

# In A Nutshell

Summer 2017/18



Growing almonds in  
Kern County,  
California

5 minutes with...

Joseph Ebbage

Marketing Program Manager

Integrating Indian health claims  
to modern marketing



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## On the Cover:

Members of the Australian and Californian Almond Boards at their Annual Meeting held before the 2017 Almond Conference in Sacramento.

### In A Nutshell

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The Almond Board of Australia is the peak industry body representing the interest of almond growers, processors and marketers in Australia. In a Nutshell is published by the ABA to bring news to all industry contacts and members.

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australian  
almonds

ALMOND BOARD OF AUSTRALIA

## ABA Membership Why become a member?

The ABA is the peak representative body for the Australian almond industry and as such addresses many issues that impact on all participants in the industry including growers, processors and marketers and those that supply inputs. These impacts can be positives such as free trade agreements or promotion to stimulate demand and hence prices or they can involve minimising negative situations such as food safety issues, market access problems, chemical registrations etc.

The ABA develops and drives the implementation of the Australian industry's strategic plan which is done to benefit all producers and other industry participants. The strategies involve building domestic and export markets, the key to strong grower returns, addressing a wide range of risks from the availability of production inputs to government policies that impact on costs and yields. These matters effect on the bottom lines of almond enterprises. The ABA's whole of industry strategies have been successful and have worked to ensure the large increases in production have been cleared.

The ABA operates a number of activities that support industry and generate revenue to fund its operations and keep membership fees at a low and affordable cost. Being an ABA member provides crucial support for your industry body that we need and appreciate. A strong membership base provides added force in our representation of industry to government and in the wider community.

Join the ABA today, in the knowledge you are assisting the industry and yourself to move forward as Australia's most valuable horticultural industry.

Join the ABA by visiting our website, phoning 08 8584 7053 or emailing [admin@australianalmonds.com.au](mailto:admin@australianalmonds.com.au)

# Executive Update

**Neale and I recently attended the California Almond Conference along with several other ABA Directors. We travelled up the Central Valley to gain a better understanding of the almond industry that dominates not only the nut industry in California but that State's agriculture.**

Their industry had suffered a four-year drought and then near record rains and snow pack when it broke in late 2016. A large volume of new plantings and orchard renewal has occurred and as these trees mature the global supply will increase significantly. It was beneficial to see and hear firsthand about the challenges the Californian industry is facing and will face in future. These include growing consumer demand to match supply and addressing production challenges of labour availability and rising cost, bee availability and hive strength, management plans for water extraction from district aquifers, pest and disease pressures, and dust and air quality in the Valley, which was advised as the worst in the US. The disposal of hull, shell, wood prunings and trees is also a challenge with falling demand from dairy feedlots and cogeneration electricity plants being closed.

During our visits over five days with producers, researchers, chemical companies, industry suppliers and machinery manufacturers we did not hear of anything that the US industry was unaware of and are not addressing in a strategic fashion to ensure producer profitability and environmental sustainability are further progressed.

The Almond Board of California have the strong support of producers behind the strategies they are implementing from aquifer recharging to driving consumer demand in key markets worldwide with tailored

programs supported by grower levy funding. The Californian almond industry is a giant of world horticulture with a value around that of all Australian horticulture combined. The challenges being faced by them has stirred a determined effort to develop new and better practices in a co-operative and planned fashion.

In Australia, we too face challenges, some similar and some different to those of California but the purposeful addressing of these in a strategic fashion is common, as is the striving by industry for continuous improvement.

The joint ABA / ABC meeting held on the Monday prior to the Conference continued to build the mutual understanding between our industries as we look to cooperate in areas such as research that will benefit all.

This issue of *In a Nutshell* will provide an insight into the Californian industry and the work being done by the ABC, researchers and others as seen through the eyes of ABA Directors and staff who attended the Almond Conference and study tour.

The funding support from Horticulture Innovation Australia Ltd for the study tour is gratefully acknowledged.

The knowledge gained and the insight into emerging technologies will help the ABA to develop and implement our own strategies to drive the Australian almond industry forward.



Neale Bennett, Chairman

Ross Skinner, CEO

*Neale Bennett*

*Ross Skinner*





# Integrating traditional Indian health claims to modern marketing

**Joseph Ebbage** - Market Development Manager

**During the session devoted to marketing Californian almonds in India, a new nutrition-related initiative was discussed. It relates to the role of almonds in *Ayurveda*, a form of alternative medicine dating back 3,000 years. *Ayurveda* integrates and treats body, mind and spirit using a holistic approach including diet, meditation and yoga.**

The ABC supported new research conducted by Dr. Padma Venkatasubramanian and Dr. Subrahmanya Kumar of Trans-Disciplinary University (TDU) in New Delhi. They found that almonds have been highly valued for their health and nutrition benefits in traditional medicinal systems. These findings were released by a press conference which attracted strong media interest resulting in over 23 million impressions.

The researchers conducted an exhaustive search of published literature sources of traditional

Indian medicinal systems that are recognized by the Ministry of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy), Government of India.

It is the recognition of the role of almonds in *Ayurveda* by the Ministry of AYUSH that has potentially significant implications in the way health claims for almonds may be communicated. Currently, there are two organisations responsible for consumer health information: Food Safety and Standards Authority of India (FSSAI) and Advertising Standards Council of India (ASCI). Given the way these organisations work, it is difficult to communicate almond health claims directly to consumers in India. However, there may be a way forward working with the Ministry of AYUSH given the role of almonds in India's traditional *Ayurveda* system of medicine.

