

2006 Specialty Carrot Cultivar Evaluation

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The 2006 Specialty Carrot Cultivar Evaluation was grown on Klaustermeyer Farms southeast of Othello, Washington, on Highway 17. The field was planted to Red Core Chantenay and managed for processing carrots. Some seeds for the trial were furnished by Dr. Phil Simon, USDA-ARS, Madison, Wisconsin, from his breeding program and some seeds were provided by commercial sources. Seeds for the trial were planted April 19, 2006 and carrots were evaluated on August 31, 2006, 134 days after planting. Root and foliage scores were based on the judging criteria in Table 1 and the shape diagram below. The results listed in Table 2 are averages obtained from the evaluations of all who participated in the survey at the Carrot Field Day held on August 31st.

Additionally, disease ratings were made by Dr. Lindsey DuToit, Plant Pathologist WSU Mount Vernon, on the same day as the root and foliage scores were compiled. For all diseases rated, a scale of 0 to 5 was used where 0 is healthy and 5 is severe. The results of the disease ratings are detailed in Table 3.

Table 1. Judging criteria used by evaluators of the trial

Judging Criteria	1	2	3	4	5
Length	< 6"	6-8"	8-10"	10-12"	> 12"
Tops	Weak		Good		Strong
Texture	Poor		Good		Excellent
Flavor	Poor		Average		Sweet
Surface	Rough		Average		Smooth
Overall	Poor		Good		Excellent

