

## 2016 COLUMBIA BASIN ONION CULTIVAR DEMONSTRATION RESULTS<sup>1</sup>

Seed Company & Cultivar	Usable <sup>2</sup> Yield T/A	Bulb Size and Defects <sup>3</sup> Yield by weight and (% of total bulb count)					Bulb Count <sup>4</sup>	Tops Down <sup>5</sup> %	Bolted <sup>5</sup> #/plot
		Pre-pack (<2.25") T/A (%)	Medium (2.25-3") T/A (%)	Jumbo (3-4") T/A (%)	Colossal (>4") T/A (%)	Culls T/A (%)			
<b>American Takii</b>									
Centerstone*	56.7	0.0 (0)	4.2 (14)	44.8 (70)	7.7 (9)	2.6 (7)	53	0	0.3
Frontier *	47.0	0.6 (4)	6.3 (20)	39.3 (75)	0.8 (1)	0.1 (1)	53	40	0.0
Grand Perfection*	55.9	0.2 (3)	1.4 (8)	25.4 (49)	29.0 (38)	0.5 (3)	39	0	1.3
Highlander*	44.1	0.2 (3)	3.6 (16)	29.4 (60)	10.9 (14)	4.7 (8)	39	90	0.0
Milestone	50.1	0.1 (1)	5.4 (19)	42.8 (75)	1.8 (2)	1.2 (3)	48	28	0.0
Ridge Line	50.1	0.6 (7)	2.4 (10)	34.1 (62)	13.1 (15)	1.7 (5)	44	50	0.0
Trailblazer*	44.9	0.2 (2)	3.7 (13)	41.0 (85)	0.0 (0)	0.0 (0)	52	47	0.0
Traverse	47.6	0.5 (7)	1.6 (7)	37.6 (67)	7.9 (9)	5.4 (10)	47	62	0.3
Trekker	42.6	0.8 (7)	6.2 (24)	35.0 (65)	0.6 (1)	1.1 (3)	48	58	0.0
<b>Bejo Seeds</b>									
Antarctica (W)*	76.6	0.2 (2)	4.2 (11)	51.0 (66)	21.2 (19)	0.3 (2)	62	0	1.3
Calibra	52.1	0.5 (5)	4.3 (16)	34.7 (57)	12.7 (14)	4.1 (8)	50	7	0.3
Crockett*	58.3	0.1 (1)	6.4 (20)	50.0 (71)	1.8 (2)	2.4 (6)	54	0	0.3
Delgado	51.2	0.3 (2)	2.6 (11)	38.0 (65)	10.3 (11)	6.2 (11)	49	0	1.7
Hamilton	48.2	0.9 (9)	4.6 (16)	38.0 (62)	4.7 (5)	3.7 (7)	53	0	3.3
Ice Pearl (W)	53.8	0.2 (3)	3.2 (12)	44.3 (74)	6.0 (5)	2.5 (7)	53	0	0.0
Legend	48.7	0.1 (1)	5.0 (18)	36.8 (64)	6.8 (8)	5.7 (9)	50	0	0.7
Red Carpet (R)	44.8	0.2 (2)	10.6 (36)	32.9 (57)	1.2 (1)	1.8 (4)	54	0	0.3
Talon*	47.2	0.5 (7)	6.3 (24)	36.9 (63)	3.6 (4)	1.4 (3)	49	38	1.0
Tamara	45.2	0.6 (8)	6.7 (25)	36.1 (63)	1.8 (2)	0.4 (3)	50	7	0.3
<b>Crookham Co.</b>									
Advantage*	43.5	0.2 (3)	2.5 (10)	31.4 (58)	9.4 (12)	5.7 (17)	43	0	6.0
Brundage (W)	50.9	0.1 (2)	1.9 (9)	17.7 (35)	31.2 (34)	6.9 (21)	43	0	2.3
Esteem*	56.4	0.3 (4)	3.4 (10)	41.8 (65)	10.8 (11)	4.0 (11)	56	0	2.7
Morpheus*	59.2	0.0 (0)	2.1 (8)	42.3 (68)	14.7 (14)	4.7 (10)	54	0	1.3
Oracle*	52.1	0.8 (9)	1.9 (6)	40.8 (65)	8.6 (10)	4.1 (9)	48	0	0.7
Pontiac*	41.4	0.0 (0)	8.5 (37)	25.1 (51)	7.8 (10)	1.7 (2)	41	0	2.0
Purple Haze(R)	46.2	0.1 (2)	5.7 (21)	30.0 (55)	10.5 (16)	1.6 (7)	46	7	3.0
Red Beret (R)	37.5	0.5 (7)	5.8 (25)	23.7 (51)	7.6 (11)	3.2 (7)	41	0	0.7
Scout*	64.2	0.3 (2)	3.8 (14)	32.5 (47)	27.6 (28)	4.8 (9)	51	3	3.3
White Cloud (W)*	55.2	0.0 (0)	2.9 (11)	32.5 (53)	19.7 (19)	10.8 (17)	52	0	3.7

