

# 2018 Leek Variety Trials

## Instructions for On-Farm Sites

### Background

Leeks (*Allium ampeloprasum*) are a high value fall and winter crop for direct-market production in the Pacific Northwest, and can be an important crop for season extension. While the majority of onion and leek seed in North America has historically been produced in the Snake River Valley of Idaho and Oregon, leek seed is also grown in the Columbia Basin of Washington and in the more maritime climates of western Washington and British Columbia (Thornton et al. 1993). Hybrid leek varieties have become popular due to their higher uniformity, but many open-pollinated varieties exist and may offer farmers more reliable access to seed, particularly if they can be combined with local seed production. For this reason, BC Seed Trials growers have expressed interest investigating **OP leek varieties that have desired market qualities and perform well in BC during the late fall and winter.**



### BC Farms Growing Leek Trials in 2018

Farmer(s)	Farm Name	Location	Email
Foster Richardson	HillDown Farm	Cobble Hill	fostertheagrarian@gmail.com
Serena Black	Sweder Berry U-Pick	Prince George	sblack@industrialforestry.ca
Bob and Char Sieffert	Lazo-Tyee Farm	Comox	lazo-tyee.sieffert@shaw.ca
Dan Oostenbrink	Local Harvest	Chilliwack	doostenbrink@gmail.com
Jen Cody & Craig Evans	Growing Opportunities	Nanaimo	jenandbearit@gmail.com
Tamara McPhail	Linnaea Farm	Cortes Island	tamara@linnaeafarm.org
Kaleigh Barton	Heavenly Roots Farm	Salt Spring Island	kaleigh.barton@gmail.com
Chrystal Bryson	Square Root Farm	Saanich	chrystal.bryson@gmail.com

### Varieties Included

The 2018 Leek Variety Trials include approximately 32 open-pollinated leek varieties, all of which will be grown in a replicated trial at the UBC Farm. In order to keep on-farm trials at a manageable size, participating farms are receiving a subset of approximately 11 varieties, including 3 varieties that will be grown at all farm sites and 8 varieties that vary between farms. **Your seed pack sheet will list the varieties included for your farm, with “code names” only to ensure a blind trial.**

**Full Variety List for 2018**

<b>Variety</b>	<b>OP?</b>	<b>Source</b>	<b>Sites</b>	<b>Certification</b>
Curling Organic F1 (check)	No	West Coast Seeds	ALL	OG
Bandit (check)	Yes	Johnny's Selected Seeds	ALL	OG
King Richard	Yes	Johnny's Selected Seeds	Set A	OG
Lancelot	Yes	Fedco	UBC Farm	CONV
Giant Musselburgh	Yes	Hawthorn Organic Seeds	Set A	OG
Verdonnet	Yes	Adaptive Seeds	Set A	OG
German Winter leek	Yes	Sunshine Seeds	Set A	OG
Hannibal (OG)	Yes	William Dam Seeds	Set A	OG
Zermatt	Yes	Park Seeds	UBC Farm	CONV
Prizetaker	Yes	Seed Savers Exchange	UBC Farm	CONV
Durabel	Yes	Salt Spring Seeds	Set A	OG
Melaton	Yes	UBC Farm	UBC Farm	OG
KingSieg	Yes	Fedco	Set A	OG
Unique Leek	Yes	Full Circle Seeds	Set A	CONV
Belgium Breeder's mix	Yes	Wild Garden Seeds	UBC Farm	OG
Ester Cook	Yes	Siskiyou	Set A	OG
King Richard	Yes	BCESC - Glorious Organics	Set B	OG
Linnaea	Yes	BCESC	UBC Farm	OG
St-Victor	Yes	BCESC - FC Seeds	Set B	OG
Blaugruner Winter Avano	Yes	Uprising Seeds	Set B	OG
Mechelen Blue Green Winter	Yes	Adaptive Seeds	UBC Farm	OG
Runner F1	No	High Mowing Seeds	UBC Farm	OG
Liege Giant Winter (OG)	Yes	Adaptive Seeds	Set B	OG
Amercian Flag/Broad London	Yes	Harold Steves	UBC Farm	CONV
Gladius F1	No	Osborne	UBC Farm	CONV
Keeper F1	No	Osborne	UBC Farm	CONV
Surfer F1	No	Osborne	UBC Farm	CONV
Ray DeVries 1	Yes	Ralph's Greenhouse	Set B	OG
Delft	Yes	Wild Garden Seeds	Set B	OG
Blue Solaise	Yes	Wild Garden Seeds	Set B	OG
Tadorna	No	High Mowing Seeds	Set B	OG
Belton	No	Osborne	UBC Farm	CONV

## Planting and Cultivation Recommendations

The table below provides *suggestions only* based on practices at the UBC Farm. Use it if you are not sure how to plant the leeks and if these suggestions make sense for your farm. **The trial should be grown as you would normally grow leeks for a fall/winter harvest, including your normal bed and row spacing.** Please record your planting dates, spacing, and other cultivation practices on the worksheet provided.

