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2005 COLUMBIA BASIN ONION CULTIVAR DEMONSTRATION RESULTS[1]

Seed Company & Cultivar[2]	Usable Yield (Tons/ Acre)	Bulb Size (Diameter) and Defects (%)[3] Over 4″	3 - 4″	2¼ - 3″	Under 2¼″	Defects	Thrips Count[4]	Maturity[5]
American Takii								
9003 G	42.1	0	67	26	6	1	0.3, 16.3, 4.8	1, 8, 47, 60
9003 G (Treated)[4]	53.0	4	80	14	2	0	0.2, 14.3, 7.3	– 4, 35, 67
T-433	54.4	12	63	17	3	6	0.3, 7.3, 4.0	1, 5, 3, 15
T-433 (Treated)	55.6	11	66	13	3	6	0.2, 7.7, 2.5	– 1, 2, 12
T-441	36.5	0	42	52	5	1	0.0, 9.8, 9.2	3, 14, 85, 93
T-441 (Treated)	39.8	1	58	35	7	1	0.5, 9.5, 3.2	– 9, 82, 95
T-817 ●	30.1	0	34	52	14	0	0.2, 13.2, 5.5	2, 14, 82, 96
T-817 ● (Treated)	33.6	0	47	47	5	1	0.2, 14.7, 1.8	– 9, 68, 95
Bejo Seeds								
Calibra F1	46.1	4	71	20	4	0	0.2, 10.8, 6.2	2, 14, 56, 83
Calibra F1 (Treated)	45.3	1	76	16	4	3	0.0, 12.3, 2.0	– 7, 66, 92
Copra F1	32.3	0	33	55	12	1	0.5, 14.5, 1.2	1, 13, 88, 93
Copra F1 (Treated)	33.8	0	33	59	8	1	0.0, 10.8, 1.2	– 9, 94, 96
Crockett F1	44.7	0	74	19	4	3	0.0, 11.5, 9.5	0, 0, 0, 10
Crockett F1 (Treated)	42.3	0	81	12	3	4	0.0, 18.7, 3.8	– 0, 1, 12
Gunnison F1	35.1	3	59	31	5	1	0.0, 21.2, 1.0	3, 31, 93, 96
Gunnison F1 (Treated)	36.3	1	65	31	3	1	0.0, 14.3, 1.5	– 20, 95, 93
Red Bull F1 ●	35.4	0	44	48	7	2	0.2, 10.3, 7.3	0, 1, 8, 27
Red Bull F1 ● (Treated)	40.5	1	64	33	3	0	0.0, 16.0, 3.2	– 1, 11, 27
Redwing ●	34.4	0	39	55	5	1	0.2, 10.5, 2.5	0, 0, 0, 3
Redwing ● (Treated)	38.9	0	64	31	4	1	0.0, 6.8, 1.7	– 0, 2, 8

