THE 'TORBERT' MANGO

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Abstract. Commercial mango growers in Florida have traditionally favored heavy-bearing, large trees, which produced large, mild-flavored fruit destined for the United States market. Great changes have occurred in the tropical fruit industry of Florida in recent years, resulting in a significant reduction in the size and number of mango orchards. In the Tropical Fruit Program of the Fairchild Tropical Botanic Garden (FTBG) there is now emphasis on smaller mango trees and cultivars, which have appeal for many different ethnic groups in the USA and elsewhere. Many mango cultivars, which previously were rejected by commercial growers, are now being evaluated with these changed criteria in mind. The 'Torbert' mango is one such cultivar.

Origin

The 'Torbert' mango originated in Goulds, Fla. during the 1940s. It was selected by Mr. and Mrs. Tommy Torbert, and its parentage is not known. The first written record for this selection was an evaluation form, "Quality Check for Mangos", submitted on 27 June 1952 at the Annual Festival of the Florida Mango Forum. The Torbert family considered the selection to be promising and gave graftwood to Seymour Goldweber and Roy O. Nelson of the University of Miami Experimental Farm at Perrine, FL, and other persons in the area. A few trees were planted in home gardens in Miami-Dade County, but there is no record of nursery sales or commercial planting of the cultivar there or elsewhere.

Brief descriptions of this mango have been published under the names of 'Torbet', 'Torbit', and 'Tolbert' (Campbell, 1992; Krochmal, 1963; Krochmal and Salgado, 1961). We now consider the correct name to be 'Torbert' after the persons who discovered the cultivar, and who still live in the area of Homestead, Fla.

In 1981 C. W. Campbell and R. J. Campbell found one tree of the 'Torbert' growing in the mango collection of the Escuela Agricola Panamericana near Tegucigalpa, Honduras, where it had been planted many years earlier by Dr. Wilson Popenoe under the erroneous name 'Tolbert'. We found no records of its acquisition in the school files, but older faculty members stated that it had been obtained from Mrs. Isabel Krome of Homestead, FL. We took graftwood back to Florida and grafted trees were planted in several locations. Later we found that Roy O. Nelson still had an older tree of the 'Torbert' at his farm near Homestead. Other old trees may still exist in Florida, but we are not aware of any.

Description

The 'Torbert' tree is moderately vigorous and mediumsized, with a rounded canopy. Grafted trees produce fruit in 2 to 3 years after planting, and are consistently productive thereafter. They can be maintained at a small size by periodic pruning, which should be done soon after fruit harvest in June or July.

The fruit has a unique, nearly spherical shape (Fig. 1). External color is yellow-orange, with a prominent red blush when exposed to the sun during development in a warm climate. We have observed fruit production in Florida, at elevations of less than 10 m above sea level, and in Honduras, at an elevation of approximately 800 m above sea level. The trees grow well at both the lower and higher elevations. Fruit grown in the hotter climate of Florida usually has more red surface color than fruit grown in the cooler climate in Honduras. There are numerous large russet dots on the skin. The skin is thick, tough, and moderately adherent to the pulp. The fruit is relatively resistant to handling injury.

The fruit has a length of 9-10.5 cm, breadth of 8-10 cm, and thickness of 9-10.5 cm. Weight varies from 360-440 g (sometimes greater). The flesh is lemon-yellow in color, with a mild, sweet, agreeable flavor. In rainy years the flavor may be insipid. The aroma is pleasant, but weak. The flesh is firm, with a moderate amount of fiber. The stone is thick and woody, with a polyembryonic seed filling 90-100% of the cavity. Ripening season is June to mid-July in Florida.

The leaves and fruit are relatively tolerant of mango anthracnose and powdery mildew diseases. Observations in areas where *Anastrepha* fruit flies occur indicate relative resistence to infection of the fruit.

Discussion

Although the 'Torbert' mango attracted the favorable attention of some experienced mango growers when it was first introduced in Florida, it never become well-known to com-



Fig. 1. Torbert mango. For a color photograph, please contact senior author.

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mercial or amateur growers. That is not surprising because it did not meet the requirements for a "commercial" mango, mainly those of large tree size, large fruit size, brilliant red color, and relatively mild flavor. The situation is now greatly different in the mango-producing world. As producers, handlers, and consumers grow more sophisticated they want more diversity in color, size, flavor, texture, and season of maturity.

It has become highly desirable to grow small trees which have the potential for high production per unit of land area. In places like Florida, "estate" type agriculture involves relatively small plantations, with production destined for specialized ethnic markets. Older cultivars like 'Tommy Atkins' are being seriously over-produced in many regions and the consequent flooding of the markets in consumer countries results in low prices and poor profits to growers and packers. The search for new and different cultivars is one way to deal with this situation, and hence is one of the principal goals of the Tropical Fruit Program of the FTBG.

Literature Cited

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