

Willamette Valley Specialty Seed Association

Specialty Seed Production

Pinning Regulations

Rules

To facilitate communication and protect the specialty seed industry in the Willamette Valley of Oregon, isolation mapping procedures have been agreed upon by the Willamette Valley Specialty Seed Association (WVSSA). Changes to these rules are subject to Board approval and a vote by the association members. The Pinning Rules and Isolation Guidelines have been established to maximize quality seed production of all vegetable and other specialty seed in the designated area by limiting potential cross pollination. The isolation control area is the Willamette Valley and includes the counties of Multnomah, Washington, Clackamas, Yamhill, Polk, Marion, Benton, Linn, and Lane.

The WVSSA maintains the field isolation program using a Web-based map of the Production Area known as the WVSSA Map System. Only WVSSA members are allowed to use the association map. Members using the map must abide by WVSSA rules.

The map is a one year map for pinning isolations from June to June. “A Map Year” is designated by the harvest year of the seed crop following the pinning year. A second map showing the past year’s priority pins is used for referencing grower priorities. The map resets on the 172nd Julian calendar day of each year (usually June 21) and pinning of new crop isolations begins.

The map separates species into crop groups for pinning: Beta, Fall Brassica 9, Spring Brassica 10, Spring Brassica Other, Radish, Spinach, Onion, Umbelliferous, Chicory, Endive, Cucumbers, Squash, Sunflowers, Flowers, Miscellaneous, and Multi Crop Pins. All fields available in the “Pin Field” window are required.

Fields are to be pinned on the entirety of the acreage to be planted to facilitate proper isolation distances to other fields. The required distance between crops, from field edge to field edge, is found in the isolation guidelines for each crop (see page 19). The crop isolation is only valid after correctly establishing that it has adequate distance and posting of the pin on the map. The isolation is not valid if pinned incorrectly. Please refer to the Map Pinning Procedures section below for further details about using the map system.

Isolation Establishment

The act of placing a pin on the map establishes the isolation. Members must meet the following conditions prior to placing a pin on the map:

- The Member must be in good standing with the WVSSA.

- The Member must have an established and binding contractual agreement with the intended grower for the intended field.
- The Member must establish that a valid isolation is available for the intended crop. The Map Pinning Procedures section outlines the necessary steps to establish that a valid isolation is available.

The map may not be pinned on a speculative basis in order to reserve isolation. Upon cancellation of an intended production prior to planting, the pin must be removed by the member within five days of the cancellation of the intended production. Upon abandonment of an established production, the pin must be marked Failed in the Remarks area. Pin changes can occur up to five days after the pin was first placed; after five days the member will be assessed a pinning fee.

The following actions may result in a pinning fee:

- Incorrect pin placement
- Failure to mark pins
- Failure to delete pins
- Failure to meet the isolation establishment conditions

These violations may result in a penalty under the WVSSA of a minimum \$50.00 fine for each offense. Payment is required to remain a member in good standing.

Pinning Priority

The WVSSA allows a grower to hold the right to one isolation for only one field location per pin in his/her farming area for the following year, in order to produce the same crop within a one-mile radius of the prior year's site. The grower maintains the choice of the contracting company. The isolation right, known as a prior year's priority, can be held only for that grower until the dates specified below.

A prior year's priority is only valid until the following dates:

- Annuals—March 1st
- Biennials—August 1st

After these dates, all isolations are available on a first-come, first-served basis.

Should a grower ask for a record of the grower's isolation, a member is required to give that grower a printout of the map showing the grower's field as pinned. The member shall produce the printout within 5 business days of the request. This should be printed in color with the Tool Tip used to show the pinning information for the grower's crop.

The contracting company must receive a written deferral from the grower with an established priority, prior to pinning the same crop pin within the established grower's priority isolation.

In the event a field is planted but fails to produce a crop, the grower will retain a priority.

Pinning Rights

A contracting company who is an active member of the WVSSA may pin productions on behalf of growers. In addition, an active member of the WVSSA may appoint a representative to pin on the member's behalf.

The contracting company or responsible seed representative with a grower contracted agreement acts as the grower's appointed representative and with the grower's consent in establishing the isolation. Growers are allowed to become members of the WVSSA and could be considered a responsible seed representative of their own productions with pinning privileges. All contracting companies or responsible seed representatives agree to abide by the pinning and isolation guidelines of the WVSSA.

