

2018 COLUMBIA BASIN ONION CULTIVAR DEMONSTRATION RESULTS¹

Seed Company & Cultivar	Usable ² Yield T/A	Bulb Size and Defects ³ Yield by weight and (% of total bulb count)					Bulb Count ⁴	Tops Down ⁵ %
		Pre-pack (<2.25") T/A (%)	Medium (2.25-3") T/A (%)	Jumbo (3-4") T/A (%)	Colossal (>4") T/A (%)	Culls T/A (%)		
American Takii								
Centerstone	48.5	0.0 (0)	1.3 (5)	39.7 (81)	7.5 (11)	1.0 (3)	49	8
Frontier	37.4	0.1 (1)	0.8 (4)	34.7 (93)	1.8 (3)	0.0 (0)	46	60
Grand Perfection	56.2	0.1 (1)	0.5 (2)	18.7 (39)	36.9 (54)	1.6 (4)	46	2
Highlander	53.7	0.2 (2)	2.7 (9)	40.3 (74)	10.4 (13)	1.4 (2)	58	100
Milestone	47.8	0.0 (0)	0.9 (3)	43.1 (91)	3.9 (6)	0.3 (1)	55	52
Ridge Line	48.9	0.4 (4)	1.2 (6)	40.0 (78)	7.2 (9)	1.7 (3)	54	85
Traverse	55.8	0.1 (1)	1.5 (5)	48.9 (87)	5.3 (7)	0.1 (1)	60	85
Trekker	45.9	0.1 (1)	1.1 (4)	43.7 (93)	1.0 (1)	0.0 (0)	55	88
Bejo Seeds								
Calibra	54.0	0.1 (1)	1.8 (7)	43.5 (80)	8.5 (11)	0.5 (1)	56	38
Crockett	46.6	0.1 (1)	1.6 (6)	39.6 (83)	5.2 (7)	0.7 (3)	53	3
Hamilton	45.5	0.3 (2)	1.1 (4)	42.4 (91)	1.8 (3)	0.3 (1)	50	2
Legend	48.6	0.1 (1)	0.6 (4)	30.2 (67)	17.7 (28)	0.5 (1)	45	3
Mondella	48.6	0.2 (1)	1.3 (5)	44.5 (85)	2.7 (3)	1.4 (5)	59	33
Red Carpet (R)	47.1	0.0 (0)	2.2 (8)	41.2 (86)	3.6 (5)	0.2 (1)	53	0
Red Mountain (R)	47.2	0.2 (1)	2.2 (8)	40.5 (84)	4.3 (6)	0.1 (1)	55	2
Talon	48.5	0.0 (0)	2.5 (10)	41.5 (84)	4.5 (6)	0.0 (0)	54	30
Tamara	46.0	0.0 (0)	2.3 (9)	42.9 (89)	0.9 (1)	0.3 (1)	53	8
Crookham Co.								
Avalon	72.3	0.0 (0)	1.1 (4)	25.5 (44)	45.7 (52)	0.2 (1)	56	25
OLYX08-640	43.3	0.2 (2)	1.8 (8)	38.6 (84)	2.7 (4)	0.4 (2)	52	47
Oracle	55.2	0.2 (2)	1.5 (5)	42.0 (78)	11.5 (14)	0.0 (0)	54	2
Purple Haze (R)	42.6	0.4 (3)	8.8 (30)	31.1 (62)	2.3 (3)	1.1 (3)	62	15
Red Beret (R)	47.7	0.2 (2)	3.5 (13)	39.2 (79)	4.7 (6)	0.0 (0)	57	17
Scout	68.3	0.1 (1)	0.7 (2)	31.6 (55)	35.9 (42)	0.0 (0)	56	30
White Cap (W)	51.8	0.1 (1)	1.9 (7)	42.4 (81)	7.4 (10)	0.4 (1)	54	5
White Cloud (W)	58.8	0.0 (0)	0.9 (4)	32.7 (61)	25.2 (31)	1.3 (3)	55	43
Enza Zaden								
E61D.10106	69.8	0.0 (0)	0.4 (2)	14.1 (27)	55.4 (64)	5.5 (7)	54	75
E61L.10132	60.7	0.0 (0)	1.5 (6)	19.5 (41)	39.7 (50)	1.2 (4)	53	53
E61L.10242F1	48.5	0.1 (1)	0.6 (3)	35.5 (75)	12.3 (17)	1.7 (3)	49	2
E61L.10284	61.6	0.1 (1)	0.6 (2)	25.2 (47)	35.7 (47)	1.6 (2)	54	25