<b>Seeding and transplant dates</b>	<ul style="list-style-type: none"> <li>● Seeding early March to mid-March</li> <li>● Transplant early to mid-May</li> <li>● Seeding and transplant dates should be adjusted depending on weather conditions and your normal dates for fall/winter leeks.</li> </ul>
<b>Plants per Variety</b>	<ul style="list-style-type: none"> <li>● <b><i>Plant one plot of 24 seedlings/plot for each variety except LK-01 and LK-04, the check varieties.</i></b></li> <li>● <b><i>Plant 2 separate plots of 24 seedlings/plot of LK-01 and LK-04.</i></b></li> </ul>
<b>Row and bed spacing</b>	<ul style="list-style-type: none"> <li>● Transplant approx 6" (~15 cm) apart in row, or as your normally would.</li> <li>● At UBC Farm we plant 2 rows/bed, with 14" between rows.</li> <li>● Bed width may vary depending on tillage methods, at the UBC farm beds are 3.67 ft center-to-center.</li> <li>● We suggest no smaller than 10" (~25 cm) between-row spacing, unless you have had previous success this way.</li> </ul>
<b>Seeding rate and thinning</b>	<ul style="list-style-type: none"> <li>● Seed in cell trays, flats, soil blocks, or nursery beds as you wish.</li> <li>● Expect low (~60-70%) germ rate and overseed in order to ensure 24 seedlings/plot. You may plant all the seeds provided.</li> <li>● UBC Farm starts leeks in nursery beds or 72 to 128-cell trays. Tops and roots are trimmed at transplant time to stimulate growth.</li> </ul>
<b>Days to harvest</b>	<ul style="list-style-type: none"> <li>● Between 120-150 days from transplant based on weather conditions and your judgement.</li> <li>● For evaluating fall/winter hardiness, leeks would ideally be left in the field into November, December and even beyond if possible based on your sales outlets.</li> <li>● Please communicate with us about your intended harvest dates</li> </ul>
<b>Irrigation</b>	<ul style="list-style-type: none"> <li>● Ideally, leeks should be grown with drip irrigation. If this is not feasible, irrigate as your normally would.</li> </ul>

## How to Arrange the Trial

The trial arrangement is flexible as long as you plant 24 seedlings per variety, and 2 plots of 24 seedlings each of LK-01 and LK-04. If the trial is too big for your space/time, let us know and you can drop some of the varieties.

Please observe these best practices to the extent possible:

- Leek plots may be distributed in multiple side-by-side beds or planted in one bed.
- Avoid the edge of the field and the end of the bed when finding a place for the trial, as well as any areas with known soil, shade or irrigation differences that would affect some plots more than others.
- If possible, plant the trial in a spot where it has the same crop on either side of it.
- Create your own random order for the varieties, either by drawing variety names out of a pile or randomly choosing which flat to transplant next.
- **Ensure that the two plots each of LK-01 and LK-04 are NOT next to each other.**
- Use stakes (which will be provided later) to label the plots AND draw a field map showing the order and location of varieties. This serves as a backup in case the stakes get lost!

## Evaluation

On-farm evaluation will consist primarily of writing your observations about the varieties in the form of descriptive notes as well as some ratings. We ask that you evaluate the leeks at a few points during the season. **We are currently revising the evaluation plan based on feedback from 2018. Instructions and worksheet will be available online at <http://www.bcseedtrials.ca/crop-instructions/>**

## Further References

[Thornton, Wilson, and Colt. 1993. "Onion and Leek Seed Production." Pacific Northwest Extension - Idaho, Oregon, Washington](#)

## 2018 Leek Variety Trials

### Crop Management, Disease, and Pest Records

Farm Name: \_\_\_\_\_

Contact Person(s): \_\_\_\_\_

*Please use the back of this page for other notes, and to draw a field map.*

<b>Seeding Date</b>	
<b>Transplant Date</b>	
<b>In-row Spacing</b>	
<b>Between-row Spacing</b>	
<b>Fertilizer applications</b> (rate, amount, and date)	
<b>Other products used</b> (rate, amount, purpose, date)	
<b>First appearance of leek rust</b> (date and notes on variety differences, if any)	
<b>First appearance of thrips</b> (date and notes on variety differences, if any)	
<b>Other diseases or pests - use additional pages if necessary</b> (Name, date of first appearance & variety differences if any)	