To obtain pinning privileges, new pinning parties need to contact an officer of the WVSSA for membership approval. The WVSSA will appoint a representative to meet with a new party to clarify pinning practices.

Membership and Pinning Fees

The contracting member or responsible party is subject to fees as established by the WVSSA. Fees include the WVSSA annual Active (voting, pinning) membership dues of \$350.00 per year, Affiliate (non-voting, pinning) membership dues of \$200.00 per year, Associate (non-voting, non-pinning) membership dues of \$60.00 per year, or Homestead (non-voting, limited pinning) membership fee of \$10.00 per year.

The pinning fees are \$70.00 per OP crop, \$80.00 per Hybrid crop, and \$50.00 for a Multi-crop. Pins that have been posted for more than five days will be charged. Dues are assessed annually and pinning fees are assessed on a quarterly basis. If timely payment of dues and pinning fees is not received, pinning rights may be revoked.

A multi-crop fee may apply when producing multiple seed crop species of an OP in a single location of no more than one acre. A multi-crop pin is to be used for research purposes or specialized production for small commercial farms. When pinning a multi-crop pin, it will specify which species and types that are to be grown in that field isolation. This will allow other growers to be notified of these species and maintain the required isolation distance. The multi-crop fee is a "payment," not a "pin." Only one multi-crop pin is allowed per member. Crop pins must be used to identify distinct species and "multi-crop" must be designated by selection.

A Homestead membership fee without a pinning fee may apply for a Homestead member when producing OP seed for non-commercial use in a single location. A Homestead membership is intended for the seed saver. This membership is not eligible for pinning priority and is required to follow WVSSA rules. Such a member is required to have a WVSSA appointed representative pin the map. Crop pins must be used to identify different species and “Homestead” must be designated on each pin.

Exception Agreements

There are two exception agreements, namely the Isolation Distance Encroachment and the One Year Isolation Deferral. Exception agreement forms are available on the WVSSA web page at www.thewvssa.org under Pinning Rules and Isolation Guidelines.

- **Encroachment Exception:** This applies when a grower and company who has an established Priority isolation pin agrees to allow another grower and company to produce a like crop under less than the WVSSA isolation distance requirement. It also applies when a grower and company pins within the isolation distance of another grower and company’s Priority Deferral pin.
- **Priority Deferral Exception:** This applies when a grower and company with an established Priority isolation pin agree to allow another grower and company to produce a like crop within the priority isolation distance for one year. The grower with the Priority Isolation shall pin as Priority Deferral and is allowed to maintain priority during this time. The grower who is allowed to grow their crop within the priority isolation shall pin as Encroachment.

The Priority Deferral exception also applies when a grower with an established Priority isolation pin does not have a crop for the upcoming year but is allowed to maintain their established priority isolation for one year. This grower and company shall pin as Priority Deferral for this year only. Other growers who may want to grow like crops in the area shall pin as Encroachment during this year. If the grower who had the established Priority isolation pin does not have a like crop following the one year of deferral, they lose their right to pin as priority the following year.

Prior to planting a competing crop, the parties involved must agree upon any exception to the established isolation for a specific harvest year. Exception agreements need to be in writing and must include the right to the isolation the following year. The WVSSA exception agreement must be signed by all parties and presented to the WVSSA administrator. All parties must agree and all other WVSSA isolation rules must be followed.

Map Pinning Procedures

To identify production fields for crop isolation on the map system, electronic pins properly placed and labeled are used to mark the location of fields. On the map, within the one of the five groups, pins and their corresponding flags are used to separate the major crop types. If pinning before the priority date is up, last year’s pins must be reviewed for available isolation

establishment by clicking on last year's pins.

- Users must have approved pinning rights and abide by the Pinning Rules and the Isolation Guidelines of the WVSSA.
- Dates covered under the priority pinning must be observed. If pinning during the priority period, last year's priority pins must be reviewed by clicking on that selection on the map.
- The pollinators are used to pin productions.
- Check for adequate isolation distance within the individual group before placing pin.
- Contact any companies involved if isolation guidelines are in question.
- Use the pin marker to place pin on map and fill out all selections on the drop-down Place Pin window to pin the field. The proper pin classification must be used.
- A Pending Pin class may be used up to 10 days during active communication between parties, if the isolation is in question. This is not considered an established pin and must be changed to a proper class or be deleted within the time allowed.

