

2023 COLUMBIA BASIN ONION CULTIVAR DEMONSTRATION RESULTS¹

		Yiel						
Seed Company & Cultivar	Usable ² Yield T/A	Pre-pack (<2.25") T/A (%)	Medium (2.25-3") T/A (%)	Jumbo (3-4") T/A (%)	Colossal (>4") T/A (%)	Culls T/A (%)	Bulb Count ⁴	Tops Down ⁵ %
American Takii								
Frontier*	42.3	0.2 (3)	8.9 (30)	33.3 (67)	0.0 (0)	0.0 (0)	48	70
Highlander	44.7	0.1 (1)	3.8 (15)	36.4 (67)	4.4 (5)	6.3 (12)	46	95
Lodestar	43.8	0.3 (4)	3.3 (12)	38.9 (75)	1.3 (2)	4.3 (8)	45	5
Outlander	41.0	0.1 (1)	7.7 (29)	33.2 (67)	0.0 (0)	1.4 (4)	46	95
Switchback	50.8	0.1 (2)	7.4 (27)	42.0 (69)	1.3 (1)	0.0 (0)	45	100
Traverse	50.7	0.4 (3)	3.5 (12)	43.8 (69)	3.1 (4)	7.9 (12)	50	80
TTA-782	54.6	0.1 (2)	0.7 (3)	39.0 (70)	14.8 (19)	2.8 (6)	41	50
Bejo Seeds								
Colt	61.3	0.2 (1)	5.0 (15)	49.9 (74)	6.3 (6)	2.4 (3)	54	25
EXP 375	51.3	0.2 (1)	4.9 (15)	45.5 (74)	0.6 (1)	4.1 (6)	52	95
EXP 386	57.6	0.6 (4)	6.5 (18)	49.8 (74)	0.7 (1)	2.0 (3)	60	50
Hamilton	51.8	0.8 (7)	4.0 (13)	45.8 (74)	1.3 (1)	5.4 (9)	54	60
Legend	45.9	0.5 (7)	5.0 (17)	39.7 (70)	0.7 (1)	4.1 (7)	47	60
Red Carpet (R)	51.1	0.3 (5)	3.4 (12)	46.2 (82)	1.2 (1)	0.0 (0)	49	5
Redwing (R)	49.0	0.3 (3)	6.3 (21)	41.9 (75)	0.6 (1)	0.2 (1)	49	0
Yakama	58.7	0.3 (3)	2.3 (7)	48.4 (78)	7.7 (9)	1.9 (3)	51	20
Crookham Company								
Avalon	58.1	0.3 (1)	1.7 (6)	39.9 (53)	16.2 (17)	9.1 (23)	49	30
Brundage (W)	49.2	0.3 (1)	5.0 (18)	40.4 (76)	3.6 (4)	0.5 (1)	45	 15
Caldwell	56.0	0.4 (3)	5.5 (19)	40.0 (66)	10.1 (11)	0.5 (1)	50	10
Caliber	56.5	3.9 (6)	3.5 (13)	38.1 (67)	11.1 (13)	0.3 (1)	46	0
Defender	56.2	0.7 (6)	4.5 (15)	45.3 (72)	5.7 (6)	0.0 (0)	48	5
Epic	46.9	0.7 (0)	9.1 (31)	34.7 (56)	2.3 (3)	2.3 (4)	54	30
Purple Haze (R)	38.9	0.8 (7)	13.7 (46)	24.1 (48)	0.7 (1)	0.7 (1)	47	50
Red Beret (R)	35.3	0.1 (2)	4.4 (21)	29.2 (73)	1.6 (3)	0.7 (1)	35	5
Scout	64.1	0.1 (2)	1.1 (4)	38.2 (54)	24.5 (24)	10.8 (15)	52	10
Trident	60.6	0.3 (2)	6.0 (17)	53.0 (80)	1.3 (1)	0.0 (0)	57	5
White Cap (W)	53.8	0.6 (2)	4.0 (14)	44.4 (76)	4.9 (6)	0.4 (2)	47	<u>5</u>
White Cloud (W)	56.9	0.2 (3)	2.9 (9)	43.8 (56)	10.0 (11)	11.8 (22)	49	50

