

Varieties and Rootstocks

For polleniser scions, see section Pollenisers on page 37

Avocado scions (the fruiting part of the tree) are usually grafted onto rootstocks of a different variety. The most common scions and rootstocks are detailed below.

SCIONS

The scion is the fruiting part of the tree. Hass is the most common fruiting variety and is the only scion with export standards.

HASS

Hass is the most common commercial variety of avocado. The spreading trees can produce high yields of medium-sized ovate fruit with good post-harvest characteristics, and which change colour on ripening. As Hass is currently the only scion with export standards, it is recommended as the main variety to plant in New Zealand. The main export harvest season for New Zealand Hass is from August to February.

REED

Reed is a round green-skin variety (Figure 26) produced on upright-growing trees. The fruit are larger than Hass and mature in March-June in New Zealand, and are sold in the domestic market in some seasons.



Figure 26: Mature Reed fruit

CARMEN

Carmen is a cultivar managed by Brokaw nursery in California. Spring-set Carmen fruit appears almost identical to Hass fruit. Carmen trees often flower out of season – this out of season flower produces a large, round, smooth-skinned fruit which blackens on ripening. The season for Carmen is similar to Hass.

MALUMA

Maluma is a cultivar from South Africa, developed by Allesbeste for its low vigour and central leader growth tendency. Maluma fruit is generally larger than Hass fruit, with a 'neckier' shape, and turns black on ripening. Due to low yields in New Zealand trials and the lack of maturity standards for the variety, it is currently not recommended to plant Maluma.

ROOTSTOCKS

Avocado scions can be grafted onto seedling or clonal rootstocks. Seedling rootstocks are inherently variable, however they have the potential to produce satisfactory yields when growing conditions are good. Clonal rootstocks can overcome some of the variability and impart some benefits in yield, vigor and tolerance to disease (including *Phytophthora cinnamomi*). Many of the imported clonal rootstocks are covered by Plant Variety Rights (PVR, similar to a patent) and purchase of these requires a non-propagation agreement and royalty payment.

ZUTANO (SEEDLING)

Zutano is the most common seedling rootstock used in New Zealand. It is currently not recommended to plant any other variety of *seedling* rootstock. As a seedling rootstock, variability in production and tolerance to environmental and disease pressure is variable. However, in virgin soils and favorable conditions Zutano rootstock trees can perform well in New Zealand. It is not recommended to plant Zutano rootstock in replant situations.

BOUNTY (CLONAL)

Bounty is a cultivar managed by The Fruit Farm Group, South Africa. It was selected for its tolerance to *P. cinnamomi*, and ability to survive in wetter soils. Bounty has performed well in New Zealand trials, including in replant situations.

DUKE 7 (CLONAL)

It is currently not recommended to plant Hass on Duke 7 rootstock.

DUSA (CLONAL)

Dusa is a cultivar managed by Westfalia, South Africa. It was selected for its tolerance to *P. cinnamomi*, and has been a popular variety since the early-mid 2000s. Dusa has performed well in New Zealand trials, including in replant situations.

LATAS (CLONAL)

Latas is a cultivar managed by Westfalia, South Africa. It was selected for its tolerance to *P. cinnamomi*, and ability to survive waterlogged and saline conditions. Results have been mixed in New Zealand trials.

SR1 (CLONAL)

SR1 is a rootstock which was developed in New Zealand from propagation of a survivor tree. Extensive trials of this variety against others have not been undertaken.