



Australian Almond Industry Study Tour California– June 2026

Gemma Jealous & Josh Moss

**Australian Almonds Conference
15th October 2026**



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Almond Industry International Study Tour



California: June 2026



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California study tour - 2026

- 7th – 18th June 2026
- Thanks to our funding body and sponsors
- 14 industry participants
- ABA board members
- Led by Almond Board of Australia staff



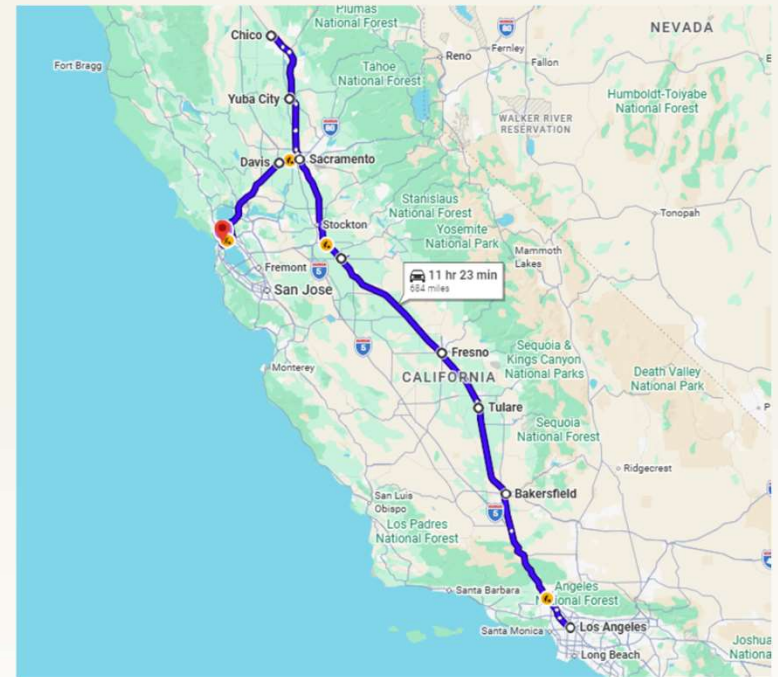
Tour objectives:

- Observe industry practices and research
- Strengthen relationships and potential collaboration
- Report back to the Australian industry
- Identify future investment ideas



California Study Tour - 2026

- Bakersfield (South) to Chico (North)
- 22 site visits
- Sites included commercial orchards, nurseries, research agencies, processing facilities and water authority



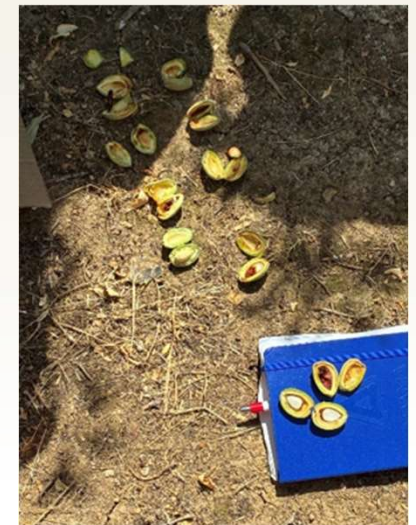
Varieties

- Independence – continues to become more popular
- Self-Fertile Nonpareil – initial plantings to occur soon
- Yorizane – yields well in 3rd leaf compared to others
- EarlyBird – potentially advantageous in Australia as it is ready to harvest 7 days before Nonpareil
- Bennett-Hickman – due diligence!

Conclusion: Pros and Cons for all varieties



Self-fertile Nonpareil fruit set by self-fertile nonpareil pollen at Sierra Gold Nursery



Prematurely fallen Bennett-Hickman fruit

Varieties and Rootstocks

- Hansen – among the more popular hybrid rootstocks in the south of the state
- Krymsk 86 – more popular in the north due to strong anchorage
- Rootstock-Scion compatibility for water and nutrient movement
- Rootstock selection - focus on factors that cannot be easily managed ie. replant disorder, soil conditions and wind exposure

Conclusion: Rootstocks must be considered.