Arbitration

Should efforts to prevent potential cross-pollination problems fail, the WVSSA utilizes a system of arbitration. WVSSA members agree to abide by arbitration as a condition of membership. Prior to arbitration, any disputes over pinning locations can include a review of the pins on the map by the interested parties and the map administrator. If one of the parties of a pin dispute requests an arbitration, the map administrator will serve as the facilitator of that process. The facilitator will notify both parties in writing of the commencement of the arbitration process to the representative for the disputed pin as well as that company's primary contact.

Arbitrations will be held at a neutral location designated by the facilitator. Arbitration will be ruled by a committee of three people. The two contesting seed companies or responsible seed representatives, in consultation with their growers, each choose a single arbitrator from another member of the WVSSA and notify the map administrator within five business days of the date the notice of proceedings is sent. The facilitator will be given the identities of the two arbitrators and notifies each of the conflict to be arbitrated without disclosing the parties in conflict. If one of the parties fails to designate an arbitrator within five business days, the facilitator may request the Board of Directors to appoint an arbitrator on behalf of the non-responding party. The facilitator will notify the non-responding party in writing of the appointment of that arbitrator. The arbitrators will choose another member of the WVSSA to serve as a third arbitrator within five business days of the date they are appointed.

The three arbitrators agree to a hearing where the parties in conflict present a case to support one side of the conflict. The hearing must be scheduled within two weeks after notice is provided, unless both parties agree to waive this requirement. No more than two seed company representatives may present for each side.

Following arguments, the arbitration committee meets privately for discussions. A solution is proposed without leaving the room and is presented in written form to both of the parties in conflict. In recognition of acceptance, both parties will sign the solution as offered and without alteration. A minimum fee of \$1,000 can be assessed to the losing party of the arbitration to cover associated costs, at the discretion of the arbitration panel. All final solutions will be forwarded to the Board and archived.

Disclosure

The WVSSA map system is for the application of pinning specialty seed crops in the Willamette Valley and is under an agreement solely between the WVSSA and the California Crop Improvement Association. The map system and all subsequent data is the sole property of the WVSSA. WVSSA and its map administrator, California Crop Improvement Association, will not provide any data derived from the pinning map to any member company or representative, or to any outside entity, except to the company that owns the pins.

Procedures

Current Active and Homestead members have the right to access and pin on the map. Personal usernames and user pins will be given only to the current representatives of members through use of updated Member Profile Sheets. Personal usernames and user pins of other members are protected and are not allowed to be used or be transferred to others.

To establish isolations for seed productions, the map system of pinning follows the long-standing logic used in pinning by the WVSSA. The WVSSA Pinning Rules and Isolation Guidelines will be adhered to for establishing isolations on the map. Pins that have been posted for more than five days will be charged for payment. If pins are deleted before 5 days after pinning there is no fee. Deleted pins will be removed from the map immediately.

The map is a one year map for pinning isolations from June to June. “A Map Year” is designated by the harvest year of the seed crop following the pinning year. The map resets in mid-June of each year and pinning of new crop isolations begins. All pin placement history will be archived.

Current Active, Affiliate, and Homestead members in good standing with the WVSSA have the right to access archived pinning information. Members may request access to archived pinning information for a species group if they have an established pin within the archived “Map Year” for the requested species group.

These Procedures can be changed by the Board as needed without a vote of membership.

For more information or assistance, the primary contact is the Pinning Chair and secondary contact is the Executive Director.

Map Processes

For a tutorial on navigating the pinning map, refer to the steps listed below or click on this link, <https://ccia.ucdavis.edu/sites/g/files/dgvnsk5326/files/files/page/Williamette%20Valley%20Specialty%20Seed%20Assn%20Map%20Tutorial.pdf>

Training video: <https://youtu.be/RLX7VW7-xO0>

1. Search for the California Crop Improvement Association’s website (<http://ccia.ucdavis.edu>)
2. Select “Maps” on the right side of the homepage.
3. Select “Willamette Valley Specialty Seed Association Map” located in the green square on the right side of the page under “Map Quick Links” or scroll down to the bottom of the page to find the section for the WVSSA Map and click on “Go to the map”.

