



AC05039-2RU

Pedigree: A99032-2TE x COA00287-1

Developer: Colorado State University and USDA-ARS

Plant Variety Protection: No

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ Good processing potential
- ★ High percentage of US No. 1 tubers
- ★ Early maturity

General Characteristics

Usage: Dual purpose with fresh and processing potential

Plant: Moderate vine size, semi-erect plants with white flowers

Maturity: Early

Tubers: Oblong tubers with medium russet skin and white flesh. Tubers are resistant to second growth and growth crack.

Yield Potential: Moderate (avg. 299 cwt/acre) and 91% US No. 1 tubers

Specific Gravity: Medium (1.086)

Detailed data summary for AC05039-2RU.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	4	299	271-366
Yield US #1 (Cwt/A)	4	273	243-341
% US #1	4	91	89-93
Yield >10 oz (Cwt/A)	4	71	52-97
Yield <4 oz (Cwt/A)	4	22	19-27
% External Defects ¹	4	1.8	0.5-3.8
% Hollow Heart ²	4	0.2	0.0-0.6
% Stand	4	98	92-100
Emergence Uniformity	4	3.3	3.0-4.0
Vine Vigor ³	4	3.1	3.0-3.5
Stems/Plant	4	2.6	2.3-3.0
Vine Size ⁴	4	2.2	1.0-3.0
Vine Type ⁵	4	2.4	2.0-3.0
Vine Maturity ⁶	4	1.8	1.5-2.0
Blackspot ⁷	Bud End	5	5.0 5.0
	Stem End	5	4.9 5.0
	Average	5	5.0
Weight Loss ⁸	5	2.3	1.8-3.0
Dormancy ⁹	5	82	55-101
Enzymatic Browning ¹⁰	5	4.4	4.2-4.6
Specific Gravity	5	1.086	1.084-1.088
Fry Color ¹¹	Harvest	5	1.0 0.0-2.0
	Storage	5	2.2 1.0-3.0
Fry Texture ¹²	Harvest	5	3.4 3.0-4.0
	Storage	5	3.2 3.0-4.0

Refer to footnotes on next page.

Footnotes for Table on previous page:

¹Percent external defects based on the proportion of the total sample weight with significant defects.

²Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.

³Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.

⁴Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.

⁵Vine type is rated on a 1 to 5 scale, with 5 indicating very upright vines.

⁶Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.

⁷Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.

⁸Tubers were stored at 45F for approximately 3 months.

⁹Days from harvest to first visible growth. Tubers were stored at 45F.

¹⁰Degree of darkening rated at 60 minutes after slicing tubers lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.

¹¹Reconditioned 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.

¹²Fry 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.