Another initiative of the ABC's marketing program has been to promote the gifting of almonds

during the festival of *Diwali*. The ABC launched two commercials, positioning the gift of almonds as a symbol of close relationships.

It should be noted that *Diwali* (the Festival of Lights) is not only celebrated in India but is also celebrated by the India diaspora all around Australia. Melbourne and Sydney, with their growing Indian populations, are taking the lead in these celebrations.

There is an opportunity for the Australian almond industry's marketing program to engage with local Indian organisations such as Victoria's "*Celebrate India*" who host a major *Diwali* celebration in Melbourne's Federation Square. Their 2017 celebration featured the state's Premier, Daniel Andrews, participating on stage.

In 2018, *Diwali* will be celebrated on November 7.



## 2018 Shockwave Sprint

- Tree Seeker Phase 2 (Optional)



**TREE SEEKER**  
PAT. # 6,658,834 7,757,471 9,485,912  
Laser Vision System

## 2018 Aftershock CC-350

- Dual chain delivery system
- Augers (Standard) or Desticker (Optional)



## 2018 Shockwave Monoboam

- 6.7L Cummins turbo diesel engine
- R3 Magnum shaker head with 10ft boom



## 2018 Aftershock AR-400

- Side-dump shuttle
- Air-ride suspension



## 2018 Shockwave Catchall VII

- Bin or Bulk Storage System
- Standard cab or Optional A/C cab



## 2018 Aftershock SD-36

- Side-dump elevator
- Optional desticker, dirt chain



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# THE LATEST:

## Developments in Californian orchard equipment

**Peter Cavallaro** ABA Director



During the recent trip to the Californian almond conference, other representatives from the ABA Board and I toured most of the US almond machinery manufacturing facilities. What we found were some very interesting developments in harvest machinery.

### **FLORY**

Flory have improved the conditioning range to include the CP87 PTO conditioner and the CC70 trailed conditioner and now have the self-propelled version to add to its range. This, combined with the 33 series sweeper, with a redesigned head, accommodates today's larger crops and windrows. The 8600 harvester offers a low speed suction fan and a high volume pre-cleaning chain to reduce dust and wear. They have also redeveloped the sweeper heads for the harvester called the wingsweep which is now a rake instead of a barrel that covers a total area of five metres across the row.

### **Orchard Machinery Company (OMC)**

OMC have a number of interesting additions to their range. The most exciting would be the "TREE SEEKER". The "TREE SEEKER" technology will identify a tree and position the shaker down the row using its laser vision guidance system. The laser is positioned in a boom that is mounted to the front of the machine and once a tree has been identified the machine moves forward the known distance to align the tree and shaker head. The operator presses the clamp shake button and the shaker head extends and undertakes the shaking process. The operator only needs to monitor the machine's operation.

This is different to the FAST system which requires the operator to drive up to the tree, send the boom out and then the system will take over to shake the tree.

Another product development is a shaker on tracks that has been popular due to wetter than normal harvest conditions. OMC are also redesigning their shake and catch equipment to be able to harvest traditional almond orchards that have lower canopies than pistachios.

### **Weiss McNair**

Weiss McNair have moved into a new state of the art facility which allows them a quicker and easier product build. The updated products include the 2850 Low Profile Sweeper which by all reports is ideal for high density plantings. They also have the low-profile Vee which is a tractor mounted V-sweep which is good for narrow rows or bushy trees with lower canopies. The new Magnum X Self-propelled Harvester is the latest machine to be redeveloped which has more power, greater throughput, improved cleaning and enhanced ease of operation.

### **Jack Rabbit**

Jack Rabbit are focused on their latest version of the harvester which runs a new disk based cleaning section. This provides an aggregated conveyance to the twin rod rear chain which offers a sleek design to minimise branch damage and the ability to control fan speed from the tractor. It will be trialled again this year.







# 5 minutes with...

# Joseph Ebbage

This edition of "5 minutes with..." is with Joseph Ebbage, the ABA's Marketing Program Manager. We asked him all about his extensive travels, his interests outside of marketing Australian almonds and what direction he sees the almond market moving in future years.

## How would you describe your role with the ABA?

My job is focused on market development for Australian almonds – both here in our domestic Australian market and overseas in our export markets. As a marketer, it has been a great privilege to work for our industry. When we kicked off our industry marketing program in July 2003, our crop was around 10,000 tonnes, 80% of which was sold domestically. This year, we harvested more than 80,000 tonnes and we export around 70%. It has been a remarkable transformation and I am very grateful for being able to be part of the journey.

## What has been the most important part of our industry's marketing program?

Without doubt, the essentially collaborative approach of our industry's marketers has made our industry's marketing program possible. Without this sense of working together, far less would have been achieved. Over the past 15 years of our program, we have had to work through drought, flood and rain and all their concomitant issues. Working together definitely offers us the best opportunity to gain maximum value for our almonds.

## In all your export travels for the ABA, what has been your 'hairiest' moment?

The clear clubhouse leader was the drive Laurence Van Driel from Select Harvests and I had from the International airport at Moscow to Moscow city. Over the course of 90 minutes, our driver reached speeds more suited to Bathurst, reached across the front seat of the car to get new CDs, talked on his mobile phone to his boss and lit numerous cigarettes. Many of these things at the same time! Little did we know that our efforts in Russia would later be halted due to international trade sanctions.