4. Log in to the map using your email address and self-selected password.

Permission to access the map are assigned to an individual on their company account. To add an individual to your company account contact the WVSSA office then fill out and submit the appropriate form. WVSSA office contact information located at

www.thewvssa.org/contactus.htm

Initial Page




- The initial page is the map. The default view is “View Map”. You cannot pin crops on this map.
- The crop links on the yellow menu bar are used to place those specific crop pins on the map. Crop categories are Beta, Fall Brassica, Spring Brassica 10 (chromosome), Spring Brassica (other chromosome groups), Radish, Spinach, Onion, Umbelliferous, Chicory, Endive, Cucumbers, Squash, Sunflowers, Flowers, Miscellaneous, and Multi Crop Pins. Each crop pin is assigned a unique shape.
- On the far right is a link to “Your Pins” where you can see the pins you have submitted.
- In the upper right corner of the map is a drop-down menu to select different map views:
 - Road is a standard road map
 - Aerial is a detailed look from above
 - Bird’s eye is a closer view that can be rotated
 - Toggle “Labels” to view/not view cities, roads, forest names, etc.

Show/No Show Pop-Ups

- The map is programmed with helpful pop-up instructions like this:

“Please right click on your final point to close the field. Remember: Field must be drawn in a clockwise direction.”
- As you become more familiar with the mapping functions you may choose to turn off the instruction pop-ups.

Pin Information

- Each crop has been assigned a different shape.
- The number on the shape corresponds to a group within this crop – such as:
 -  Radish white stem OP would have # 4 inside shape.
 -  Radish red root hybrid would have # 8 inside shape.
 -  Spinach savoy pollinator hybrid would have #5 inside shape.



Spinach red pollinator multi would have # 12 inside shape.

- The map is programmed with isolation distances allowed between crops.
- Pointing the cursor at a pin will provide the following information:
 - Pin number
 - Company
 - Crop
 - Harvest year
 - Group
 - Class
 - Pin date
 - Contact information
 - Public comments

Show Pins

- Click button “Show Pins” to view **all the pins** on the map.
- If there are many pins on the map, depending on your connection speed, it may take a minute or more for the pins to show. If it is taking a while to map the pins, please be patient and wait for the pins to show.
- If you zoom to a specific location and request to show pins, when you zoom out you will continue to see **only the pins** that showed in the zoomed screen.
- Tip: Zoom to show a large area of interest, click “Show Pins”, then as you zoom in and out all pins will continue to show. However, you may need to wait a bit for all the pins to load.
- When you go to place a new pin, you should always hit the “show pins” button while zoomed out a little. Then when you place your new pin and get warnings, you can find those and see quickly whether they are your pins (yellow icon) or belong to someone else (purple icon).

Show Pins- Show Selected Crops

- Click on the dropdown list “Show these crops (...)” to select only the crops you may want to view.
- Use the Ctrl key to select more than one crop.
- Then click on “Show pins” to view pin locations.

Zooming to a Location

- Zooming in shows actual field location and boundaries of the field.
- Move the viewable area by clicking and dragging the mouse.
- There are several ways to zoom:
 - Enter the latitude and longitude of a desired location. The map will place this location in the center of the screen.
 - Enter text for any location that may be noted on the map; such as city, national park, etc.
 - Point cursor to a specific area on the map and double click or use the mouse roller.
 - Click on the + or double click on the map to zoom in.
 - Click on the - to zoom out.

Draw Radius

- You may draw a radius to check the isolation distance from other fields.
- Enter radius distance, select miles or kilometers
- Click on button “Draw Radius”.
- A pop-up message will appear:

“wvssa.cciamaps.ucdavis.edu says

Please right click on the map at the center of your radius. Click “Draw Radius” again to cancel circle drawing.”
- A light green circle will be drawn at the radius requested.

Use Yard Stick

- You may measure the distance between two points (fields) in miles with the yard stick.
- Click “Yard Stick” button.
- A pop-up message will appear:

“wvssas.cciamaps.ucdavis.edu says

Please right click on the points you wish to include in your distance measurement. Click “Yard Stick” again to cancel measurement taking.”
- Distance will be displayed near the “Yard Stick” button.

Pin/Draw Field

- Change from “View Map” to one of the pinning maps by selecting a crop from the yellow menu bar.
- The map will then open to a new map with pin detail information at the top of the page for you to complete. Fill in all the information. Private notes are to be used for only the people within your organization can see. Public notes are to be used to for all to see, sharing information containing specific species details to allow your fellow pinners awareness of the crop and they can make adequate decision on the isolation distance needed or which crops can be used within the distance.
- Crops may only be pinned at selected times. If the crop you selected is not able to be pinned you will see this message:

“At this time, only select maps are open. Please check back later.”

