



CO05175-1RU

Pedigree: Mesa Russet x AC96052-1RU

Developer: Colorado State University

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ High yield potential
- ★ Processing potential
- ★ High percentage of US No. 1 tubers

General Characteristics

Usage: Dual purpose with fresh and processing potential

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

Maturity: Medium

Tubers: Long tubers with russet skin and white flesh. Tubers are resistant to blackspot bruise.

Yield Potential: High (avg. 428 cwt/acre) and high percentage of US No. 1 tubers (: 9%)

Specific Gravity: Medium (1.087)

Detailed data summary for CO05175-1RU.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	426	410-450	
Yield US #1 (Cwt/A)	5	378	360-406	
% US #1	5	89	82-92	
Yield >10 oz (Cwt/A)	5	195	153-264	
Yield <4 oz (Cwt/A)	5	34	17-49	
% External Defects ¹	5	3.5	1.7-7.8	
% Hollow Heart ²	5	4.1	0.8-6.0	
% Stand	5	96	92-99	
Emergence Uniformity	5	3.1	2.5-4.0	
Vine Vigor ³	5	3.2	2.5-3.5	
Stems/Plant	5	3.6	3.2-3.9	
Vine Size ⁴	5	4.1	3.5-4.0	
Vine Type ⁵	5	2.9	2.8-3.0	
Vine Maturity ⁶	5	3.3	3.0-3.5	
Blackspot ⁷	Bud End	6	5.0	4.9 5.0
	Stem End	6	4.9	4.6 5.0
	Average	6	4.9	
Weight Loss ⁸	6	3.3	2.7-4.3	
Dormancy ⁹	6	69	56-77	
Enzymatic Browning ¹⁰	6	3.2	2.0-4.0	
Specific Gravity	6	1.087	1.083-1.093	
Fry Color ¹¹	Harvest	6	1.0	0.0-2.0
	Storage	6	1.3	0.0-2.0
Fry Texture ¹²	Harvest	6	3.8	3.0-5.0
	Storage	6	4.2	4.0-5.0

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.
- ¹¹Chip color was rated using the Snack Food Association 1-5 scale. Ratings of ≤ 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 ≤ 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.