



CO00277-2R

Pedigree: CO89097-2R x CO94065-2R

Developer: Colorado State University

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ High yield potential
- ★ Attractive tuber type
- ★ Early maturity

General Characteristics

Usage: Fresh market

Plant: Medium vine size, semi-erect plants with dark red-purple flowers

Maturity: Early

Tubers: Round tubers with red skin and white flesh. Tubers are resistant to hollow heart, growth crack and second growth.

Yield Potential: High (avg. 427 cwt/acre) and 79% of US No. 1 tubers

Specific Gravity: Medium (1.080)

Detailed data summary for CO00277-2R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	427	380-479	
Yield US #1 (Cwt/A)	6	333	287-390	
% US #1	6	78	69-85	
Yield >10 oz (Cwt/A)	6	66	39-110	
Yield <4 oz (Cwt/A)	6	90	54-127	
% External Defects ¹	6	0.7	0.0-1.8	
% Hollow Heart ²	6	0.5	0.0-1.8	
% Stand	6	98	93-100	
Emergence Uniformity	6	3.0	2.5-3.8	
Vine Vigor ³	6	3.0	2.8-3.3	
Stems/Plant	6	4.6	3.3-5.7	
Vine Size ⁴	6	2.8	2.3-3.0	
Vine Type ⁵	6	2.3	2.0-2.5	
Vine Maturity ⁶	6	1.7	1.3-2.0	
Blackspot ⁷	Bud End	7	4.4	3.9-5.0
	Stem End	7	4.3	3.7-5.0
	Average	7	4.4	
Weight Loss ⁸	7	5.2	2.7-8.3	
Dormancy ⁹	7	61	47-77	
Enzymatic Browning ¹⁰	7	4.3	3.6-4.6	
Specific Gravity	7	1.080	1.075-1.084	
Fry Color ¹¹	Harvest	7	3.0	2.0-4.0
	Storage	7	3.9	3.0-4.0
Fry Texture ¹²	Harvest	7	2.6	2.0-3.0
	Storage	7	2.4	2.0-3.0

Refer to footnotes on next page.

Footnotes for Table on previous page:

- ¹ Percent external defects based on the proportion of the total sample weight with significant defects.
- ² Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.
- ³ Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.
- ⁴ Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.
- ⁵ Vine type is rated on a 1 to 5 scale, with 5 indicating very upright vines.
- ⁶ Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.
- ⁷ Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.
- ⁸ Tubers were stored at 45F for approximately 3 months.
- ⁹ Days from harvest to first visible growth. Tubers were stored at 45F.
- ¹⁰ Degree of darkening rated at 60 minutes after slicing tubers lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.
- ¹¹ Chip color was rated using the Snack Food Association 1-5 scale. Ratings of ≤ 2.0 are acceptable. Reconditioned 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.
- ¹² Fry 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.