

Final report

Project title:

Almond industry international study tours

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Project code:

AL23004

Date:

31 July 2026

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This project has been funded by Hort Innovation, using the almond research and development levy and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

Publishing details:

Published and distributed by: Horticulture Innovation Australia Limited
ABN 71 602100149

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141 Walker Street
North Sydney NSW 2060

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www.horticulture.com.au

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Public summary

The Almond Board of Australia (ABA) is responsible for the development and implementation of the Australian Almond Industry Strategic Plan, which relies heavily on the development of outputs delivered by Hort Innovation funded projects and knowledge and technologies sourced from overseas researchers, growers, and companies. To facilitate the identification of emerging production, processing and marketing practices, study tours to major producing countries are an important undertaking. This project provided the opportunity for the Australian almond industry to build on existing international networks in Spain/Portugal and California and to see production practices and innovations firsthand, assessing their applicability for an Australian setting.

Two study tours (Spain/Portugal and California) were delivered by this project, targeting Australian almond industry value chain stakeholders, to improve knowledge and capability in the Australian almond industry and support the optimisation of future investments in productivity and demand. The tour itineraries were designed in close consultation with the Project Reference Group (PRG), utilising past tour learnings, international networks and grower feedback to ensure tours were relevant to industry issues across the value chain. A selection process was developed via consultation with the PRG to ensure participants provided diverse representation across the Australian almond industry.

The intended outcome was improved knowledge, capability and an innovative culture in the Australian almond industry helping to optimise future investments in productivity and demand. The study tours enabled participants to observe practices and innovations to improve understanding of relevant issues and opportunities faced by the international almond industry and potential impacts on the Australian industry. As the Australian almond industry enters a significant orchard redevelopment phase, the study tours provided valuable exposure to high-density and super-high-density production systems in Spain, together with rootstock and variety trials in both Spain and California.

The study tours strengthened existing relationships and established new connections between Australian participants and their international counterparts, identifying opportunities for ongoing collaboration across the Australian, Californian, and Iberian almond industries. Equally significant were the relationships developed among the Australian participants themselves, with many identifying the strengthened networks, increased industry cohesion, and opportunities for future collaboration as one of the key benefits of the tours.

A measure of success for the project was the ability for learnings from the tour groups to be shared broadly amongst the almond industry, allowing all stakeholders to benefit from the activity. Learnings were shared with the broader Australian almond industry to ensure the benefits extended beyond the tour participants. Extension and communication activities included two articles published in the industry publication *In a Nutshell* and a presentation on the Spain and Portugal study tour delivered at the Almond R&D Forum in August 2025. Video interviews were conducted with participants during the tours to capture their key observations and insights. Extension and communication activities will continue beyond the life of the project, with a presentation by the California study tour participants scheduled for the Australian Almond Conference in October 2026. Information Resources are available through the Almond Industries Grower site in [News](#) and [Publications](#).

Keywords

Almond; Australian Almonds; International; Study Tour; Australia; Spain; Portugal; California; 2025; 2026

Introduction

The development of the Australian almond industry into a major horticultural industry has occurred over the past two decades. It is now one of Australia's most valuable horticultural products and Australia's most valuable horticultural export crop. In 2023, the estimated farm gate value of Australian almonds was almost \$650 million from 128,000 kernel tonnes grown across 62,400 hectares in four States, most of which are located within the Murray-Darling Basin in the Riverland, Sunraysia and Riverina irrigation regions. Australia's production is anticipated to increase to 180,000 tonnes by 2025-26 as recent developments mature and market signals remain strong.

The Australian industry is the second largest producing nation, closely followed by Spain, but is dwarfed by the Californian industry, which is 80% of global production. The US industry is also the leader in developing export markets and currently exports to 100 countries. The size of the US industry also means it has specialist staff addressing trade and production issues within the Almond Board of California (ABC).

