EVALUATION OF EASTERN STYLE MUSKMELONS

for SOUTHERN OHIO, 1999

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This Eastern style muskmelon cultivar trial compared 13 cultivars using 4 replications of each cultivar. Objectives were to evaluate potential muskmelon cultivars for their suitability in a southern Ohio growing season. The plots were located at the Ohio State University Enterprise Center research and demonstration plots in Hillsboro, Ohio.

METHODS:

Planting: Seeded 4/29/99 into 50- cell Pro Trays using a peat-vermiculite soilless mix. Cells were thinned as needed to 1 plant per cell. Plants were field planted on May 22, 1999 using a Water Wheel Planter.

Spacing: Rows were 5 feet apart, with plants set onto raised beds at 36" spacing between plants in the row. The beds were covered with black plastic mulch with trickle irrigation under the mulch prior to planting..

Soil Type: Haubstadt Silt Loam

Fertilizer: Applied 120 lbs. N, 120 lbs. P2O5 and 120 lbs. K2O per acre prior to laying plastic mulch according to soil test recommendations. 20-20-20 (1 lb./100 gallon water, 8 oz. per plant) with transplanting water.

Weed Control: 4 pt. / Acre Curbit 3EC pre-plant between rows on 6/17/99; hand hoed and cultivated as necessary.
Pest Management: 2.5 fl. Oz. Furadan 4F per 1000 linear feet of row applied as a 7 inch spray band over the row prior to laying the plastic mulch. Pounce on 7/21 and 8/24 at a rate of 5fl oz./A; Sevin XLR 1 qt./A 7/29, 8/16; Bravo Ultrex 2 lb./A on 7/21/, 7/29, 8/10, 8/19.

Irrigation: Trickle irrigated on 6/22, 6/29, 7/11, 7/14, 7/28, 8/2, 8/13 and 8/23
Harvests: August 11, August 18, August 24 and September 1

RESULTS:

There was average fruit set and yield throughout the harvest season. Bacterial Wilt, a disease vectored by the cucumber beetle became increasingly prevalent towards the end of our harvest. Harvest yield and quality attributes were collected and observed.

The cultivar Super Star had the largest average fruit weight for the season.

HMX 0509 and SXM 7204 had the largest total number of marketable fruit per acre for the season and the third largest early marketable ton per acre.

SMX 7119 had the second largest total number of marketable fruit per acre and the largest marketable ton of fruit per acre in the early harvest.

With field trials similar to this, Muskmelon crops can fit into the production scheme for southern Ohio growers. The growing

season and average daily heat units seem to be adequate to produce a high quality melon crop. The long range goal is to utilize the existing agricultural infrastructure of southern Ohio to introduce these muskmelon cultivars as an alternative crop for southern Ohio producers.

Table1. Yields and Comparisons from the Muskmelon Cultivar Evaluation Trial: Hillsboro, Ohio

Cultivar	Mkt. Ton/a	Mkt. Fruit/a	Avg. Fruit Wt.	% Soluable Solids
SXM 7119	16.42	5795	5.74	8.70
Super Star	13.26	4318	6.29	9.70
HMX 0586	12.38	5909	4.19	8.00
PSR 1295	10.74	4886	4.43	8.40
Apollo	10.16	4318	4.68	8.10
Quasar	10.10	3523	5.76	6.60
Legend	9.58	4773	4.20	5.80
SXM 7204	9.42	5909	3.17	11.40
Athena	9.40	4318	4.47	8.70
HXM 7607	7.33	3977	3.90	8.00
Sugar Bowl	5.91	3977	3.11	8.40
Pass Port	4.64	3068	2.00	7.50
ACX 6391	3.70	1818	2.55	7.80

Table 2. Seed Sources from the Muskmelon Cultivar Evaluation

Cultivar	Seed Source
SXM 7119	Sun Seed
Super Star	Harris Moran Seed
HMX 0586	Harris Moran Seed
PSR 12695	Rupp Seeds
Apollo	Rogers Northrup King
Quasar	Rupp Seeds
Legend	Rupp Seeds
SXM 7204	Sun Seed
Athena	Rogers Northrup King
HMX 7607	Harris Moran Seed
Sugar Bowl	Rupp Seeds
Pass Port	Rupp Seeds
ACX 6391	Abbott and Cob