Speciality Melon Evaluation

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Interpretative Summary

Seven cultivars of specialty type melons including two honey dew cultivars were evaluated in 2002. Performance from all cultivars was less than optimum. Plants experienced 3 consecutive nights of freezing or near freezing temperatures some after transplanting into the field, thus delaying growth and plant vigor somewhat. Overall yields and fruit size were less than desired. The performance of 'Passport', an early maturing, specialty type melon has characteristics favorable for local fresh market production.

Introduction

In the muskmelon family, several other types from Europe and Asia, often referred to as specialty melons, are gaining in popularity in the United States. These melons are of highest eating quality and are smaller than typical cantaloupes and honeydew melons. Fruits average 11/2 to 2 lbs and are very sweet and aromatic and with distinctive smooth greenish to yellow rind. Most of these types of melons are not especially resilient for lasting quality and are recommended for local market or home garden use. They have a softer rind/skin and do not hold as well as shipping type cantaloupes and honeydew melons.

Materials and Methods

Seven hybrid cultivars were evaluated at Knoxville Experiment Station in 2002. Seeds were grown in the grown in the greenhouse in 4.5 in peat pots. Plants were transplanted to the field on May 14, 2002. Experiment was arranged in a randomized complete block with 4 replications. Individual plots consisted of 7 hills/plot spaced 36 inches apart and 2 plants per hill. Black plastic on 6 inch raised beds equipped with trickle irrigation was utilized. All plots were fertilized with 500 lbs/a broadcast application of 10-10-10 prior to mulch installation. Additional nitrogen totaling 60 lbs/a N was applied in weekly increments in drip irrigation with equal amounts from calcium nitrate, potassium nitrate and ammonium nitrate.

Results

Table 1. Numbers of marketable fruits of honeydew and specialty melon cultivars evaluated the University of Tennessee Knoxville Experiment Station, 2002.

ltivar Marketable

	number per acre	total lbs./acre
Early Dew	4209ab	21199abc
Honey Brew	2192b	10917bc
San Juan	1827b	7110c
Gailicum	1973b	5813c
Passport	7745a	32604a
Sonora	5553ab	2685ab
Rocky Sweet	3361b	15009ab

Means in a column followed by the same letter do no differ significantly according to Duncan's Mulitple Range Test at P=0.05.

Table 2. Weights of marketable fruits and sugar content of honeydew and specialty melon cultivars evaluated the University of Tennessee Knoxville experiment Station, 2002

Cultivar	Fruit Weight Marketable	Fruit Sugar Con
	(lb.)	(EBrix)
Early Dew	5.0ab	11.2a
Honey Brew	5.4a	10.9a
San Juan	4.0bc	10.3a
Gallicum	3.0c	9.2a
Passport	4.1abc	9.6a

Sonora	4.9ab	10.1a
Rocky Sweet	4.4abc	10.1a

Means in a column followed by the same letter do not differ significantly according to Duncan's Multiple Range Test at P=0.05.

This research represents one season's data and does not constitute recommendations. After sufficient data is collected over the appropriate number of seasons, final recommendations will be made through research and extension publications.