## What other interests do you have when not marketing almonds?

With my kids finishing school, I am spending more time on my Rotary interests. I am on the Board of my club, the Rotary Club of Melbourne and also a founding member of a multi-club initiative to help improve indigenous health in remote communities called Nourish Our Communities Limited. We are developing a nutrition program – Footy Nuts – to leverage Aboriginal kids' love of football to make healthy food choices such as snacking on almonds.

*"Without doubt, the essentially collaborative approach of our industry's marketers has made our industry's marketing program possible. Without this sense of working together, far less would have been achieved."*

## In terms of our ABA marketing program, where to from here?

Well, we know that with the new planting that has been taking place over the past couple of years we are going to have additional crop to market. But this has been our constant story over the past 15 years of our program. So provided we keep working together, there is no reason we won't continue to grow our key markets.

From a domestic market perspective, I look to the Nielsen Homescan consumer research. It tells us that around 85% of Australian households buy some nuts every year. The almond purchasing segment of this market is around 46%. This means that approximately 40% of Australian households buy some nuts but not almonds. This is a huge opportunity for the Australian almond industry.

From an export perspective, it is vital that we continue to grow our established markets of Europe, India and the Middle East. That said, we will devote increasing resources to also grow our markets in both North-East and South-East Asia. As Australians, we are well placed geographically to promote our almonds to the growing number of middle-class consumers in Asia who are looking for healthy and tasty food.



# Growing almonds Kern County



Figure 1: Overwintering nuts on a tree in California

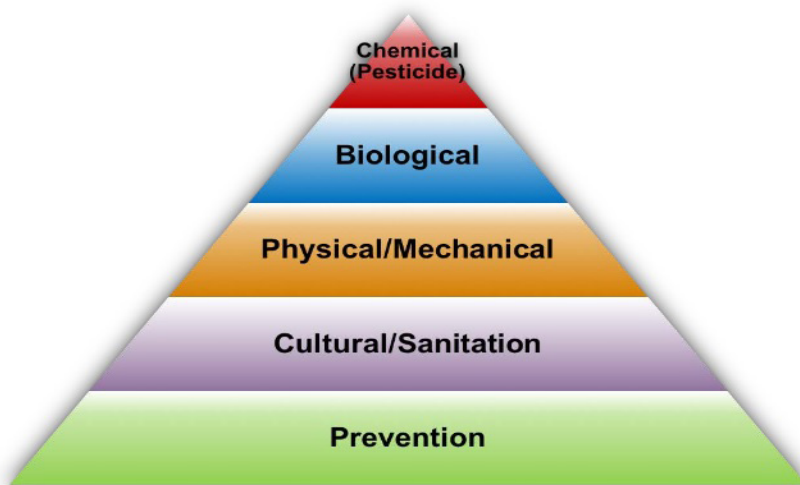


Figure 2: NOW Prevention Pyramid

On the 28th November 2017, upon arrival in Los Angeles the tour group travelled to Bakersfield to meet with Blake Sanden (University of California Extension Officer and Irrigation Technicia) for a tour of Kern County, the southern-most region for almond growing in California. The following outlines the first day of the study tour.

## Navel Orange Worm: *Sanitation, Sanitation, Sanitation!*

David Haviland, an entomologist who is working on a Navel Orange Worm (NOW) project through the University of California Cooperative Extension and University of California Statewide Integrated Pest Management (UC IPM) Program, met with the group to discuss management practices of the pest that is similar to our Carob Moth.

NOW is a significant issue throughout California and is amplified throughout Kern County. Research conducted through 2003-2006 showed that if there are 0.5 to 1.76 nuts per tree overwintering in the Kern County, the NOW damage levels for the following season can go from 1.57% to 7.85% respectively.

The NOW is more aggressive than the Carob Moth present in Australia. While Carob Moth is still present in California, these pests are more commonly seen in soft fruits, such as dates, rather than almonds.

The discussion of NOW control was based on the core components seen in the pyramid to the left (Figure 2). The diagram shows the importance and relationships of each core practice in controlling the pest. Just as we are emphasising in Australia with carob moth, sanitation is extremely important in managing pest numbers. Sanitation is described as the foundation of NOW management and if that is not up to standard, you are fighting a losing battle. Sanitation requires the removal of overwintering nuts or mummy nuts through re-shakes and manual removal. Due to the NOW pressure throughout

# Almonds in Kern County, California

**Josh Fielke - Industry Development Officer**

In the southern regions of California, the Integrated Pest Management Guidelines released by the University of California in 2017 put in to place a threshold of no more than an average of 0.2 mummies per tree canopy and 8 per tree on the ground. In the northern regions where there is less NOW pressure, the threshold is at a level of two mummies per tree with no ground threshold.

Looking at these numbers, you would notice that ground hygiene is at a much lower rate than tree hygiene. However, it is important to note that in Australia, the situation with Carpophilus Beetle influences the need for ground nuts to be destroyed as they are optimal hosts for the beetle.

