



### **CO00291-5R**

**Pedigree:** CO94019-1R x NDC5281-2R

**Developer:** Colorado State University

**Plant Variety Protection:**

**Seed Availability:** San Luis Valley Research Center

### **Incentives for Production**

- ★ Yield potential
- ★ Attractive tuber type
- ★ Color retention in storage

### **General Characteristics**

**Usage:** Fresh market

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

**Maturity:** Medium

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

**Yield Potential:** Medium-high (avg. 390 cwt/acre) and 78% of US No. 1 tubers

**Specific Gravity:** Medium (1.084)

Detailed data summary for CO00291-5R.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	390	343-446	
Yield US #1 (Cwt/A)	6	305	263-329	
% US #1	6	78	74-87	
Yield >10 oz (Cwt/A)	6	28	17-47	
Yield <4 oz (Cwt/A)	6	83	45-117	
% External Defects <sup>1</sup>	6	0.5	0.0-1.0	
% Hollow Heart <sup>2</sup>	6	0.0	0.0-0.0	
% Stand	7	97	96-99	
Emergence Uniformity	7	2.9	2.3-3.5	
Vine Vigor <sup>3</sup>	7	2.8	2.3-3.3	
Stems/Plant	7	3.2	2.4-3.8	
Vine Size <sup>4</sup>	7	4.4	3.5-5.0	
Vine Type <sup>5</sup>	7	3.6	3.3-4.0	
Vine Maturity <sup>6</sup>	7	3.3	3.0-3.8	
Blackspot <sup>7</sup>	Bud End	7	3.2	2.0-4.7
	Stem End	7	3.6	2.0-4.8
	Average	7	3.4	
Weight Loss <sup>8</sup>	7	7.8	4.6-11.1	
Dormancy <sup>9</sup>	7	73	56-87	
Enzymatic Browning <sup>10</sup>	7	1.8	1.0-2.4	
Specific Gravity	7	1.084	1.072-1.090	
Fry Color <sup>11</sup>	Harvest	7	2.3	2.0-3.0
	Storage	7	3.0	2.0-4.0
Fry Texture <sup>12</sup>	Harvest	7	2.4	1.0-3.0
	Storage	7	2.1	1.0-3.0

Refer to footnotes on next page.

**Footnotes for Table on previous page:**

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