



Crimson King

Pedigree: CO94170-1 x Mountain Rose

Developer: Colorado State University

Plant Variety Protection: Pending, No. 201600314

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ Yield potential
- ★ Attractive tuber type
- ★ Small tuber size profile

General Characteristics

Usage: Fresh market specialty

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

Maturity: Medium-early

Tubers: Oval tubers with red skin and red flesh. Tubers are resistant to hollow heart, second growth and growth crack.

Yield Potential: Medium-high (avg. 396 cwt/acre) and 58% of US No. 1 tubers

Specific Gravity: Low (1.076)

Detailed data summary for CO97222-1R/R.

Variable	# Trials	Mean	Range
Total Yield (Cwt/A)	7	396	349-447
Yield US #1 (Cwt/A)	7	231	151-309
% US #1	7	58	42-76
Yield >10 oz (Cwt/A)	7	27	7-56
Yield <4 oz (Cwt/A)	7	159	91 -223
% External Defects ¹	7	1.5	0.0-3.0
% Hollow Heart ²	7	0.0	0.0-0.0
% Stand	7	96	94-99
Emergence Uniformity	7	2.9	2.0-3.5
Vine Vigor ³	7	2.8	2.3-3.3
Stems/Plant	7	3.7	2.3-5.1
Vine Size ⁴	7	3.0	2.8-3.0
Vine Type ⁵	7	2.9	2.5-3.0
Vine Maturity ⁶	7	2.5	2.0-3.0
Blackspot ⁷	Bud End	--	-- --
	Stem End	--	-- --
	Average	--	--
Weight Loss ⁸	8	3.3	1.4-4.3
Dormancy ⁹	8	81	56-132
Enzymatic Browning ¹⁰	--	--	-- --
Specific Gravity	8	1.076	1.073-1.080
Fry Color ¹¹	Harvest	--	-- --
	Storage	--	-- --
Fry Texture ¹²	Harvest	7	2.1 1.0-3.0
	Storage	7	2.0 1.0-3.0

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.