



Red Luna (CO97233-3R/Y)

Pedigree: CO94218-1 x VC0967-5

Developer: Colorado State University

Plant Variety Protection: In process

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ High yield potential
- ★ Attractive red skin and yellow flesh

General Characteristics

Usage: Fresh market specialty

Plant: Medium vine size, with reddish-purple flowers

Maturity: Medium

Tubers: Oblong tubers with red skin and yellow flesh. Tubers are resistant to blackspot bruise and shatter bruise.

Yield Potential: High (477 cwt/acre) and 73% of US No. 1 tubers

Specific Gravity: Medium (1.082)

Detailed data summary for Red Luna.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	477	409-524	
Yield US #1 (Cwt/A)	7	351	294-425	
% US #1	7	73	61-82	
Yield >10 oz (Cwt/A)	7	83	42-133	
Yield <4 oz (Cwt/A)	7	108	67-162	
% External Defects ¹	7	4.0	2.5-6.1	
% Hollow Heart ²	7	2.3	0.3-5.2	
% Stand	7	90	80-95	
Emergence Uniformity	7	3.1	3.0-3.5	
Vine Vigor ³	7	3.6	3.3- 4.0	
Stems/Plant	7	3.8	2.6-4.6	
Vine Size ⁴	7	3.0	2.8-3.3	
Vine Type ⁵	7	2.0	2.0-2.3	
Vine Maturity ⁶	7	3.3	2.8-4.0	
Blackspot ⁷	Bud End	8	4.7	4.2-5.0
	Stem End	8	4.0	3.2-5.0
	Average	8	4.4	
Weight Loss ⁸	8	3.1	1.6-6.0	
Dormancy ⁹	8	74	61-94	
Enzymatic Browning ¹⁰	8	4.1	3.6-4.6	
Specific Gravity	8	1.082	1.077-1.090	
Fry Color ¹¹	Harvest	8	1.3	0.0-2.0
	Storage	8	2.0	1.0-3.0
Fry Texture ¹²	Harvest	8	2.8	2.0-3.0
	Storage	8	2.6	2.0-3.0

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.