

Horticulture Program HORT-00-09

EVALUATION OF EASTERN STYLE MUSKMELONS FOR SOUTHERN OHIO, 2000

Brad R. Bergefurd, Extension Agent, Horticulture Thom C. Harker, Research Assistant, Horticulture The Ohio State University Extension Enterprise Center 1864 Shyville Road, Piketon, Ohio 45661-9749 Phone: (740) 289-3727

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 4/25/2000 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 June, 12 2000 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: 4.0 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 @ 8 fl. Oz / acre on 6/29, 7/19 and 8/2.; Bravo Ultrex 2.7 lb./acre on 6/29, 7/19,8/2. Quadris @ 15.4 fl. Oz / acre on 7/7, 7/26, 8/9.

Irrigation: Trickle irrigated on 6/12, 6/21, 7/7, 7/14, 7/21, 7/28, 8/11 and 8/18.

Harvests: August 18, August 22, August 24, August 29 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 RML 8726 had the largest average fruit weight for the season.

RML 8726 and ACX 6898 had the largest total number of marketable fruit per acre for the season and the third largest early marketable ton per acre.

RML 8726 had the 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.

Table 1. Early Harvest from replicated Melon Cultivar Evaluation Trial: Ohio State University Centers at Piketon, Hillsboro, Ohio 2000 (Harvest: August 18 and August 24)

| | Marketable | Marketable | Average | |
|-----------|------------|------------|------------------|--|
| Cultivar | Ton/A | Fruit/A | Fruit Wt. (lbs.) | |
| RML 8726 | 6.13 | 1524.70 | 8.00 | |
| Star Fire | 2.89 | 1089.70 | 4.02 | |
| SXM 7119 | 2.30 | 762.30 | 5.92 | |
| Athena | 1.26 | 435.60 | 4.03 | |
| LSD | 4.70 | 1027.30 | 2.91 | |

Table 2. Total Harvest from replicated Melon Cultivar Evaluation Trial:

Ohio State University Centers at Piketon, Hillsboro, Ohio 2000

| | Seed | Marketable | Marketable | Average | % Soluble |
|-----------|--------|------------|------------|------------------|-----------|
| Cultivar | Source | Ton/A | Fruit/A | Fruit Wt. (lbs.) | Solids |
| RML 8726 | NV | 19.64 | 4683.00 | 8.39 | 9.30 |
| ACX 6898 | AC | 13.07 | 3921.00 | 6.72 | 12.66 |
| SXM 7119 | SS | 10.82 | 3812.00 | 5.75 | 10.93 |
| Star Fire | HR | 10.11 | 3485.00 | 5.61 | 7.90 |
| Athena | NV | 7.15 | 2940.00 | 4.87 | 10.93 |
| LSD | | 7.22 | 0.00 | 0.70 | NA |

Table 3. Seed Sources

| Abbreviation | Seed Company | Address |
|--------------|-------------------------|--|
| AC | Abbott and Cobb Inc. | Box 307, Feasterville, PA 19053-0307 |
| HR | Harris Seeds | 60 Saginaw Drive, P.O. Box 22960, Rochester NY 14692 |
| 1 | | |

| NV | Novartis Seeds, Inc. | P.O. Box 4188, Boise, ID 83711-4188 |
|----|-------------------------|--|
| SS | Sunseeds | 18640 Sutter Blvd., P.O. Box 2078, Morgan Hill, CA 95038 |