Before this project, it had been several years since an Australian contingent visited almond-producing regions in Spain (2014). Since this time, there has been rapid expansion, with the total area planted to almonds across the Iberian Peninsula (Portugal and Spain) reaching 792,000 ha, which now exceeds the almond production area in Californian being 650,000ha (2022). Iberian producers have transformed production by embracing self-compatible varieties, irrigation, and super-high-density growing systems, enabling economically sustainable production despite relatively low yields. With a climate similar to Australia's, and shared challenges including limited water availability, late frosts, and spring pest and disease pressure, the Iberian almond industry offers valuable opportunities for shared learning,

The Australian industry is closely modelled on the Californian orchards with similar varieties and production systems. However, there are distinct differences in irrigation and nutrition practices between Australian and Californian systems. Regular visits to the US have enabled the development of mutually beneficial relationships with the ABC, managing an \$80 million investment in R&D and Market Development programs for their \$10 billion industry. It is acknowledged that many of the practices applied in Australia were developed by the Californian industry. The Australian industry recognises this contribution and therefore has an open policy in relation to sharing the outputs of our research programs and the knowledge of industry participants, which in the areas of drought management, irrigation, nutrition, varietal breeding and orchard and processing equipment is valued by the Californian industry and, more recently, the expertise in managing *Carpophilus* beetle, which has recently been detected in California.

Funding for study tour projects by Hort Innovation enables the Australian almond industry to build on international networks and observe production practices and innovations firsthand, assessing their applicability in the Australian setting. The benefits have extended beyond the direct participants in the engagement program as the information is widely disseminated throughout the industry. Many contacts established during previous study tours have welcomed further visits from Australian industry members and researchers.

The tour itineraries were designed in close consultation with the Project Reference Group (PRG) utilising past tour learnings, existing networks in California and Spain/Portugal together with grower feedback and participant interests to ensure tour destinations are relevant to industry issues across the value chain. The study tours sought to target and provide opportunity to Australian almond value chain participants, with a wide range of industry participants including growers, processors, researchers, service providers, and ABA staff represented.

This project aligned with the following outcomes of the Almond Strategic Investment Plan (SIP):

Outcome one: Industry Supply, Production and Sustainability. The Australian almond industry has increased profitability, efficiency and sustainability through innovative R&D focusing on an integrated approach to plant improvement, orchard productivity, soil health, water-use efficiency, pollination, IPDM and emerging technologies.

Outcome three: Extension and Capability. Improved capability and an innovative culture in the Australian almond industry maximises investments in productivity and demand, with demonstrated increase of industry (Ha) with positive change in KASA, practice and impact in targeted high priority areas e.g., IPDM, biosecurity, soil and water management.

Outcome four: Business Insights. The Australian almond industry is more profitable through informed decision-making using consumer knowledge and tracking, trade data, production statistics and forecasting, and independent reviews.

Methodology

1. Project management

1.1 *Project initiation*

Shortly after project commencement, a project start-up meeting with Hort Innovation was held to discuss and agree to the activities and objectives for this project

1.2 *Project reference group*

A project reference group (PRG) was established to endorse the tour itinerary to ensure that the itinerary is relevant to industry needs, reflects the goals of the Industry Strategic Investment Plan and activities align with known events and/or existing collaborations where possible. The PRG was managed by the ABA including the establishment of terms of reference.

1.3 *Monitoring and evaluation*

A program logic and monitoring and evaluation plan was developed by the ABA project team to clearly identify linkages between project resources, activities, outputs, target audience, project objectives and long- and short-term outcomes.

1.4 *Identifying risks*

Potential risks to project delivery will be identified and suitable mitigation strategies were developed and documented in the project risk register.

1.5 *Stakeholder evaluation and communication*

Key messaging for each stakeholder were considered and used to formulate a stakeholder engagement and communications plan.

1.6 *Milestone reporting*

Milestone status reports, including a public summary and a final report, were provided as per contractual requirements.

2. Itinerary design

Itineraries were developed in consultation with the PRG and informed by insights from previous tours and participant feedback, as well as consultations with industry networks in Spain, Portugal, and California, to ensure that each study tour reflected current industry priorities and opportunities. For each destination, ABA staff established contact with host organisations to confirm meeting locations, schedules, and discussion topics. Hastwell Travel was engaged to assist with travel logistics and coordinate arrangements with the overseas tour operator.