Significant actions are now being taken throughout California to reduce carryover of populations of NOW. Re-shakes and manual removal of the nuts is now a must. Biological methods such as mating disruption is being used across significant acreages and in 2014 it covered 20,000 acres (Figure 3). This figure has only increased since 2014 with technologies becoming better and easier to use. For mating disruption, the method of choice in California is puffer technology. A trial is in the process of analysing NOW mating disruption puffers using products such as Suterra Puffer NOW (2006), Semios NOW (2016), Isomate NOW (Pacific Biocontrol 2017) and Cidetrak NOW (Trece) that will be released in California during 2018. In the trial the technology produced between an 82-97% reduction in trap numbers. This trial was conducted in an orchard utilising 40 acres for each treatment. When using mating disruption, it is important that it is used over a significant area. Mating can occur outside the boundaries of mating disruption and fly back into the treated area to forage. Therefore, if prevention of the pest is the overall goal, this can only be achieved if all practices are conducted area wide.

In Australia, puffer trials are planned to take place in the 2018/19 growing season to gain the data needed to get the registration in Australia. The dosage and distribution density of the technology will be evaluated in this process to optimise Carob Moth mating disruption.

As an outcome of David's project, the researchers produced a calculator that predicts the approximate kernel damage you will incur in the Kern County depending on how well you sanitise your orchard in relation to peach twig borer and proximity to pistachio orchards. This calculator is accessible at <http://www.almonds.com/pests/now-predictor> for different examples of damage levels.

## Wonderful Orchards

Our visit to Wonderful Orchards was hosted by John Gaugel (Assistant Irrigation Manager), Ashlee Desilva (Entomologist), Eric Mercure (Plant Production Manager) and Mohammad Yaghmour (Kern County Extension Officer).

Wonderful Orchards is a significant grower in the American horticulture industry cropping approximately 65,000 acres of almonds and pistachios, 58,000 acres of citrus and 45,000 acres of pomegranates.

Due to location and lack of snow melt, most of the irrigation water used in the region is from ground water that reaches as deep as 2000 feet. Over the past few years, Kern County has experienced significant use of groundwater extraction and has seen a subsidence in the aquifer of between 200-300 feet across different areas of the Kern

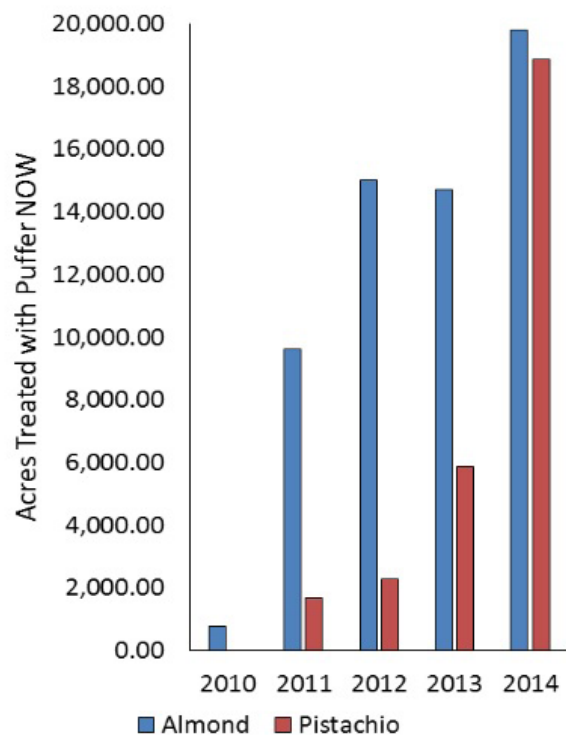


Figure 3: The increase of mating disruption with puffer technology



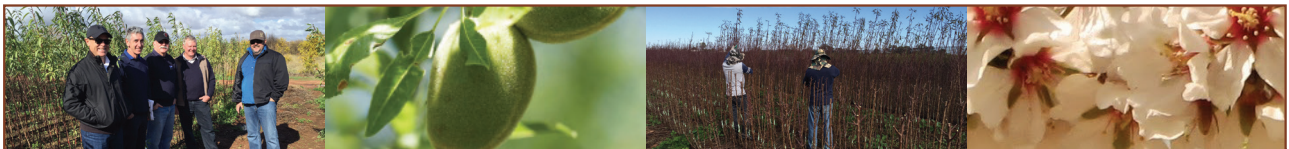
# Growing at Kern Co

County. Water authorities have now recognised this as unsustainable and are looking at developing management plans. Wonderful Orchards have also recognised this and are in the process of installing efficient dual drip irrigation lines as we have in most of our orchards throughout Australia.

Wonderful Orchards experience challenges with pollination, as the base value that is being paid is sitting at US\$150 per hive. If the beekeeper performs well, he can receive a bonus based on the number of frames per hive. The higher price in America is largely related to the increased costs of treating hives for Varroa Mite. Dennis VenEngelsdorp (a member of Bee Informed Partnership) advised at the conference that throughout California over the past five years the mite caused a 20-30% overwintering mortality rate to the

honeybee. This reinforces the need for Australia to maintain its high level of biosecurity protection to keep Varroa Mite out.

The planting process at Wonderful Orchards is conducted using GPS due to the significant planting area that needs to be covered in a day. The trees are generally planted at 22' by 18' (6.7m x 5.5m) with some new plantings going as close as 16' by 10' (6.1m x 4.9m). Replantings are now starting to occur in significant numbers. Research conducted in this area by Brent Holtz (University of California Director and Advisor) is showing that orchard recycling by mulching into the soil holds significant advantages (Figure 4). Over the eight-year life of the orchard recycling trial, 70 of the 120 micronutrient and cation exchange categories were significantly greater than the treatment where removed trees were burnt along the tree



## L&T Nursery – Supplying the Almond Industry with Quality Nursery Trees

Located within the irrigation district surrounding Robinvale, Victoria, L&T Nursery is a quality producer supplying growers in the area and across NSW and SA with almond trees. With over 20 years of experience in the almond sector and 30 years at a primary production level, L&T Nursery has a well-grounded understanding of how the industry operates. The company has a strong commitment to expanding the production of Australian almonds through the production and distribution of quality young trees.

