



**AC03433-1W**

**Pedigree:** A94322-8C x COA96141-4

**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:** Large vine size, semi-erect plants with light purple flowers

**Maturity:** Medium

**Tubers:** Round tubers with white skin and white flesh. Tubers are resistant to hollow heart, blackspot bruise, second growth and shatter bruise.

**Yield Potential:** High (avg. 414 cwt/acre) and a high percentage of US No. 1 tubers (80%)

**Specific Gravity:** Medium (1.086)

Detailed data summary for AC03433-1W.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	396	309-492	
Yield US #1 (Cwt/A)	6	320	242-421	
% US #1	6	80	74-86	
Yield >10 oz (Cwt/A)	6	69	22-95	
Yield <4 oz (Cwt/A)	6	50	41-64	
% External Defects <sup>1</sup>	6	7.1	3.7-10.1	
% Hollow Heart <sup>2</sup>	6	0.2	0.0-1.0	
% Stand	6	94	89-98	
Emergence Uniformity	6	3.0	2.3-4.3	
Vine Vigor <sup>3</sup>	6	2.8	2.5-3.3	
Stems/Plant	6	3.4	2.5-4.6	
Vine Size <sup>4</sup>	6	3.8	3.5-4.0	
Vine Type <sup>5</sup>	6	3.0	3.0-3.0	
Vine Maturity <sup>6</sup>	6	3.6	3.0-4.0	
Blackspot <sup>7</sup>	Bud End	14	4.8	4.3-5.0
	Stem End	14	4.2	2.5-5.0
	Average	14	4.5	
Weight Loss <sup>8</sup>	14	3.4	2.2-5.5	
Dormancy <sup>9</sup>	14	81	69-101	
Enzymatic Browning <sup>10</sup>	14	4.4	3.4-5.0	
Specific Gravity	15	1.086	1.076-1.092	
Chip Color <sup>11</sup>	40	15	3.3	2.5-5.0
	40R	15	2.6	1.5-4.0
	50	15	1.8	1.0-4.0
	50R	15	1.8	1.0-3.0

Refer to footnotes on next page.

**Footnotes for Table on previous page:**

- <sup>1</sup>Percent external defects based on the proportion of the total sample weight with significant defects.
- <sup>2</sup>Percent hollow heart calculated as follows: (Weight of tubers >10 ounces with defects/total sample weight) x 100.
- <sup>3</sup>Vine vigor is rated on a 1 to 5 scale, with 5 indicating very vigorous vines.
- <sup>4</sup>Vine size is rated on a 1 to 5 scale, with 5 indicating very large vines.
- <sup>5</sup>Vine type is rated on a 1 to 5 scale, with 5 indicating very upright vines.
- <sup>6</sup>Vine maturity is rated on the following basis: 1=very early; 2=early; 3=medium; 4=late; and 5=very late.
- <sup>7</sup>Blackspot was rated on a 1 to 5 scale, with 5 indicating no discoloration.
- <sup>8</sup>Tubers were stored at 45F for approximately 3 months.
- <sup>9</sup>Days from harvest to first visible growth. Tubers were stored at 45F.
- <sup>10</sup>Degree of darkening rated at 60 minutes after slicing tubers lengthwise. Rated on a 1 to 5 scale, with 5 indicating no discoloration.
- <sup>11</sup>Chip color was rated using the Snack Food Association 1-5 scale. Ratings of  $\leq 2.0$  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  $\leq 2.0$  are acceptable.
- <sup>12</sup>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.