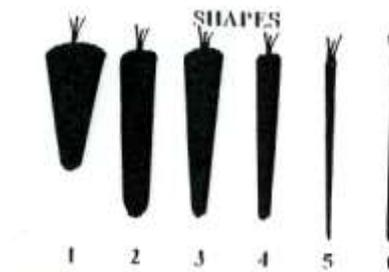


Table 2. Results of the evaluation of the 2006 specialty carrot variety trial

Trial Number	Pedigree	Source	Color	Shape	Length	Tops	Texture	Flavor	Surface	Overall
WA 601	SRC P119	Nunhems	Purple	2.00	2.64	2.55	2.67	2.75	2.56	2.43
WA 602	7262 x Turkish	218-7	Purple	2.80	2.91	2.91	2.67	3.50	3.20	3.43
WA 603	KXPC-402	Integra	Purple	2.78	1.80	2.50	2.33	2.50	2.50	2.00
WA 604	7262 x Turkish	218-6	Purple	2.78	2.80	3.20	3.00	2.50	3.38	3.00
WA 605	71 0603	Seminis	Purple	3.00	3.10	2.80	3.00	4.00	3.63	3.00
WA 606	7262 x Turkish	218-1	Purple	2.22	2.80	3.00	2.00	3.00	3.00	2.57
WA 607	SRC P163	Nunhems	Purple	2.33	2.25	2.00	2.67	2.50	2.67	2.00
WA 608	SRC P160	Nunhems	Purple	2.78	3.50	3.67	3.25	3.25	3.33	3.29
WA 609	PI 432903	001-4	Red	1.33	1.80	2.50	1.25	2.00	1.10	1.71
WA 610	(LWG-S x PI264543 ²)x (PI264543 x 2566)	410-1	Red	2.56	2.30	2.90	1.50	2.50	2.22	2.29
WA 611	(LWG-S x PI264543 ²)x (PI264543 x 2566) cg P	539-1	Red	2.25	2.00	2.78	2.50	2.50	2.25	1.83
WA 612	[(2566 x 6253) x Red] x PI432903	303-2	Red	2.17	1.86	1.57	2.00	3.50	2.29	1.67
WA 613	432906PRC x 319858JP	70528M	Red	1.50	1.89	2.11	1.80	1.67	1.29	1.33
WA 614	(5280 x 6366) x Red	411-2	Red	1.50	1.56	2.33	1.75	2.00	1.50	1.50
WA 615	432906PRC x 319858JP	209-1	Red	2.00	2.50	2.63	2.00	2.00	2.00	1.67
WA 616	Forage carrot-Jaune Obtuse de Doubs	102-3	Yellow	2.50	3.25	3.88	3.50	2.50	3.63	3.17
WA 617	Yellowstone	Bejo	Yellow	2.50	2.88	4.00	3.33	3.50	4.00	3.60
WA 618	W.Belgian x JOD	211-1	Yellow	2.00	2.75	3.50	3.00	2.50	3.50	2.83
WA 619	71 0005	Seminis	Yellow	1.56	1.70	2.80	3.60	3.00	3.38	2.71
WA 620	Lobbericher	102-2	Yellow	2.25	2.78	3.44	2.67	3.00	3.00	3.00
WA 621	Mello Yello F1	Bejo	Yellow	3.00	3.29	3.29	3.50	2.00	3.14	3.00
WA 622	W.Belgian x JOD	310-1	Yellow	2.40	2.83	2.83	3.67	4.00	2.80	2.80
WA 623	WAR x JOD	702-5	Yellow	2.14	2.63	3.13	2.00	3.00	3.00	2.60
WA 624	WAR x JOD	211-4	Yellow	2.75	2.78	3.78	3.25	4.00	3.43	3.33
WA 625	WAR x JOD	603-5	Yellow	2.86	3.50	3.25	2.67	3.00	3.14	3.20
WA 626	Rainbow F1	Bejo	Mix	3.71	3.88	3.75	3.33	3.50	3.71	4.00
WA 627	Crème de Lite	Nunhems	Cream	2.75	3.22	3.67	3.00	3.33	3.38	3.33
WA 628	WWortel x BCVTHT	105-2	White	2.57	3.38	3.25	3.33	3.50	3.43	3.20
WA 629	BCVTHT x WWortel	105-1	White	2.71	4.71	3.86	4.00	4.00	3.83	3.50
WA 630	White Satin F1	Bejo	White	2.86	4.71	3.14	4.50	4.00	3.83	3.83
WA 631	BCVTHT x W.Belgian	105-3	White	3.17	4.33	3.71	3.50	3.00	3.67	3.20

<u>Trial Number</u>	<u>Pedigree</u>	<u>Source</u>	<u>Color</u>	<u>Shape</u>	<u>Length</u>	<u>Tops</u>	<u>Texture</u>	<u>Flavor</u>	<u>Surface</u>	<u>Overall</u>
WA 632	(2126 x 6253) x 3035	322-2	Orange	4.00	4.67	2.14	3.00	3.00	3.57	3.60
WA 633	SugarSnax 54	Nunhems	Orange	3.83	4.00	3.43	4.00	4.00	4.00	3.80
WA 634	Apache	Nunhems	Orange	3.17	3.57	3.14	3.33	3.50	3.67	3.40
WA 635	Sunrise	Crookham	Orange	3.50	3.71	3.14	2.67	3.33	3.43	3.50
WA 636	(2144 x 8503) x 8524	176-7	Orange	2.33	2.57	2.14	3.33	3.00	3.29	2.50
WA 637	Sweet Bites	HM	Orange	4.25	4.67	3.11	3.67	3.50	4.29	4.40
WA 638	Trinity	Sakata	Orange	4.56	4.80	2.60	3.25	3.50	4.11	3.86
WA 639	Choctaw	Nunhems	Orange	3.29	3.25	3.00	3.00	3.00	3.86	3.40
WA 640	Enterprise	Seminis	Orange	3.57	4.25	3.25	3.33	3.00	4.00	3.80
WA 641	Imperial Cuts	Integra	Orange	4.00	4.50	3.00	3.00	2.50	3.22	3.86
WA 642	Independent F ¹	Bejo	Orange	3.89	4.20	2.80	3.00	3.00	3.56	3.67

