

Cantaloupe Variety Trial, 1993

Grower Cooperator: The Barkley Company, Yuma, Arizona

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Introduction

Cantaloupe acreage in Yuma county is estimated at approximately 1200 to 1500 acres for the 1993 spring season. Cantaloupe production has traditionally centered in the Bard District on the west side of the Colorado River, but recently spread into the Yuma, Gila and Dome Valleys. Due to high infestations of the "Sweetpotato" Whitefly, the planting of fall melons has been virtually non-existent in the county. Spring melons decreased dramatically several years ago and has stabilized at the estimated acreage over the past two years. An abnormally damp winter and spring with moderate temperatures created a desirable environment for many of the insect pests which typically infest melon crops. However, no abnormal infestations were reported or observed. In addition, the aphid vectored viruses (zucchini yellows mosaic virus, watermelon mosaic viruses I & II, and cucumber mosaic virus) were reported and observed at low rates and spotty.

Materials and Methods

Ten numbered varieties from the Asgrow seed company were evaluated and compared with three standard commercial varieties. Single row 100 foot plots were planted with an Earthway push planter. The beds were typical Yuma beds in an east-west orientation with seed rows on the south side of the bed. The following is a record of the critical cultural practices performed over the growing season.

Irrigation dates:

2-13-93
3-7-93
4-19-93
4-30-93
5-7-93
5-14-93

Fertility:

Preplant - 25 gal. of 10-34-0
4-12-93 - 25 gal. of UN 32
4-19-93 - 10 gal. of UN 32
5-7-93 - 10 gal. of UN 32

Pesticide Applications:

3-16-93 - Asana, Capture
& Thiodan
4-12-93 - Capture & Thiodan
4-24-93 - Benalate &
Thiodan
5-10-93 - Capture and
Thiodan

Ten fruit were randomly selected from each variety plot and evaluated as follows. On May 24 the first evaluation included percent bed cover, maturity, fruit size, cavity size, fruit weight, brix and crop uniformity. On June 2 external appearance of the fruit was rated as well as vine vigor, internal color, flavor, disease presence and the overall rating. The ratings were timed, as prescribed by the grower, on the dates of the first two commercial harvests.

Results and Discussion

The trial produced generally strong stands with little or no virus or insect infestations. A summary of the results are provided in Table 1. The numbered varieties compared well to the standards in the characteristics of vine vigor, percent bed cover, fruit size, netting, color and vine virus and disease. Generally speaking, all the numbered varieties showed less than desirable ratings in flavor, cavity size, fruit uniformity, maturity, internal color and foliar disease.

1993 Cantaloupe Variety Trial Results
 Mark Wilcox, U of A Extension Agent
 Yuma County

TABLE 1.

Variety	% Bed Cover	Vine Vigor	Maturity	Fruit Size (inches)	Fruit Weight (lbs.)	Cavity Size	Brix	Netting	Sutures	Fruit Uniformity	Internal Color	Flavor	Vine Disease	Foliar Disease	Virus Disease	Overall Evaluation	Evaluation Date	Comments:
Caravelle (Asgrow)	85	5	4	4½x4½ (R)	1.7	4	14.7	M	N	5	5	4	5	5	5	4.5	5-24	Large round fruit, good texture and flavor
Primo (Northrup King)	85	5	4	5x4½ (O)	2.0	5	14.2	M	N	5	5	4	5	5	5	5	5-24	Large oval fruit, small cavity, excellent flavor
Reliant (Genecorp)	80	4	4	4½x4½ (R)	1.6	4	14.0	M	N	4	4	4	5	5	5	4	5-24	Large round fruit, good netting and flavor
XP6110 (Asgrow)	80	4	4	4x4 (R)	1.6	4	6.2	M	N-T	4	4	3	5	4	5	3.5	5-24	Medium round fruit, variability in cavity size, poor flavor
XP6112 (Asgrow)	80	4	4	4½x4½ (R)	1.7	4	14.4	M	N-T	3	4	3	5	4	5	3.5	5-24	Large round fruit, moderate cavity and flavor
XP6180 (Asgrow)	75	4	3	4½x4½ (R)	1.6	3	14.2	M	N-T	2	4	3	5	4	5	3	5-24	Lack of fruit uniformity, large cavity, slow maturing
XP6181 (Asgrow)	80	4	4	4½x4½ (R)	1.7	3	11.4	M	N	3	4	3	5	4	5	3	5-24	Variability in size of fruit and cavity, good flavor
XP6182 (Asgrow)	80	4	3	4x4 (R)	1.5	3	13.2	M	N	3	4	4	5	4	5	3	5-24	Variability in fruit and cavity size, good flavor
XP6183 (Asgrow)	80	4	4	4½x4½ (R)	1.6	3	10.4	M	N-T	4	4	3	5	4	5	3	5-24	Large round fruit with variability in cavity size
XP6184 (Asgrow)	85	4	4	4-3/4x4½ (R)	1.8	3	10.2	M	N	4	4	3	5	4	5	3.5	5-24	Large fruit with good uniformity of shape and size, cavity large
XP6185 (Asgrow)	85	4	3	4½x4½ (R)	1.7	4	11.6	M	N	3	4	3	5	4	5	3.5	5-24	Large fruit with good tight cavity, variability of fruit size, high
XP6186 (Asgrow)	85	4	4	4-3/4x (R)	1.8	3	7.8	M	N-T	3	4	3	5	3	5	3.5	5-24	Large fruit, late maturing with large cavity size
XP6187 (Asgrow)	75	4	3	4½x4½ (R)	1.7	4	12.8	M	N	4	4	3	5	4	5	3	5-24	Late in maturity, round fruit with good flavor but poor uniformity in fruit size