



## **AC96052-1RU**

**Pedigree:** A81386-1 x GemStar Russet

**Developers:** Colorado State University and  
USDA-ARS

**Plant Variety Protection:**

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

## **Incentives for Production**

- ★ High yield potential
- ★ Processing potential
- ★ High percent US No.1 tubers

## **General Characteristics**

**Usage:** Dual purpose with fresh and processing potential

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

**Maturity:** Medium

**Tubers:** Oblong tubers with heavy russet skin and white flesh. Tubers are resistant to hollow heart, second growth and growth crack.

**Yield Potential:** High (avg. 441 cwt/acre) and a high percentage of US No. 1 tubers (86%)

**Specific Gravity:** High (1.090)

Detailed data summary for AC96052-1RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	8	441	355-530	
Yield US #1 (Cwt/A)	8	377	276-457	
% US #1	8	86	78-92	
Yield >10 oz (Cwt/A)	8	84	23-117	
Yield <4 oz (Cwt/A)	8	60	30-100	
% External Defects <sup>1</sup>	8	0.8	0.1-1.9	
% Hollow Heart <sup>2</sup>	8	0.2	0.0-0.7	
% Stand	8	94	68-99	
Emergence Uniformity	8	2.7	1.5-3.5	
Vine Vigor <sup>3</sup>	8	2.9	2.0-3.3	
Stems/Plant	8	2.9	2.3-3.9	
Vine Size <sup>4</sup>	8	3.9	3.8-4.5	
Vine Maturity <sup>5</sup>	8	3.2	2.8-3.8	
Blackspot <sup>6</sup>	Bud End	9	4.0	2.7-4.8
	Stem End	9	3.0	1.4-4.0
	Average	9	3.5	
Weight Loss <sup>7</sup>	9	2.5	1.0-4.9	
Dormancy <sup>8</sup>	9	83	70-104	
Enzymatic Browning <sup>9</sup>	9	3.8	3.2-4.2	
Specific Gravity	9	1.090	1.080-1.096	
Fry Color <sup>10</sup>	Harvest	9	0.3	0.0-1.0
	Storage	9	0.9	0.0-2.0
Fry Texture <sup>11</sup>	Harvest	9	3.6	2.0-5.0
	Storage	9	3.6	3.0-4.0

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.