

## WVSSA Specialty seed Production Isolation Guidelines

### **Beta species (Beets and Swiss chard)**

#### **Four Separate Groups: Sugar beets, Table beets, Fodder beets, Swiss chard**

Between one O.P. and another of the same color and group	1 mile
Between Hybrid of the same color and group	1 mile
Between Hybrid and O.P. of the same color and group	2 mile
Between different colors within a group	3 mile
Between stock-seed and a Hybrid within a group	2 mile
Between stock-seed and O.P. within a group	3 mile
Between Hybrids of different groups	3 mile
Between Hybrid and O.P. of different groups	4 mile
Between GMO's and any other Beta species no closer than (And is excluded from exception to lessen this distance)	3 mile

### **Brassica species (Fall types – 9 chromosomes)**

Includes; Cabbage, Kale, Kohlrabi, Brussel Sprouts, etc.

Between O.P. of the same color and group	1 mile
Between O.P. of different color	2 mile
Between O.P. cabbage and non-heading cultivars (Savoy, Kale, Brussel Sprouts, Collards and Cauliflower)	2 mile
Between Hybrids and Hybrids and O.P. of the same color and group	2 mile
Between Hybrids and O.P. of different colors or group	3 mile
Between Hybrid cabbage and non-heading cultivars	3 mile

### **Brassica species (Spring types – 6 groups)**

- 1 Turnip types – 10 chromosomes (Japanese type, purple top, strap leaf, Shogoin)
- 2 Chinese Mustard types – 10 chromosomes (komatsuna, mizuna, mibuna, tatsoi)
- 3 Chinese Cabbage types – 10 chromosomes (heading, semi-heading, non-heading)
- 4 Pak Choi types – 10 chromosomes
- 5 Choi Sum types – 10 chromosomes
- 6 Indian Mustard types – 18 chromosomes (Florida broadleaf, southern giant curled, red mustard, Chinese mustard, leaf mustard)

**SPECIAL ATTENTION MUST BE PAID TO THESE CROPS AS THERE IS A VERY WIDE RANGE OF PHENOTYPES THAT CAN CROSS. IF THERE IS ANY DOUBT, CHECK WITH THE OTHER COMPANY REP. BEFORE PINNING & PLANTING.**

Between any 10 chromosome and any 18 chromosome types	Physical separation
Between O.P. of the same group	1 mile
Between O.P. of different groups	1.5 mile
Between Hybrids or Hybrids and O.P. of same group and phenotype	2 mile
Between Hybrids of different groups or phenotype	2.5 mile
Between Hybrids and O.P. of different groups or phenotype	3 mile

**Brassica species Canola**

Must be grown under permit from Oregon Department of Agriculture  
GMO type Canola or Rapeseed is not allowed to be grown.

Between any other specialty seed crops 3 mile

**Allium cepa species (Onion)**

Male parent used to pin hybrids

**Onion Hybrid**

Between Hybrid and O.P. of different color 3 mile  
Between Hybrid and O.P. of same color, different shape 2 mile  
Between Hybrid and O.P. of same color, shape and type 2 mile  
Between Hybrid of same color, shape and type 1 mile

**Onions Open Pollinated**

Between Hybrid and O.P. of different color or shape 3 mile  
Between O.P. of different color 3 mile  
Between O.P. of same color, but different shape 2 mile  
Between Hybrid of same color and shape 2 mile  
Between O.P. of same color, type and shape 1 mile

**Allium fistulosum species (Bunching Onions)**

Between another variety of fistulosum 1 mile

**Allium porrum or ampleoprasum species (Leek)**

Between another variety of Leek 2 mile

**Allium other species (Chives)**

no distance

**Umbelliferous other species (Parsley, Dill, Parsnips, etc.)**

Between same types 1 mile  
Between Hybrid and O.P. of similar types 2 mile  
Between different types 3 mile

**Rhaphanus sativus species (Radish)**

Between O.P. varieties of same color and or shape 1 mile  
Between Hybrids or Hybrid and O.P. type 2 mile  
Between Hybrid and O.P. of different colors and or shape 3 mile  
Between Red globes or from White tip type 1 mile  
Between Long Red from any other Red type 2 mile  
Between Any Red from any other White type 3 mile

**Spinacia species (Spinach)**

Male parent used to pin hybrids

Between any Hybrid, no matter male leaf type	2 mile
Between O.P. of the same leaf shape type	1 mile
Between O.P. of different leaf shape type	3 mile
Between Hybrid and O.P. type	3 mile

**Cichorium intybus (Chicory)****Includes: raddichio, chicory, whitloof, fodder, root**

Between O.P. type or endiva species	1 mile
Between Hybrids or Hybrid and O.P. type	2 mile

**Cichorium endiva (Endive)****Includes: endive, escarole, frizze**

Between O.P. type or intybus species	1 mile
--------------------------------------	--------

**Cucumis sativus (Cucumber)****Types: Slicer, Pickle, White spine, Black spine, Beta alpha.**

Between O.P. of the same type	1 mile
Between O.P. of different type or spine color	2 mile
Between Hybrid and O.P. type	3 mile
Between Hybrid of different type or spine color	3 mile

**Cucurbita species (Squash)****Includes: pepo, moshchata, mixta, maxima**

Between Similar types, shape and color	1 mile
Between Same or Different species	1 mile
Between another Hybrid of similar variety	1 mile
Between Hybrid and O.P. of similar type and shape	1.5 mile
Between O.P. or Hybrid of different type, shape or color	2 mile

**Flowers**

All Flowers need to be pinned

Between ones that cross pollinate 1 mile

Includes: Chrysanthemums, Sunflowers, Helianthus, Poppies, etc.

Multiple non-crossing flowers at one location can be pinned with one pin denoting flowers

Consult company representatives on general pinned flower locations

**All other seed crops need to be pinned.**

For isolation distances consult company representatives