With the principle of ‘seeing is believing’, the tours were scheduled for May (Spain and Portugal) and June (California), allowing for observations to occur during the growing season (Spring/Summer) when trees have leaves, orchard practice and machinery operation can be seen in action, and farm managers, researchers and nurseries are available to host field walks and talks. Feedback from previous study tours indicated that there was less value from tours undertaken during dormancy months when key personnel are not available, and there is little farm activity to observe.

3. Study tour promotion and participant selection

Expressions of Interest (EOIs) for both study tours were launched at the Australian Almond Conference in October 2024. Promotion of the opportunity was developed in consultation with the ABA Communications Manager, and appropriate industry communication channels were utilised. The application process and selection criteria were developed in consultation with the Project Reference Group (PRG), with applicants required to submit a written EOI via SurveyMonkey. The selection criteria included contributing to tour objectives, capacity to influence, share and report back to industry, cohesive travel experience, emerging leader candidate, and active engagement in industry, and were designed to ensure a diverse and balanced delegation, representing a broad cross-section of the Australian almond industry, including different sectors of the value chain, job roles, levels of experience, and almond-growing regions. This approach ensured participants brought a wide range of perspectives and maximised opportunities for knowledge exchange and industry benefits.

4. Undertaking study tours

The study tours were coordinated by ABA staff and led by Industry Development Manager, Deidre Jaensch, with support from Ella Henson, Sustainability Manager. Each tour spanned 11 days, with participant accommodation, meals and transport partially subsidised through the project.

Before each tour, an information package was developed to assist participants with planning and preparation, and an online briefing was held one month prior to communicating tour objectives, logistics and participant expectations. A summary itinerary was also provided to Hastwell Travel for upload to the itinerary app. A WhatsApp group was established at the commencement of each tour to communicate daily activities and capture participant observations and insights. Participants were encouraged to share reflections on how the knowledge gained during the tours could be applied within the Australian almond industry.

During the California study tour, daily debrief sessions were conducted on the bus and recorded using the Voice Memos app. Following each day's activities, ABA staff facilitated group discussions to capture participant observations, insights and ideas for application in Australia. The recordings were summarised using AI (Claude) and shared with participants via WhatsApp on the same day. Participants reported that these summaries were valuable in helping them reflect on key learnings and communicate outcomes within their own organisations. Weekly summaries were also provided to the ABA Board, enabling timely sharing of insights and learnings throughout the tour.

5. Reporting back to industry

Learnings from the study tours were shared with the broader Australian almond industry to maximise the value of the project beyond the tour participants. Following each tour, reports were prepared and presented to the ABA Board and relevant industry sub-committees. Extension activities included articles published in *In a Nutshell*, presentations at the Almond R&D Forum, participant video interviews, and study tour videos showcasing key observations and learnings. Communication activities continued beyond the completion of the tours, with further presentations and publications planned to share outcomes from the California study tour with the wider industry.

Results and discussion

For the implementation of the Australian Almond Industry's Strategic Plan developed by the ABA, there is a need for new knowledge and technologies to be developed not only by Hort Innovation's R&D program but also identified from the work being undertaken overseas by researchers and commercial companies. This project resulted in the delivery of two highly successful study tours, in Spain and Portugal (2025) and California (2026)

The Spain and Portugal tour was undertaken in May 2025. The tour was for 11 days across 19 locations. Hosts spanned Spain and Portugal, including commercial orchards, nurseries, research and processing facilities and a water authority. Participants included 15 people from the Australian Almond industry supply chain, including ABA staff, growers, processors, consultants and researchers. Four ABA Board Members accompanied the tour but were not funded through this project.



Image 1: The Spain and Portugal study tour group outside the Agromillora facility near Barcelona.

The Californian Study tour was undertaken 7th – 18th June 2026. The tour was for 11 days with 22 sites visited along the way. Hosts spanned Californian almond production areas starting from Bakersfield in the south, through the central San Joaquin Valley up to Chico in the north. Sites included commercial orchards, nurseries, research agencies, processing facilities, and a water authority. Participants included 16 stakeholders from the Australian Almond industry supply chain, including ABA staff, growers and agronomists. Three ABA Board Members accompanied the tour but were not funded through this project.