- Zoom to the field you plan to pin.
- Click on “Drawing Mode OFF” to turn on drawing OR click on the green polygon image in the upper left corner of the map.
- This pop-up will appear:

“wvssa.cciampas.ucdavis.edu says

Please double click or right click on your final point to close the field. You may also use the escape key to stop drawing. Remember: Field must be drawn in a clockwise direction.”

- Left click to begin drawing the field boundaries. Continue around the field in a clockwise direction left clicking at each point.
- Right click on your final point. The map will connect the first click with the last click.
- The field will show in light green.
- Click “Pin Field” button when finished. Be certain it is correct before selecting this button. the field map cannot be edited after submission.
- After you select ‘Pin Field’ a message aft the top of the pinning menu will read “Field successfully pinned. PIN ID#12345.”

Edit Field

- You may only edit your field drawing **prior** to clicking the ‘Pin Field’ button. Once the field has been pinned it is final. To edit the field before pinning:
- Drawing mode was turned off automatically when the last point on the map was right clicked.
- Turn drawing mode on again to clear the map and draw again.

- If you realize you have made an error after submitting the pin you may delete the pin and mark the pin as ‘inactive’ from “Your Pins”.





































Edit/Delete “Your Pins”

- All pins are assigned a unique ID number in the order they are submitted to the map. It does not matter which company enters the pin. Your pins will not have sequential numbers.
- You can sort the table by clicking on any of the headers, enter a pin ID to search for a specific pin, select the harvest year. You may also export your pin table to Excel.
- Click on “Your Pins” on the yellow menu bar. A table of your pins will be displayed.
- Click on “Select” to edit pin information. After selecting a pin to edit, only the white boxes may be changed.
- To delete pin click “Delete Pin” button. Deleted pins are removed from the map immediately.
- The fee is voided if the pin is deleted before 5 days of initial pinning date.

<u>LIST 1</u>		<u>Species and Crop Selection</u>		
Your company pins are yellow				
Other company pins are purple				
The number inside of pin correlates with category of that crop type/group				
<u>#</u>	<u>Pin Shape</u>	<u>Crop</u>	<u>Pollination</u>	<u>Color/Type</u>
Beta				
1	◆	Sugar Beets	OP	Any
2	◆	Sugar Beets	Hybrid	Any
3	◆	Sugar Beets	Multi	Any
4	◆	Table Beets	OP	Any
5	◆	Table Beets	Hybrid	Any
6	◆	Table Beets	Multi	Any
7	◆	Fodder Beets	OP	Any
8	◆	Fodder Beets	Hybrid	Any
9	◆	Fodder Beets	Multi	Any
10	◆	Swiss Chard	OP	Green
11	◆	Swiss Chard	Hybrid	Green
12	◆	Swiss Chard	Multi	Green
13	◆	Swiss Chard	OP	Red
14	◆	Swiss Chard	Hybrid	Red
15	◆	Swiss Chard	Multi	Red

16	1	Swiss Chard	OP	Multi Color
17	1	Swiss Chard	Hybrid	Multi Color
18	1	Swiss Chard	Multi	Multi Color
19	1	Other Beta	OP	Any
20	1	Other Beta	Hybrid	Any
21	1	Other Beta	Multi	Any
22	1	Other Beta	GMO	Any
Fall Brassica- All 9 chromosomes				
1	1	Cabbage	OP	Red
2	1	Cabbage	Hybrid	Red
3	1	Cabbage	Multi	Red
4	1	Cabbage	OP	White
5	1	Cabbage	Hybrid	White
6	1	Cabbage	Multi	White
7	1	Cabbage	OP	Multi Color
8	1	Cabbage	Hybrid	Multi Color
9	1	Cabbage	Multi	Multi Color
10	1	Collards	OP	Any
11	1	Collards	Hybrid	Any
12	1	Collards	Multi	Any
13	1	Cauliflower	OP	Any
14	1	Cauliflower	Hybrid	Any
15	1	Cauliflower	Multi	Any
16	1	Kale	OP	Red
17	1	Kale	Hybrid	Red
18	1	Kale	Multi	Red
19	1	Kale	OP	White
20	1	Kale	Hybrid	White
21	1	Kale	Multi	White
22	1	Kale	OP	Red/White Mix
23	1	Kale	Hybrid	Red/White Mix
24	1	Kale	Multi	Red/White Mix
25	1	Chinese Kale	OP	Any
26	1	Chinese Kale	Hybrid	Any
27	1	Chinese Kale	Multi	Any
28	1	Kohlrabi	OP	Any
29	1	Kohlrabi	Hybrid	Any
30	1	Kohlrabi	Multi	Any
31	1	Brussels	OP	Any
32	1	Brussels	Hybrid	Any
33	1	Brussels	Multi	Any
34	1	Other Brassica	OP	Any
35	1	Other Brassica	Hybrid	Any

