

# Alfalfa – Foundation, Registered and Certified Production

The requirements shown here are specifically for Foundation, Registered and Certified production of Open-pollinated Alfalfa. **Hybrid Alfalfa** is not included and can be found under its own heading.

## 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 Alfalfa.

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

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

## Crop Inspection

Alfalfa crops must be inspected when the crop is in bloom and before harvest.

## Age of Stand

The maximum number of years pedigreed seed can be produced from a stand of Alfalfa 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
5 yrs.	+	3 yrs.				
				8 yrs.		
		5 yrs.	+	3 yrs.	5 yrs.	+
						3 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.

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

- |   |                    |
|---|--------------------|
| <b>1. Varietal Purity</b>                                       | <b>Distance</b>    |
| a. Inspected pedigreed Alfalfa of same variety and class        | 1 meter (3 feet)   |
| b. Inspected pedigreed Alfalfa of same variety, different class | 3 meters (10 feet) |
| c. Different varieties of Alfalfa or non-pedigreed Alfalfa      | Table below        |

Area of Inspected Crop	Minimum Isolation Distance		
	Foundation	Registered	Certified
5 acres or less	300 m (984 ft)	150 m (492 ft)	50 m (164 ft)
More than 5 acres	200 m (656 ft)	100 m (328 ft)	50 m (164 ft)

- |                               |                    |
|-------------------------------|--------------------|
| <b>2. Mechanical Purity</b>   | <b>Distance</b>    |
| a. Red Clover or Sweet Clover | 3 meters (10 feet) |

#### Border Removal in Lieu of Isolation (10% Rule) for **Certified** Crops of Alfalfa (not applicable to Foundation or Registered crops):

For a Certified seed crop, 50 meters (164 feet) is normally required from the edge of the inspected crop to adjacent contaminating pollen sources including crops of different varieties or a non-pedigreed crop of Alfalfa. However, isolation requirements are based on the size of the Certified crop and the percentage of the crop within 50 meters of a contaminating pollen source (see demonstration of the 10% rule).

If the calculated area makes up more than 10% of the total inspected area of the seed crop, then border removal in lieu of isolation will be required so that the area harvested for seed is at least 50 meters from all contaminating pollen sources. Borders must be allowed to shed pollen before being discarded.

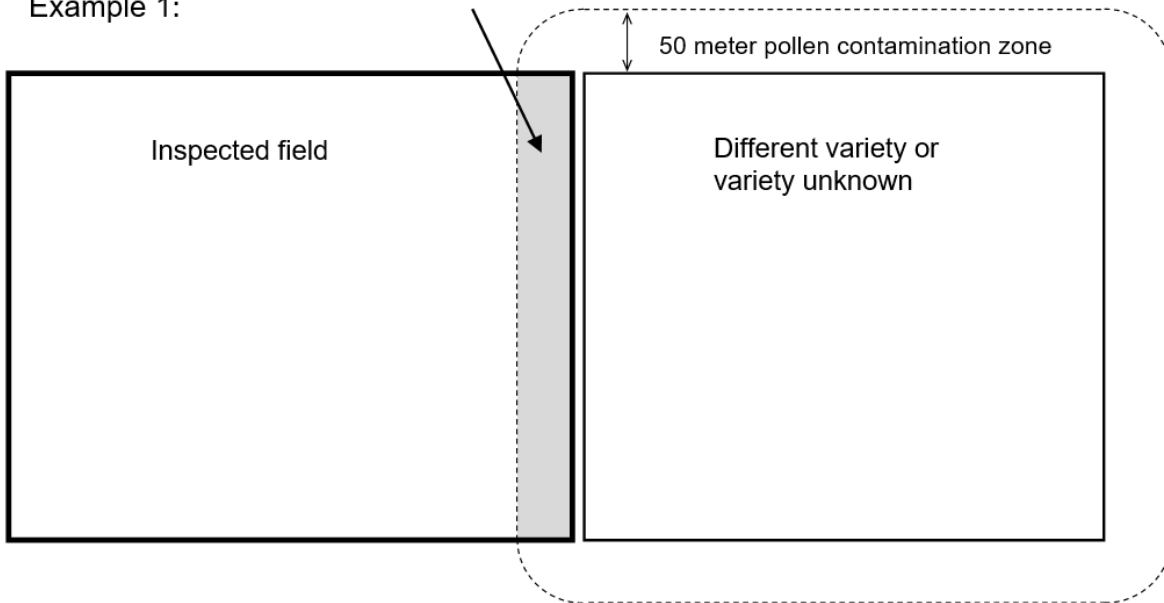
Even if each contaminating pollen source is separately affecting less than 10% of the seed field, the isolation correction/s will be required if, when combined, the sum total of all areas being affected is more than 10% of the entire seed field. For example, isolation correction is required if 6% of the west side of the field, and 5% of the south side of the field are within 50 meters of a different variety. Although each source of contamination is affecting less than 10% of the field, 11% (6+5) of the field is being affected in total so all sides affected will need to be corrected. Using this same example, if the west side of the field is 4 meters and the south side is 5 meters from a different variety, a border of 46 meters on the west side and 45 meters on the south side would need to be removed after pollen shed.

If the calculated area makes up 10% or less of the total inspected area of the seed crop, no border removal will be required provided there are at least 3 meters of isolation. A 3 meter isolation strip is always required between the inspected crop and adjacent contaminating pollen sources to prevent accidental harvest of the contaminating pollen source.

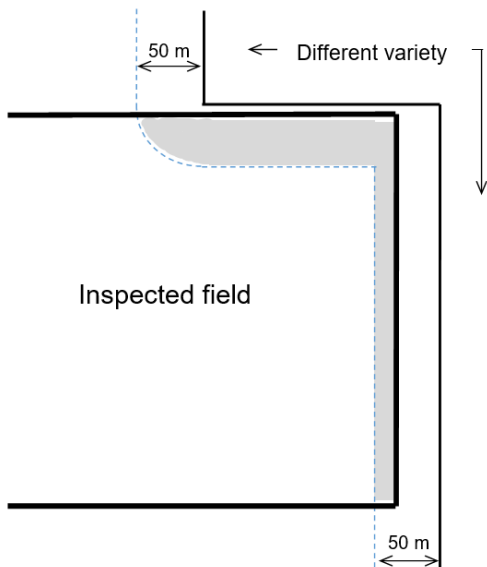
**Demonstration of the 10% rule for Certified Crops of Alfalfa**

The pollen contamination zone (**shaded area**) within the inspected field must not comprise more than 10 percent of the inspected seed crop area.

Example 1:

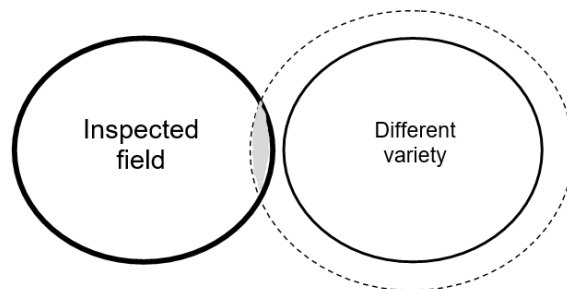


Example 2:



Example 3:

Irrigation pivots (estimate area as additive triangles)



**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 Alfalfa that includes Red Clover and Sweet Clover)
  - 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>