Image 2: The California study tour group at a commercial orchard near Tulare

Key insights

The study tours provided participants with the opportunity to see production practices and innovations firsthand and assess their applicability to Australian production. The observations and key learnings identified through participant discussions throughout the study tours and post-tour feedback surveys provide valuable insights to inform the broader industry and future investment decisions.

Spain and Portugal

- The scale and innovation of Spain and Portugal's almond industry, in particular its super high-density (SHD) systems, was impressive. Production in Spain and Portugal equates to 33% of global area plants (similar area to California) and 9% of global supply (similar to Australia).
- Irrigation in Spain and Portugal is only a recent reality due to government investment in irrigation infrastructure over the last 10 years and now accounts for ~18% of production. However, water use is limited to ~6ML/ha. With the introduction of irrigation and more intensive systems, there has been a higher incidence of disease.
- Spanish producers face greater environmental challenges and operational constraints plus restrictions enforced through EU regulations. This means they have had to be innovative and adapt their production systems to remain profitable. For example, limited chemical options have motivated adoption of super-high-density plantings with smaller canopy size (height and width) and reduced spray volumes and better canopy penetration.
- Restrictions to nitrogen application are present in areas where there is a risk of water pollution caused by run-off or leaching, primarily driven by the European Union's Nitrates Directive. These restrictions make it challenging for growers to reach desired yields.

- Climatic conditions (frost, winds, humidity, shallow calcareous soils) have informed breeding programs through local agencies to develop varieties and rootstocks to suit SHD, self-fertile and hard-shell to tolerate pests and disease.
- The tour provided proof of concept that high-intensity almonds are possible, albeit with lower yield (~2-2.8tonne/ha), which is offset by lower input costs (trees, water, chemicals and fertilisers, no need for bees, off-ground single-pass harvest, in-field hulling, fuel etc).
- The approach to sustainability in Spain and Portugal has been influenced by the long history of farming and the prevalence of multi-generational family-owned and operated businesses. In contrast, Australian sustainability efforts are typically environmentally focused.
- Xylella is the highest priority pest in the EU, and containment zones have been established under legislation (Spain, Portugal, France, Italy) and 7 million euros invested to prevent spread, including tree removals, movement controls, risk modelling under future climate change scenarios, and rapid detection using remote sensing. These strategies could be useful for Australian preparation for this exotic disease, as three of five high-priority pests for almonds are Xylella species.
- While super-high-density systems are promising, they may not be viable for Australian conditions due to high capital costs and labour in establishing trees in early years. Currently, there is little motivation to change, i.e. while land and inputs are available and affordable. This may change in the future, so there is benefit in maintaining an interest in Spanish and Portuguese research on varieties and the super high-density system, emphasising the importance of new and strengthened relationships and potential areas for collaboration between the two countries established throughout the tour.



Image 3: Xavier Minatru shows the group research trials at the Institute of Agrifood Research and Technology (IRTA) in Lleida, Spain.