The University of Adelaide has developed several new almond varieties; these new cultivars have opened up new pathways for growers and new opportunities for the industry. L&T Nursery are committed to supporting the almond industry in these ventures through providing an avenue for access to both traditional and new varieties. Traditional varieties have shown their capacity in relation to quality and yield, however, several varieties recently released have shown strong results in these areas. It is the distribution of these promising new varieties, alongside continuing production of traditional varieties that L&T Nursery is excited to explore. The growth of the Australian almond industry depends upon a solid foundation, with innovation and expansion from this central core. The approach that L&T Nursery has employed is modelled around this ideal.

We have a commitment to unrestricted supply of high quality trees. It is a great time to visit and view the trees and see why feedback from growers has been so positive. L&T Nursery is excited about building upon this success with further growers, to help strengthen the Australian almond industry.

Alongside involvement in nursery production, L&T Nursery are also almond growers. This gives L&T Nursery a holistic understanding of the most important elements of almond production and the requirements of growers. This knowledge allows L&T Nursery to better cater to grower requirements in the production of young trees.

L&T Nursery understands that planning ahead and securing trees is critical to create a well-functioning orchard; as such **we are currently taking orders for both the 2017 and 2018 winter planting.** Orders are also currently being taken for the current winter season for any re-planting or development needs. L&T Nursery are happy to work closely with growers throughout the cultivation of their trees.

**L&T Nursery** have a good supply of the following rootstocks to support your almond variety requirements:

- Traditional Rootstocks** – Hansen (peach and almond hybrid), Bright's Hybrid (peach and almond hybrid).
- Predominant Rootstocks** – Nemaguard (peach seedling), GF677 (peach and almond hybrid).
- New Rootstocks** – RootPAC-R (plum and almond hybrid), Garnem (almond and peach hybrid).



**Enquires relating to orders or nursery visits, may be directed to:**

**Tim on 0407 883 992 or [timmillen68@gmail.com](mailto:timmillen68@gmail.com)**

or

**Lynn on 0408 225 831 or [lynnolley@live.com.au](mailto:lynnolley@live.com.au)**



# Almonds in San Joaquin County, California

line. In the burn treatment there was a spike in soil micronutrients in the first year however this advantage was lost after the initial boost. Incorporation of the almond wood into the soil delivered greater benefits over a prolonged period and continued to show benefits in 2017.

Wonderful Orchards is also researching the incorporation of hulls into the orchard soils as an amelioration/fumigation type process labeled anaerobic soil disinfestation (ASD). This process works by incorporating products such as hull and shell into the soil. Water, tarps and the sun are then used in combination to deplete the oxygen in the soil to make it inhospitable to nematodes and other soil borne pathogens (Figure 5).

While the trees are growing up, a large amount of research has been conducted and published on pruning techniques. Roger Duncan's most recent paper showed that the best method of pruning was minimal to no pruning. Wonderful have now adopted this method defined as leaving multiple scaffolds after the first heading cut. For the initial five growing seasons they tie the trees to help form the shape using two or three straps.

Once the trees reach maturity, a general aim is for each ranch to average approximately three tonnes per hectare. To achieve this in most cases, the nutritional input is 275-310 units per hectare of nitrogen, with 220 units of potassium. Phosphorous is being widely discussed throughout California and within Wonderful. Generally speaking, they do not see deficiencies for phosphorous, however, they still do apply around 10-15 units per hectare.

During harvest, dust is a big issue within the San Joaquin Valley, contributing to poor air quality in the region. Wonderful Orchards are seeking to mitigate dust production by growing good covercrops and engaging with machinery companies to help reduce dust.



Figure 4: Young Trees entering dormancy at Wonderful Orchards (orchard recycling block)



Figure 5: Anaerobic soil disinfestation.



# MARKETING

## Domestic Update

### Household Penetration

	Oct 14	Dec 14	Mar 15	Jun 15	Oct 15	Dec 15	Mar 16	Jun 16	Oct 16	Dec 16	Mar 17	Jun 17	Oct 17
Nuts	85.3	84.5%	84.8%	84.6%	84.3%	83.8%	84.5%	84.4%	85.2%	84.7%	85.2%	85.6%	85.6%
Almonds	47.6%	46.0%	45.9%	46.1%	45.4%	44.2%	44.4%	44.5%	45.4%	45.9%	46.7%	46.8%	47.7%
Cashews	48.1%	47.2%	47.7%	48.1%	47.0%	46.1%	47.0%	47.1%	47.5%	46.6%	46.4%	46.4%	44.0%
Mixed Nuts	40.7%	40.6%	41.3%	41.2%	41.3%	40.0%	40.5%	40.7%	42.4%	41.5%	42.1%	41.7%	44.3%

