

Specialty Melon Variety Evaluation, 2003

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Introduction

Fifteen specialty melon varieties were evaluated in this trial. These included honeydew, canary, Sicilian, Piel de Sapo, and specialty hybrid types of melons. This trial was designed to evaluate a number of different specialty melons under Kentucky conditions.

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. Each plot was 21 feet long, with 7 plants set 3 feet apart within the row and 6 feet between rows. Each plot was replicated 4 times in a randomized complete block design with 6 feet between replications. Drip irrigation was used to provide 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 nine lbs N/A as ammonium nitrate divided into eight applications over the season. 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. One fruit from each replication was measured and evaluated for flavor, soluble solids, interior color, rind color and net type.

Results

The growing season was cool and there were many rainy periods providing intense disease pressure. Even though the melons were on raised beds, the early season rain and cool temperatures produced a nutritional deficiency that turned the edges of older leaves chlorotic with some necrosis. This was evident in many cucurbit fields in Kentucky this season. 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. Harvest and evaluation data for these melons are in Tables 1 and 2.

Honeydew All but the White Skinned HD #6 performed very well and all had excellent flavor and sugar contents. Sundew had the highest yield of this group, closely followed by Honey Brew, as occurred in last season's trial. This is the third year in a row that Sundew and Honey Brew have been the top yielding honeydew melons in these trials. Both of these varieties have large fruit in the 6-7 lb range. Sundew was rated as having the most attractive rind and had a low number of culls. Honey Pearl and San Juan have smaller fruit, in the 3 to 4 lb range. Honey Pearl

and Orange Blossom have creamy white and orange flesh, respectively. All other varieties have light green flesh. Both Honey Pearl and Orange Blossom had low cull numbers. Orange Blossom also looked good in this trial although it was a little lower yielding than several of the other varieties. The orange-fleshed honeydews were very popular at the local farmers' market. The Honey Orange variety in the observation trial (see report in this publication) had a higher flavor rating, sugar content and yield than Orange Blossom in this trial, however both will need to be grown side by side and evaluated. Honeydews were harvested when the exterior exhibited a cream blush and the ground spot was a cream color.

Canary Golden Beauty and Dorado again performed very well this season. Golden Beauty had no culls while Dorado had 6 percent culls. However, Dorado was rated, as it was last season, as having a slightly better flavor. Both varieties were very attractive and uniform in size. Sugar Nut was evaluated for the first time. It had an excellent yield, very uniform fruit size, low cull percentage, and was roughly half the size of Dorado and Golden Beauty. However, Sugar Nut showed some longitudinal checking on its surface as it ripened, making it slightly less attractive.

Sicilian Branco Perfecto was the only Sicilian melon evaluated this season. This melon has a wrinkled rind, which makes it stand out. Fruit quality and sugar content were very good. This season this variety showed some surface checking at maturity and a higher number of culls.

Piel de Sapo Sancho was judged the best tasting melon in this trial and was very highly rated in informal taste tests. It sold very well at the Lexington farmers' market and was requested by returning customers. The fruit has a dark green exterior, which was very attractive. This variety had 14 percent culls, primarily due to rind cracking.

Specialty Hybrid Sprite and Angel were the two specialty hybrid varieties evaluated. Sprite had outstanding flavor, quality, appearance and fruit uniformity. The 6 percent cull rate was due to cracking and some decay at the blossom end of the fruit. Sprite was very acceptable to consumers in retail markets and is highly recommended. Angel was a very attractive melon, with high sugar content, but it had a grainy, objectionable flesh texture.

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