California

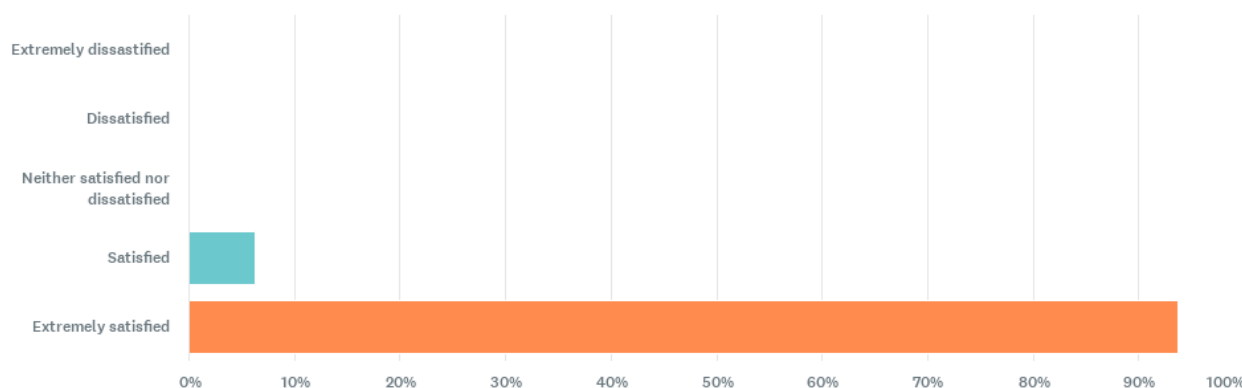
- California acreage outlook is uncertain, with talk of significant almond removals over the coming years. The California State University indicates that supply is projected at around 3.7 billion pounds (1.68 million tonnes) against demand approaching 4.7 billion pounds (1.23 million tonnes) by 2030. Australia's ability to fill that gap is unknown given water constraints and pollination challenges. It was noted that Australian and Californian yields per hectare are more comparable than commonly assumed.
- The comparison of Californian and Australian water management systems reinforced Australia's strengths in water governance, metering and irrigation technology. California's reliance on remote sensing rather than metering, the absence of any environmental water allocation, and the fragmented, slow-moving implementation of the Sustainable Ground Water Management Act (SGMA) over twelve years left the group with a strong appreciation for the certainty and structure of the Murray-Darling Basin agreement. Despite carrying a heavier regulatory burden at home, Australian growers were assessed as well ahead on metering and data-driven water management.
- Rootstock and variety selection was the most consistently discussed topic throughout the study tour. Independence remained the preferred self-fertile variety, although participants noted uncertainty around its long-term performance, particularly on Nemaguard rootstock. Emerging varieties such as Yorizane require further evaluation. The self-fertile Nonpareil (Fruition One) generated significant interest. The tour reinforced the importance of selecting appropriate scion–rootstock combinations, with repeated evidence of Independence underperforming on Nemaguard. Hybrid rootstocks such as Hansen 536 are attracting increasing interest in California.
- Significant opportunities for collaborative research between Australia and the United States, particularly in areas such as replant disease, rootstock performance, carbohydrate management, irrigation, soil health, pest management and whole orchard recycling were observed.
- Potted trees were widely seen as offering real advantages, including reduced root disruption, reduced disease, a shorter lead time of around twelve months compared to two years for bare-rooted stock, and better suitability for late-season planting, replants and difficult ground, although cost and labour intensity remain barriers to wider adoption by nurseries in Australia. The zero-pruning and tying approach generated interest as an alternative for high-density systems. However, long-term data is required to assess applicability.
- There is surprisingly little automation in use, even among large corporate growers, with valve operation, fertigation and irrigation scheduling still largely manual despite extensive monitoring infrastructure such as dendrometers and pressure sensors.
- Monterey decline emerged as a key topic across multiple site visits, with the consistent conclusion that there is no silver bullet and that removal of affected trees is the most effective management strategy.
- Government assistance has supported the adoption of Whole Orchard Recycling in California, while cost remains a barrier in Australia. This is largely driven by air quality regulations that prohibit open burning of plant material in California.
- The Almond Board of California invests significant resources into telling their sustainability story, highlighting that sustainability credentials and storytelling will become increasingly important to remain competitive and protect our social license. Australian growers implement many of the same sustainable practices and often more, and there is an opportunity to tell our story better. However, to do so effectively, we need independent, industry-owned data to support advocacy and counter inaccurate comparisons drawn from California.

Participant experience

Feedback from participants from both study tours was collected via Survey Monkey, and there was an overall positive response to the tour. This was observed during the tours through active participation by all participants right until the last day. Although different topics appealed to different participants, there was something for everyone and the group remained engaged. Participants noted the benefits of a diverse group of stakeholders with different knowledge and interests.

