2019 Fall Variety Trial

Curly Kale | Russian kale | Romaine lettuce | Garden beet | Salad turnip | Red salad radish

Introduction:

This SARE-funded fall variety trial was undertaken to compare varieties of common fall crops from both national and regional organic seed sources. The trial was planted and maintained by staff and students of the 'Growing Agripreneurs' program, a weekly OSU Extension class for aspiring small farmers that includes both lecture-based classes and hands-on experiences in the field.

Materials and Methods:

- The trial was grown in Central Point, Oregon on a field at OSU's Southern Oregon Research and Extension Center (SOREC) which has 'Central Point sandy loam' soil.
- Pre-plant fertilization was based on a soil test and amendments applied included feathermeal, potassium sulfate, and lime.
- All crops were irrigated by overhead sprinklers.
- 2019 average climate data is as follows:

Month	Average daily temp	Total precipitation
July	73 F	0"
August	74 F	.8″
September	63 F	1.6″
October	50 F	.7"

Conclusions:

While we feel that this trial report presents useful information, we also realize that most crops in this trial performed slightly poorer than generally expected and we feel that a repeat of the trial is warranted to properly judge and compare these varieties. As such, we refrained from drawing too many conclusions as to what was 'best' and 'worst', and rather tried to provide more objective data and photos so that readers can come to their own conclusions. Flavor was the exception in this and we generally rated these on a 1-9 scale where the best tasting set the '9', the least pleasant tasting set the '1' and the rest were then judged according to that scale.

Funding for this variety trial came from Western S.A.R.E. <u>https://www.westernsare.org</u> For more information, contact Maud Powell, OSU Small Farms at <u>maud.Powell@oregonstate.edu</u>

B.oleracea (Curly) Kales

Materials and Methods:

- Four varieties of curly kale were grown and evaluated
- Three repetitions of the four-plot trial were planted with each variety plot having 16 plants.
- Each variety was seeded in 98 cell flats on July 18th and transplanted September 1 (41 days)
- Evaluation was conducted on October 15th: 44 days after transplant and 85 days after seeding
- Spacing was 12" apart in rows 30" apart.
- Evaluations included:
 - Averaging weight of three plants
 - Tasting and rating flavor (1= worst of rep / 9= best of rep)
 - Taking pictures of individual plants and individual leaves
 - o Additional notes
- The four varieties evaluated were: (trial code / variety / source)
 - o OK1 / Pentland Brig / Adaptive Seeds
 - OK2 / Baltic Red / Adaptive Seeds
 - OK3 / Westlandse / Johnny's Selected Seeds
 - OK4 / Alive Grex / Siskiyou Seeds

Results:

Variety	Average plant weight at 47 days after transplanting	Flavor rating (1-worst to 9-best)	Notes
Pentland Brig	.8 lb	7	Open habit, light colored
Baltic Red	.9 lb	9	Deep color, nice architecture
Westlandse	1.5 lb	1	Vigorous, tight curls, light green
Alive Grex	.8 lb	7	Dark green, short, uniform





B.napus (Russian) Kales

Materials and Methods:

- Four varieties of B.napus, frilly kale were grown and evaluated
- Three repetitions of the four-plot trial were planted with each variety plot having 16 plants.
- Each variety was seeded in 98 cell flats on August 5 and transplanted September 5 (31 days)
- Evaluation was conducted on October 15th: 40 days after transplant and 71 days after seeding
- Spacing was 12" apart in rows 30" apart.
- Evaluations included:
 - Averaging weight of three plants
 - Tasting and rating flavor (1= worst of rep / 9= best of rep)
 - Taking pictures of individual plants and individual leaves
 - o Additional notes
- The four varieties evaluated were: (trial code / variety / source)
 - NK1 / Russian Frill / Adaptive Seeds
 - NK2 / Red Russian / Johnny's Selected Seeds
 - NK3 / Siber Frill / Siskiyou Seeds
 - NK4 / White Russian / Wild Garden Seeds

Results:

Variety	Average plant weight at 47 days after transplanting	Flavor rating (1-worst to 9-best)	Notes
Russian Frill	2.0	7	Extra-frilly red stemmed
Red Russian	2.3	9	Classic red-russian type
Siber Frill	2.4	1	Extra-frilly white stemmed
White Russian	2.4	5	Medium-frilled white stemmed





