



**CO00415-1RF**

**Pedigree:** Kipfel x NDC5281-2R

**Developer:** Colorado State University

**Plant Variety Protection:**

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

**Incentives for Production**

- ★ Early maturity
- ★ Attractive tuber type
- ★ Resistant to internal and external grade defects

**General Characteristics**

**Usage:** Fresh market specialty

**Plant:** Medium-small vine size, semi-erect plants with purple flowers

**Maturity:** Early

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

**Yield Potential:** Medium (avg. 384 cwt/acre)

**Specific Gravity:** Medium (1.077)

Detailed data summary for CO00415-1RF.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	384	278-446	
Length: <2"	3	57	46-72	
Length: 2-4"	3	255	207-304	
Length: >4"-6"	3	49	19-77	
Length: >6"	3	8	0-22	
% External Defects <sup>1</sup>	6	4.4	1.1-8.4	
% Hollow Heart <sup>2</sup>	6	0.0	0.0-0.0	
% Stand	6	91	54-100	
Emergence Uniformity	6	3.1	2.0-3.5	
Vine Vigor <sup>3</sup>	6	3.1	2.5-4.0	
Stems/Plant	6	4.8	3.2-7.2	
Vine Size <sup>4</sup>	6	2.5	2.0-3.3	
Vine Type <sup>5</sup>	6	2.4	2.0-3.0	
Vine Maturity <sup>6</sup>	6	1.5	1.0-2.0	
Blackspot <sup>7</sup>	Bud End	7	4.9	4.5-5.0
	Stem End	7	4.7	3.1-5.0
	Average	7	4.8	
Weight Loss <sup>8</sup>	7	2.8	2.2-4.1	
Dormancy <sup>9</sup>	7	91	70-105	
Enzymatic Browning <sup>10</sup>	7	4.5	4.0-4.8	
Specific Gravity	7	1.077	1.071-1.082	
Fry Color <sup>11</sup>	Harvest	7	1.9	1.0-2.0
	Storage	7	2.9	2.0-3.0
Fry Texture <sup>12</sup>	Harvest	7	2.4	1.0-4.0
	Storage	7	2.6	1.0-4.0

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.