Seed Company & Cultivar	Usable <sup>2</sup> Yield T/A	Bulb Size and Defects <sup>3</sup> Yield by weight and (% of total bulb count)					Total Bulb Count <sup>4</sup>	Tops Down <sup>5</sup> %	Bolted <sup>5</sup> #/plot
		Pre-pack (<2.25") T/A (%)	Medium (2.25-3") T/A (%)	Jumbo (3-4") T/A (%)	Colossal (>4") T/A (%)	Culls T/A (%)			
<b>Hazera</b>									
Cruiser	45.9	0.0 (0)	3.3 (16)	35.4 (65)	7.2 (10)	2.7 (10)	41	0	4.0
37-86	53.3	0.2 (2)	4.0 (14)	38.3 (68)	10.9 (12)	0.8 (4)	50	17	0.3
37-93*	33.6	0.0 (0)	1.2 (8)	24.1 (51)	8.3 (12)	13.6 (29)	37	0	0.3
<b>Nunhems USA</b>									
Anillo	55.8	0.4 (3)	4.1 (15)	43.6 (67)	7.7 (8)	3.3 (7)	55	0	4.7
Arcero	58.6	0.2 (2)	3.0 (12)	39.9 (64)	15.5 (19)	1.1 (3)	48	0	0.3
Granero	55.2	0.0 (0)	3.6 (13)	42.1 (66)	9.5 (11)	3.1 (10)	50	0	5.0
Joaquin*	46.7	0.3 (3)	1.1 (4)	39.2 (63)	6.1 (7)	10.4 (23)	56	0	0.7
Marenge (R)	52.0	0.3 (4)	3.2 (12)	32.8 (59)	15.6 (20)	1.5 (4)	49	0	0.0
Montero	64.0	0.1 (1)	1.5 (7)	27.0 (48)	35.5 (42)	1.2 (3)	44	20	0.7
Oloroso	39.7	0.1 (2)	5.9 (19)	24.5 (62)	9.2 (10)	3.2 (8)	52	0	0.3
Ranchero	65.6	0.2 (2)	3.5 (11)	40.5 (60)	21.4 (21)	2.0 (5)	55	0	0.0
Vaquero	59.6	0.2 (2)	1.7 (6)	34.4 (57)	23.3 (24)	4.5 (11)	52	0	2.3
<b>Sakata Seed</b>									
Dulce Reina	51.5	0.4 (5)	2.7 (10)	34.0 (53)	14.5 (14)	8.6 (18)	49	0	8.0
Great Western	57.9	0.1 (1)	2.3 (10)	18.7 (38)	36.8 (42)	5.0 (9)	41	25	0.0
Lasso	51.9	0.1 (1)	1.1 (6)	28.8 (53)	21.9 (25)	8.0 (15)	47	0	4.7
Spanish Medallion	63.2	0.0 (0)	1.4 (8)	16.8 (36)	45.0 (50)	3.1 (6)	38	0	0.0
Yukon	50.2	0.2 (2)	3.0 (13)	24.9 (47)	22.1 (28)	6.4 (9)	40	0	1.3
<b>Seminis Veg. Seeds</b>									
Belmar	54.6	0.1 (1)	4.0 (13)	34.0 (58)	16.6 (19)	3.2 (10)	49	0	2.3
Commendable	64.7	0.2 (1)	4.2 (13)	52.7 (75)	7.7 (8)	1.9 (3)	56	0	0.0
SV4643NT (R)	58.3	0.2 (2)	3.8 (13)	38.1 (62)	16.2 (18)	2.4 (5)	53	67	2.0
SV6672NW*	72.7	0.1 (1)	2.4 (7)	45.3 (64)	25.0 (26)	0.4 (2)	55	2	4.3
Swale	51.5	0.3 (2)	3.5 (13)	30.8 (51)	16.8 (18)	6.3 (16)	50	0	2.7
Tucannon*	47.8	0.3 (3)	3.7 (15)	35.1 (57)	8.6 (8)	9.1 (16)	54	18	2.3
XP0771600	62.2	0.1 (1)	3.5 (11)	41.2 (56)	17.4 (16)	7.2 (14)	56	0	2.7
<b>AVERAGES</b>	<b>52.5</b>	<b>0.2 (3)</b>	<b>3.8 (14)</b>	<b>34.9 (59)</b>	<b>13.6 (15)</b>	<b>3.8 (9)</b>	<b>49</b>	<b>11</b>	<b>1.6</b>

