



AC03452-2W

Pedigree: A998423-1C x COA96141-2C

Developers: Colorado State University and
USDA-ARS

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ High yield potential
- ★ Processing potential
- ★ High percentage of US No. 1 tubers

General Characteristics

Usage: Chipping

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

Maturity: Medium

Tubers: Round tubers with white skin and white flesh. Tubers are resistant to blackspot bruise, growth crack and second growth.

Yield Potential: High (avg. 468 cwt/acre) and a high percentage of US No. 1 tubers (85%)

Specific Gravity: Medium (1.078)

Detailed data summary for AC03452-2W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	446	388-505	
Yield US #1 (Cwt/A)	6	377	321-428	
% US #1	6	85	81-88	
Yield >10 oz (Cwt/A)	6	63	34-91	
Yield <4 oz (Cwt/A)	6	62	46-74	
% External Defects ¹	6	1.6	1.2-2.2	
% Hollow Heart ²	6	0.5	0.0-1.5	
% Stand	6	98	97-99	
Emergence Uniformity	6	3.6	3.3-4.0	
Vine Vigor ³	6	3.8	3.3-4.3	
Stems/Plant	6	3.4	2.7-4.4	
Vine Size ⁴	6	3.4	3.0-3.8	
Vine Type ⁵	6	2.9	2.3-3.0	
Vine Maturity ⁶	6	3.1	3.0-3.3	
Blackspot ⁷	Bud End	13	4.9	4.6-5.0
	Stem End	13	4.8	3.6-5.0
	Average	13	4.9	
Weight Loss ⁸	13	1.9	1.4-2.8	
Dormancy ⁹	13	72	52-95	
Enzymatic Browning ¹⁰	13	4.8	4.4-5.0	
Specific Gravity	14	1.078	1.073-1.087	
Chip Color ¹¹	40	14	3.4	2.5-4.5
	40R	14	2.7	1.0-4.0
	50	14	1.8	1.0-4.0
	50R	14	1.8	1.0-3.5

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.