



Centennial Russet

Pedigree: WQ12-3 x Nooksack

Developer: Colorado State University

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ Excellent culinary quality for baking and boiling
- ★ Storage potential
- ★ Moderate tolerance to Verticillium wilt, Early blight, Rhizoctonia and Fusarium dry rot

General Characteristics

Usage: Fresh Market

Plant: Medium-large upright vine with lavender flowers.

Maturity: Medium-late

Tubers: Oblong blocky tubers with heavy russet skin and white flesh.

Yield Potential: Medium (avg. 294 cwt/acre) and 77% US No. 1 tubers

Specific Gravity: Medium (1.079)

Detailed data summary for Centennial Russet.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	35	294	177 - 392	
Yield US #1 (Cwt/A)	35	229	129 - 320	
% US #1	35	77	62 - 89	
Yield >10 oz (Cwt/A)	35	26	4 - 72	
Yield <4 oz (Cwt/A)	35	62	32 - 102	
% External Defects ¹	35	0.8	0.0 - 3.3	
% Hollow Heart ²	35	0.3	0.0 - 3.3	
% Stand	35	97	90 - 99	
Emergence Uniformity	15	3.2	3.0 - 3.5	
Vine Vigor ³	15	2.2	1.0 - 3.0	
Stems/Plant	27	3.0	2.2 - 3.6	
Vine Size ⁴	15	2.6	2.0 - 3.0	
Vine Type ⁵	15	3.2	2.8 - 3.8	
Vine Maturity ⁶	35	3.0	2.5 - 3.5	
Blackspot ⁷	Bud End	53	4.9	3.7 - 5.0
	Stem End	53	4.8	4.2 - 5.0
	Average	56	4.9	
Weight Loss ⁸	56	5.8	1.6 - 9.2	
Dormancy ⁹	49	86	57 - 123	
Enzymatic Browning ¹⁰	51	4.1	3.2 - 5.0	
Specific Gravity	63	1.079	1.068 - 1.092	
Fry Color ¹¹	Harvest	55	3.6	3.0 - 4.0
	Storage	55	3.9	3.0 - 5.0
Fry Texture ¹²	Harvest	55	2.4	1.0 - 4.0
	Storage	55	2.3	1.0 - 3.0

Refer to footnotes on next page.

Footnotes for Table on previous page:

¹Percent external defects based on the proportion of the total sample weight with significant defects.

²Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.

³Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.

⁴Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.

⁵Vine type is rated on a 1 to 5 scale, with 5 indicating very upright vines.

⁶Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.

⁷Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.

⁸Tubers were stored at 45F for approximately 3 months.

⁹Days from harvest to first visible growth. Tubers were stored at 45F.

¹⁰Degree of darkening rated at 60 minutes after slicing tubers lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.

¹¹Reconditioned samples were stored at 60F for three weeks. Fry color was rated on a 0 to 4 scale, with 0 being the lightest or best color. Color ratings of ≤ 2.0 are acceptable.

¹²Fry texture was rated on a 1 to 5 scale, with 5 indicating the cooked flesh was dry and mealy and 1 representing a soggy, wet texture.