Pests and Diseases - Nematodes

- Knowing what is in your soil assists in making crucial development decisions that impact orchard longevity
- Soil samples should be collected prior to orchard removal
- Rootstock selection vital to minimising nematode impact
- Nematodes feed on new root flushes – ripping/root pruning
- Good orchard hygiene practices are essential
- Nemaguard on Nemaguard? Debilitated and stunted root systems, stunted tree growth, poor establishment
- Peach-almond hybrids preferred option in California for replant – improved vigour, nematode tolerance, greater tolerance to prunus replant disease

Pests and Diseases - Nematodes



Pests and Diseases – Red Leaf Blotch

- Present across California
- South – higher incidence, lower number of sprays
- North – lower incidence, higher number of sprays (similar practices to Aus)
- General consensus – we have good, robust programs that should be effective



Pests and Diseases – Brown Marmorated Stink Bug

- It's not IF, it's WHEN!
- Can decimate crops
- Feeding damage earlier in the season (approx. September – October) results in significant crop losses



Water: SGMA, Data, and Consequences

- Sustainable Groundwater Management Act (SGMA) is expected to have an impact on productive orchard acreage
- Historically, many growers had access to approximately 4 acre-feet of irrigation water per acre - allocations in some districts are expected to decline to around 1.5 acre-feet per acre based on data from land that is currently being sold
- Central and Southern California –greatest impact estimate 80,000Ha (200,000 acres)
- Remote sensing and modelling tools such as Land IQ are being used to estimate crop water use

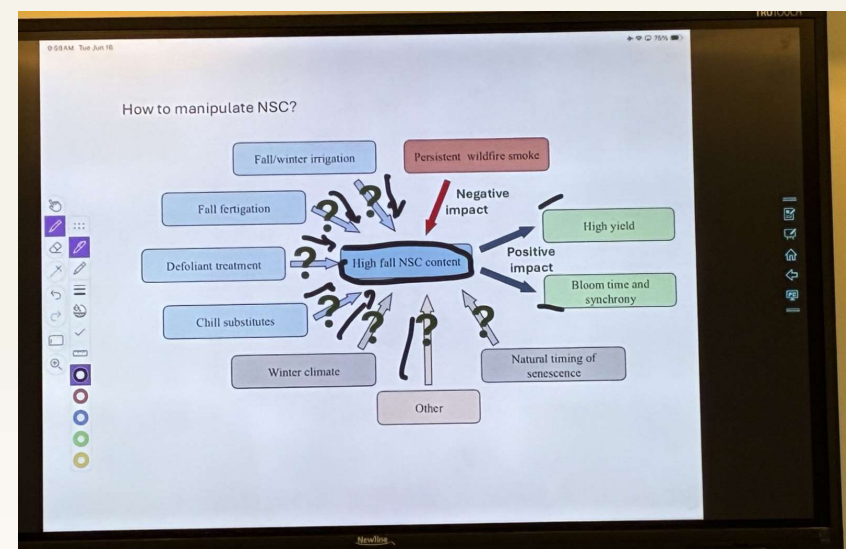
Whole Orchard Recycling

- Now widely adopted in California (100,000Ha) supported by grants of approximately US\$600–900 per acre
- Orchards generally allow one year between chipping and incorporation and replanting
- High C-N Ratio



Role of Carbohydrate Reserves and Monterey

- Dr Z provided detail on the role of non-structural carbohydrates on a good following season.
- Early defoliation will limit carbohydrate accumulation with a negative impact on the following season.
- Observed that Monterey accumulates less non-structural carbohydrates than others. Among the likely reason for Monterey Dieback in Australia – however this does not appear to be an issue in California.



From Dr Z's Presentation on manipulating non-structural carbohydrates

Nursery Practices and Tree Establishment

- The industry is shifting away from bare-rooted trees to potted trees.
- Increased cost as a result of this, however this reduces root diseases – particularly *Phytophthora sp.* As it prevents wounds in the roots.
- Moving towards larger trees out of the nursery.



At Duarte's Nursery

Automation and Technology

- The perception of the study tour is that the Australian industry is using more technology and more open to automation.
- Examples that stood out was open-cab tractors and the fact that irrigation systems are rarely automated.
- Visit to Bonsai Robotics however demonstrated that there is an appetite to adopt new technologies to reduce costs. Of course, Australian growers will be willing adopters of new technologies from overseas.



Autonomous tractors pulling and operating spray carts and autonomous shaker



Big thank you to the organisers!

Almond Board of California



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