



Allesbeste

"Kwaliteit weens passie"

"Quality through passion"

Maluma

History and Development

Maluma, a predominantly Guatemalan cultivar with some Mexican genes, was discovered in the early 1990's by Mr. Dries Joubert on his farm Maluma, South Africa, as a chance seedling of unknown parentage, due to its similarity to Hass.

Mr. Joubert handed over Maluma to Allesbeste Nursery, under the watchful eye of Dr. Andre Ernst, for further development and research. Maluma was then evaluated in respect of numerous factors of importance to both the producer as well as the consumer, such as productivity, exportability, shelf life, ripening, quality, internal as well as external appearance, taste and many other.

After Maluma's potential was realised protection of Plant Breeder's Rights in South Africa was applied for and granted during 2004. Maluma is the first South African cultivar to reach the world stage by having achieved full export status during 2006. Maluma was officially unveiled to the world at the VI World Avocado Congress in Chile, November 2007.

Since 2007 many entities from different countries across the globe have expressed their interest in this new early bearing Hass-like cultivar. Maluma currently enjoys full plant protection in South Africa (ZA 20043215) and the USA (US PP21,099 P3). Plant Breeder's Rights are pending in Australia, New Zealand, Peru, Chile, Israel, Spain and Morocco.

Maluma is actively growing in stature, with its limits still unknown.

Cultivation

"...lends itself tremendously to high density planting..."

Maluma is an early Hass-type which, depending on climate, is more or less 4 to 6 weeks earlier than standard Hass. It is also a very precocious cultivar and produces high yields from the start.

The tree has a distinctive central leader with prominent lateral branches, and without manipulation typically grows in an A-shape. Maluma lends itself tremendously to high density planting without compromising on production as these trees have superior light penetration. Maluma does not grow as vigorously as Hass, and therefore requires no use of growth retardants. Similar to Hass the flower is an A type which is the preferred type suitable for all avocado producing regions. Maluma's fruit are generally bigger than that of Hass, with fruit weight ranging from 150g (count 26) to 400g (count 10), peaking on 250g (count 16).

Maluma is only marginally susceptible to fruit diseases, with manageable physiological disorders.

Pruning is suggested on Maluma. Due to the magnificent frame that the trees provide naturally, it is a very easy task and can even be done sufficiently by hand.

Tests are currently being conducted on the effect of different modern rootstocks on the precocity and productivity of Maluma, and will be reported on soon.



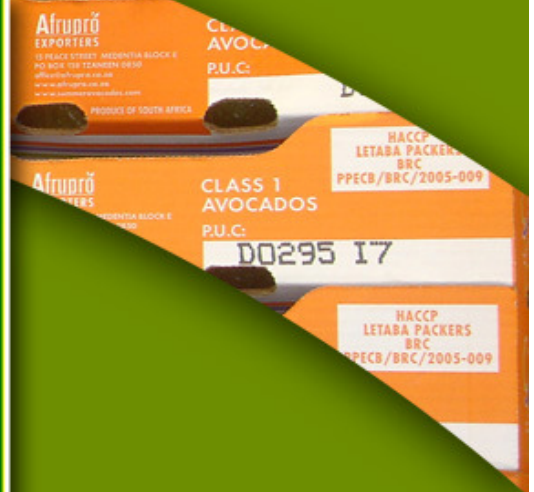
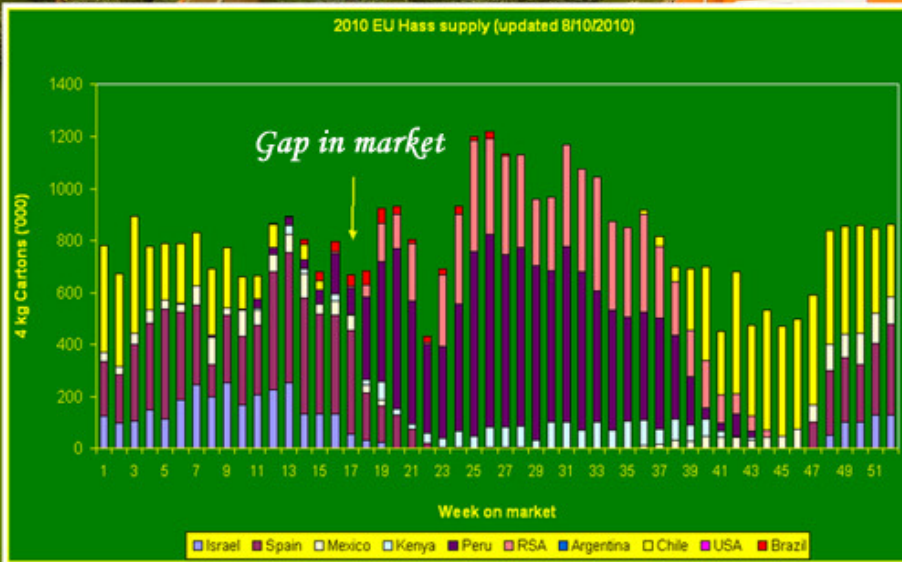
Characteristics