Seed Company & Cultivar[2]	Usable Yield (Tons/ Acre)	Bulb Size (Diameter) and Defects (%)[3] Over 4″	3 - 4″	2¼ - 3″	Under 2¼″	Defects	Thrips Count[4]	Maturity[5]
Bejo Seeds, cont.								
Sedona F1	44.8	1	76	15	6	3	0.3, 16.2, 3.5	0, 1, 21, 35
Sedona F1 (Treated)	48.1	1	73	18	4	5	0.2, 11.5, 2.3	– 1, 22, 43
Talon F1	36.1	0	53	44	3	0	0.2, 13.3, 4.0	3, 18, 76, 93
Talon F1 (Treated)	43.3	0	69	28	3	1	0.0, 16.7, 3.2	– 6, 76, 93
Tamara F1	34.8	0	48	40	11	1	0.0, 16.3, 7.8	0, 8, 57, 67
Tamara F1 (Treated)	36.4	0	59	33	8	0	0.2, 6.0, 1.8	– 3, 70, 83
Crookham Company								
Genesis	32.4	0	46	47	3	4	0.3, 14.7, 7.3	53, 87, 98, 99
Genesis (Treated)	36.0	0	47	45	7	2	0.0, 12.5, 4.0	– 87, 98, 99
Harmony ■	49.9	9	66	9	2	13	0.3, 14.7, 7.3	1, 2, 17, 43
Harmony ■ (Treated)	44.7	7	59	11	0	22	0.0, 12.5, 4.0	– 0, 27, 50
Nobility	32.6	0	42	46	10	2	0.3, 13.3, 6.3	8, 40, 82, 96
Nobility (Treated)	35.7	0	51	40	7	2	0.0, 11.8, 1.3	– 20, 90, 99
Global Genetics								
Maverick	43.7	3	56	25	11	5	0.0, 16.7, 3.5	0, 2, 5, 22
Maverick (Treated)	52.5	6	71	12	6	4	0.2, 11.8, 17.3	– 0, 5, 22
Varsity	42.7	1	65	30	3	2	0.2, 22.5, 4.7	6, 33, 83, 87
Varsity (Treated)	42.5	1	67	23	2	7	0.2, 14.2, 2.3	– 32, 83, 85
SWO 4001	38.2	0	76	21	3	0	0.0, 15.0, 2.3	0, 3, 47, 70
SWO 4001 (Treated)	38.8	1	64	26	8	1	0.0, 16.3, 3.7	– 5, 60, 70
SWO 4014	46.5	1	67	25	6	1	0.2, 7.8, 7.0	10, 25, 60, 85
SWO 4014 (Treated)	46.8	1	73	18	3	5	0.0, 10.3, 2.8	– 15, 53, 78
SWO 6011	46.3	14	65	16	5	0	0.0, 20.2, 19.5	0, 1, 11, 38
SWO 6011 (Treated)	48.7	14	60	18	6	1	0.0, 13.0, 6.8	– 0, 4, 30
Nippon Norin								
REE	39.3	0	58	37	5	1	0.2, 16.8, 5.5	0, 0, 14, 30
REE (Treated)	39.5	0	76	24	1	0	0.2, 27.5, 3.2	– 0, 15, 27
W-10	31.0	0	61	28	6	5	0.2, 15.0, 4.2	0, 5, 57, 83
W-10 (Treated)	38.1	1	73	23	1	1	0.0, 13.2, 0.0	– 3, 53, 83
Tenshin	20.7	0	59	31	8	1	0.0, 26.3, 3.2	0, 0, 0, 2
Tenshin (Treated)	25.1	2	62	28	8	0	0.5, 20.0, 4.3	– 0, 1, 8

