



CO99045-1W/Y

Pedigree: Rio Grande Russet x German Butterball

Developer: Colorado State University

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ High yield potential
- ★ Attractive tuber type

General Characteristics

Usage: Fresh market specialty

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

Maturity: Medium

Tubers: Long tubers with white skin and yellow flesh. Tubers are resistant to hollow heart, blackspot bruise and growth crack.

Yield Potential: Very high (avg. 554 cwt/acre) and 80% US No. 1 tubers

Specific Gravity: High (1.090)

Detailed data summary for CO99045-1W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	7	554	501-634	
Yield US #1 (Cwt/A)	7	441	397-519	
% US #1	7	80	73-87	
Yield >10 oz (Cwt/A)	7	141	97-240	
Yield <4 oz (Cwt/A)	7	96	61-160	
% External Defects ¹	7	3.2	0.8-5.2	
% Hollow Heart ²	7	0.1	0.0-0.8	
% Stand	7	100	98-101	
Emergence Uniformity	7	3.5	3.0-3.8	
Vine Vigor ³	7	3.5	3.0-4.3	
Stems/Plant	7	4.1	3.1-6.0	
Vine Size ⁴	7	4.1	3.5-4.8	
Vine Type ⁵	7	3.0	3.0-3.3	
Vine Maturity ⁶	7	3.1	3.0-3.5	
Blackspot ⁷	Bud End	8	4.7	3.8-5.0
	Stem End	8	4.5	3.8-5.0
	Average	8	4.6	
Weight Loss ⁸	8	2.7	1.4-3.9	
Dormancy ⁹	8	72	55-87	
Enzymatic Browning ¹⁰	8	4.4	3.8-5.0	
Specific Gravity	8	1.090	1.080-1.094	
Fry Color ¹¹	Harvest	8	2.8	2.0-3.0
	Storage	8	3.0	2.0-4.0
Fry Texture ¹²	Harvest	8	3.0	2.0-4.0
	Storage	8	3.0	2.0-4.0

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.