

PERFORMANCE OF 8 MELON SELECTIONS UNDER EARLY-SEASON CONDITIONS IN SOUTHWEST MICHIGAN

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OBJECTIVE:

To evaluate adaptability of seven cantaloupe and one honeydew melon variety to early-season southwest Michigan growing conditions.

SUMMARY:

Five melons ('Mistic', 'Odyssey', 'Aphrodite', 'Athena' and 'Superstar' were similar in total fruit yield (1203, 1117, 1097, 1084 and 1058 cartons/acre, respectively). 'Odyssey' had the highest yield of Fancy Fruit (438 c/a) and 'Superstar' had highest yield of No. 1 fruit (662 c/a). 'Minerva' had the highest average fruit yield (8 pounds/fruit).

METHODS:

Fertilizer: Prior to planting, 0-0-60, 33-0-0, and Solubor were broadcast and incorporated at 200, 150, and 10 pounds/acre, respectively. After planting 4-0-8-2(Ca) was applied through the drip irrigation at 1 pound nitrogen/acre/day. Application of 4-0-8-2 began on 11 June and continued through 18 August, 2003.

Fumigation/Herbicide: Beds were fumigated at shaping and plastic laying with 350 pounds/Acre 67/33% Methyl Bromide/Chloropicrin. Prior to planting, Curbit 3E at 2 pints/acre was applied between the plastic.

Planting: Seed was planted in a greenhouse on 24 April, 2003 and transplanted 22 May to raised, plastic mulched beds, 6" high and 24" wide. Beds were spaced on 5.5' centers and in row spacing was 24" (3960 plants/acre). The trial was planted and analyzed as a completely randomized design with five replications, eight plants/replication. Each plot was bordered by two guard plants.

Harvest and data collection: Harvest was conducted seven times; 13 August through 29 August. Fruit was graded at each harvest into Fancy, No. 1, No. 2 and cull. Soluble solids (SS) were taken for each grade at each harvest, except for culled fruit. Number of harvested fruit was also collected.

RESULTS:

Seven entries were cantaloupe and one ('Honeycomb') was a honeydew. Total yield for all entries ranged from 1203 cartons/a (c/a) for 'Mistic' to 776 c/a for E-1006 (Table 1). 'Odyssey', 'Aphrodite', 'Athena' and 'Superstar' did not differ significantly from 'Mistic' in total yield. 'Odyssey', 'Aphrodite', 'Mistic' and 'Minerva' had similar yield of Fancy Fruit, while 'Mistic' was lower in yield of No. 1 fruit than all other entries.

Differences were noted in soluble solids (SS) within and between grades. Fancy and No. 1 fruit generally had higher SS readings than No. 2 fruit. Only 'Minerva' had lower SS readings for Fancy fruit than other entries. 'Honeycomb' and 'Athena' were similarly high for SS readings of No. 1 fruit (12.4 and 12.2, respectively).

'Minerva' had the highest average fruit weight at 8 pounds. 'Odyssey' was similar at 7.2 pounds/fruit. E-1006, 'Superstar' and 'Athena' had the smallest fruit at 4.9, 5.4 and 5.7