

## AC00395-2RU

Pedigree: A95523-12 x Summit Russet

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

**Plant Variety Protection:** 

Seed Availability: San Luis Valley Research Center

## **General Characteristics**

Usage: Dual purpose with fresh and processing potential

Plant: Large vine size, semi-erect plants with light purple flowers

Maturity: Late

**Tubers:** Oblong tubers with medium russet skin and white flesh. Tubers are resistant to second growth, blackspot bruise and shatter bruise.

Yield Potential: High (avg. 478 cwt/acre) and a high percentage of US No. 1 tubers (87%)

Specific Gravity: High (1.101)

## **Incentives for Production**

- $\star$  High yield potential
- $\star$  Processing potential
- ★ Resistant to internal and external grade defects

Variable		# Trials	Mean	Range
Total Yield (Cwt/A)		6	478	393-574
Yield US #1 (Cwt/A)		6	412	344-478
% US #1		6	87	80-91
Yield >10 oz (Cwt/A)		6	110	73-129
Yield <4 oz (Cwt/A)		6	59	28-97
% External Defects <sup>1</sup>		6	1.5	0.0-3.0
% Hollow Heart <sup>2</sup>		6	0.6	0.0-2.0
% Stand		6	99	98-100
Emergence Uniformity		6	3.3	2.8-3.8
Vine Vigor <sup>3</sup>		6	3.4	2.3-4.3
Stems/Plant		6	2.8	1.9-3.4
Vine Size <sup>4</sup>		6	4.7	4.3-5.0
Vine Type <sup>5</sup>		6	3.2	3.0-4.0
Vine Maturity <sup>6</sup>		6	3.9	3.8-4.0
Blackspot <sup>7</sup>	Bud End		4.9	4.6-5.0
	Stem End Average		4.9 4.9	4.7-5.0
Weight Loss <sup>8</sup>		7	2.3	2.0-2.8
Dormancy <sup>9</sup>		7	100	70-155
Enzymatic Browning <sup>10</sup>		7	4.7	4.6-4.8
Specific Gravity		7	1.101	1.092-1.108
Fry Color <sup>11</sup>	Harvest Storage		1.7 2.6	1.0-3.0 2.0-3.0
Fry Texture <sup>12</sup>	Harvest Storage		4.0 4.0	3.0-5.0 3.0-5.0

Detailed data summary for AC00395-2RU.

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.