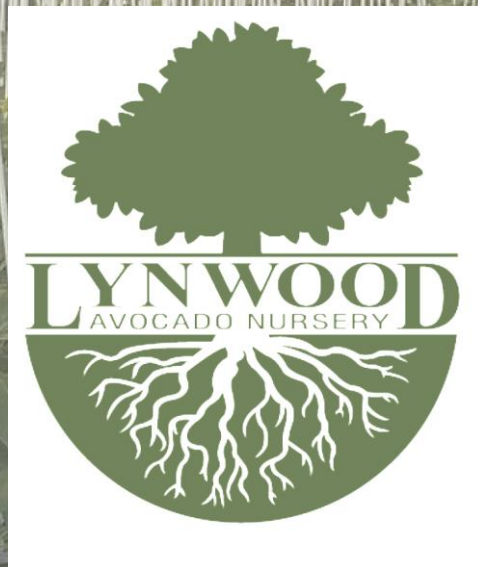


# LYNWOOD AVOCADO NURSERY



# About Lynwood

- Specialist avocado nursery based in Whangarei
- Established in 1988 by Stephen Wade
- Largest supplier of avocado trees to commercial and retail customers in New Zealand
- Team of 40 – 50 staff
- Small producer of export avocados



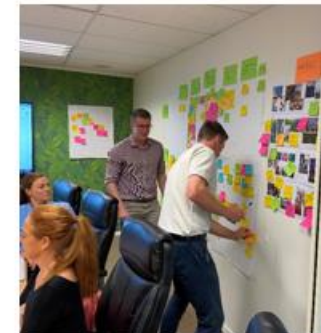
# Avocado growing in New Zealand

- 95% of the New Zealand crop is Hass predominantly grown for export
- Avocados are New Zealand's 4<sup>th</sup> largest horticultural export crop
- Approximately 4,000 ha in production worth \$200 million
- Industry vision is to have 10,000 ha in production worth \$1 billion by 2040
- Main growing areas are Bay of Plenty, Whangarei and Far North
- Emerging areas are Nelson, Kaipara and Wairarapa



# Global demand for avocados

- Demand for avocados still growing exponentially
- ‘Superfood’ status of avocados will help continue to drive demand
- Asian countries are only just discovering avocados, NZ is situated in a good position to supply to them

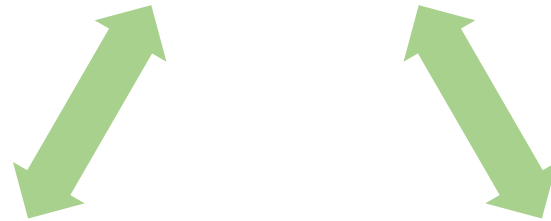


# Key requirements of avocado



## Climate

- Minimal frosts
- Ideal day temperatures 20-25°C during growing season
- No less than 10°C at night during flowering



- Free draining
- Gentle contour
- Ideally north facing

## Soil

## Water

- Irrigation and frost protection
- Reliable source of clean water



# Suitability of Taranaki for avocados



## Positives

- Good soils
- Market window
- Climate change

## Negatives

- Variable spring temperatures
- Exposure to wind

A close-up photograph of several green avocados hanging from a tree branch. The avocados are in various stages of ripeness, with some showing a darker green hue. The leaves are large, dark green, and have a prominent vein structure. The background is slightly blurred, showing more of the tree and some sky.

