

## 2022 COLUMBIA BASIN ONION CULTIVAR STORAGE DEMONSTRATION RESULTS

Seed Company & Cultivar	Firmness <sup>1</sup> (1-5)	Scale Retention <sup>2</sup> (1-5)	Shape Uniformity <sup>3</sup> (1-5)	Bacterial Rot (%)	Neck Rot (%)	Fusarium Basal Rot (%)	Single Centered Bulbs (%)
<b>American Takii</b>							
Frontier	4.2	3.3	4.5	0.7%	0.0%	0.8%	27.0%
Highlander	2.7	2.3	3.2	4.7%	0.0%	0.0%	8.8%
Lodestar	4.5	4.0	4.2	0.0%	0.0%	0.9%	59.3%
Milestone	4.0	3.8	3.2	1.5%	0.0%	3.6%	53.8%
Outlander	2.8	1.7	4.0	0.0%	0.0%	1.4%	9.7%
Switchback	4.2	2.7	3.5	0.0%	0.0%	1.4%	31.2%
Traverse	4.0	3.2	4.0	0.7%	0.0%	0.7%	78.5%
<b>Bejo Seeds</b>							
Bridewhite (W)	3.2	3.3	2.7	1.7%	0.0%	0.8%	70.5%
Hamilton	4.5	4.3	4.0	0.7%	0.0%	0.7%	68.7%
Legend	4.7	4.8	4.2	0.0%	0.0%	0.0%	41.0%
Mondella	4.5	3.8	3.8	0.0%	0.0%	0.8%	75.9%
Red Carpet (R)	4.2	4.3	3.8	0.0%	0.8%	0.0%	40.6%
Redwing (R)	4.3	4.3	3.3	0.0%	0.0%	0.0%	64.4%
Tamara	4.7	4.0	4.0	0.0%	0.0%	0.0%	44.6%
<b>Crookham</b>							
Avalon	2.3	1.8	3.0	5.3%	0.7%	2.1%	58.2%
Brundage (W)	3.2	3.2	2.7	1.0%	0.0%	5.3%	78.7%
Caldwell	3.5	3.5	3.2	0.0%	0.0%	0.7%	54.3%
Caliber	3.7	2.8	3.5	0.0%	0.0%	2.5%	80.4%
Defender	3.7	4.3	3.7	3.1%	0.8%	0.7%	71.9%
Epic	3.5	3.3	3.0	0.7%	0.0%	0.0%	79.9%
Purple Haze (R)	3.5	3.7	2.8	0.9%	0.0%	0.0%	75.4%
Red Beret (R)	3.2	2.3	2.3	3.1%	0.0%	1.5%	49.6%
Scorpion	4.3	3.5	3.0	1.5%	0.0%	0.0%	77.0%
Scout	3.3	2.5	3.3	3.3%	0.0%	0.7%	64.7%
Trident	3.7	3.0	3.0	0.7%	0.0%	2.7%	81.8%
White Cap (W)	3.8	3.0	2.8	0.9%	0.0%	1.7%	67.3%
White Cloud (W)	3.0	2.8	3.3	0.0%	0.0%	0.0%	41.4%
<b>Enza Zaden</b>							
Barolo (R)	3.8	3.3	3.3	3.4%	0.8%	2.9%	38.6%
Elsye	2.3	1.2	2.2	4.3%	0.0%	0.0%	21.6%
Tannat (R)	3.7	3.8	3.5	0.0%	0.0%	0.0%	67.0%

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<b>Hazera Seeds</b>							
37-126-F1	4.3	4.0	4.0	0.0%	0.0%	0.0%	44.9%
37-127-F1	2.8	2.7	3.7	3.3%	0.0%	0.8%	45.2%
8104 Onion	3.8	3.8	3.7	1.5%	0.0%	2.2%	61.0%
Thunderstone	4.3	4.0	3.8	0.0%	0.0%	1.5%	73.6%
<b>Nunhems - BASF</b>							
Airoso	4.7	4.0	4.0	0.0%	0.0%	0.0%	81.1%
Anillo	4.2	4.5	3.5	0.0%	1.3%	0.7%	60.0%
Arcero	3.5	3.3	4.0	0.7%	0.0%	0.0%	83.8%
Cometa (W)	3.8	3.8	4.0	4.6%	0.8%	0.7%	79.7%
Glorioso	4.2	3.3	4.0	0.0%	0.0%	0.0%	90.2%
Granero	4.3	4.7	4.3	0.8%	0.0%	2.78%	81.3%
Joaquin	3.7	4.2	3.7	1.5%	0.0%	0.0%	91.8%
Marengo (R)	3.8	3.5	3.5	0.0%	0.0%	2.3%	55.7%
Montero	3.5	3.5	3.5	3.4%	0.0%	2.1%	76.7%
Oloroso	3.7	4.2	4.0	0.7%	0.0%	0.0%	74.5%
Rhea (W)	4.0	4.0	4.3	0.7%	0.0%	0.0%	90.7%
Vaquero	3.8	4.2	3.8	0.0%	0.0%	0.7%	82.8%
<b>Seminis Veg Seeds</b>							
Almanzoro	3.7	4.2	3.3	0.7%	0.0%	4.0%	67.0%
Crusher	3.8	3.5	3.2	0.7%	0.0%	1.3%	73.3%
Hatchet	3.7	3.8	3.8	0.0%	0.0%	1.3%	80.7%
Jawbridge	3.0	3.3	3.5	4.8%	0.0%	5.0%	66.2%
SV4643NT (R)	2.5	2.3	3.0	0.7%	0.0%	0.7%	28.0%
Tucannon	4.3	4.0	3.7	2.7%	0.0%	0.0%	76.0%
XP07716000	3.8	3.8	3.3	0.7%	0.0%	1.4%	82.8%
<b>AVERAGES</b>	<b>3.7</b>	<b>3.5</b>	<b>3.5</b>	<b>1.2%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>62.6%</b>

<sup>1</sup>Firmness 1 to 5 scale

5 = Rock hard bulbs

1 = Soft bulbs

<sup>3</sup>Shape 1 to 5 scale

5 = Highly uniform shape

1 = Extremely variable

<sup>2</sup>Scale 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 15, 2022 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 January 31, 2023.

**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

**Thanks to everyone who participated in the storage evaluation:**

René Emch, Enza Zaden	Josh Carter, Keithly-Williams Seeds
Kevin Moe, Nunhems	Javier Ramos, Nunhems
Peter Rogers, Nunhems	Donavin Beck, Seedway
Kenny Nakamura, Seedway	Josh Turner, TS&L Seeds
Jennifer Darner, WSU	Maddie Spets, WSU

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**If you have questions or comments:**

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