

Specialty Melon Variety Observation Trial

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Introduction

This trial was designed to screen 24 different specialty melon varieties under Kentucky growing conditions. Honeydew, galia, charentais, canary and Christmas melons were evaluated in this trial.

Materials and Methods

All varieties were seeded on 25 April into cell packs (72 cells per tray) at the Horticulture Research Farm in Lexington. Cell packs were set on a mist bench with bottom heat until seeds germinated, then moved to a drier, cooler bench in the greenhouse, where the seedlings were thinned to one per cell. Plants were set into black plastic-mulched, raised beds using a waterwheel setter on 27 May. A single plot of each variety was planted. Each was 36 feet long, with 12 plants set 3 feet apart within the row and 6 feet between rows. Drip irrigation provided water and fertilizer as needed.

One hundred lbs N/A as ammonium nitrate were applied and incorporated into the field prior to bed shaping and planting. The plot was fertigated with a total of 9 lbs N/A as ammonium nitrate divided into five applications. The systemic insecticide Platinum 2 SC was applied with a hand sprayer as a drench to the base of each plant after planting, using the maximum rate of 8 fl oz/A. Foliar insecticide applications during the season included Sevin, Capture and Pounce. Fungicide applications included foliar applications of Bravo, fixed copper, and Quadris. Curbit preemergent herbicide was applied and incorporated between the rows, just as the vines began to grow off the plastic mulch. Two average sized fruit of each variety were measured and evaluated for flavor, soluble solids, interior color, and rind color as each variety reached harvest maturity.

Results and Discussion

The growing season was cool, and there were many rainy periods providing intense disease pressure. Early in the season the edges of older leaves turned chlorotic with some necrosis. This was evident in many cucurbit fields in Kentucky this season. These symptoms were probably nutritional deficiencies resulting from the many early season rains and cool temperatures. Very little virus was observed in the plot. Vine cover was thick, with little plant death. Fruit were generally harvested twice a week. Despite the rain, melon sugar contents were high, probably due to the cool weather. Variety evaluation results can be found in Tables 1 and 2.

Galia Melons. Creme de la Creme, Galileo, Vicar, Arava, HSR 4238, and Sweet Dreams were the best galia melons. All had excellent eating quality. Creme de la Creme, Galileo, and Vicar had very low cull rates. Galileo had a slightly stronger, but pleasant musk flavor. All of these varieties were very attractive for galia melons, with the exception of Sweet Dream, our standard for quality. Galia melons must be harvested as soon as the rind starts to turn yellow. Otherwise, the melons rapidly become overripe and unmarketable. Galia melons do not have a long shelf life. After the initial melon set was harvested, most varieties continued

producing fruit, although the number and quality harvested decreased.

Honeydews. Fantasma, a green fleshed honeydew, and Honey Orange, an orange fleshed honeydew, were the best of the four varieties evaluated. Both had excellent flavor, very high sugar contents, attractive rinds, and minimal cracking. Fantasma was a large melon averaging 6.9 lb. Honey Orange did not have any culls. The orange-fleshed honeydews were top sellers at the local farmers' market.

Ananas. Three of the ananas melons, HSR 4208, HSR 2528, and HSR 4220 looked very promising. All had excellent eating quality, were uniform in size, and were fairly large, averaging around 6 to 7 pounds. They were all very attractive and had a light to medium netting. Ananas melons ripen rapidly in the field, necessitating frequent harvests. These should be harvested at the first sign of exterior yellowing. Like galia melons, storage life is fairly short.

Canary. One canary melon was evaluated in this trial, HMX 1602. The yield was very high and there were no cull fruit. This variety was very attractive and was very uniform in size, although it had a little surface checking. The sugar content and flavor, while good, were below those of the canary melons in the replicated trial.

Charentais. Two charentais melon varieties were evaluated. The Serenade variety performed very well. It had excellent eating quality, was uniform in size and produced no culls. Fruit cracking was minimal. Severe fruit cracking is a characteristic of charentais melons and our past experience has almost convinced us that these could not be grown profitably in Kentucky. The rind on Serenade was not as attractive as that on some other varieties and it developed a creamy exterior with dark green spots at maturity.

Christmas. The St. Nick Christmas melon, which we have tested in the past, again produced high quality melons. However, fruit cracking was considerably more severe than in the past. This variety has a very crunchy flesh that a number of consumers find objectionable, because they do not expect this in a melon. Others find this crunchiness delightful.

Acknowledgments

The authors would like to thank the following for their hard work and assistance in the successful completion of this trial: Dave Lowry, Phillip Bush, Larry Blandford, Derek Law, Audrey Horrall, Barry Duncil, Courtney Bobrowski, Curtis Gregory, Justin Clark, Selvapasanna Sanjeevijulian, Ashok Swaminathon, Saravanna Kannan, Kalyan Tangirala, Teerasak Tiamdao (Oa), Tanasit Laosomboon (Koh), Spencer Helsabeck and John C. Clark.