



CO05037-2R/Y

Pedigree: Midnight Moon x CO97227-2P/PW

Developer: Colorado State University

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ Small tuber size profile
- ★ Attractive tuber type
- ★ Resistant to internal and external grade defects

General Characteristics

Usage: Fresh market specialty

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

Maturity: Medium

Tubers: Long tubers with red skin and yellow flesh with some red in the vascular ring. Tubers are resistant to blackspot bruise, growth crack, second growth and hollow heart.

Yield Potential: Medium (avg. 334 cwt/acre) and 34% of US No. 1 tubers

Specific Gravity: High (1.089)

Detailed data summary for CO05037-2R/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	314	234-389	
Yield US #1 (Cwt/A)	5	111	55-187	
% US #1	5	32	22-47	
Yield >10 oz (Cwt/A)	5	6	0-28	
Yield <4 oz (Cwt/A)	5	202	179-226	
% External Defects ¹	5	0.0	0.0-0.2	
% Hollow Heart ²	5	0.0	0.0-0.0	
% Stand	5	99	97-100	
Emergence Uniformity	5	3.3	3.0-3.5	
Vine Vigor ³	5	2.6	1.8-3.3	
Stems/Plant	5	4.8	3.8-5.5	
Vine Size ⁴	5	3.1	2.5-3.5	
Vine Type ⁵	5	3.2	3.0-3.8	
Vine Maturity ⁶	5	2.9	2.3-3.3	
Blackspot ⁷	Bud End	6	4.8	4.6-5.0
	Stem End	6	4.6	4.2-5.0
	Average	6	4.7	
Weight Loss ⁸	6	2.7	2.0-3.1	
Dormancy ⁹	6	60	42-81	
Enzymatic Browning ¹⁰	6	4.2	3.8-4.6	
Specific Gravity	6	1.089	1.083-1.094	
Fry Color ¹¹	Harvest	6	1.2	1.0-2.0
	Storage	6	1.3	1.0-3.0
Fry Texture ¹²	Harvest	6	3.8	3.0-4.0
	Storage	6	3.8	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.
- 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.