

Muskmelon and Honeydew Cultivar Trial - 2003

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The 2003 trial investigated the performance characteristics of twelve muskmelon and six honeydew/specialty melon cultivars. Good yields and quality were obtained with the help of favorable growing weather. Harvest started on July 21 and, on average, 3.1 marketable fruit were picked from each plant during the season. The average marketable yield for the trial was 441.2 CWT/Acre with individual cultivar yields ranging from 315.4 to 612.6 CWT/Acre (Table 1).

Eclipse produced a high yield of attractive fruit and continues to be the standard in this trial. *Aphrodite* showed potential as an early season cultivar when its first ripe fruit were picked with those of *Superstar* and about five days before *Eclipse*. The firm fruit had a relatively smooth oval shape, didn't show any cracking problems and had a higher soluble solids content than *Superstar*. *Aphrodite* also tended to bear fruit over the entire picking season although after the early pickings the daily yields were generally low. *ACX 60* was evaluated for the first time in 2003 and also showed merit with a good early yield of fruit with high soluble solids readings. *ACX 60* was distinctive because it displayed prominent green sutures at harvest. The green stripes gradually faded as the fruit ripened and became a uniform creamy tan color. I thought both *Odyssey* and *Sugar Bowl* produced great tasting fruit that were sweet and juicy, however, because the fruit softened quickly after harvest they are best suited for quick local marketing. Also, *Sugar Bowl*, like *Superstar*, exhibited some cracking at the stem end.

Moneyloupe, 1461-1013, 1460-4099 and *XLT 9201 MAX* are interesting cultivars that varied by appearance and size but all had very firm thick flesh, small tight seed cavities and high soluble solids. These cultivars generally needed two or three days of storage after picking to soften and develop their best eating quality - which was very good in this year's trial.

Honey Star, *Sundew*, *SXM 7066*, *Honey Gold* and *Morning Ice* all had vigorous vines that bore an abundance of large, six to eight pound, honeydew fruit. *Honey Gold* was a favorite of several people who sampled it because of its consistently good honeydew flavor. As the name implies it had pale orange-colored flesh. *Angel*, described as a 'Mediterranean' type melon, bore round greenish-yellow fruit containing very sweet light colored flesh. Unfortunately, the fruit tended to split wide open on the vines even after small amounts of rainfall. Concerning honeydews I have found the challenge in growing them here is determining when to harvest. Ideally, I would like to harvest before surface cracking on the fruit occurs but still waiting long enough for the fruit to develop full flavor. My approach has been to look for a slight color change in the rind from light green to more of a creamy color, sample a few to verify maturity and then harvest all fruit of similar size and appearance. Usually, by this time, a few fruit will be forming an abscission layer between the fruit and stem and will 'slip' from the vine but most would have to be cut. This method wasn't entirely successful in 2003 as we lost several *Morning Ice* fruit to splitting and the other honeydew cultivars, while not as prone to this problem, did frequently develop hairline cracks on their surface. The dilemma for me has been that cutting the fruit from the vine in an earlier harvest at a more immature stage reduces the cracking problem, improving shelf life and appearance, but results in fruit with lower sugar content and inferior flavor.

Materials and Methods

Planting: Planted in greenhouse one seed per cell, 72 cell-pack, April 17, 2003.
Transplanted to field on May 14.

Plot Design: RCB, 3 reps. Plot = 1 row of six hills 28" apart, rows 7' apart.

Culture: Loamy sand soil type. Plants grown on black plastic mulch with drip irrigation.
Fertilizer applied preplant incorporated under plastic mulch and through trickle tubes during growing season. Rates determined by soil and plant tests.

Pesticides: Curbit, Poast herbicide; Capture, Furadan, Sevin XLR insecticide;
Bravo 720, Quadris fungicide.

Table 1. Muskmelon and honeydew marketable yield and fruit characteristics.

Cultivar	Seed Source	Yield CWT/A ¹	Fruit No./Acre ¹	Avg Frt Wt - lbs	% Soluble Solids	% Early ²	% Mid	% Late
<i>Muskmelon</i>								
1461-1013	SM	548.3	9384	6.0	10.8	14	45	41
Eclipse	SM	478.8	7469	6.4	11.3	8	50	42
Odyssey	SS	465.0	6703	7.0	12.5	29	49	23
Starfire	HM	453.7	8043	5.7	9.7	14	57	29
Moneyloupe	AC	448.3	5554	8.1	12.9	10	52	38
Minerva	RG	441.2	5362	8.4	11.8	8	42	50
Superstar	HM	435.7	6320	6.8	10.6	47	41	13
1460-4099	SM	350.4	7852	4.5	13.5	12	49	39
XLT 9201	AC	348.9	6894	5.0	13.4	-	34	66
Sugar Bowl	ST	343.7	7015	4.9	13.0	31	63	6
ACX 60	AC	339.6	5390	6.3	13.1	39	43	18
Aphrodite	RG	324.6	5593	5.8	12.0	36	33	31
<i>Honeydew/Specialty</i>								
Honey Star	SS	612.6	8618	7.2	13.7	-	-	100
Honey Gold	HM	553.2	9192	6.0	13.7	-	11	89
Sundew	SS	545.8	8235	6.5	11.8	-	5	95
SXM 7066	SS	421.1	5937	7.1	12.7	-	-	100
Angel	ST	334.3	10447	3.2	14.0	6	37	57
Morning Ice	HM	315.4	3894	8.1	13.0	-	-	100
<i>Trial Avg</i>		<i>441.2</i>	<i>7213</i>	<i>6.3</i>	<i>12.4</i>			
<i>LSD 5%</i>		<i>152.7</i>	<i>2432</i>	<i>1.0</i>	<i>1.4</i>			

1. Yield per acre based on plant population of 2,300.

2. % of fruit harvested, Early = July 21-29, Mid = July 30-Aug 8, Late = Aug 9-17.