

2023 COLUMBIA BASIN ONION CULTIVAR STORAGE DEMONSTRATION RESULTS

Seed Company & Cultivar	Firmness ¹ (1-5)	Scale Retention ² (1-5)	Shape Uniformity ³ (1-5)	Neck Rot (%)	Black Mold (%)	Bacterial Rot (%)	Fusarium Basal Rot (%)	Single Centered Bulbs (%)	Sprouts (%)
American Takii									
Frontier*	3.3	3.0	2.3	0.0%	0.0%	0.7%	0.0%	16.6%	24.4%
Highlander	1.7	1.3	1.7	0.0%	2.9%	2.8%	0.0%	1.6%	47.7%
Lodestar	4.0	3.7	3.3	1.3%	1.9%	0.0%	0.0%	24.0%	17.5%
Outlander	2.3	1.7	3.0	0.9%	0.0%	1.8%	0.0%	15.4%	61.5%
Switchback	4.3	3.3	3.3	0.0%	2.2%	4.3%	0.0%	15.0%	30.4%
Traverse	4.0	3.3	3.3	0.0%	7.2%	0.8%	1.3%	29.0%	13.9%
TTA-782	4.0	4.0	3.0	0.8%	0.0%	0.0%	3.2%	31.8%	10.6%
Bejo Seeds									
Colt	4.0	4.7	3.0	1.3%	0.0%	0.0%	1.3%	60.0%	2.7%
EXP 375	4.3	4.3	3.3	1.5%	0.0%	0.0%	0.0%	49.1%	8.1%
EXP 386	3.3	4.0	2.3	0.7%	0.0%	0.0%	0.7%	27.7%	36.3%
Hamilton	5.0	4.7	3.7	2.4%	0.0%	0.0%	0.0%	52.9%	1.4%
Legend	4.3	4.7	3.0	0.0%	1.6%	0.0%	1.6%	34.8%	3.1%
Red Carpet (R)	3.7	4.0	2.7	1.5%	0.0%	0.0%	0.7%	24.5%	38.8%
Redwing (R)	4.0	3.7	3.0	5.7%	0.0%	0.0%	0.0%	30.9%	45.2%
Yakama	4.0	3.7	3.7	2.9%	0.7%	0.0%	0.0%	67.3%	7.9%
Crookham Co.									
Avalon	3.0	2.3	2.3	5.3%	5.2%	2.3%	0.0%	32.5%	13.5%
Brundage (W)	2.7	3.0	2.3	11.2%	3.9%	0.0%	0.8%	67.1%	11.2%
Caldwell	4.3	3.7	3.0	0.7%	0.0%	0.0%	1.4%	74.4%	16.7%
Caliber	4.3	4.0	3.3	2.2%	0.0%	0.0%	0.0%	73.0%	8.8%
Defender	3.3	4.0	3.0	0.0%	1.5%	0.0%	1.4%	81.3%	5.6%
Epic	3.3	3.3	1.7	2.0%	8.2%	0.7%	1.3%	72.7%	12.8%
Purple Haze (R)	3.3	2.7	1.3	2.2%	0.0%	1.4%	0.7%	58.1%	33.3%
Red Beret (R)	2.7	2.7	1.7	2.6%	0.0%	0.0%	2.5%	58.9%	40.6%
Scout	2.7	2.0	2.3	2.3%	4.5%	0.0%	1.5%	42.8%	17.3%
Trident	3.3	3.3	2.7	2.8%	1.4%	0.0%	0.0%	85.3%	11.3%
White Cap (W)	3.0	3.7	2.7	2.2%	0.7%	1.5%	0.0%	77.8%	11.1%
White Cloud (W)	3.0	2.0	2.3	14.2%	3.8%	0.0%	0.0%	32.8%	21.0%

