

Redtop – 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 Redtop.

Land Requirements*

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

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

Crop Inspection

Redtop 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 Redtop 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
4 yrs.	+ 2 yrs.	4 yrs.	+ 2 yrs.	6 yrs.	4 yrs.	+ 2 yrs.

*Or when crop is established with Registered seed of a variety with a Registered class.

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

- Inspected pedigreed Redtop of same variety and class
- Inspected pedigreed Redtop of same variety, different class
- Planted with Certified seed of the same variety
- Different varieties of Redtop or non-pedigreed Redtop

Distance

- 1 meter (3 feet)
- 3 meters (10 feet)
- 3 meters (10 feet)*
- Isolation 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

- Bentgrasses (Colonial/Browntop Creeping, Velvet)

Distance

- 2 meters (6 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 Redtop is permitted as outlined in the table below. The border must be allowed to shed pollen before being discarded.

Border Removal in Lieu of Isolation Distances		
Inspected Crop	Actual isolation distance from contaminating source	Distance to be removed from the inspected seed crop
Foundation	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
Registered	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
Certified	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** (on average in either 10 or 100 m²)
 - a. Off-types/other varieties of the same crop kind
 - i. Foundation – 3 plants/100 m²
 - ii. Registered – 1 plant/10 m²
 - iii. Certified – 1 plant/10 m²
2. **Mechanical Purity** (on average in either 10 or 100 m²)
 - a. Plants of species with seed difficult to distinguish in a lab test from seed of the inspected crop, but do not cross pollinate; for Redtop, that includes Colonial/Browntop, Creeping, and Velvet Bentgrass.
 - i. Foundation – 3 plants/100 m²
 - ii. Registered – 1 plant/10 m²
 - iii. Certified – 1 plant/10 m²
 - b. Plants with seed difficult to separate (DTS) from seed of the inspected crop will be reported by frequency in the field and will not be a factor in the seed crop certification decision. For Redtop, that includes Bluegrass and Orchardgrass.