Seed Company & Cultivar[2]	Usable Yield (Tons/ Acre)	Bulb Size (Diameter) and Defects (%)[3] Over 4″	3 - 4″	2¼ - 3″	Under 2¼″	Defects	Thrips Count[4]	Maturity[5]
Nunhems								
Flamenco ●	30.3	0	56	34	9	1	0.3, 7.8, 9.8	12, 32, 88, 95
Flamenco ● (Treated)	35.0	0	57	35	8	0	0.3, 9.8, 3.7	– 36, 88, 96
Granero	48.0	1	67	28	4	0	0.3, 17.2, 5.7	1, 7, 4, 30
Granero (Treated)	49.4	4	70	22	4	0	0.0, 12.0, 2.7	– 2, 11, 30
Montero	45.4	4	65	24	4	2	0.3, 7.0, 6.8	7, 17, 80, 88
Montero (Treated)	54.3	6	82	11	1	1	0.0, 13.7, 1.8	– 10, 78, 87
Pandero	48.5	6	84	7	2	1	0.0, 11.0, 6.8	0, 1, 3, 7
Pandero (Treated)	48.4	9	67	15	6	2	0.0, 14.3, 3.3	– 1, 3, 12
Ranchero	46.6	14	59	18	6	4	0.2, 22.7, 13.2	1, 13, 17, 43
Ranchero (Treated)	54.3	20	64	10	3	2	0.2, 13.0, 8.0	– 12, 17, 43
Sabroso	36.7	1	47	44	8	1	0.2, 11.8, 17.3	1, 6, 28, 38
Sabroso (Treated)	41.5	2	61	29	6	1	0.2, 12.0, 2.2	– 2, 32, 45
Salsa ●	44.4	1	75	16	6	1	0.3, 16.3, 3.2	1, 13, 47, 87
Salsa ● (Treated)	46.6	1	73	20	3	3	0.0, 11.3, 1.5	– 7, 50, 85
Tesoro	45.0	1	73	18	5	3	0.2, 20.0, 4.3	0, 3, 55, 83
Tesoro (Treated)	46.3	1	69	22	5	3	0.0, 20.7, 3.5	– 3, 83, 96
Vaquero	52.7	9	75	13	3	0	0.0, 7.3, 3.5	1, 3, 37, 65
Vaquero (Treated)	52.0	8	71	18	2	1	0.0, 16.2, 20.7	– 7, 38, 47
SR 7200 ON	36.8	1	80	13	5	2	0.3, 19.2, 13.3	0, 0, 7, 17
SR 7200 ON (Treated)	37.1	1	77	18	2	2	0.0, 10.8, 7.5	– 0, 13, 22
SX 7004 ON	51.2	3	74	20	2	1	0.0, 13.5, 19.3	1, 2, 14, 35
SX 7004 ON (Treated)	52.0	6	75	12	6	1	0.3, 17.3, 1.7	– 1, 14, 30
Seminis Vegetable Seeds								
Charismatic (PX 5299)	48.3	12	60	19	4	5	0.2, 19.8, 3.3	0, 7, 8, 23
Charismatic (Treated)	58.3	11	69	13	4	3	0.3, 17.2, 3.7	– 3, 17, 37
Citation (EX 7004)	44.3	2	66	24	3	5	0.3, 17.0, 8.8	27, 58, 88, 95
Citation (Treated)	45.8	1	69	21	4	5	0.0, 10.2, 4.2	– 48, 94, 97
Pinnacle	44.5	3	77	19	1	0	0.0, 14.7, 11.3	2, 9, 43, 78
Pinnacle (Treated)	45.4	4	72	20	4	0	0.0, 13.2, 4.8	– 4, 47, 78