Q4 16 responses

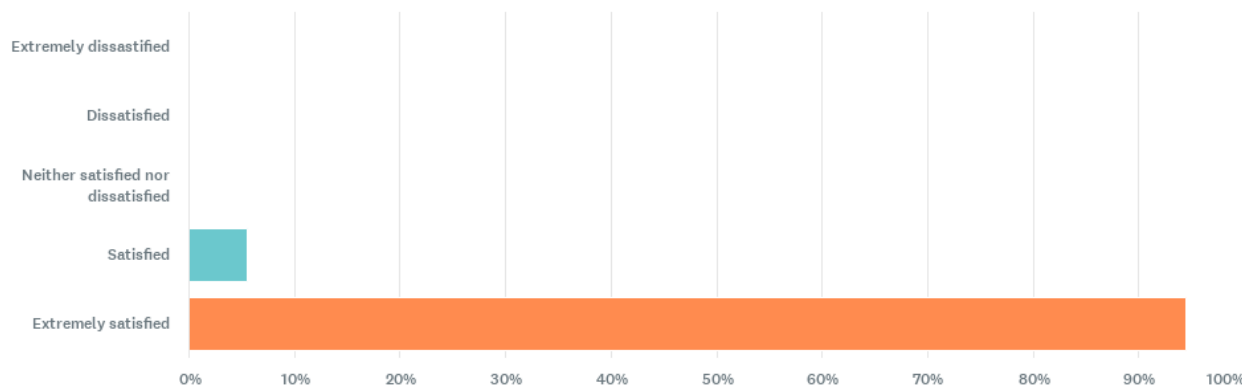
How satisfied were you that the tour provided a valuable experience in better understanding the international almond industry?



93.75% of participants on the Spain and Portugal study tour indicated that they were 'extremely satisfied' that the tour provided a valuable experience in better understanding the international almond industry.

Q4 18 responses

How satisfied were you that the tour provided a valuable experience in better understanding the international almond industry?



94.44% of participants on the California study tour indicated that they were 'extremely satisfied' that the tour provided a valuable experience in better understanding the international almond industry.

Reporting back to industry

A measure of success for the project was the ability for learnings from the tour groups to be shared broadly amongst the almond industry, allowing all stakeholders to benefit from the activity. Learnings were shared with the broader Australian almond industry to ensure the benefits extended beyond the tour participants. Reports on the study tours conducted were documented and presented to the ABA Board and relevant industry sub-committees. Extension and communication activities included two articles published in the industry publication *In a Nutshell* and a presentation on the Spain and Portugal study tour delivered at the Almond R&D Forum in August 2025. Video interviews were conducted with participants during the tours to capture their key observations and insights. A video showcasing the Spain and Portugal study tour was launched at the Almond R&D Forum in October 2025, while a video documenting the California study tour is currently under development. Extension and communication activities will continue beyond the life of the project, with a presentation by the California study tour participants scheduled for the Australian Almond Conference in October 2026. Two articles on the California tour will be published in the Spring edition of *In a Nutshell*.

Outputs

Table 1. Output summary

Output	Description	Detail
A start-up meeting with Hort Innovation	As per contractual requirements.	Delivered at project start-up.
Program logic and monitoring and evaluation plan with Linkage to Hort Innovation and industry/fund objectives.	The program logic and monitoring and evaluation plan was developed to map project activities to long-term industry outcomes, ensuring alignment with the Strategic Investment Plan.	Supplied to Hort Innovation as part of Milestone 102.
A project risk register and how risks will be managed.	The project risks register was developed to identify potential risks associated with the delivery of the project and document how risks will be managed.	Supplied to Hort Innovation as part of Milestone 102.
A stakeholder engagement and communication plan	The stakeholder evaluation and communications plan was developed to outline how information and project outputs will be delivered to key stakeholders.	Supplied to Hort Innovation as part of Milestone 102.
A study tour to Spain and Portugal (2025) and California (2026)	Study tour to Spain and Portugal undertaken in May 2025.	The above section (results and discussion) details the knowledge gained across the broad scope of the two study tours. Information from the study tours was organised according to the project output and shared with industry stakeholders.

Communication and extension materials	A range of communication and extension activities were undertaken after the study tours. Ongoing communication and extension activities include two articles to be published in industry magazine 'In a Nutshell' (Spring 2026), and a presentation at the Australian Almond Conference (October 2026).	In a Nutshell through the articles: • <i>"Industry Lessons from the Almond Study Tour to Spain and Portugal"</i> pages 7-9 • <i>"Sustainability Insights from the Iberian Peninsula"</i> page 10 • <i>"Caution advised when comparing super-high density (SHD) and conventional almond planting systems"</i> pages 36-37 IAN Winter 2025 V2 FINAL Presentation at the Almond R&D Forum – Oct 2025. The-almond-industry-international-stuexperience.pdf Video production https://vimeo.com/1117349848?fl=tl&fe=ec Extension and communication activities will continue beyond the project through presentations at the Australian Almond Conference and industry articles in <i>In a Nutshell</i>, ensuring ongoing dissemination of study tour outcomes.
6-monthly milestone reports	As per contractual requirements.	Submitted via the delivery partner portal.