The following is a short comparison of key characteristics between Maluma and Hass

CHARACTERISTICS	MALUMA	HASS
Race	Guatemalan with some mexican genes	Guatemalan with some mexican genes
Canopy shape	Upright & Triangular	Fairly round, Circular
Canopy structure	Central leader with lateral branches	Several vertical leader branches
Canopy density	Good light penetration	Dense, poor light penetration
Growth Vigour	Thrifty	Medium - vigorous
Growth manipulation	Yes, pruning without growth retardant	Yes, pruning with growth retardant
Plant density	400 – 800 / Ha	200 – 400 / Ha
Precocity	High	Intermediate
Bearing pattern and productivity	Fairly constant and high	Alternative and moderate
Harvest Period (RSA)	Week 12 – 24	Week 18– 33
Flower group	A	A
Fruit internal frost damage (orchard)	None	Severe to moderate
Fruit size	150 – 400g	100 – 330g
Fruit shape	Pyriform	Obovate
Fruit colour (ripe)	Purple-black	Reddish-black
Fruit appearance	Shiny	Dull
Seed as % of fruit	10 – 15%	20 – 25%
Skin thickness	1–2 mm	1–2 mm
Skin texture	Semi-rough, pebbly and leathery	Semi-rough, lightly pebbly and leathery
Lenticel damage	Tolerant	Susceptible
Maturity	≤ 78% moisture	≤ 77% moisture
Flesh texture	Smooth and light fibre	Smooth and light fibre
Shipping and storage ability	Excellent and acceptable, improved by Smartfresh®	Excellent and good
Cercospera	Resistant	Resistant
Anthraco nose	Tolerant	Tolerant
Ring neck	Less significant	Present
Physiological disorders	Negligable if managed	Negligable if managed
Insect tolerance	Fairly tolerant	Fairly tolerant



Marketing



Maluma has been marketed in both the UK and Europe with tremendous success. As the graph displays, Maluma's arrival in Europe, being 4 weeks earlier than standard Hass, fits perfectly into the gap created in the Hass market during the changeover from northern to southern hemisphere supply countries. Note, however, that the second gap in the market was only due to the Transnet strike of 2010 in South Africa, and does not usually occur. Maluma outperforms early Hass on its perfect skin colouring. Due to its skin texture Maluma develops less skin blemishes during handling. As a result Maluma is less prone to lenticel damage and therefore on appearance outperforms Hass on arrival in the marketplace.

Maluma performs the best by far of all dark-skinned (Hass and Hass like) cultivars based on return per hectare, year on year, for South African producers. Its success speaks for itself and the relative demand from intermediaries, and accordingly producers, are growing season on season.