36	1	Other Brassica	Multi	Any
Spring Brassica 10 chromosomes				
1	1	Turnip	OP	Any
2	1	Turnip	Hybrid	Any
3	1	Turnip	Multi	Any
4	1	Chinese Cabbage	OP	Any
5	1	Chinese Cabbage	Hybrid	Any
6	1	Chinese Cabbage	Multi	Any
7	1	Chinese Mustard	OP	Any
8	1	Chinese Mustard	Hybrid	Any
9	1	Chinese Mustard	Multi	Any
10	1	Pak Choi	OP	Any
11	1	Pak Choi	Hybrid	Any
12	1	Pak Choi	Multi	Any
13	1	Choi Sum	OP	Any
14	1	Choi Sum	Hybrid	Any
15	1	Choi Sum	Multi	Any
16	1	Indian Mustard	OP	Any
17	1	Indian Mustard	Hybrid	Any
18	1	Indian Mustard	Multi	Any
19	1	Brassica Spring-Other	OP	Any
20	1	Brassica Spring-Other	Hybrid	Any
21	1	Brassica Spring-Other	Multi	Any
Spring Brassica - other chromosome groups				
1	1	Indian Mustard-18 chromosomes	OP	Florida Broadleaf
2	1	Indian Mustard-18 chromosomes	Hybrid	Florida Broadleaf
3	1	Indian Mustard-18 chromosomes	Multi	Florida Broadleaf
4	1	Indian Mustard-18 chromosomes	OP	Southern giant curled
5	1	Indian Mustard-18 chromosomes	Hybrid	Southern giant curled
6	1	Indian Mustard-18 chromosomes	Multi	Southern giant curled
7	1	Indian Mustard-18 chromosomes	OP	Red mustard
8	1	Indian Mustard-18 chromosomes	Hybrid	Red mustard
9	1	Indian Mustard-18 chromosomes	Multi	Red mustard
10	1	Indian Mustard-18 chromosomes	OP	Chinese mustard
11	1	Indian Mustard-18 chromosomes	Hybrid	Chinese mustard
12	1	Indian Mustard-18 chromosomes	Multi	Chinese mustard
13	1	Indian Mustard-18 chromosomes	OP	Leaf mustard
14	1	Indian Mustard-18 chromosomes	Hybrid	Leaf mustard
15	1	Indian Mustard-18 chromosomes	Multi	Leaf mustard
16	1	White mustard-12 chromosomes	OP	Any
17	1	White mustard-12 chromosomes	Hybrid	Any
18	1	White mustard-12 chromosomes	Multi	Any

19		Arugula-11 chromosomes	OP	Any
20		Arugula-11 chromosomes	Hybrid	Any
21		Arugula-11 chromosomes	Multi	Any
22		Brassica carinata types-17 chromosomes	OP	Any
23		Brassica carinata types-17 chromosomes	Hybrid	Any
24		Brassica carinata-17 chromosomes	Multi	Any
25		Brassica napus types-19 chromosomes	OP	Any
26		Brassica napus types-19 chromosomes	Hybrid	Any
27		Brassica napus types-19 chromosomes	Multi	Any
28		Canola	OP	Any
29		Canola	Hybrid	Any
30		Canola	Multi	Any
Radish				
1		Radish	OP	Green stem
2		Radish	Hybrid	Green stem
3		Radish	Multi	Green stem
4		Radish	OP	White stem
5		Radish	Hybrid	White stem
6		Radish	Multi	White stem
7		Radish	OP	Red root
8		Radish	Hybrid	Red root
9		Radish	Multi	Red root
10		Radish	OP	Other
11		Radish	Hybrid	Other
12		Radish	Multi	Other
Spinach				
1		Spinach	OP	Asian type pollinator
2		Spinach	Hybrid	Asian type pollinator
3		Spinach	Multi	Asian type pollinator
4		Spinach	OP	Savoy pollinator
5		Spinach	Hybrid	Savoy pollinator
6		Spinach	Multi	Savoy pollinator
7		Spinach	OP	Smooth pollinator
8		Spinach	Hybrid	Smooth pollinator
9		Spinach	Multi	Smooth pollinator
10		Spinach	OP	Red pollinator
11		Spinach	Hybrid	Red pollinator
12		Spinach	Multi	Red pollinator