Romaine Lettuce

Materials and Methods:

- Four varieties of green romaine were grown and evaluated
- Three repetitions of the four-plot trial were planted with each variety plot having 16 plants.
- Each variety was seeded in 98 cell flats on 7/28 and transplanted 9/1 (35 days)
- Evaluation was conducted on 10/15: 44 days after transplant and 79 days after seeding
- Spacing was 12" apart in rows 30" apart.
- Evaluations included:
 - Averaging weight of three plants
 - Tasting and rating flavor (1= worst of rep / 9= best of rep)
 - Taking pictures of individual plants and individual leaves
 - o Additional notes
- The four varieties evaluated were: (trial code / variety / source)
 - o RL1 / Kalura / Adaptive Seeds
 - RL2 / Green Towers / High Mowing Seeds
 - RL3 / Coastal Star / Johnny's Selected Seeds
 - RL4 / Platonic / Wild Garden Seeds

Results:

Variety	Average plant weight at 44 days after transplanting	Flavor rating (1-worst to 9-best)	Notes
Kalura	.5	5	Least cold hardy
Green Towers	.3	5	Flat (prostrate) initial growth habit
Coastal Star	.4	1	Most cold hardy
Platonic	.6	9	Upright, wavy leaf edge, most vigorous









Beets

Materials and Methods:

- Four varieties of table beets were grown and evaluated
- Three repetitions of the four-plot trial were planted with each variety plot having 20 plants.
- Each variety was seeded in 98 cell flats on 7/28 and transplanted 9/3 (37 days)
- Evaluation was conducted on 10/15: 42 days after transplant and 79 days after seeding
- Spacing was 5" apart in rows 30" apart.
- Evaluations included:
 - Averaging weight of five plants
 - Taking pictures of individual plants and individual leaves
- The four varieties evaluated were: (trial code / variety / source)
 - o BT1 / Red Ace / Johnny's Selected Seeds
 - o BT2 / Shiraz / Siskiyou Seeds
 - BT3 / Feuer Kugel / Uprising Seeds
 - o BT4 / Touchstone Gold / Wild Garden Seeds

Results:

Variety	Average plant weight at 47 days after transplanting
Red Ace	.37
Shiraz	.30
Feuer Kugel	.44
Touchstone gold	.46



*Other photos on next page



Salad Turnip

Materials and Methods:

- Two varieties of salad turnip were grown and evaluated
- There were 3 reps of 2 plots each and each plot had 20 plants
- Each variety was direct seeded on 8/24
- Evaluation was conducted on 10/15: 52 days after seeding
- Spacing was 2" apart in rows 30" apart.
- Evaluations included:
 - Averaging weight of five plants
 - o Taking pictures of individual plants and individual leaves
 - Tasting and rating flavor
 - o Additional notes
- The four varieties evaluated were: (trial code / variety / source)
 - o TP1 / Hakurei F1 / Johnny's Selected Seeds
 - o TP2 / Tokyo Market / Wandering Fields Farm

Results:

Variety	Average plant weight at 54 days after seeding	Flavor rating	Notes
Hakurei F1	.5	Better	Softer, sweeter, slightly more vigor
Tokyo Market	.3	Good	Firmer, good flavor, flatter shape, close 2 nd



Radish

Materials and Methods:

- Four varieties of red salad radish were grown and evaluated
- There were 3 reps of 4 plots each and each plot had 16 plants
- Each variety was direct seeded on 9/1
- Evaluation was conducted on 10/15: 44 days after seeding
- Spacing was 2" apart in rows 30" apart.
- Evaluations included:
 - Tasting and rating flavor (1= worst of rep / 9= best of rep)
 - Counting % marketable roots
 - o Taking pictures of individual plants and individual leaves
 - Additional notes
- The four varieties evaluated were: (trial code / variety / source)
 - RD1 / Rudi / Adaptive Seeds
 - RD2 / Rudolf / High Mowing Seeds
 - o RD3 / Cherry Belle / Siskiyou Seeds
 - RD4 / Sora / Uprising Seeds

Results:

Variety	Flavor rating (1-worst to 9-best)	% Marketable roots	Notes
Rudi	6	93%	Sweet flavor
Rudolf	9	68%	Rich flavor
Cherry Belle	3	67%	Mild flavor
Sora	1	71%	Mildly spicy flavor