Figure 1

### AWOP\$

	Oct 14	Dec 14	Mar 15	Jun 15	Oct 15	Dec 15	Mar 16	Jun 16	Oct 16	Dec 16	Mar 17	Jun 17	Oct 17
Almonds	\$24.10	\$25.20	\$25.79	\$26.50	\$27.30	\$28.70	\$29.95	\$30.10	\$30.89	\$30.90	\$30.10	\$29.70	29.78
Cashews	\$26.00	\$26.60	\$27.27	\$27.70	\$25.70	\$26.20	\$28.13	\$28.40	\$28.86	\$29.00	\$29.40	\$28.60	\$25.89
Mixed Nuts	\$22.60	\$22.30	\$22.83	\$23.10	\$22.00	\$22.50	\$23.22	\$22.70	\$21.84	\$22.10	\$22.50	\$22.70	\$24.59
Macadamias	\$19.40	\$20.70	\$21.38	\$22.20	\$22.60	\$23.10	\$22.95	\$23.60	\$24.43	\$26.40	\$26.90	\$25.80	\$25.96

Figure 2

Over the course of 2017, we have seen an increase in the number of Australian households purchasing almonds. The Nielsen Homescan research for MAT (Moving Annual Total) October 2017 indicated that 47.7% of Australian households purchased almonds compared to 45.4% for the same time in 2016 (Figure 1).

The global pricing movement downwards over this period saw a slight decline in the average dollar spend per household from \$30.89 in 2016 to \$29.78 in 2017 (Figure 2). Interestingly, Australian households spend more dollars on almonds than on any other nut type.

When looking at the number of new food and beverage products launched in Australia over the past year, almonds is the clear leader (Figure 3). The Innova Research report highlights that during the twelve months to December

Nut Category	Dec 17	Dec 16
Almonds	274	287
Hazelnuts	76	88
Cashews	144	148
Wanuts	38	34
Pistachio	10	12
Macadamia	34	58
Peanuts	169	208

Figure 3

2017, 274 products were launched with almonds as an ingredient. This compares to 144 new products with cashews and 169 products with peanuts. The versatility of almonds, combined with its health and taste attributes continues to drive almond consumption.

The ten top market or retail categories launching new products with almonds are below (Figure 4). Over the past couple of years, the 'cereal and energy bar' category has been very important for new almond products.

Top Cat	Market sub-category: Almonds Jan to Dec 2017	
1	Cereal & energy bars	81
2	Snack nuts & seeds	32
3	Breakfast cereals	31
4	Baking ingredients & mixes	13
5	Chocolate blocks	11
6	Sports bars	10
7	Cakes - pastries & sweet goods	9
8	Chocolate pieces - unwrapped	9
9	Fruit based snacks	9
10	Dairy alternative drinks	8

Figure 4

# G MATTERS

## Almond-specific heart health claims

During the last quarter, we drilled down into the research undertaken by the Nuts For Life program to identify that almonds are able to make General Level Health Claims relating to heart health. The key claim, called the Context Statement, has been lodged with FSANZ (Food Standards Australia New Zealand) by the ABA. This process has been overseen by Bree Murray, an experienced dietitian in on-pack labelling.

The Context Statement that needs to be included with each abbreviated claim is:

*A regular 30gm handful of almonds when eaten as part of healthy diet with a variety of foods contributes to heart health.*

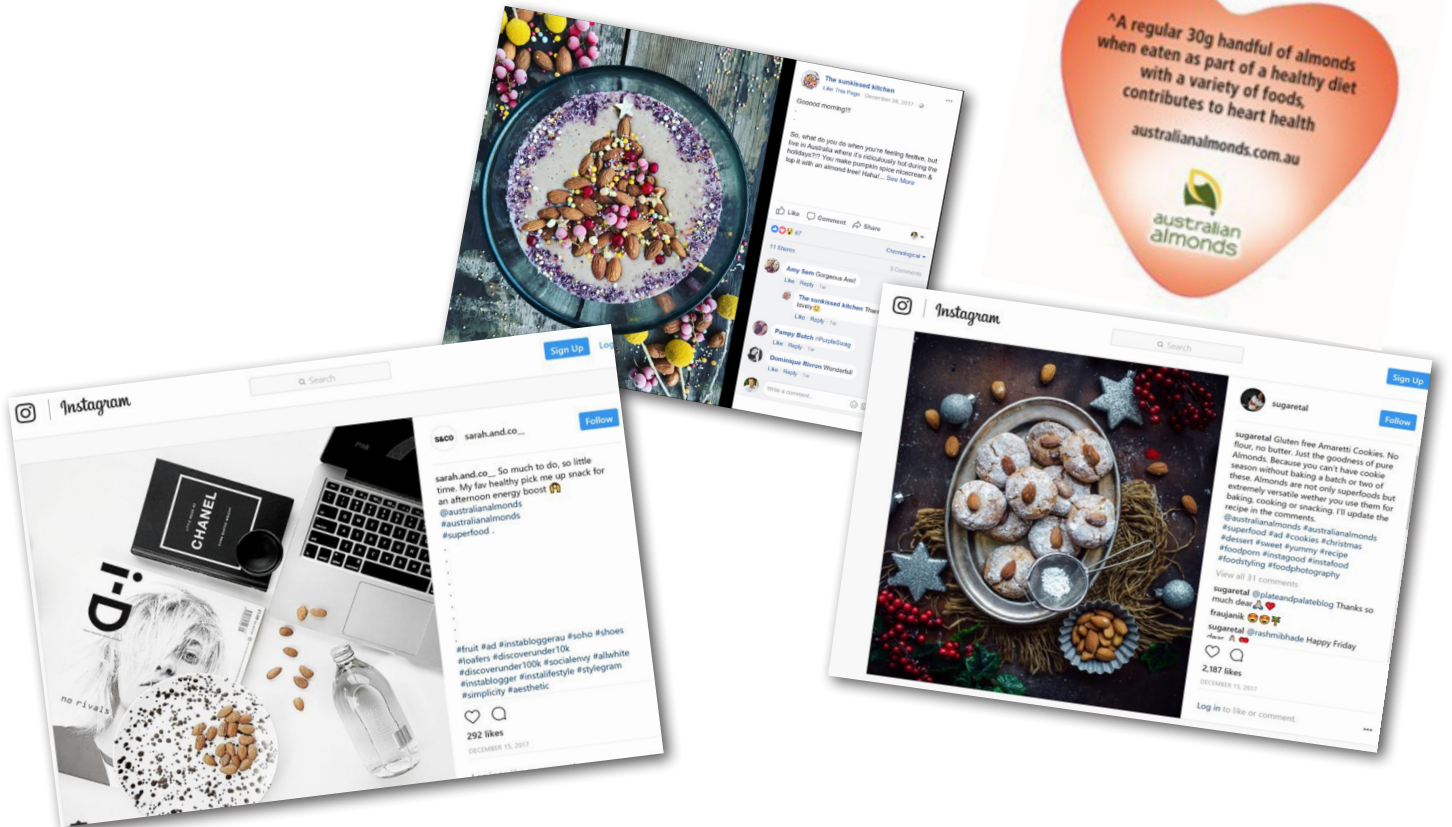
This 'context statement' will be abbreviated for our social media posts and snack tins. Our creative agency is working on some on-pack graphics that will be available in January 2018 (right).