Table 3. Disease Ratings

<u>Trial Number</u>	<u>Pedigree</u>	<u>Source</u>	<u>Color</u>	<u>Bacterial Blight</u>	<u>Cercospora Leaf spot</u>	<u>Powdery Mildew</u>
WA601	SRC P119	Nunhems	Purple	No plants with tops left		
WA602	7262 x Turkish	218-7	Purple	0	3.5	2.5
WA603	KXPC-402	Integra	Purple	1	4.5	1
WA604	7262 x Turkish	218-6	Purple	0	4.5	0
WA605	71 0603	Seminis	Purple	3	5	3.5
WA606	7262 x Turkish	218-1	Purple	1	4	2
WA607	SRC P163	Nunhems	Purple	No plants with tops left		
WA608	SRC P160	Nunhems	Purple	1	5	2
WA609	PI 432903	001-4	Red	No plants with tops left		
WA610	(LWG-S x PI264543 ²)x (PI264543 x 2566)	410-1	Red	2	4	2
WA611	(LWG-S x PI264543 ²)x (PI264543 x 2566) cg P	539-1	Red	No plants with tops left		
WA612	[(2566 x 6253) x Red] x PI432903	303-2	Red	No plants with tops left		
WA613	432906PRC x 319858JP	70528M	Red	No plants with tops left		
WA614	(5280 x 6366) x Red	411-2	Red	1	5	0
WA615	432906PRC x 319858JP	209-1	Red	3	2	0
WA616	Forage carrot-Jaune Obtuse de Doubs	102-3	Yellow	2	2	0
WA617	Yellowstone	Bejo	Yellow	3.5	1	3

<u>Trial Number</u>	<u>Pedigree</u>	<u>Source</u>	<u>Color</u>	<u>Bacterial Blight</u>	<u>Cercospera Leaf spot</u>	<u>Powdery Mildew</u>
WA618	W.Belgian x JOD	211-1	Yellow	2	1	2
WA619	71 0005	Seminis	Yellow	2	3	3
WA620	Lobbericher	102-2	Yellow	4	1	3
WA621	Mello Yello F1	Bejo	Yellow	3	3.5	4.5
WA622	W.Belgian x JOD	310-1	Yellow	5	1	0
WA623	WAR x JOD	702-5	Yellow	5	1	3
WA624	WAR x JOD	211-4	Yellow	4	1	2
WA625	WAR x JOD	603-5	Yellow	4.5	1	4.5
WA626	Rainbow F1	Bejo	Mix	3	3	3
WA627	Crème de Lite	Nunhems	Cream	2	3.5	2
WA628	WWortel x BCVTHT	105-2	White	2	4	3
WA629	BCVTHT x WWortel	105-1	White	4	1	0
WA630	White Satin F1	Bejo	White	0	3.5	0
WA631	BCVTHT x W.Belgian	105-3	White	2	1	3
WA632	(2126 x 6253) x 3035	322-2	Orange	2	3	0
WA633	SugarSnax 54	Nunhems	Orange	3	1	0
WA634	Apache	Nunhems	Orange	3	2	0
WA635	Sunrise	Crookham	Orange	1	4	2
WA636	(2144 x 8503) x 8524	176-7	Orange	2	4.5	0
WA637	Sweet Bites	HM	Orange	5	2.5	4
WA638	Trinity	Sakata	Orange	3	4	0
WA639	Choctaw	Nunhems	Orange	1	4.5	3
WA640	Enterprise	Seminis	Orange	2	4.5	4
WA641	Imperial Cuts	Integra	Orange	3	4	0
WA642	Independent F ¹	Bejo	Orange	2	4.5	0

Acknowledgements to: Klaustermeyer Farms for hosting the trial, Rob Maxwell Bejo Seeds, Phil Simon USDA Madison, WS, Lindsey DuToit WSU for disease ratings, and to all those who participated in the 2006 Carrot Field Day.

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