Maluma is an attractive Hass-type by being a naturally glossy fruit, with its pebbly skin compared to the dull smooth-skinned South African Hass. Maluma has been tested intensively in the UK- and South African ripe-and-ready programs for the last 10 years. Maluma is well suited for these markets as the fruit colours up and ripens very evenly and it turns dark purple instead of reddish as with standard Hass. Ripening is also a very easy process and is possibly one of the best suited cultivars for these programs.

To secure quality on arrival with acceptable shelf life the time and temperature management during picking, packing, shipping and storage is critically important. To achieve this, post harvest protocols have been developed, prescribed and is constantly re-evaluated for Maluma.





Consumer

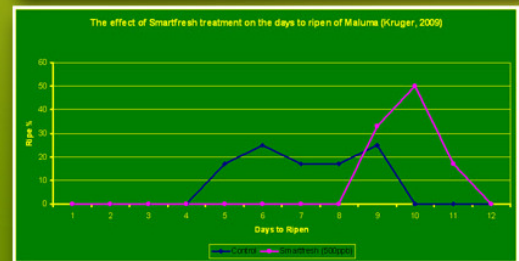
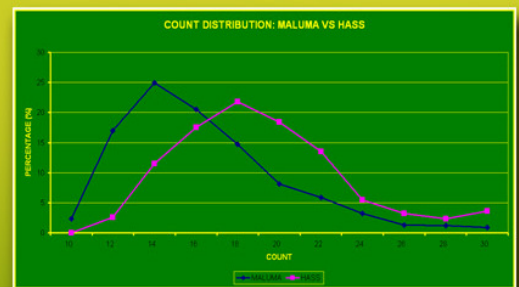
"...Maluma provides the consumer with confidence..."

Since Maluma's introduction vast amounts of time was dedicated to uncovering the myths and potential of this cultivar in the marketplace.

Maluma initially ripened very quickly and it was soon realised that this was a potential threat for the cultivar as it complicated the handling of the product. Fortunately, through the careful management of the packing process, the application of Smartfresh® (1-methylcyclopropene) and cold chain management, these problems no longer pose a threat, but rather provides a product that, when triggered, ripens effectively and efficiently with high internal quality. Maluma provides the consumer with the confidence that, even if they were to buy a hard product, it would ripen easily.

Maluma is attractive with its shiny-black presence on shelves and its glossy exterior merely introduces the true wonder of the fruit in its internal appearance and delectable taste. The greater fruit flesh percentage in Maluma also distinguishes it from Hass.

Maluma prides itself on a rich nutty taste and was chosen during a blind panel test, that included members of a leading British supermarket group, as the best tasting avocado when compared to Hass and other Hass-like selections present in the test.



The first graph illustrates the difference in fruit size between Maluma and Hass, where Maluma peaks on count 12 to 20 (333g - 200g) and Hass on count 14 to 22 (286g - 182g). The second graph illustrates the effect of Smartfresh® on days to ripen, and the advantage thereof in that most fruit ripen within 3 days of each other, which improves uniformity.

"...rich nutty taste..."

Conclusion

Allesbeste commits itself to Maluma and the development of this unique and modern, South African cultivar. Maluma is still in its humble beginnings but is definitely setting the pace on many criteria of importance to both the market and its role-players as well as the farmer himself.

The vision with Maluma is not to merely dump it on the market and let people produce and sell it at its own detriment because the needed means weren't provided, but that it will be managed carefully in a responsible way to ensure the future of this unique offering. We are committed to building relationships with all stakeholders in order to enable us to be up to date with any new developments or issues that may arise regarding the cultivar. We will always welcome your feedback or requests. No product was born without challenges, but these challenges may not be allowed to become problems if they arise, but rather need to be identified and managed timeously. Allesbeste is committed to doing just this, to not merely improve its own business but that of the entire avocado industry.

We are looking forward to the growth of this cultivar.

Caring for Maluma through passion

www.allesbeste.com

