

Abstract

In 2003, mini seedless watermelons averaging about 2.5 kg became available to the American consumer. The first mini seedless watermelons were sold under the brand names of PureHeart and Bambino and were developed by Syngenta and Seminis. Vegetable Seeds, respectively. Other seed companies have developed their own... mini seedless watermelon cultivars. The goal of these studies was to evaluate various mini seedless watermelons for yield and quality for commercial production in the United States.

Twenty six cultivars or lines (cultigens) of mini seedless watermelon were evaluated in 2004 in Kinston, NC and Charleston, SC. A randomized complete block design was employed. Each cultivar treatment was replicated three times at each field site. Watermelons were grown on black polyethylene mulch and fertigated through drip tape. Between row spacing was 2.72 m and in-row spacing was 0.46 m. There were three harvests per site and each harvested fruit was weighed. Objective quality measures were taken which included interior color, rind thickness, brix, length diameter ratio and hollow heart.

The cultigens which produced the highest cumulative marketable yield (> 13,500 fruit/ha) were Syngenta cultigens: Petite Perfection, Precious Petite, RWT 8149, RWT 8154, Bibo, and RWT 8162. Cultigens developed by other companies that yielded well (11,000 marketable fruit/ha) were PS 4911714, HA 5130, Mielhart, and Vanessa. Mini Yellow was the only cultigen with a canary yellow flesh rather than a red flesh. Rinds were thinnest on all the Syngenta cultigens, compared with most other cultigens which were evaluated. The brix reading for all cultigens ranged between 10.6 and 12.0. Fruit of most cultivars were round with some cultivars producing oval fruit. Hollow heart was minimal or nonexistent in most cultigens. The cultigens sold under the Pureheart and Bambino brand names all had very high yields and quality. There are a number of cultigens that are not sold under a contract basis which produced very acceptable yields and quality; they were HA 5130, Mielhart and Vanessa. Growing and marketing mini seedless watermelon may provide an opportunity to diversify ones produce business and reap additional revenue and profits.