Outcomes

Table 2. Outcome summary

Outcome	Alignment to fund outcome, strategy and KPI	Description	Evidence
Intermediate outcome Stakeholders identified in the itinerary covered various aspects of the value chain	Almond SIP Outcome 1: Industry Supply, Production and Sustainability. Outcome 3: Extension and Capability. Outcome 4: Business insights.	The tour itineraries were developed with the Project Reference Group, drawing on previous tour learnings, grower feedback, participant interests, and industry networks in Spain, Portugal, and California to ensure relevance across the almond value chain.	See results and discussion.
Intermediate outcome Participants valued the study tour program and opportunity to create/strengthen connections.	Almond SIP Outcome 1: Industry Supply, Production and Sustainability. Outcome 3: Extension and Capability.	Participant feedback indicated that the study tours provided valuable opportunities to establish and strengthen relationships with international industry networks and fellow participants. Participants valued camaraderie within the group and valuable industry connections.	<i>"One of the key benefits was the diverse backgrounds and experiences of the tour group. I really enjoyed debriefing with and hearing the perspectives of other group members throughout the tour."</i> Spain and Portugal Study Tour participant <i>"A very valuable experience seeing where the research is coming from and gaining more of an understanding of the system the research is being undertaken in. The relationships built and collaboration between industries is very beneficial."</i> California Study Tour participant
Intermediate outcome Communication outputs featuring tour participants.	Almond SIP Outcome 3: Extension and Capability.	Study tour participants supported industry extension by participating in video interviews and presenting key learnings from the Spain and Portugal study tour at the Australian Almond R&D Forum in October 2025.	Presentation at the Almond R&D Forum – Oct 2025. The-almond-industry-international-stuexperience.pdf Video production https://vimeo.com/1117349848?fi=tl&fe=ec
End of project outcome Study tour insights and	Almond SIP Outcome 1: Industry Supply, Production	Study tour outcomes were communicated through reports to the ABA Board and	In a Nutshell through the articles: <i>"Industry Lessons from the Almond Study Tour to Spain and Portugal"</i>

learnings captured, and the relevance/impact with respect to the Australian industry identified.	and Sustainability. Outcome 3: Extension and Capability. Outcome 4: Business insights.	industry sub-committees, industry presentations, articles in <i>In a Nutshell</i>, participant video interviews, and study tour videos. Extension activities have promoted knowledge sharing across the industry and will continue beyond the project, including presentations at the 2026 Australian Almond Conference and <i>In a Nutshell</i> (Spring 2026).	pages 7-9 • “Sustainability Insights from the Iberian Peninsula” page 10 • “Caution advised when comparing super-high density (SHD) and conventional almond planting systems” pages 36-37 IAN Winter 2025 V2 FINAL Presentation at the Almond R&D Forum – Oct 2025. The-almond-industry-international-stuexperience.pdf Video production https://vimeo.com/1117349848?fl=tl&fe=ec
End of project outcome At least one new project idea per tour identified for future investment in productivity and demand identified.	Almond SIP Outcome 1: Industry Supply, Production and Sustainability. Outcome 3: Extension and Capability. Outcome 4: Business insights.	Ideas for future investment were identified through discussions during the study tours and captured through participant post-tour feedback surveys.	See recommendations

