

2002 EASTERN MUSKMELON CULTIVAR OBSERVATION

***William H. Shoemaker,
University of Illinois**

Direct-market vegetable growers value muskmelons as a popular crop with customers, generating market demand and very good returns. As growers, they are interested in keeping abreast of new cultivar development. This trial evaluates muskmelon cultivars for quantitative and qualitative factors.

Materials and Methods

This observation was conducted at the St Charles Horticulture Research Center in St Charles, IL, in a Proctor Silt Loam soil. 20 commercial cultivars were selected and seeded on 4/49/02 into Pro-Tray 50sq plug flats with Jiffy Mix Plus growing media. Plants were fertilized weekly with 100 ppm N of 20-20-20 in the watering system. The field was prepared by discing and laying 4' black plastic mulch, with T-tape drip irrigation tubing underneath. No fertilizer or herbicide was used. Transplants were set in the field on 6/4/02 and watered in with 9-45-15 starter solution. Admire 2F at 20 oz/A was watered into the base of the transplants for cucumber beetle control. Cultivars were set in unreplicated single row plots with 8 plants 1.5' apart in rows 8' apart. Weed control was provided by hand. Insecticides and fungicides were applied as needed to maintain proper plant health. Irrigation was applied at the rate of 1.5" - 2" weekly. Fruit were harvested 2-3 times per week, as needed. Data were taken on fruit numbers, weight and °Brix.

Results and Discussion

Conditions were favorable for muskmelon production in 2002, with hot, dry conditions dominating the heart of the season. Plants made very good progress through the season and maintained good plant health. Bee activity was good during flowering, resulting in good fruit set. High temperatures and bright, sunny days during the fruit development and maturation period led to excellent sizing and a higher than average degree brix in the fruit. All cultivars had satisfactory to excellent flavor qualities as a result. Top performing cultivars for grower trial included RML 8797, Eclipse, KXPM 142, Starsweet, Apollo, Starfire and ACX 3908. The last was a western style melon with firm flesh and excellent flavor.

**Sr Research Specialist, Food Crops, Dept of Natural Resources and Environmental Sciences*

***TABLE 1. Eastern Muskmelon Harvest Data**

Cultivar	Source	Total Fruit		Ave. Fruit Wt.	Tons/Acre	Ave. °Brix
		No.	Wt.			
RML 8797	RG	27	243.5	9.0	41.4	13.3
Eclipse	SM	31	219.5	7.1	37.3	13.4
Starsweet	HM	39	200.9	5.2	34.2	11.9
KXPM 142	SI	33	197.4	6.0	33.6	14.0
Apollo	RG	34	194.8	5.7	33.1	13.8
Starfire	HM	30	178.0	5.9	30.3	11.0
RML 8726	RG	19	174.8	9.2	29.7	13.1
Athena	RG	31	172.2	5.6	29.3	13.3
Superstar	HM	25	171.9	6.9	29.2	10.5
ACX 3908	AC	23	160.5	7.0	27.3	12.3
Starship	HM	29	155.7	5.4	26.5	11.4
Minerva	RG	21	154.8	7.4	26.3	12.1
Odyssey	ST	22	152.2	6.9	25.9	13.2
RML 8793	RG	21	152.0	7.2	25.8	14.7
SuperSun	BU	21	135.3	6.4	23.0	11.7
ACX 4757	AC	23	135.3	5.9	23.0	11.6
Vienna	SM	18	122.7	6.8	20.9	12.5
KXPM 876	SI	22	116.0	5.3	19.7	11.7
Primo	ST	27	115.7	4.3	19.7	12.8
Earliqueen	ST	28	109.4	3.9	18.6	11.6

**Ranked according to fruit weight. All weights in pounds. Tons/acre are extrapolated data.*