

Miyagawa Wase Satsuma

Origin

A limb sport originating in Japan from the seedy Zairai, an old Satsuma selection. The selection was released in South Africa in 1991.

Ownership

Open.

General Description

It is the most extensively planted selection in Japan. Tree size is small with good yields and fruit size. Maturity is early with a sharper flavour than Miho Wase.

Tree Characteristics

The tree is less vigorous and smaller than the Miho and Okitsu Wase selections with a spreading, open growth habit. Production is good, being better than Okitsu Wase.

Rootstock Options

Rootstocks used in South Africa include Carrizo and Troyer citrange. Due to Satsumas having inherently low sugars, rootstocks inducing low sugars like Rough Lemon, Volckameriana and Rangpur lime are not recommended. Swingle citrumelo is not recommended due to delayed rind colour. Cleopatra mandarin is not recommended due to delayed cropping. Choice of rootstock also depends on soil type and whether plantings are on new or replant ground.

Fruit Characteristics

Fruit size is slightly larger than Okitsu and Miho Wase. Fruit are smooth and fairly flat. Of the three selections, Miyagawa has lower ratios, resulting in a sharper flavour. Internal flesh colour is deep orange and the fruit is seedless. Maturity is from early April about two weeks after Miho Wase.

Production

Yields of 50 to 60 tons per hectare are normal for mature orchards.

General

Deficit irrigation may be necessary to enhance sugar levels. Degreening can be necessary for the first harvest in late March. Satsumas are degreened successfully. As with all Satsumas, nitrogen should not be applied too late. No specific pest and disease problems have been noted under South African conditions, except for fruit piercing moths (*Serrodus partita*) that occur erratically approximately every 10 years.

The moths live in the semi desert regions and in years when abnormally high rainfall occurs in the late summer the moths breed profusely due to over abundance of vegetative growth on the indigenous wild plum trees (*Pappea capensis*). This causes a migration of the moths away from their breeding grounds and in so doing they pass through regions such as the East Cape citrus areas where they cause varying degrees of damage on early maturing cultivars such as Satsumas. Control options are limited and there is little that can be done to eradicate the moths once on the move. For further details refer to the section on Fruit Piercing Moths by S. D. Moore in the Production Guidelines.

Sunburn can be a problem in dry climates with terminal fruit being the worst affected. Wind blemish can reduce exportable fruit. Satsuma mandarins have a short harvest period which usually lasts 2 - 3 weeks, although selective picking can extend this period. Harvest, packing and shipping requirements as well as post harvest disorders are as for other Mandarins.



Seven year old Miyagawa Wase Satsuma tree on Swingle citrumelo showing typical crop and fruit size (Tree height = 2.0m)



Version 1: May 2012

Status, Area Suitability and Availability

Satsumas are the most cold hardy of all the mandarin selections. The Miyagawa Wase appears to be suited to southern Africa's cooler coastal and cold inland climatic zones where there are a number of commercial orchards. 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.

Evaluation Data

Internal Quality - Miyagawa Wase on Carrizo citrange - Count 2 - East Cape Midlands						
Date	Juice %	Brix	Acid	Ratio	Seed	Colour
25/03/2010	60.7	10.0	1.18	8.5	0	5-6
31/03/2010	56.1	9.9	1.12	8.8	0	5
07/04/2010	56.1	10.0	1.06	9.4	0	4-5

Count Distribution

Count	1XX	1X	1	2	3	4	5
%	8	18	18	20	15	12	9

Production

80 Kg per tree and 58 tons per hectare at 5.5 x 2.5m spacing.

Export %

Grade	Percentage
1	65.0
2	15.0
3	6.0
4	14.0*

*Mainly sunburn

Note: These data are from 8 year old trees in the Adelaide region of the East Cape Midlands

Comments

The Miyagawa Wase has been planted on a limited scale in South Africa to date. It matures after Miho Wase and before Kuno and other later Satsuma selections. As such it is a useful gap filler. It is a very good quality Satsuma amongst a series of selections that need special attention to produce good quality fruit.



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