We will support the launch of our almond heart health claims with a new design on our ever-popular heart-shaped snack tins. The front of the tin will promote our heart health claim and the back of the tin will provide the full context statement.

## Social media promotions

Our domestic social media promotional program continued through to Christmas. Our Australian Almond Facebook and Instagram communities continue to grow. For example, our Facebook platform grew from 44,000 in August to 54,000 in December.

Through our public relations agency, we continue to engage with social media influencers who post recipes and photos of their latest almond creations.





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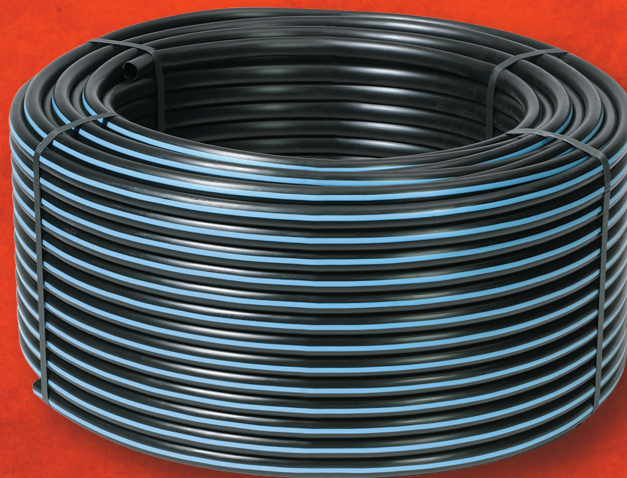


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# MARKETING MATTERS

## Export Update

The global supply context for almonds was updated at the 2017 Almond Board of California annual conference. During their 'State of the Industry' report, they discussed their production outlook to 2021/22. The ABC forecast is for a 30% increase in crop size over five years which will reach 3 billion pounds.

The ABC highlighted that their total assessment (levy) for these five years is forecast to reach \$US369 million or \$AUD472 million. Approximately 70% of this assessment is devoted to their full range of marketing activities and programs.

During the last quarter, our major Australian Almonds export marketing activity was our exhibition at the Anuga Food Fair in Cologne, Germany in October. Anuga is one of the world's largest food and beverage industry promotions. It is held biennially and in 2017, ran from October 7 to 11.

Anuga attracted approximately 165,000 visitor entries from 198 countries. The share of international visitors was 75%. There were more than 7,400 exhibitors from 107 countries and the share of

international exhibitors was 90%. To give a context of the size of the expo, the 2017 Anuga expo covered more than 284,000 sqm.

Anuga is a very important trade event for the Australian almond industry as Europe represents approximately 40% of our total exports.

The Australian Almond stand at Anuga is situated within the Fine Foods section of the exhibition. It is also situated close to the USA pavilion which provides a convenient solution to our customers who can visit the pavilions of both the Californian and Australian almond industries

As Anuga takes place in October, there was a lot of trading discussion with the Australian marketers about the 2018 Australian almond new season. Although the pressures of drought in California have eased, many international almond buyers who have not previously purchased Australian almonds remain interested to learn more about the Australian almond industry and to commence building relationships with the Australian almond marketers.





# REVIEW

**For the first time, the 2017 Research & Development Forum was held across two days in Loxton on 24th and 25th October consisting of research updates on Day 1 followed by a Field Day at Century Orchards on Day 2. The first day of the R&D Forum was held at the new Loxton Research Centre conference facility. This new look Centre provided an excellent venue for the forum. The Centre is a world class facility and is achieving the South Australian Government's aim in redeveloping the site to develop a collaborative hub to help bring together industry, research, education and government to drive agriculture and business innovation.**

The Forum was divided into two events, with participants having the option of attending both days or only one. The attendance at the Forum was double that of the previous 2015 Forum with total registrations of 221.