Seed Company & Cultivar	Firmness¹ (1-5)	Scale Retention² (1-5_)	Shape Uniformity³ (1-5)	Neck Rot (%)	Black Mold (%)	Bacterial Rot (%)	Fusarium Basal Rot (%)	Single Centered Bulbs (%)	Sprouts (%)
Enza Zaden									
Barolo (R)	3.0	2.3	2.0	1.6%	0.0%	0.0%	0.8%	5.2%	20.4%
Elsye									
Tannat (R)	3.7	4.3	2.3	0.7%	0.0%	0.0%	0.0%	35.3%	30.0%
Hazera Seeds									
37-120 F1	4.3	3.7	2.7	3.8%	0.8%	0.0%	0.8%	48.2%	9.5%
37-126 F1	3.7	4.0	3.0	8.4%	1.1%	1.1%	0.0%	44.9%	5.7%
37-127 F1	3.7	4.0	4.0	7.1%	7.0%	1.0%	4.2%	67.3%	12.5%
37-128 F1	4.0	4.0	1.7	2.2%	0.0%	0.0%	0.7%	14.5%	20.5%
Nunhems - BASF									
Airoso	4.7	3.3	3.3	3.0%	0.0%	0.0%	0.8%	81.3%	9.4%
Anillo	3.7	5.0	3.3	2.0%	0.0%	0.7%	0.0%	80.5%	6.7%
Arcero	3.7	3.3	3.0	3.5%	2.4%	0.8%	0.7%	72.7%	11.9%
Campero	3.3	3.3	3.0	2.1%	4.3%	2.7%	0.8%	43.2%	12.1%
Cometa (W)	2.7	3.0	3.0	7.9%	3.5%	0.7%	0.0%	65.6%	15.5%
Glorioso	4.3	4.0	3.0	1.5%	0.0%	1.5%	1.5%	70.9%	11.5%
Granero	4.3	4.3	3.7	6.8%	0.0%	2.7%	0.0%	66.7%	8.6%
Joaquin	4.3	4.7	3.0	0.7%	0.0%	0.0%	0.7%	75.5%	16.4%
Marenge (R)	3.7	3.0	3.0	14.1%	0.0%	1.3%	2.0%	29.7%	37.3%
Montero	3.3	3.0	3.0	2.6%	0.0%	5.3%	0.0%	68.9%	11.2%
Oloroso	4.3	4.7	4.0	4.2%	0.8%	0.8%	0.0%	76.6%	23.6%
Rhea (W)	3.3	3.7	2.7	10.7%	1.6%	0.0%	0.0%	68.8%	29.5%
Vaquero	4.7	4.7	3.0	1.5%	0.7%	0.0%	2.3%	72.6%	5.8%
Seminis Veg Seeds									
Almanzoro	4.0	4.0	3.0	0.0%	0.7%	0.0%	2.2%	44.2%	18.6%
Crusher	3.3	4.0	2.3	5.9%	0.0%	6.5%	0.9%	65.5%	13.4%
Hatchet	3.7	4.0	2.7	3.4%	0.0%	0.7%	0.0%	67.3%	16.7%
Takana (W)	3.0	3.0	3.3	20.2%	0.8%	3.0%	0.7%	65.5%	15.1%
Tucannon	4.0	3.7	3.3	0.0%	7.0%	0.9%	0.8%	67.9%	11.3%
AVERAGES	3.8	3.5	2.9	3.2%	1.8%	0.9%	0.4%	52.1%	19.2%

Firmness 1 to 5 scale

5 = Rock hard bulbs

1 = Soft bulbs

³Shape 1 to 5 scale

5 = Highly uniform shape

1 = Extremely variable

²Scale Retention 1 to 5 scale

5 = Complete scales, no cracks/shrink

4 = Complete scales, some cracks

3 = Marketable, partial balding

2 = 50-75% incomplete skins

1 = Unacceptable scale retention, non-marketable

Storage Evaluation Overview:

Bulbs were harvested on September 11, 2023 after field curing. Approximately 50 bulbs were collected and bagged from each plot. Bulbs were held in bins in a commercial storage facility until evaluation on February 8, 2024.

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

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Kevin Moe, Nunhems

Javier Ramos, Nunhems

Peter Rogers, Nunhems

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Kenny Nakamura, Seedway

Logan Zenner, TS&L Seeds

Jim Christopherson, Bejo

Zack Frederick, Bayer/Seminis

Maddie Spets, WSU

Jennifer Darner, WSU

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If you have questions or comments:

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