years prior.</li> </ul>
<b>Rye (Spring and Winter)</b> Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Rye.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Canaryseed, Flax, Safflower or Sunflower which followed a non-pedigreed crop of Rye 2 years prior or a different variety of Rye 2 years prior.</li> </ul>

**Table 2.2.5 (continued): Specific Crop Land Requirements**

<b>Inspected Crop</b>	<b>Must NOT be grown on land which:</b>
<b>Rye (Spring)</b> Registered (Winter) Foundation and Registered	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different variety of Rye.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower which followed a non-pedigreed crop of Rye 2 years prior or a different variety of Rye 2 years prior.</li> </ul>
<b>Rye (Spring)</b> Foundation	<ul style="list-style-type: none"> <li>• In the previous year produced a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Triticale or Wheat.</li> <li>• In either of the preceding 2 years produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Rye;</li> <li>- a crop of a different variety of Rye.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower which followed a non-pedigreed crop of Rye 3 years prior, or a different variety of Rye 3 years prior.</li> </ul>
<b>Triticale</b> (Spring and Winter) Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale, or Wheat;</li> <li>- a crop of a different variety of Triticale.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Canaryseed, Flax, Safflower or Sunflower which followed a non-pedigreed crop of Triticale 2 years prior, or a different variety of Triticale 2 years prior.</li> </ul>
<b>Triticale</b> (Spring) Registered (Winter) Foundation and Registered	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, Triticale, or Wheat;</li> <li>- a crop of a different variety of Triticale.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower which followed a non-pedigreed crop of Triticale 2 years prior, or a different variety of Triticale 2 years prior.</li> </ul>
<b>Triticale</b> (Spring) Foundation	<ul style="list-style-type: none"> <li>• In the previous year produced a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye, or Wheat.</li> <li>• In either of the preceding 2 years produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Triticale;</li> <li>- a crop of a different variety of Triticale.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower which followed a non-pedigreed crop of Triticale 3 years prior or a different variety of Triticale 3 years prior.</li> </ul>

**Table 2.2.5 (continued): Specific Crop Land Requirements**

<b>Inspected Crop</b>	<b>Must NOT be grown on land which:</b>
<b>Wheat</b> (Spring and Winter) Certified	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different* variety of Wheat;</li> <li>- a crop of Durum.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Canaryseed, Flax, Safflower or Sunflower, and which followed a non-pedigreed crop of Wheat or a different* variety of Wheat 2 years prior.</li> </ul>
<b>Wheat</b> (Spring) Registered  <b>(Winter)</b> Foundation and Registered	<ul style="list-style-type: none"> <li>• In the previous year produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Barley, Buckwheat, Oat, Rye, Triticale or Wheat;</li> <li>- a crop of a different* variety of Wheat;</li> <li>- a crop of Durum.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower, and which followed a non-pedigreed crop of Wheat, a different* variety of Wheat or a crop of Durum 2 years prior.</li> </ul>
<b>Wheat</b> (Spring) Foundation	<ul style="list-style-type: none"> <li>• In the previous year produced a non-pedigreed crop of Barley, Buckwheat, Durum, Oat, Rye or Triticale.</li> <li>• In either of the preceding 2 years produced:               <ul style="list-style-type: none"> <li>- a non-pedigreed crop of Wheat;</li> <li>- a crop of a different* variety of Wheat;</li> <li>- a crop of Durum.</li> </ul> </li> <li>• In the previous year produced a non-pedigreed crop of Bean, Canaryseed, Fababean, Flax, Lentil, Lupin, Pea, Safflower, Soybean or Sunflower and which followed a non-pedigreed crop of Wheat 3 years prior, or a different* variety of Wheat 3 years prior.</li> </ul>

\* In crops of pest tolerant varietal blends, "different" variety means a variety other than the varieties prescribed in the description of the pest tolerant variety.

### **2.3 CROP INSPECTION**

The basic standards for all crops are set out in Section 1.7. In addition, the following apply to crops in this section.

- 2.3.1 It is the grower's responsibility to ensure that crops are inspected by an authorized inspector prior to swathing or harvesting.
- 2.3.2 A crop that is cut, swathed or harvested prior to crop inspection is not eligible for pedigree.
- 2.3.3 The crop must be inspected at a stage of growth when varietal purity is best determined. Crops not inspected at the proper stage for best determining varietal purity may be cause for declining pedigreed status. Cereal crops must be headed and other crops must be in bloom.

## 2.4 CROP STANDARDS

### 2.4.1 Isolation for All Crops in this Section

- a) The perimeter of the crop to be inspected must be clearly defined.
- b) The required isolation must be provided prior to the time of flowering and crop inspection, and may be clean summerfallow, non-contaminating native growth, forage crop, cultivated row crop of another crop kind, the seeds of which can be easily separated, or a mowed grain crop, provided the plants in the mowed strip do not form seed heads or in any way constitute a source of contamination.
- c) Any plants considered a source of contamination found within 3 meters (10 feet) of the inspected crop may be reason for declining pedigreed status.

