



Mercury Russet (CO99100-1RU)

Pedigree: AC93047-1 x Silverton Russet

Developer: Colorado State University

Plant Variety Protection: PVP No. 201400089

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ Early maturity
- ★ Processing potential
- ★ Attractive tuber type

General Characteristics

Usage: Dual market

Plant: Small vine size with white flowers

Maturity: Very early

Tubers: Oblong tubers with medium russet skin and white flesh. Tubers are resistant to hollow heart, blackspot bruise and shatter bruise.

Yield Potential: Medium (avg. 358 cwt/acre) and a high percentage of US No. 1 tubers (85%)

Specific Gravity: Medium (1.084)

Detailed data summary for Mercury Russet.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	358	308-409	
Yield US #1 (Cwt/A)	7	304	271-377	
% US #1	7	85	76-92	
Yield >10 oz (Cwt/A)	7	80	48-121	
Yield <4 oz (Cwt/A)	7	40	25-82	
% External Defects ¹	7	3.9	0.0-9.1	
% Hollow Heart ²	7	0.2	0.0-0.7	
% Stand	7	99	97-100	
Emergence Uniformity	7	3.2	3.0-3.5	
Vine Vigor ³	7	3.4	2.8-4.0	
Stems/Plant	7	3.4	2.6-4.2	
Vine Size ⁴	7	2.4	2.3-2.5	
Vine Type ⁵	9	2.4	2.0-3.0	
Vine Maturity ⁶	7	1.4	1.0-2.0	
Blackspot ⁷	Bud End	8	4.6	3.8-5.0
	Stem End	8	4.8	4.5-5.0
	Average	8	4.7	
Weight Loss ⁸	8	3.5	1.4-5.7	
Dormancy ⁹	8	62	49-77	
Enzymatic Browning ¹⁰	8	3.8	3.4-4.6	
Specific Gravity	8	1.084	1.078-1.088	
Fry Color ¹¹	Harvest	8	0.4	0.0-1.0
	Storage	8	1.4	1.0-2.0
Fry Texture ¹²	Harvest	8	3.0	2.0-4.0
	Storage	8	3.3	3.0-4.0

Refer to footnotes on next page.

Footnotes for Table on previous page:

- ¹ Percent external defects based on the proportion of the total sample weight with significant defects.
- ² Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.
- ³ Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.
- ⁴ Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.
- ⁵ Vine type is rated on a 1 to 5 scale, with 5 indicating very upright vines.
- ⁶ Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.
- ⁷ Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.
- ⁸ Tubers were stored at 45F for approximately 3 months.
- ⁹ Days from harvest to first visible growth. Tubers were stored at 45F.
- ¹⁰ Degree of darkening rated at 60 minutes after slicing tubers lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.
- ¹¹ Chip 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.
- ¹² 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.