The Ohio State University

South Centers

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EVALUATION OF WATERMELON CULTIVARS FOR SOUTHERN OHIO, 2002

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This Watermelon cultivar trial compared 8 cultivars of seeded (diploid) and seedless (triploid) watermelons, using 3 replications of each cultivar. Objectives were to evaluate potential watermelon cultivars for their suitability in a southern Ohio growing season. The plots were located at the Ohio State University South Centers research and demonstration plots in Hillsboro, Ohio.

Methods

Planting: Diploid watermelons were seeded on 5/10/02 into 50-cell Pro-Trays using a peat vermiculite soil-less mix. Trays for the triploid watermelons was wetted on 5/9/02 and seeded on 5/10/02 into 50-cell Pro-Trays using a peat vermiculite soil-less mix. Trays were put into a germination chamber set at 75-80 degrees Fahrenheit for 48 hours. Plants were field-planted on June 11, 2002 using a Water Wheel Planter.

Spacing: Rows were 5 feet apart, with plants set onto raised beds at 36" spacing between each plant 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, approximately 8 oz. per plant) with transplanting water.

Weed Control: 4 pts / Acre Curbit 3EC pre-plant between rows on 6/10/02; hand-hoed and cultivated as necessary.

Pest Management: 24 fl oz/A of Admire 2F was added to transplant water at planting. Pounce at a rate of 5 fl oz./A; Thiodan 3EC 1.3 gt/A; Bravo Ultrex 2 lb/A on; Quadris 15.4 oz/A.

Harvests: Harvested three times starting on 8/13/02

Results

There was average fruit set and yield throughout the harvest season. Vine health and quality remained good throughout the season. Harvest yield and quality attributes were collected and observed.

The cultivar Mardi Gras was the seeded watermelon producing the largest amount of marketable pounds per acre, also producing the most fruit per acre. 1032 had the largest average fruit weight of the seeded watermelons that were on trial.

The cultivar Tri x Brand Carousel was the seedless watermelon producing the largest amount of marketable pounds per acre, also producing largest average fruit size of the seedless melons. 5015 had the largest number of marketable fruit per acre of the seedless watermelons that were on trial this year.

The growing season and average daily heat units seem adequate to produce high quality watermelon crop. With field trials similar to this, watermelon crops may fit into the production and marketing scheme for Southern Ohio growers.

Table 1. Yields and Quality comparisons from replicated Total harvest Watermelon cultivar trials in Southern Ohio: Ohio State University Extension South Centers, Hillsboro, Ohio 2002.

	Marketable	Marketable	Average	% Soluble	Melon
<u>Cultivar</u>	lbs/a	Fruit/a	Fruit Weight	Solids	<u>Type</u>
Tri x Brand Carousel	131733	10667	12.71	9.90	Seedless
Dillion	115600	11000	10.43	10.90	Seedless
Mardi Gras	115133	12667	8.44	10.90	Seeded
Jamboree	102933	10000	10.75	9.30	Seeded
5015	92367	12333	7.65	7.60	Seedless
Celebration	87267	9000	11.14	8.60	Seeded
Imagination	66467	7333	9.64	13.50	Seedless
1032	65733	4667	14.66	10.00	Seeded
LSD	NSD	5850.4	NSD	NA	NA

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