

Washington Navel

Origin

The origin of the Washington or Parent navel, the source of all navel trees, is controversial as it was originally thought to have originated in Bahia, Brazil in the early 1800s. There is however evidence to prove the existence of navel oranges prior to this time. The world expansion of navels however only really started after the Bahia navel was sent to Washington in 1870 and since then it has become one of the most popular eating oranges world wide.

Ownership

Open.

General Description

A mid maturing navel with excellent internal quality and appearance. In the East Cape citrus areas fruit matures late May to mid June. This navel selection has shown such promise through the years that it makes up a large percentage of navel plantings throughout the world.

Tree Characteristics

The tree is similar in growth, shape and yield to other navel selections. Vigour is also similar to normal navels.

Rootstock Options

Although many older plantings still exist on Rough Lemon rootstock in South Africa, suggested rootstocks are Swingle citrumelo and Carrizo/Troyer citrange, depending on soil type and whether plantings are on new or replant ground. Rootstocks inducing lower sugars and acid levels are not advised.

Fruit Characteristics

Fruit size is a uniform medium large and navel ends are

medium to small. Fruit shape is round. The fruit rind colour is uniform and develops a deep orange at maturity. Peelability and rind oil are reasonable and similar to most other navel selections. Internal flesh colour is orange, and flesh texture is tender. The flavour is excellent with high sugars, acid levels and a ratio of 10:1 early in June. Fruit size ranges from 85 to 70 mm (Count 56 to 88) with normal crops.

Production

Yields of 50 to 60 tons per hectare are normal for mature orchards. Young trees bear well.

General

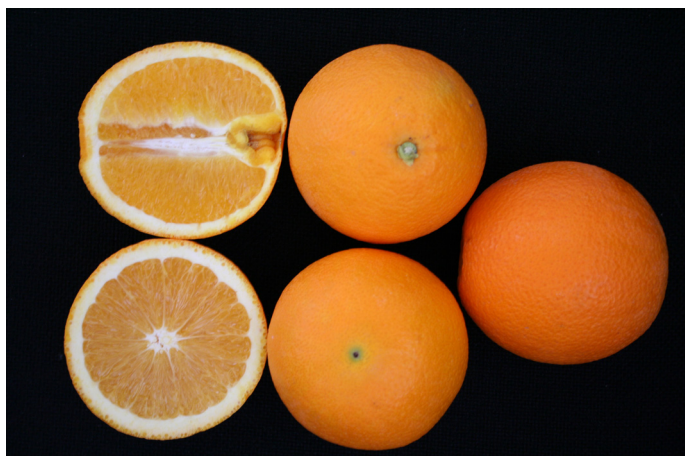
The Washington does not require crop manipulation and it is not susceptible to any pests and/or diseases other than those common to other navel selections. Harvest, packing and shipping requirements as well as post harvest disorders are as for other navels.

Status, Area Suitability and Availability

Commercial - suitable navel areas. Commercial quantities of propagation material are available from the Citrus Foundation Block.

Key References

The information in this fact sheet is based on evaluations by Citrus Research International.



Washington navel fruit showing typical rind texture, shape and navel.



Version 1: May 2012

Evaluation Data

Internal Quality - Washington Navel on Troyer citrange - Count 56 - East Cape Midlands.						
Date	Juice %	Brix	Acid	Ratio	Seed	Colour
28/05/2008	52.1	11.7	1.24	9.4	0	2-3
04/06/2008	53.6	11.6	1.10	10.5	0	1-2
11/06/2008	51.9	10.7	1.02	10.5	0	1

Count Distribution

Count	36	40	48	56	64	72	88	105
%	0.3	1.4	4.1	20.2	24.5	24.3	18.0	7.2

Production

105.2 Kg per tree and 44 tons per hectare at 6 x 4 m spacing.

Export %

Grade	Percentage
1	56
2	22
3 & 4	22

Note: These data are from 9 year old trees in the Patensie region of the Gamtoos River Valley in the East Cape for the 2008 season.

Comments

The Washington is an excellent quality navel that forms a substantial percentage of navel plantings and now fills the mid season period.



Disclaimer: Information contained in this publication is provided as general advice only. For application to specific circumstances, professional advice should be sought.