## **Recent changes in growing practices**

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- Rootstocks
- Planting densities
- Use of pollinisers
- Pruning
- Artificial shelter

# Clonal vs seedling rootstocks

## Seedling rootstocks

- Propagated from seeds
- Natural genetic variability
- Simple propagation process

## Clonal rootstocks

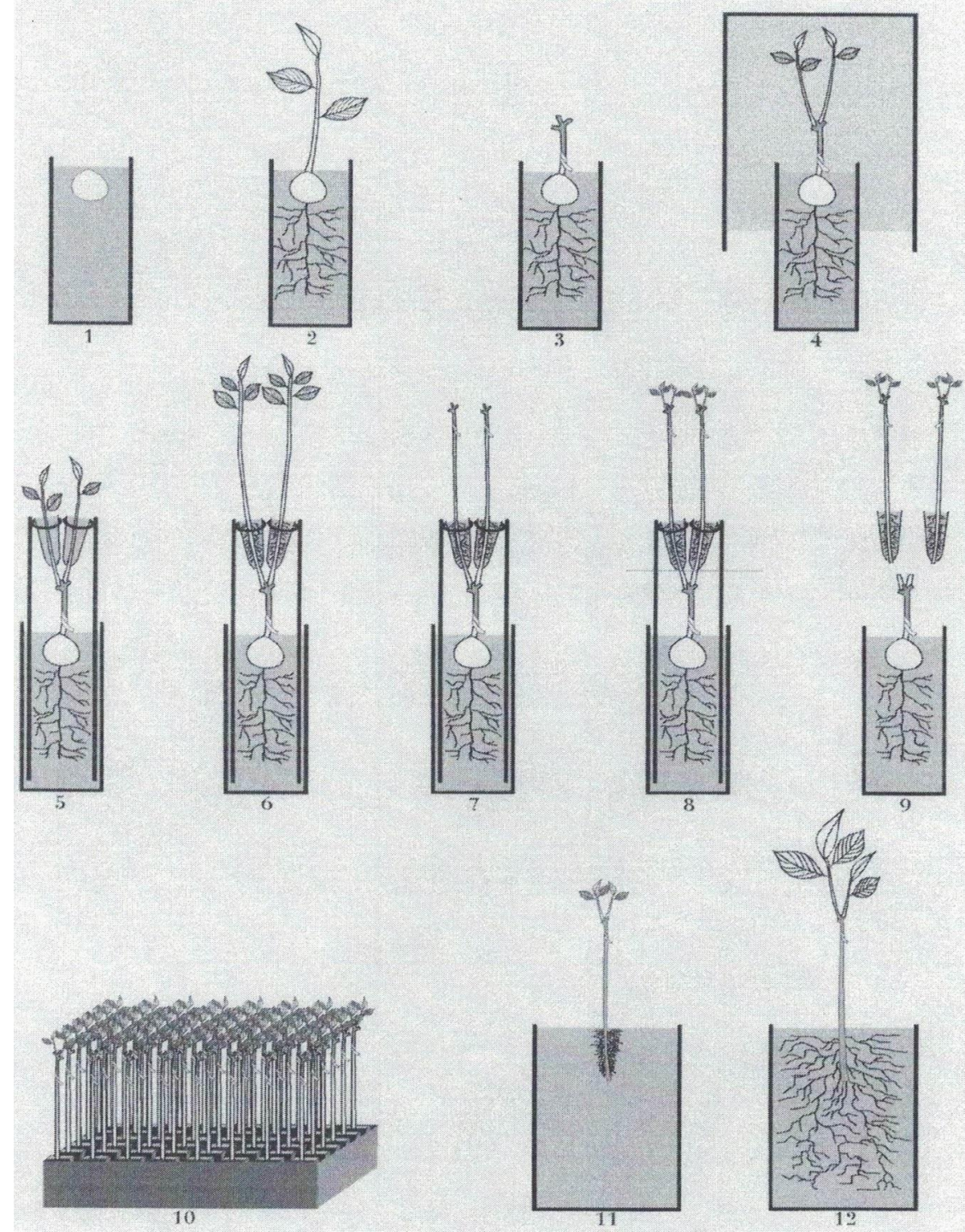
- Propagated from cuttings
- Genetically identical to mother trees
- Complex propagation process
- Selected from 'survivor trees'





# Clonal rootstocks

- Several different types from South Africa
  - Dusa®
  - Bounty®
  - Latas®
- SR1 rootstock discovered in Whangarei
- Excellent performance in replant situations