Seed Company & Cultivar	Usable ² Yield T/A	Bulb Size and Defects ³ Yield by weight and (% of total bulb count)					Culls T/A (%)	Bulb Count ⁴	Tops Down ⁵ %
		Pre-pack (<2.25") T/A (%)	Medium (2.25-3") T/A (%)	Jumbo (3-4") T/A (%)	Colossal (>4") T/A (%)				
Nunhems									
Airoso	53.4	0.3 (3)	4.1 (15)	44.8 (78)	4.1 (5)	0.0 (0)	61	27	
Anillo	50.0	0.1 (1)	3.3 (13)	39.1 ((73)	7.6 (9)	1.1 (4)	58	32	
Arcero	50.3	0.2 (2)	1.1 (4)	44.2 (83)	4.8 (7)	1.7 (4)	54	5	
Granero	51.5	0.2 (3)	1.2 (5)	43.8 (80)	6.2 (8)	1.1 (5)	56	2	
Joaquin	54.9	0.0 (0)	0.9 (4)	42.4 (80)	11.6 (15)	0.3 (1)	54	0	
Montero	51.5	0.1 (1)	1.5 (6)	28.2 (58)	21.7 (31)	1.0 (4)	50	42	
Oloroso	46.7	0.0 (0)	2.1 (8)	39.1 (82)	5.5 (8)	0.5 (1)	52	18	
Ranchero	58.6	0.1 (1)	1.1 (4)	30.0 (58)	27.4 (36)	0.2 (1)	52	3	
Vaquero	57.1	0.0 (0)	1.7 (7)	29.8 (57)	25.6 (34)	0.4 (2)	51	10	
Sakata Seed									
Aruba	58.2	0.2 (1)	2.2 (9)	33.8 (62)	22.1 (27)	0.0 (0)	53	10	
Dulce Reina	58.4	0.1 (1)	0.8 (4)	35.5 (65)	21.9 (28)	1.0 (2)	53	0	
Lasso	59.7	0.1 (1)	1.4 (6)	24.3 (47)	33.9 (44)	1.5 (3)	52	18	
Ovation	68.3	0.1 (1)	0.3 (1)	23.7 (43)	44.2 (55)	0.2 (1)	55	13	
Yosemite	60.5	0.1 (1)	1.1 (5)	25.2 (48)	34.2 (43)	2.6 (4)	52	57	
Yukon	57.7	0.3 (2)	2.0 (9)	31.2 (57)	24.2 (30)	0.6 (1)	54	20	
Seminis Veg. Seeds									
16000	61.7	0.1 (1)	1.5 (5)	31.0 (57)	29.1 (36)	0.9 (2)	55	5	
Red Nugent (R)	60.0	0.1 (1)	2.7 (9)	34.6 (60)	22.7 (27)	1.2 (2)	60	67	
SV4643NT (R)	54.0	0.2 (1)	1.0 (5)	35.2 (69)	17.6 (23)	0.8 (2)	53	47	
SV6646NW	59.8	0.1 (1)	0.3 (1)	43.3 (78)	16.0 (21)	0.0 (0)	54	22	
SV6672NW	61.8	0.0 (0)	0.3 (2)	46.5 (78)	15.0 (18)	0.6 (2)	58	23	
Swale	56.3	0.1 (1)	1.6 (5)	39.9 (72)	14.7 (19)	1.2 (3)	55	30	
Tucannon	53.9	0.1 (1)	1.9 (8)	36.7 (69)	15.2 (19)	1.3 (4)	55	40	
SV4058NV (W)	58.0	0.0 (0)	1.2 (5)	41.5 (73)	15.2 (18)	2.1 (4)	58	8	
Western Onion									
903-5X	36.8	0.3 (2)	4.2 (19)	28.9 (69)	3.3 (5)	1.8 (4)	53	63	
RED-903-5X	33.8	0.3 (3)	4.1 (20)	27.6 (70)	1.7 (3)	2.1 (5)	52	60	
AVERAGES	53.3	0.1 (1)	1.7 (7)	35.8 (70)	15.7 (20)	0.9 (2)	54	29	

¹ Yield data were collected from a 5-ft section of each plot and are averaged from three replicate plots.

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

³ 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, and rotten bulbs.

⁴ The bulb count is the number of bulbs from a 5-ft section of each plot and is averaged from three replicate plots.

⁵ The percentage of the tops estimated to have fallen as of August 14, shown as averages from three replicate plots.

Onion Cultivar Trial Overview:

The onion cultivar trial was planted on March 29, 2018 with a Stanhay vacuum planter on 44-in beds with two double rows per bed and 4-in in-row seed spacing. Each cultivar was planted in three replicated plots. Plots were 44-in wide by 30-ft long with two double rows. The center pivot irrigated field was managed by Hartley Farms and was located in the Horse Heaven Hills area south of Prosser, WA. Tops down (maturity) were evaluated for each plot on August 14. The onions were lifted on September 10. A 5-ft section of each plot was topped on September 17, and hand-harvested on September 19.

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.

Enza Zaden USA, Inc., 7 Harris Place, Salinas, CA 93901

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

Western Onion, 295 Willis Ave, Suite D, Camarillo, CA 93010-8562

Special thanks for the cooperation and assistance of:

HOST: Hartley Farms

TECHNICAL ASSISTANCE: Jennifer Darner and Don Kinion, *WSU Extension*

PLANTING: Jim Christopherson, *Bejo Seeds*

HARVEST: Casey Crookham, *Gowan Company*; Bob Mittelstadt and Nick Webb, *Clearwater Supply*

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

Carrie Wohleb

WSU Grant & Adams Co. Extension

1525 E. Wheeler Rd.

Moses Lake, WA 98837

509-754-2011 ext. 4313

cwohleb@wsu.edu