



CO04099-3W/Y

Pedigree: VC1002-3W/Y x ATC98495-1W/Y

Developer: Colorado State University

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ Attractive tuber type
- ★ Deep yellow flesh color
- ★ Processing potential

General Characteristics

Usage: Fresh market specialty

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

Maturity: Medium-early

Tubers: Oval tubers with white skin and yellow flesh. Tubers are resistant to hollow heart and second growth.

Yield Potential: High (avg. 394 cwt/acre) and 52% of US No. 1 tubers, small tuber size profile

Specific Gravity: High (avg. 1.091)

Detailed data summary for CO04099-3W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	5	394	335-454	
Yield US #1 (Cwt/A)	5	207	168-274	
% US #1	5	52	44-60	
Yield >10 oz (Cwt/A)	5	7	2-11	
Yield <4 oz (Cwt/A)	5	182	160-214	
% External Defects ¹	5	1.1	0.0-3.4	
% Hollow Heart ²	5	0.5	0.0-1.3	
% Stand	5	98	96-100	
Emergence Uniformity	5	3.4	3.0-3.8	
Vine Vigor ³	5	3.5	3.3-4.0	
Stems/Plant	5	4.6	3.3-5.7	
Vine Size ⁴	5	3.7	3.0-4.0	
Vine Type ⁵	5	2.9	2.8-3.0	
Vine Maturity ⁶	5	2.8	1.8-3.0	
Blackspot ⁷	Bud End	6	4.2	3.6-4.7
	Stem End	6	3.7	2.3-4.6
	Average	6	4.0	
Weight Loss ⁸	6	2.2	1.7-3.1	
Dormancy ⁹	6	81	63-116	
Enzymatic Browning ¹⁰	6	3.8	2.8-4.6	
Specific Gravity	6	1.091	1.085-1.095	
Fry Color ¹¹	Harvest	6	1.0	0.0-2.0
	Storage	6	0.7	0.0-1.0
Fry Texture ¹²	Harvest	6	3.8	3.0-4.0
	Storage	6	3.8	3.0-5.0

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.