

# Bentgrass — 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 Bentgrass.

## 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 Bentgrass.</li> <li>• a different variety of Bentgrass.</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 Bentgrass.</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 Bentgrass.</li> </ul>

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

## Crop Inspection

Bentgrass 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 Bentgrass 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	
3 yrs.	+	2 yrs.					
				5 yrs.			
		3 yrs.	+	2 yrs.	3 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 Bentgrass of same variety and class	1 meter (3 feet)
b. Inspected pedigreed Bentgrass 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 Bentgrass or non-pedigreed Bentgrass	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. Redtop, Bluegrasses, Orchardgrass, other Bentgrasses	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 Bentgrass 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 Bentgrass that includes Redtop, Bluegrasses, Orchardgrass and other Bentgrasses)
  - 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>