

# Needlegrass – Foundation, Registered and Certified Production

## General Requirements for All Pedigreed Seed Crops

The basic standards for all crops are set out in [General Requirements for All Pedigreed Seed Crops](#). In addition, the following standards apply to Needlegrass.

### Land Requirements\*

| Inspected Crop    | Must NOT be grown on land which:  |
|-------------------|---|
| <b>Foundation</b> | In any of the 5 years prior to the year of seeding produced: <ul style="list-style-type: none"> <li>• a non-pedigreed crop of Needlegrass.</li> <li>• a different variety of Needlegrass.</li> </ul> In any of the 3 years prior to the year of seeding produced: <ul style="list-style-type: none"> <li>• a pedigreed crop of the same variety.</li> </ul> |
| <b>Registered</b> | In any of the 3 years prior to the year of seeding produced: <ul style="list-style-type: none"> <li>• a crop of Needlegrass.</li> </ul>   |
| <b>Certified</b>  | In any of the 2 years prior to the year of seeding produced: <ul style="list-style-type: none"> <li>• a crop of Needlegrass.</li> </ul>   |

\*Except where chemical control measures acceptable to the CSGA have been taken to eradicate growth from a previous crop of Needlegrass.

### Crop Inspection

Needlegrass crops must be inspected when the crop is headed and before harvest.

### Age of Stand

The maximum number of years pedigreed seed can be produced from a stand of Needlegrass established with Breeder or Foundation seed is outlined below. The class that can be produced from a stand varies with the class used to establish the crop, the classes of seed through which a given variety may be multiplied and the number of years the stand has been in production.

| When crop is established with:                       |           |   |            |   |  |           |
|--|-----------|---|------------|---|--|-----------|
| Breeder seed of a variety without a Registered class |           | Breeder seed of a variety with a Registered class |            | Foundation seed of a variety without a Registered class | Foundation seed of a variety with a Registered class |           |
| Foundation   | Certified | Foundation  | Registered | Certified   | Registered   | Certified |
| 2 yrs.   | +         | 2 yrs.  | +          | 2 yrs.  | +  | 2 yrs.    |
|  |           |   |            | 4 yrs.  |  |           |
|  |           |   |            |   | 2 yrs.   | +         |
|  |           |   |            |   |  | 2 yrs.    |

## Crop Standards

### Isolation

The isolation must be reasonably free from plants that may cross pollinate with the inspected crop. The risk to varietal purity posed by plants that may cross pollinate varies depending on area, density, stage of maturity and distance from the inspected crop. These factors will be taken into consideration in determining the pedigreed status of the inspected crop. Not more than 3 plants per square meter, on average, of plants that may cross pollinate with the inspected crop should be in the required isolation adjacent to an inspected crop.

#### Minimum Isolation Distances Required from an Inspected Crop to Other Crops:

| 1. Varietal Purity  | Distance            |
|---|---------------------|
| a. Inspected pedigreed Needlegrass of same variety and class        | 1 meter (3 feet)    |
| b. Inspected pedigreed Needlegrass of same variety, different class | 3 meters (10 feet)  |
| c. Planted with Certified seed of the same variety                  | 3 meters (10 feet)* |
| d. Different varieties of Needlegrass or non-pedigreed Needlegrass  | Table below         |

\* For Certified crop status only, provided the pedigree of the Certified seed used can be established.

| Area of Inspected Crop | Minimum Isolation Distance |                |                |
|------------------------|----------------------------|----------------|----------------|
|                        | Foundation                 | Registered     | Certified      |
| 5 acres or less        | 400 m (1312 ft)            | 300 m (984 ft) | 150 m (492 ft) |
| More than 5 acres      | 300 m (984 ft)             | 100 m (328 ft) | 50 m (164 ft)  |

| 2. Mechanical Purity   | Distance           |
|--|--------------------|
| a. Bromegrasses, Fescues, Ryegrasses, Wheatgrasses, Wildryes | 3 meters (10 feet) |

#### Border Removal in Lieu of Isolation:

For seed crops in excess of 5 acres, removal of a border from the inspected crop in lieu of the required isolation to a different variety or non-pedigreed Needlegrass is permitted as outlined in the table below. The border must be allowed to shed pollen before being discarded.

| Inspected Crop    | Border Removal in Lieu of Isolation Distances       |  |
|-------------------|---|--|
|                   | Actual isolation distance from contaminating source | Distance to be removed from the inspected seed crop              |
| <b>Foundation</b> | 300 m (984 ft) +                                    | 0 m (0 ft)   |
|                   | 200 - 299 m (656 - 983 ft)                          | 3 m (10 ft)  |
|                   | 150 - 199 m (492 - 655 ft)                          | 5 m (16 ft)  |
|                   | less than 150 m (492 ft)                            | 5 m (16 ft) + 150 m (492 ft) minus the actual isolation distance |
| <b>Registered</b> | 100 m (328 ft) +                                    | 0 m (0 ft)   |
|                   | 75 - 99 m (246 - 327 ft)                            | 3 m (10 ft)  |
|                   | 50 - 74 m (164 - 245 ft)                            | 5 m (16 ft)  |
|                   | less than 50 m (164 ft)                             | 5 m (16 ft) + 50 m (164 ft) minus the actual isolation distance  |

| <b>Border Removal in Lieu of Isolation Distances</b> |  |  |
|--|--|--|
| <b>Inspected Crop</b>                                | <b>Actual isolation distance from contaminating source</b> | <b>Distance to be removed from the inspected seed crop</b>     |
| <b>Certified</b>                                     | 50 m (164 ft)  | 0 m (0 ft)   |
|  | 30 - 49 m (98 - 163 ft)                                    | 3 m (10 ft)  |
|  | 25 - 29 m (82 - 97 ft)                                     | 5 m (16 ft)  |
|  | less than 25 m (82 ft)                                     | 5 m (16 ft) + 25 m (82 ft) minus the actual isolation distance |

### **Maximum Impurity Standards**

1. **Varietal Purity** (off-types/other varieties on average in either 10 or 100 m<sup>2</sup>)
  - a. Foundation – 3 plants/100 m<sup>2</sup>
  - b. Registered – 1 plant/10 m<sup>2</sup>
  - c. Certified – 1 plant/10 m<sup>2</sup>
  
2. **Mechanical Purity** (other crop kinds, the seeds of which are difficult to separate from the seeds of the inspected crop on average in either 10 or 100 m<sup>2</sup>; for Needlegrass that includes Bromegrasses, Fescues, Ryegrasses, Wheatgrasses and Wildryes)
  - a. Foundation – 3 plants/100 m<sup>2</sup>
  - b. Registered – 1 plant/10 m<sup>2</sup>
  - c. Certified – 1 plant/10 m<sup>2</sup>