Monitoring and evaluation

Table 3. Key Evaluation Questions

Key Evaluation Question	Project performance	Continuous improvement opportunities
1. To what extent has the project achieved its expected outcomes? - To what extent was observations and new knowledge shared with the broader industry? - To what extent were international linkages with key research institutes and fellow producers developed/strengthened? - To what extent were future investments in productivity and demand identified?	Observations and new knowledge were shared with the broader industry using appropriate communication channels and will continue to be shared beyond the life of the project. The study tours established new international linkages with leading research institutions and almond producers while strengthening existing relationships, creating a foundation for future collaboration and knowledge exchange. The study tours generated valuable insights to inform future investment in productivity and demand, including focus areas for future tours and the identification of production practices with potential for trial and adoption in the Australian almond industry.	Regular study tours to almond-producing regions offer benefits to industry.
2. How relevant was the project to the needs of intended beneficiaries? Relevance of study tour itineraries to the needs of almond industry value-chain stakeholders?	Study tour itineraries were developed with the Project Reference Group, drawing on previous tour learnings, grower feedback, participant interests, and industry networks in Spain, Portugal, and California to ensure relevance across the almond value chain. Feedback from participants collected via Survey Monkey indicated a positive response to the tours. This was observed through active participation by all participants right until the last day. Although different topics appealed to different participants, there was something for everyone.	Participant feedback identified the most valuable aspects of the tours and captured ideas for future programs, helping inform future investment and continuous improvement.
3. How well have intended beneficiaries been engaged in the project? - How well did study tour participants contribute to the project objectives? - To what extent was there interest demonstrated by	Study tour participants engaged in discussion during the study tours and actively contributed to reporting back to industry by taking part in video interviews. Two Study Tour participants delivered a presentation on the Spain and Portugal Study Tour at the Australian Almond R&D Forum in	The successful use of voice recording and AI during the California tour demonstrated its value in capturing discussions and enhancing reporting outcomes and should be incorporated into future study tours.

industry when reporting back?	October 2025. Study Tour findings were well received by industry, highlighting the value of the initiative and supporting continued investment in future study tours.	
4. What efforts did the project make to improve efficiency? Did the project deliver required outputs and outcomes on time and on budget?	The project delivered required outputs and outcomes on time and on budget.	The successful use of voice recording and AI during the California tour demonstrated its value in capturing discussions and enhancing reporting outcomes and should be incorporated into future study tours.

Recommendations

Recommendation 1 – Future study tours

An annual study tour to a major almond-producing region should be considered to maintain international industry networks and ensure the Australian almond value chain remains informed of emerging research, best management practices, and technological innovations.

Priority future study tours include:

- **Spain and Portugal (harvest period):** Focus on harvest and post-harvest systems, including shake-and-catch harvesting, drying methods, production practices for hard-shelled varieties, and the evaluation of on-farm harvesting, hulling, and drying equipment with potential application to Australian conditions, particularly for managing wet harvests.
- **California:** Monitor the ongoing performance of new almond varieties and rootstocks through established breeding and trial programs, with a focus on evaluating their potential suitability and application under Australian growing conditions.

Recommendation 2 – Future collaboration

Strengthen and expand collaborative research partnerships to facilitate knowledge exchange and maximise benefits for all almond growing regions.

Priority areas for future collaboration include:

- **California:** Variety and rootstock evaluation, breeding programs, and research into Monterey decline and its management, sustainability reporting and certification.
- **Spain:** Plant pathology and disease management, optimised high-density production systems, and variety and rootstock development.

Recommendation 3 – High-Density Planting Systems

Investigate the potential for high-density or super-high-density almond planting systems in Australia, while recognising the current constraints on suitable varieties, rootstocks, and management practices. Insights gained from the study tour should be incorporated into ongoing Australian research to evaluate the productivity, economic viability, and management requirements of higher-density production systems under local growing conditions.

Recommendation 4 – Variety and Rootstock Trials

Continue to invest in the evaluation of emerging almond varieties and rootstocks to improve understanding of their performance under Australian growing conditions. Observations from Spain, Portugal and California highlighted the importance of assessing the interaction between variety and rootstock and identifying the most suitable combinations for different production regions and management systems. Future research should consider the evaluation of promising new and self-fertile varieties to determine their productivity, resilience, and suitability for commercial adoption in Australia.

Acknowledgements

We thank our international contacts in Spain, Portugal, and California their generosity and hospitality in hosting us during the tours. Special thanks to Xavier Miarnau, the Institute of Agrifood Research and Technology (IRTA), and the Almond Board of California for sharing your knowledge and insights