<sup>1</sup> Yield data are averaged from three replicate plots except where there were outliers. All yield results from plots that had bulb counts > +/- 2 standard deviations from the grand mean were deemed outliers. This excluded plots with poor stands or those that were tampered with before harvest. Cultivars marked with an \* had outliers for bulb count.

<sup>2</sup> The usable yield is the cumulative yield of all bulb size categories in tons per acre and does not include culls.

<sup>3</sup> Yield for each size category and culls is expressed in tons per acre AND as a percentage of the total bulb count (shown in parenthesis). Defects include split bulbs, severely split skins, rotten bulbs, and bulbs with seed stalks.

<sup>4</sup> The bulb count is the average number of bulbs from a 5-ft section of each plot.

<sup>5</sup> The percentage of the tops estimated to have fallen and the number of bolted onions per plot as of Aug. 19, 2016.

## **Onion Cultivar Trial Overview:**

The onion cultivar trial was planted on April 11, 2016 with a Stanhay belt planter on 34-in beds with four double rows per bed and 4-in in-row seed spacing. Each cultivar was planted in three replicated plots. Plots were 34-in wide by 30-ft long with two double rows. The drip irrigated field was managed by Skone and Connor's Produce and was located northeast of Othello, WA. The field cultivar was Sedona. Tops down ratings and the number of bolted onions in each plot were recorded on August 19. A 5-ft section of each plot was topped and hand-harvested on September 29.

## **Participating Companies:**

American Takii, Inc., 301 Natividad Rd., Salinas, CA 93906

Bejo Seeds, Inc., 1972 Silver Spur Place, Oceano, CA 93445

Crookham Company, P.O. Box 520, Caldwell, ID 83606.

Hazera Seeds, 1200 N El Dorado Pl. #D440, Tucson, AZ 85715

Nunhems USA, 8850 59th Ave. NE, Brooks, OR 97305

Sakata Seed America, Inc., New Mexico Station, P.O. Drawer F, Messilla, NM 88046

Seminis Vegetable Seeds, 32537 Apple Valley Rd, Parma, ID 83660

## **Special thanks for the cooperation and assistance of:**

HOST: Bruce Swindler, *Skone and Connor's Produce*

PLANTING: Michael Navarrete, Deron Beck, and Robert Proksch, *Seminis Vegetable Seeds*

HARVEST: Josh Carter, Curtis Mokler, and Patrick Ross, *Keithly-Williams Seeds*; Bob Mittelstadt, *Clearwater Supply*; Steve Graton and Casey Crookham, *Gowan Company*; Ron Hull, *Osborne Seed Co.*; and Mike Derie, John Weber, Shannon Carmody, and Brian Henrichs, *WSU-Mount Vernon*

## **If you have questions or comments:**

Tim Waters

WSU Franklin & Benton Co. Extension

404 W. Clark Ave.

Pasco, WA 99301

509-545-3511

[twaters@wsu.edu](mailto:twaters@wsu.edu)

Carrie Wohleb

WSU Grant & Adams Co. Extension

1525 E. Wheeler Rd.

Moses Lake, WA 98837

509-754-2011 ext. 4313

[cwohleb@wsu.edu](mailto:cwohleb@wsu.edu)