Onion				
1	1	Onion	OP	Red
2	1	Onion	Hybrid	Red
3	1	Onion	Multi	Red
4	1	Onion	OP	Yellow
5	1	Onion	Hybrid	Yellow
6	1	Onion	Multi	Yellow
7	1	Bunching Onions	OP	Any
8	1	Bunching Onions	Hybrid	Any
9	1	Bunching Onions	Multi	Any
10	1	Leek	OP	Any
11	1	Leek	Hybrid	Any
12	1	Leek	Multi	Any
13	1	Chives	OP	Any
14	1	Chives	Hybrid	Any
15	1	Chives	Multi	Any
Umbelliferous				
1	1	Parsley	OP	Curled Leaf
2	1	Parsley	Hybrid	Curled Leaf
3	1	Parsley	Multi	Curled Leaf
4	1	Parsley	OP	Flat leaf
5	1	Parsley	Hybrid	Flat leaf
6	1	Parsley	Multi	Flat leaf
7	1	Dill	OP	Any
8	1	Dill	Hybrid	Any
9	1	Dill	Multi	Any
10	1	Parsnip	OP	Any
11	1	Parsnip	Hybrid	Any
12	1	Parsnip	Multi	Any
13	1	Other Umb.	OP	Any
14	1	Other Umb.	Hybrid	Any
15	1	Other Umb.	Multi	Any
Chicory				
1	1	Chicory	OP	Any
2	1	Chicory	Hybrid	Any
3	1	Chicory	Multi	Any
Endive				
1	1	Endive	OP	Any
2	1	Endive	Hybrid	Any
3	1	Endive	Multi	Any

Cucumbers				
1	1	Cucumber	OP	Slicer
2	1	Cucumber	Hybrid	Slicer
3	1	Cucumber	Multi	Slicer
4	1	Cucumber	OP	Pickle
5	1	Cucumber	Hybrid	Pickle
6	1	Cucumber	Multi	Pickle
7	1	Cucumber	OP	White spine
8	1	Cucumber	Hybrid	White spine
9	1	Cucumber	Multi	White spine
10	1	Cucumber	OP	Black spine
11	1	Cucumber	Hybrid	Black spine
12	1	Cucumber	Multi	Black spine
13	1	Cucumber	OP	Beta alpha
14	1	Cucumber	Hybrid	Beta alpha
15	1	Cucumber	Multi	Beta alpha
16	1	Parthenocarpic	Hybrid	Any
17	1	Non parthenocarpic	Hybrid	Any
Squash				
1	1	Squash	OP	Pepo
2	1	Squash	Hybrid	Pepo
3	1	Squash	Multi	Pepo
4	1	Squash	OP	Moshchata
5	1	Squash	Hybrid	Moshchata
6	1	Squash	Multi	Moshchata
7	1	Squash	OP	Mixta
8	1	Squash	Hybrid	Mixta
9	1	Squash	Multi	Mixta
10	1	Squash	OP	Maxima
11	1	Squash	Hybrid	Maxima
12	1	Squash	Multi	Maxima
Sunflowers				
1	1	Sunflower	OP	Multi head
2	1	Sunflower	Hybrid	Multi head
3	1	Sunflower	Multi	Multi head
4	1	Sunflower	OP	Single head
5	1	Sunflower	Hybrid	Single head
6	1	Sunflower	Multi	Single head

Flowers				
1	1	Flowers	OP	Chrysanthemums
2	1	Flowers	Hybrid	Chrysanthemums
3	1	Flowers	Multi	Chrysanthemums
4	1	Flowers	OP	Poppies
5	1	Flowers	Hybrid	Poppies
6	1	Flowers	Multi	Poppies
7	1	Flowers	OP	Flower-other
8	1	Flowers	Hybrid	Flower-other
9	1	Flowers	Multi	Flower-other
Miscellaneous				
1	1	Misc crop	OP	Any
2	1	Misc crop	Hybrid	Any
3	1	Misc crop	Multi	Any
<u>LIST 2</u> <u>Grower Priority</u>				
		<u>Pin Priority Selection</u>		
		Annuals	March 1st	
		Biennials	August 1st	
<u>LIST 3</u> <u>Pin Classification</u>				
		<u>Pin Class Selection</u>		
		Priority		
		Encroachment		
		Deferral		
		Pending		
		Homestead		

Guidelines

As part of our isolation mapping procedures, the Isolation Guidelines have been agreed upon by the Willamette Valley Specialty Seed Association (WVSSA). Changes to these Guidelines are subject to Board approval and a vote by the association members. The pollinators are used to pin productions.

