

NATIONAL TREE CROP

Intensification In
Horticulture Program
(AS18000)

ALMOND

ACE Open Day

Nov 14th 2023



This is a project of the *National Tree Crop Intensification in Horticulture Program (AS18000)*, funded by the Hort Frontiers strategic partnership initiative developed by Hort Innovation, with co-investment from Plant & Food Research, South Australian Research and Development Institute, Hort Innovation using the Almond research and development levy, and contributions from the Australian Government.





PFR High Density + 2D Canopies


High Density + 2D canopies

AIM: To understand the performance of cultivars with different architectural traits, on vigour-controlling rootstocks, to **growing in super high density** and **2-dimensional** systems.

Panned measurements:

- ✓ precocity (reach marketable harvest faster)
- ✓ light interception (light within the lower canopy)
- ✓ Fruiting habit/position (wood age, wood type, position)
- ✓ productivity
- ✓ water use efficiency
- ✓ responses to pruning cuts
- ✓ vigour





PFR High Density + 2D Canopies

Planted in August 2022

Cultivars and rootstocks:

- ✓ 'Carina' on Controller™ 6
- ✓ UA102 (R36T212) on 'Nemaguard'
- ✓ 'Marinada' on Nemaguard (to be planted in 2024)

Row spacing:

- ✓ 4.5 and 3.5 m

Growing systems:

- ✓ Tall, narrow “slender pyramid” shaped trees
- ✓ Informal “planar cordon” type-tree





2D canopies



2D almond
canopy growing
in New Zealand



2D canopies



2D almond canopy growing in New Zealand





Cultivar 'Marinada'



- How does this cultivar behave in a planar cordon canopy system?
- How would it respond to mechanical pruning cuts?



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THANK-YOU



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