Seed Company & Cultivar[2]	Usable Yield (Tons/ Acre)	Bulb Size (Diameter) and Defects (%)[3] Over 4″	3 - 4″	2¼ - 3″	Under 2¼″	Defects	Thrips Count[4]	Maturity[5]
Seminis Vegetable Seeds, cont.								
Red Zeppelin ●	31.8	1	45	36	12	7	0.2, 15.5, 13.2	2, 10, 73, 85
Red Zeppelin ● (Treated)	34.3	0	52	40	7	1	0.2, 12.3, 2.5	– 15, 75, 82
Tioga	51.8	2	73	19	5	2	0.5, 9.5, 7.0	2, 6, 73, 93
Tioga (Treated)	54.4	2	71	20	5	2	0.2, 14.2, 2.0	– 9, 77, 93
5646 ▲	48.5	4	69	23	3	2	0.3, 18.8, 7.5	0, 7, 8, 33
5646 ▲ (Treated)	52.2	4	82	12	2	1	0.5, 17.3, 3.2	– 0, 15, 35
5813	55.8	6	85	8	1	1	0.0, 20.8, 4.3	0, 3, 17, 58
5813 (Treated)	58.1	12	75	9	3	1	0.2, 10.8, 2.7	– 4, 24, 58
5819	48.4	7	62	26	4	2	0.0, 16.0, 2.2	1, 7, 44, 60
5819 (Treated)	54.9	11	71	11	2	4	0.0, 10.3, 4.2	– 2, 44, 63
5843	50.8	10	74	10	3	4	0.3, 20.3, 9.3	1, 2, 12, 47
5843 (Treated)	55.0	15	66	15	1	3	0.2, 9.7, 4.5	– 3, 15, 33
6045	61.8	10	78	5	5	3	0.3, 22.7, 2.0	0, 2, 3, 25
6045 (Treated)	62.0	25	65	5	0	6	0.0, 13.0, 9.3	– 0, 3, 23
7011	39.2	0	63	32	3	2	0.0, 17.3, 3.8	2, 16, 82, 88
7011 (Treated)	39.1	0	57	37	4	2	0.2, 17.0, 1.0	– 3, 82, 88
7106 ▲	46.3	3	62	28	7	0	0.2, 8.5, 16.8	2, 9, 15, 15
7106 ▲ (Treated)	48.3	1	69	25	3	2	0.2, 7.3, 3.2	– 3, 15, 18
8112	40.5	0	70	28	2	0	0.3, 12.8, 5.3	27, 67, 97, 99
8112 (Treated)	42.4	1	60	37	3	0	0.2, 9.3, 2.2	– 50, 93, 97
8117	43.4	4	77	16	3	0	0.2, 15.8, 9.0	4, 33, 80, 90
8117 (Treated)	42.1	2	65	29	3	1	0.2, 13.0, 4.0	– 26, 77, 90
Averages	**43.6**	**4**	**65**	**25**	**5**	**2**	**0.15, 15.0, 5.6**	**4, 12, 44, 60**

● = red onion ▲ = white onion ■ = bolted Cultivars or lines showed significant seed stalk formation. (5% or more of the bulbs in at least two of the replications) at the time of maturity evaluations.

1. Plots consisting of 4-double rows 30'-long on 88" beds were planted with coated seed on March 25, 2005 at an intended 4" spacing within rows, using a Stanhay belt planter. The field was furrow-irrigated, fertilized, cultivated, and maintained by L&L Farms throughout the season. The plots were lifted on September 5, and a 5' section of each plot was hand-harvested on September 13. All data is an average of 3 replications.

2. American Takii Inc., 301 Natividad Rd, Salinas, CA 93906, 408.443.4901
   Bejo Seed Co. PO Box 40607, Eugene, OR 97404, 541.953.2090
   Crookham Company, PO Box 520, Caldwell, ID 83606, 208.459.7451
   Global Genetics, 3424 Roberto Court, San Luis Obispo, CA 93401, 208.642.0301
   Nippon Norin, 3219 Mariner Lane, Longmont, CO 80503, 303.772.0185
   Nunhems, 908 Riverview Ave., Selah, WA 98942, 503.393.3243
   Seminis Vegetable Seed, 425 N. Columbia Center Blvd., Kennewick, WA 99336, 509.374.2805

3. Bulb size and defects are expressed as a percentage of total bulbs harvested. Defects include double or split bulbs, severely split skins, "bald", off-color or obviously rotten bulbs, and bulbs with seedstalks.

4. Thrips Counts = mean number of thrips counted on two plants per plot and averaged over 3 replications. The 2 east double-rows of each plot were treated with insecticides on June 15, July 13, and August 18. The 2 west double-rows in each plot were not treated with insecticides. Insecticide applications and thrips counts were completed by Dough Walsh, Tim Waters, and Ron Wight (WSU Prosser IAREC). Counts were made 5 or 8 days following insecticide applications in both the insecticide-treated and non-treated sections of each plot.

5. Maturity is expressed as a visual estimate of the percentage of plants with "tops down" on August 1, August 8, August 14, and August 22, averaged over 3 replications at each date. For the August 1st maturity rating, the whole plot was evaluated for "tops down". Thereafter, separate maturity ratings were made for the insecticide-treated and non-treated sections of each plot on August 8, August 14, and August 22.

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