Beta vulgaris (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

GMO isolation:

Between a GMO and a non-GMO from different groups	4 mile
---	--------

Within a group with hybrid productions and where one or both parent lines may be identified as GMO, isolation will be based on the pollinator as follows:

GMO trait resides on the pollinator*:

Non-GMO pollinator	4 mile
GMO pollinator	1 mile

**Exception agreement for isolation distance encroachment is not allowed.*

GMO trait resides on the male sterile:

Use conventional isolation requirements above

Brassica species (Fall types – 9 chromosomes)

Includes groups: Cabbage, Kale, Chinese Kale, Kohlrabi, Brussel Sprouts, etc.

Between O.P. of the same color and group	1 mile
Between O.P. of different color, same group	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 10 chromosomes)

- Turnip types – 10 chromosomes (Japanese type, purple top, strap leaf, Shogoin)
- Chinese Mustard types – 10 chromosomes (komatsuna, mizuna, mibuna, tatsoi)
- Chinese Cabbage types – 10 chromosomes (heading, semi-heading, non-heading)
- Pak Choi types – 10 chromosomes
- Choi Sum types – 10 chromosomes

Brassica species - other chromosome groups

- Indian Mustard types – 18 chromosomes (Florida broadleaf, southern giant curled, red mustard, Chinese mustard, leaf mustard)
- White Mustard types – 12 chromosomes
- Arugula – 11 chromosomes
- Brassica carinata – 17 chromosomes Abyssinian/Ethiopian kale
- Brassica napus types – 19 chromosomes: rutabaga, Russian kales

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

Between any 10 chromosome and any other chromosome group, except canola	Physical separation
Between O.P. of the same group and phenotype	1 mile
Between O.P. of different chromosome groups	1.5 mile
Between Hybrids or Hybrids and O.P. of same group, phenotype, and color	2 mile
Between Hybrids of different groups or phenotype	2.5 mile
Between Hybrids and O.P. of different groups, phenotype or color	3 mile

Brassica species Canola

May be grown only under permit from the Oregon Department of Agriculture. GM Canola or Rapeseed is not allowed to be grown.

Between any other brassica species seed crops	3 mile
---	--------

Rhaphanus sativus species (Radish)

Between O.P. varieties of same color and/or shape	1 mile
Between O.P white stem and O.P. green stem	1 mile
Between Hybrids or Hybrid and O.P. of same color and/or shape	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)

Between Hybrids of savoy or smooth leaf type	2 mile
Between Hybrids of Asian type pollinator and any other leaf type Pollinator	3 mile
Between Hybrids of same male leaf type	1 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

Allium cepa species (Onion)**Cepa Onion Hybrid**

Between all onions, Hybrids or OPs, of different color, shape, type, or day length	3 mile
Between Hybrid and OP of same color, shape, and type	2 mile
Between Hybrids of same color, shape, and type	1 mile

Cepa Onion Open Pollinated

Between all onions, Hybrids or OPs, of different color, shape, type, or day length	3 mile
Between OP of same color but different shape	2 mile
Between OP of same color, type, and shape	1 mile

Allium fistulosum species (Bunching Onions)

Between different color types	2 mile
Between same color types	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, Coriander, etc.)

Between same types	1 mile
Between Hybrid and O.P. of similar types	2 mile
Between different types	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 Hybrids of same type	2 mile
Between Hybrid and O.P. type	3 mile
Between Hybrid of different type or spine color	3 mile
Between Hybrid Non-Parthenocarpic and Hybrid Parthenocarpic	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 Hybrid or O.P. of different type, shape or color	2 mile

Flowers

All Flowers need to be pinned

Between flowers that cross pollinate	1 mile
Includes: Chrysanthemums, Helianthus, Poppies, etc.	
Between Sunflowers of similar types	1 mile
Between Sunflowers of different types	2 mile

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 other WVSSA representatives.