



ATC00293-1W/Y

Pedigree: Agria x TXA1655-1DY

Developer: Colorado State University,
USDA-ARS and Texas A&M

Plant Variety Protection:

Seed Availability: San Luis Valley Research Center

Incentives for Production

- ★ High yield potential
- ★ Attractive tuber type
- ★ High percentage of US No.1 tubers

General Characteristics

Usage: Fresh market specialty

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

Maturity: Medium

Tubers: Oblong tubers with white skin and yellow flesh. Tubers are resistant to second growth and shatter bruise.

Yield Potential: High (avg. 547 cwt/acre) and a high percentage of US No. 1 tubers (85%)

Specific Gravity: Medium (1.083)

Detailed data summary for ATC00293-1W/Y.

Variable	# Trials	Mean	Range	
Total Yield (Cwt/A)	6	547	402-621	
Yield US #1 (Cwt/A)	6	465	338-520	
% US #1	6	85	80-91	
Yield >10 oz (Cwt/A)	6	139	61-256	
Yield <4 oz (Cwt/A)	6	59	40-78	
% External Defects ¹	6	4.2	1.7-6.8	
% Hollow Heart ²	6	2.9	1.1-3.9	
% Stand	6	98	95-100	
Emergence Uniformity	6	2.9	2.5-3.3	
Vine Vigor ³	6	3.1	2.0-4.0	
Stems/Plant	6	3.4	2.8-3.8	
Vine Size ⁴	6	4.3	4.0-4.8	
Vine Type ⁵	6	3.1	3.0-3.5	
Vine Maturity ⁶	6	3.0	3.0-3.0	
Blackspot ⁷	Bud End	7	4.3	2.6-5.0
	Stem End	7	4.2	2.8-5.0
	Average	7	4.3	
Weight Loss ⁸	7	2.0	1.6-2.8	
Dormancy ⁹	7	114	98 -129	
Enzymatic Browning ¹⁰	7	4.5	4.2-4.8	
Specific Gravity	7	1.083	1.075-1.087	
Fry Color ¹¹	Harvest	7	1.0	0.0-2.0
	Storage	7	1.7	1.0-3.0
Fry Texture ¹²	Harvest	7	2.3	1.0-3.0
	Storage	7	2.4	2.0-3.0

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.