

Muskmelon Cultivar Trial

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Introduction

The 2005 trial investigated the performance characteristics of eight muskmelon cultivars. On May 13, plants were transplanted to the field, where they were grown on clear plastic mulch with drip irrigation. Warm growing conditions promoted strong, rapid vine growth, but it wasn't a perfect growing season. Hot temperatures during late June and July likely contributed to a concentrated fruit set in most cultivars, resulting in some huge pickings July 20–24. Marketable yields were mostly good, ranging from 359.5 cwt for Aphrodite to a high of 583.2 cwt for Superstar (Table 1). The first fruit were picked on July 12. Cultivars with significant early yield included Aphrodite, Athena, Crescent Moon, and Superstar. The fruit were unusually large this season, with HMX 4587, Moneyloupe, and Crescent Moon producing the heaviest melons averaging seven pounds or more. Fruit from Athena, Aphrodite, Eclipse, and Moneyloupe gave the highest soluble solids (sweetness) readings when tested with a refractometer.

Materials and Methods

Planting. On April 12, 2005, planting was done in the greenhouse, with 1 seed/cell and 72 cells/pack. The young plants were transplanted to the field on May 13.

Plot Design. The following plot design was used: a randomized complete block with three replications. The plot consisted of a row of eight hills 32 in. apart. The rows were 7 ft apart.

Culture. The soil is a loamy sand. Plants were grown on black plastic mulch with drip

irrigation. Fertilizer was applied preplant incorporated under plastic mulch and through trickle tubes during the growing season. Rates were determined by soil and plant tests.

Pest Control. Curbit and Sandea were the herbicide used; Capture, Furadan, and Sevin XLR were the insecticides; Bravo 720 and Quadris were the fungicides.

Results and Discussion

Superstar. The top pick was Superstar because of early maturity, yield, a distinctive ribbed shape, and sweet, juicy flesh. The hot, dry weather favored it with no disease or fruit cracking problems this season.

HMX 2607. A strong yield from this cultivar provided round, good-quality fruit with small cavities.

Eclipse. This standard cultivar performed well, yielding uniform fruit of a nice size (average 6.5 lb) and good flavor.

Aphrodite. Noted in this cultivar were early maturity; large, firm fruit; resistance to cracking; and mediocre yields. Yet it was not as prone to concentrated fruit set and a short harvest season as seen in some cultivars.

HMX 4587. Very large fruit with round to elongated shape and low soluble solids were typical characteristics.

Moneyloupe. This is a full-season shipper type, with big, oblong fruit and good eating characteristics when fully ripened. A few fruit developed soft ground spots, which might be a problem in wet seasons.

Crescent Moon. Large attractive fruit with prominent ribbing, but low soluble solids are features of this cultivar.

Athena. Although this melon is a high-quality fruit with good shelf life, its size might be small for some markets.

Table 1. Muskmelon cultivar marketable yield and fruit characteristics.

Cultivar	Seed source	Marketable fruit/plant	Early yield (cwt/acre) ¹	Total yield (cwt/acre) ¹	Avg. frt. wt. (lb)	% Soluble solids
Superstar	HM	4.0	61.7	583.2	6.4	10.4
HMX 2607	HM	3.9	11.5	565.0	6.5	10.1
Crescent Moon	RU	3.5	56.5	551.3	7.0	8.7
HMX 4587	HM	3.1	0.0	537.9	7.8	8.7
Eclipse	SM	3.7	0.0	532.2	6.5	11.4
Moneyloupe	AC	2.6	6.4	463.4	7.6	11.1
Athena	RG	3.6	67.1	388.5	4.9	12.2
Aphrodite	RG	2.5	43.8	359.5	6.5	11.6
Trial Average		3.4	30.9	494.3	6.7	10.5
LSD 5%			37.1	88.7	.8	

¹Early yield= from the harvest 7/12–7/18. Per acre yield was based on a plant population of 2,240.