# High density plantings

- Traditional spacings around 100 trees per hectare (10m x 10m spacing)
- Trees grow up to 12m tall
- Intensive plantings in NZ range from 300 – 650 trees per hectare (7m x 5m and 5m x 3m)
- Trees pruned to maintain 3m height



# Benefits of high density planting

- Trees reach full production earlier
- Reduced harvest and management costs
- Improved fruit size and quality
- Improved tree health
- Trees help to shelter each other
- Reduced health and safety risks



# Pollinisers

- 'A' type flowering vs 'B' type flowering

'A' type flowering cultivars
Hass
Reed
Carmen <sup>®</sup> Hass
Maluma <sup>®</sup> Hass
GEM <sup>®</sup>

'B' type flowering cultivars
Zutano
Bacon
Fuerte
Ettinger
Edranol

- Recommend a '1 in 9' spacing for polliniser trees

# Pruning



- Pruning is now a regular management practice on most avocado orchards
- Essential on intensive plantings to manage tree height and size
- Allows maximum light penetration
- Reinvigorates the trees – maintains root to shoot ratios
- Flower pruning helps to manage crop load and biennial bearing

# Artificial shelter



# Orchard development

- Shelter – artificial vs natural
- Soil preparation – ripping, drainage, contouring
- Irrigation
- Trees and planting
- Infrastructure requirements – tractor, sprayer
- Costs can vary between \$40,000 and \$90,000 per ha



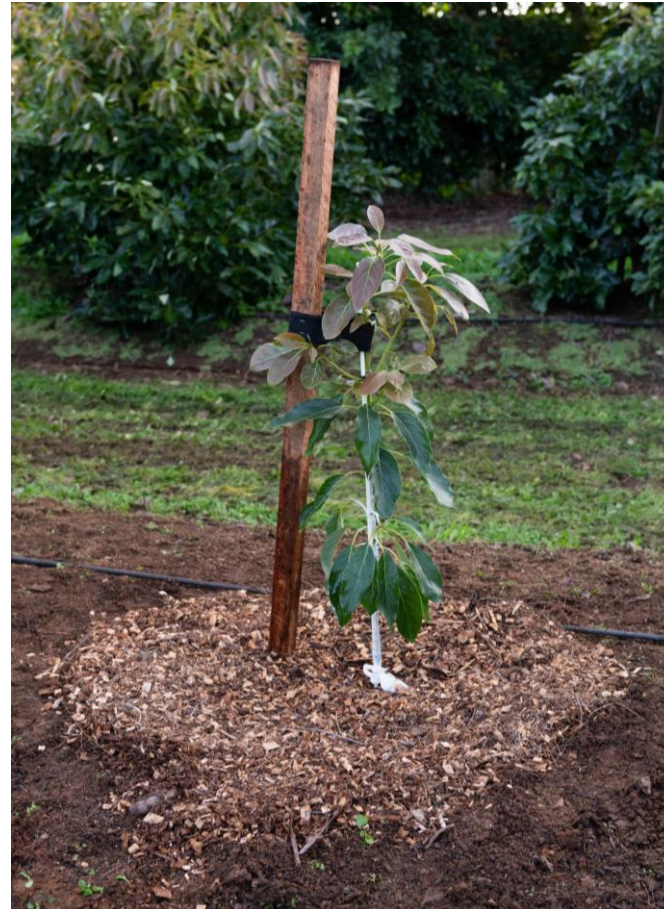
# Orchard management

## Ongoing management tasks

- Pest monitoring and spraying
- Fertiliser applications
- Weed control
- Irrigation

## Seasonal management tasks

- Mulching
- Pruning
- Harvesting





# Next steps

- Talk to us – we can help support you with site suitability and tree selection
- Talk to other people already in the industry – growers, packhouses, exporters
- Gather information – NZ Avocado, climate data