**Table 2.4.2: Minimum Isolation Distances Required from an Inspected Crop to Other Crops**

<b>Inspected Crop</b>	<b>Other Crops</b>	<b>Isolation Distance Required</b>
<b>Barley</b>	- Inspected pedigreed Barley of same variety	1 meter (3 feet)
	- Buckwheat, Durum, Oat, Rye, Triticale, Wheat	3 meters (10 feet)
	- Different varieties of Barley	
	- Non-pedigreed Barley	
<b>Buckwheat</b>	- Inspected pedigreed Buckwheat of same variety	1 meter (3 feet)
	- Barley, Durum, Oat, Rye, Triticale, Wheat	3 meters (10 feet)
	- Different varieties of Buckwheat	300 meters (984 feet)
	- Non-pedigreed Buckwheat	
<b>Canaryseed</b>	- Inspected pedigreed Canaryseed of same variety	1 meter (3 feet)
	- Flax	3 meters (10 feet)
	- Different varieties of Canaryseed	
	- Non-pedigreed Canaryseed or Flax	
<b>Durum</b>	- Inspected pedigreed Durum of the same variety	1 meter (3 feet)
	- Barley, Buckwheat, Durum, Oat, Rye, Triticale, Wheat	3 meters (10 feet)
	- Different varieties of Durum	
	- Non-pedigreed Durum	
<b>Flax</b>	- Inspected pedigreed Flax of same variety	1 meter (3 feet)
	- Canaryseed	3 meters (10 feet)
	- Different varieties of Flax	
	- Non-pedigreed Flax or Canaryseed	
<b>Oat</b>	- Inspected pedigreed Oat of same variety	1 meter (3 feet)
	- Barley, Buckwheat, Durum, Rye, Triticale, Wheat	3 meters (10 feet)
	- Different varieties of Oat	
	- Non-pedigreed Oat	
<b>Rye</b>	- Inspected pedigreed Rye of same variety	1 meter (3 feet)
	- Barley, Buckwheat, Durum, Oat, Triticale, Wheat	3 meters (10 feet)
	- Different varieties of Rye	300 meters (984 feet)
	- Non-pedigreed Rye	

**Table 2.4.2 (continued): Minimum Isolation Distances Required from an Inspected Crop to Other Crops**

<b>Triticale</b>	- Inspected pedigreed Triticale of same variety	1 meter (3 feet)
	- Barley, Buckwheat, Durum, Oat, Rye, Wheat	3 meters (10 feet)
	- Different varieties of Triticale - Non-pedigreed Triticale	
<b>Wheat</b>	- Inspected pedigreed Wheat of same* variety	1 meter (3 feet)
	- Barley, Buckwheat, Durum, Oat, Rye, Triticale	3 meters (10 feet)
	- Different* varieties of Wheat - Non-pedigreed Wheat	

\* In crops of pest tolerant varietal blends, “different” variety means a variety other than the varieties prescribed in the description of the pest tolerant variety.

### 2.4.3 Weeds

- a) All crops for pedigree should be free of Prohibited noxious weeds.
- b) Very weedy crops may be declined pedigree status.

### 2.4.4 Maximum Impurity Standards

- a) Crops contaminated with limited amounts of other crop kinds which are readily removable in processing and do not hinder crop inspection may be allowed pedigree status.
- b) Impurities in pedigreed crops should be removed prior to crop inspection.
- c) The impurities outlined in Table 2.4.4 are the maximum levels for impurities. Variants may be specified by the responsible Breeder and are not considered impurities unless reported in excess of the acceptable level specified.
- d) Any combination of impurities may be reason for declining pedigree status.
- e) Table 2.4.4 indicates the maximum number of plants of other varieties or other crop kinds permitted in approximately 10,000 plants of the inspected crop. The inspector makes 6 counts (10,000 plants each) in the field to determine the number of impurities. The resulting average must not exceed the maximum impurity standards in Table 2.4.4.

**Table 2.4.4: Maximum Impurity Standards**

Inspected Crop	IMPURITIES IN CROP															
	Off-types or Other Varieties of the same crop kind		Barley		Buckwheat		Durum		Oats		Rye		Triticale		Wheat	
	F & R	C	F & R	C	F & R	C	F & R	C	F & R	C	F & R	C	F & R	C	F & R	C
<b>Barley</b>	1	5	n/a	n/a	1	3	1	2	2	4	1	3	2	4	2	8
<b>Buckwheat</b>	1	5	2	4	n/a	n/a	2	4	2	4	2	4	2	4	2	4
<b>Canaryseed</b>	1	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Durum</b>	1	5	1	2	1	3	n/a	n/a	4	8	1	3	1	5	1	5
<b>Flax</b>	1	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Oat*</b>	1	5	1	2	1	3	2	4	n/a	n/a	1	3	4	8	4	8
<b>Rye</b>	1	5	2	4	1	3	2	4	2	4	n/a	n/a	2	4	2	4
<b>Triticale</b>	1	5	2	4	1	3	1	5	4	8	1	3	n/a	n/a	1	5
<b>Wheat **</b>	1	5	2	4	1	3	1	5	4	8	1	3	1	5	n/a	n/a

F = Foundation R = Registered C = Certified n/a = Not Applicable

\* In Oat crops, counts of Wild Oats are subject to the maximum impurity standards for Off-types or Other Varieties of the same crop kind.

\*\*C.P.S. wheat for other varieties and Off-types: Foundation = 1, Registered = 3, Certified = 8.

## 2.5 SPECIFIC REQUIREMENTS

2.5.1 CSGA may require submission of a seed sample for varietal identity verification testing.