

Recent Mango-cultivar Introductions to South Africa

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ABSTRACT

The mango cultivars, Osteen, Parvin, Palmer, Pope, Van Dyke, Haden, Nam Dok Mai, Allen, and R2E2 were introduced into South Africa during 1992 or 1993. These cultivars are briefly described. Osteen, Parvin, Nam Dok Mai, Allen, and R2E2, are new introductions to South Africa.

UITTREKSEL

Die mango kultivars, Osteen, Parvin, Palmer, Pope, Van Dyke, Haden, Nam Dok Mai, Allen, en R2E2 is gedurende 1992 of 1993 in Suid Afrika ingebring. Hierdie kultivars word kortliks beskryf. Osteen, Parvin, Nam Dok Mai, Allen, en R2E2, is vir die eerste keer in die Land ingebring.

INTRODUCTION

In July 1992, during a visit to Puerto Rico by the author (sponsored by the South African Mango Growers' Association), bud-wood of the mango cultivars Osteen, Parvin, Palmer, Pope, Van Dyke, and Haden was obtained from the University of Puerto Rico's Agricultural Experimental Station at Rio Piedras. Ten defoliated terminal shoots were obtained per cultivar. On arrival in South Africa, this material was grafted on Sabre seedlings obtained from the mango nursery at Constantia Estate (Merensky Holdings). The grafted trees then underwent quarantine at the plant quarantine station in Buffelspoort, after which they were delivered to the Constantia Estate nursery for propagation.

In March 1993, during a visit by Josua Colyn (General Manager, South African Mango Growers' Association) to Australia, graft-wood (defoliated terminal shoots) of the mango cultivars Nam Dok Mai, Allen, and R2E2 was obtained. This material was grafted to Sabre on arrival, following which it underwent quarantine at the plant quarantine station in Buffelspoort and propagation at the Mariepskop Estate nursery (Merensky Holdings).

The cultivars Osteen, Parvin, Nam Dok Mai, Allen, and R2E2 are new introductions to South Africa. Palmer, Pope, and Van Dyke were previously obtained by the Institute for Tropical and Subtropical Crops, but were never released to growers.

Haden is grown commercially on a small scale in South Africa. There is controversy concerning the genetic authenticity of the Haden plantings that currently exist. Graft-wood of this cultivar was therefore obtained.

A brief description of each of the introduced cultivars follows:

ALLEN

Very little documented information is available on this cultivar, which is sometimes referred to as G. Allen. Allen originated in Western Australia, where it is a mid-season cultivar.

HADEN

Haden, a chance seedling of Mulgoba - an Indian import to Florida at the turn of the 19th century, is thought have been "fathered" by common Turpentine. Its ap-

pearance revolutionized mango growing worldwide, it being the first of the popular Florida mango cultivars to emerge and the seed parent of Osteen, Parvin, Tommy Atkins and Zill.

Haden is notorious for being a poor and inconsistent bearer, although it is reported to perform well in Tropical America. The fruit are highly attractive on ripening in view of their excellent eating quality and bright colour at this stage. The tree is vigorous, and develops a large, spreading canopy. Haden is considered to be an early to mid-season cultivar. It exhibits little tolerance to disease, and is losing popularity in South Africa mainly due to its poor and irregular bearing habit in the areas where it is grown.

NAM DOC MAI

This regular bearing, mid-season cultivar was popularized in Thailand. The tree develops a dense, medium sized canopy. The seed is polyembryonic. The fruit is fibreless, oblong and has a prominent nose. It develops little blush colour. The green ground-colour becomes yellow on ripening. The fruit has an exceptionally sweet taste. It is often eaten "green" in Thailand, due to its low acid content. The inflorescences of this cultivar are reported to be highly susceptible to powdery mildew.

OSTEEN

This late cultivar develops a medium sized, dense canopy. The fruit become large. On exposure to the sun, they attain a lavender colour whilst attached to the tree due to the development of a purple blush. The ground colour becomes yellow-orange on ripening. The pulp is fibreless and the seed monoembryonic.

PALMER

This heavy and regularly bearing cultivar develops an upright, open canopy. The fruit develop a dark red to crimson blush early in the season. The ground colour becomes yellow-orange on ripening. Colour-break often occurs whilst the fruit are still attached to the tree. The pulp contains little fibre, and the seed is monoembryonic. Susceptibility to anthracnose is reported.

PARVIN

The fruit of this mid- to late-season cultivar are well known for having excellent storage and handling char-

acteristics. Post-harvest shelf-life is long, and tolerance to anthracnose is exhibited. The tree is vigorous, and develops a rounded, dense canopy. Bearing is consistent. The fruit is attractive, having a greenish-yellow ground colour on ripening and developing a dark red to crimson blush in response to sun exposure. Blush colouration is often observed to cover up to two-thirds of the fruit's surface. The pulp contains little fibre, and may develop internal breakdown. The seed is monoembryonic.

POPE

Pope arose in Hawaii. Its seed parent is Irwin. It is late and crops both heavily and regularly. The attractive fruit contains little fibre and shows some tolerance to anthracnose.

VAN DYKE

This heavy and regular bearing, early to mid-season cultivar has fruit that develop exceptional colour. The ground colour is bright yellow on ripening, and sun exposure results in the development of a bright red to crimson blush. The fruit, which tend to be small in size, exhibit good storage characteristics and tolerance to anthracnose. The pulp is prone to cavity development at the stem-end. It contains little fibre, and the seed is monoembryonic. Internal breakdown occurs, although it is reported that by avoiding excessive nitrogen fertilization, the incidence of this disorder is reduced. The tree develops a large, open canopy.

R2E2

This early to mid-season cultivar is of Australian origin. Kent is its seed parent. The fruit is fibreless and becomes exceptionally large, averaging in the region of 900 g. It develops good colour (red blush, yellow ground colour on ripening) and flavour, and the seed can either be mono- or polyembryonic. The tree is reported to be highly vigorous. Fruit retention is low.

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