		Bulb Size and Defects ³ Yield by weight and (% of total bulb count)						
Seed Company & Cultivar	Usable ² Yield T/A	Pre-pack (<2.25") T/A (%)	Medium (2.25-3") T/A (%)	Jumbo (3-4") T/A (%)	Colossal (>4") T/A (%)	Culls T/A (%)	Bulb Count ⁴	Tops Down⁵ %
Enza Zaden								
Barolo (R)	48.3	0.3 (3)	4.3 (12)	40.2 (67)	3.5 (4)	7.6 (14)	55	90
Elsye	3.1	0.3 (3)	0.2 (1)	0.5 (1)	2.2 (2)	61.8 (93)	47	80
Tannat (R)	55.5	0.8 (2)	3.9 (12)	49.7 (79)	1.1 (1)	3.3 (6)	54	90
Hazera Seeds								
37-120 F1	43.4	0.1 (1)	4.1 (15)	33.7 (68)	5.6 (9)	4.3 (7)	41	80
37-126 F1	43.2	0.1 (2)	0.8 (4)	36.5 (85)	5.7 (9)	0.0 (0)	33	15
37-127 F1	45.5	0.0 (0)	0.8 (4)	38.2 (80)	6.5 (9)	4.3 (7)	36	5
37-128 F1	35.8	0.6 (4)	13.6 (43)	21.7 (47)	0.0 (0)	2.5 (6)	52	20
Nunhems - BASF								
Airoso	50.9	0.7 (6)	7.1 (21)	42.5 (71)	0.6 (1)	0.5 (1)	51	25
Anillo	51.3	0.5 (3)	4.0 (11)	46.2 (85)	0.6 (1)	0.0 (0)	55	15
Arcero	50.8	0.4 (3)	3.1 (10)	40.3 (73)	6.9 (8)	4.1 (7)	45	5
Campero	52.7	0.9 (3)	4.2 (14)	41.1 (72)	6.4 (7)	1.8 (3)	47	0
Cometa (W)	52.5	0.3 (2)	4.6 (15)	45.7 (70)	2.0 (2)	6.8 (10)	49	50
Glorioso	48.3	0.4 (5)	3.8 (15)	42.9 (78)	1.2 (1)	0.9 (2)	47	40
Granero	62.3	0.0 (0)	3.7 (12)	53.0 (82)	5.6 (6)	0.2 (1)	51	10
Joaquin	49.9	0.6 (7)	4.5 (16)	40.5 (65)	4.4 (5)	3.1 (7)	48	0
Marenge (R)	31.6	0.1 (2)	2.5 (10)	27.8 (66)	1.1 (2)	7.5 (20)	38	15
Montero	61.6	0.8 (8)	2.5 (9)	34.5 (54)	23.8 (25)	2.0 (4)	48	70
Oloroso	48.5	0.4 (5)	2.7 (9)	40.6 (79)	4.8 (6)	0.0 (0)	43	10
Rhea (W)	53.7	0.5 (5)	7.2 (21)	45.5 (72)	0.6 (1)	0.6 (1)	51	25
Vaquero	47.8	0.5 (6)	3.8 (13)	40.9 (67)	2.6 (3)	7.4 (11)	50	15
Seminis Veg Seeds								
Almanzoro	45.5	0.3 (1)	5.4 (17)	39.6 (66)	0.0 (0)	9.2 (16)	51	5
Crusher	56.3	0.1 (1)	3.6 (13)	43.7 (71)	8.9 (10)	0.4 (5)	47	5
Patrick	59.7	0.4 (3)	4.5 (14)	46.7 (72)	8.2 (9)	1.0 (2)	52	15
Takana	48.8	0.3 (2)	5.4 (17)	42.0 (74)	1.1 (1)	2.8 (6)	49	5
Tucannon	52.0	0.3 (2)	5.8 (17)	41.7 (68)	4.2 (5)	5.2 (8)	50	10
AVERAGES	49.8	0.4 (3)	4.6 (15)	40.0 (69)	4.7 (5)	4.2 (7)	48	

¹ Yield data were collected from a 5-ft section of each plot and are averaged from three replicate plots, except for Frontier where only two replicate plots were used.

² The usable yield is the cumulative yield (by weight) of all bulb sizes 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 double or split bulbs, rotten bulbs, and bulbs with seed stalks.

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 13 (first replicate only).

Onion Cultivar Trial Overview:

The onion cultivar trial was planted on April 6, 2023, with a Stanhay vacuum planter on 68-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 center pivot irrigated field was managed by Skone and Connors Ranching and was located west of Moses Lake, WA. Tops down (maturity) were evaluated for each plot on August 13. The onions were lifted on September 1. A 5-ft section of each plot was topped on September 8 and hand-harvested on September 11.

Participating Companies:

American Takii, Inc., 301 Natividad Rd., Salinas, CA
Bejo Seeds, Inc., 1972 Silver Spur Place, Oceano, CA
Crookham Company, 301 W Warehouse St., Caldwell, ID
Enza Zaden USA, Inc., 7 Harris Place, Salinas, CA
Hazera USA, 3155 SW 10th Street, Suite 6L, Dearfield Beach, FL
Nunhems USA - BASF, 1200 Anderson Corner Rd., Parma, ID
Seminis Vegetable Seeds - Bayer, 800 North Lindbergh Blvd, St. Louis, MO

Special thanks for the cooperation and assistance of:

HOST: Skone and Connors Ranching

PLANTING: Jim Christopherson, Bejo Seeds

HARVEST: Bob Mittelstadt and Jesus Olascon, Clearwater Supply

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