

## Mustard – Foundation Production of Parent Seed of Hybrid *B. juncea*

The requirements shown here are specifically for Foundation plot production of the parent seed for Hybrid *B. juncea* (including canola quality *B. juncea*). **Open-pollinated *B. juncea*, *S. alba* and *Carinata*** are not included and can be found under separate headings.

### General Requirements for All Pedigreed Seed Crops

The basic standards for all crops are set out in [General Requirements for All Pedigreed Seed Crops](#). The basic standards for all plots are set out in [General Requirements for Plot Production](#). In addition, the following standards apply to Foundation plot production of parent seed of Hybrid *B. juncea*.

### Land Requirements

Inspected Crop	Must NOT be grown on land which:
Foundation	<p>In any of the preceding 5 years has been planted with or produced a crop of:</p> <ul style="list-style-type: none"><li>• Canola or Rapeseed (<i>B. napus</i>, <i>B. rapa</i>)</li><li>• Carinata (<i>B. carinata</i>)</li><li>• Mustard (<i>B. juncea</i>, <i>S. alba</i>)</li><li>• Radish (<i>R. sativus</i>)</li></ul>

### Crop Inspection

Foundation plot production of the parent seed for Hybrid *B. juncea* must be inspected when the crop is in the early flowering stage.

### Crop Standards

#### Isolation

The first 50 meters of isolation must be practically free from plants that may cross pollinate (CP in table below) with the inspected seed crop (not more than 1 plant per 100 square meters, on average) and the remaining distance reasonably free from plants that may cross pollinate with the inspected crop (not more than 1 plant per 10 square meters, on average).

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:

1. Varietal Purity	Distance
a. Certified seed crops planted with Breeder * or Foundation* seed of the same pollen bearing (male) parent	3 meters (10 feet)
b. Plot of the same pollen bearing (male) plant	3 meters (10 feet)

- |   |                        |
|---|------------------------|
| c. Crop planted with different pollen (male) parent of <i>B. juncea</i> or non-pedigreed crop of <i>B. juncea</i> | 800 meters (2624 feet) |
| d. <i>B. napus</i> , <i>B. rapa</i> or <i>B. carinata</i>   | 800 meters (2624 feet) |

\* Provided the pedigree of the Breeder or Foundation seed used can be established.

## 2. Mechanical Purity

### Distance

- |  |                    |
|--|--------------------|
| a. <i>S. alba</i> or <i>R. sativus</i> | 3 meters (10 feet) |
|--|--------------------|

### Border Rows

1. Must be planted with the same seed as the pollen (male) parent rows.
2. Must be planted such that synchronous flowering occurs with pollen (male) parent rows and, more importantly, with receptive female parent plants of the inspected crop.

### Weeds

1. The presence of Cleavers (*Galium aparine*) is cause for declining pedigreed status.
2. Wild mustard (*Sinapis arvensis*) must not be present in the area of the crop to be harvested for seed at an average of more than 1 plant/20,000 plants.

### Maximum Impurity Standards

1. **Varietal Purity** (on average in 20,000 plants)
  - a. Off-types/other varieties of the same species – 1
  - b. Plants of species that may cross pollinate (CP in table below) – 1
2. **Mechanical Purity** (on average in 20,000 plants)
  - a. Plants of species with difficult to separate seeds (DTS in table below) – 1

Species	Canola ( <i>B. napus</i> )	Canola ( <i>B. rapa</i> )	Mustard Brown/Oriental ( <i>B. juncea</i> )	Mustard White/Yellow ( <i>S. alba</i> )	Carinata ( <i>B. carinata</i> )	Radish ( <i>R. sativus</i> )
<i>B. juncea</i>	CP	CP	n/a	DTS	CP	DTS