The Chair of the Almond Board of Australia, Neale Bennett, opened the day by welcoming everyone to the event. The sessions commenced with a presentation from Corrine Jasper and Alok Kumar providing a background to Hort Innovation's allocation of industry levies and the opportunities and challenges that are being addressed through the implementation of the Strategic Investment Plan and Hort Frontiers, the Strategic Partnership Initiative that aims to facilitate collaborative cross-industry investments.

Michelle Wirthensohn from the University of Adelaide delivered an update of the advances that have been made in the Australian Almond Breeding Program. An area of interest to growers is the performance of different rootstocks. Everard Edwards and Mandy Walker, CSIRO, presented their work on the influences of rootstocks on better tree performance and water use efficiency through root system resilience, nematode resistance, and gaining a better understanding of almond root systems.

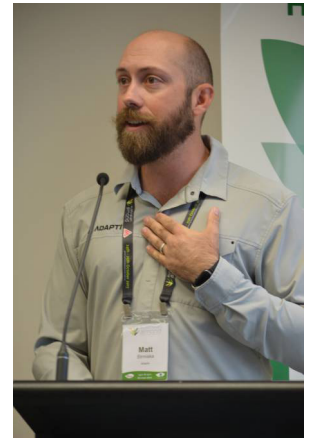
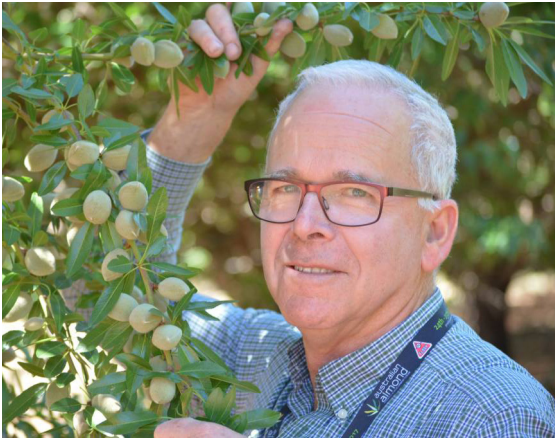
An update on the progress being achieved by the Almond Board of Australia in establishing the Almond Centre of Excellence experimental orchard in Loxton was provided by Brett Rosenzweig. Current trial information and the future plans under ST16000, Advanced production systems for the temperate nut industries were outlined.

This update tied in well with the presentation from Michael Treeby as Agriculture Victoria are also establishing trials as part of ST16000. An update on the factors influencing spur productivity was provided by Michael detailing factors that influence spur mortality and also differences between almond cultivars.

As a part of the industry's vision for advanced production systems, an update on better understanding dehydration and on farm hulling was delivered by Michael Coates and John Fielke of the University of South Australia. The ability to dehydrate the kernels







to the right moisture level will help reduce chips and scratches on kernels and improve the shelf life of the product. The on-farm hulling of almonds is appealing to growers as it will provide transport efficiencies and potentially enable the hulls to be returned to the orchard soil providing a valuable source of nutrient and organic matter.

Matt Strmiska was the international guest speaker at the Forum. His presentation provided insights into delivering integrated pest management to the Californian almond industry. Matt focused on key factors that the grower can control such as knowing the performance attribute of their spray machinery as this can lead to problems such as pest and disease resistance to chemicals. Matt's presentation was well delivered in a relatable manner and very well received.

The final presentation of the Forum was on 'Increasing whole tree yield by spraying pollen: are there trade-offs?' by Sarina Macfadyen. Sarina has years of pollination research experience with the almond industry in her role with the CSIRO. Sarina addressed the impacts of resource availability, such as light and leaf area, and their influence on flowering and fruiting at spur level, the implications of whole tree pollen application, and how growers can increase profitability with improvements to pollination.

The Field Day at Century Orchards was well attended with 12 exhibitors demonstrating their equipment to interested onlookers. In addition to the exhibitor stands, the Almond Board of Australia staff conducted field walks through the range of new varieties that are planted at Century Orchards and OCP demonstrated their drone chemical applicator.





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Source: Loxton Waikerie Council - "Environment Fact Sheet 300"

**Bird damage to orchards and vineyards can substantially affect the profitability of primary production. Audible bird scaring devices can be used to limit crop damage. However, the use of such devices becomes inappropriate when they impact upon the quality of life of nearby residents, create a fire risk or are overused and become ineffective.**

Ensuing the following of the guidelines will help protect amenity for the surrounding community, protect against fires and preserve the effectiveness of the devices.

## Noise Control

The operation of audible bird scaring devices should comply with any conditions attached to a development approval as well as the "Audible Bird Scaring Devices Environmental Noise Guidelines 2007" prepared by the EPA.

Guidelines for noise control include:

- Audible bird scaring devices, where gas-fired or electronic, must not be used from 8.00pm on any night until 7.00am on the following morning unless the maximum noise level, when measured at any nearby noise sensitive premises, is less than 45dB(A).
- At other times, noise levels should not exceed the maximum noise levels set out in the "Audible Bird Scaring Devices Environmental Noise Guidelines 2007"
- There should not be more than 6 shots per hour from a gas gun.
- Bird scaring devices should not be used within 300 metres of a dwelling on an adjoining property in a rural area, or within 500 metres of a dwelling on an adjoining property in a residential or rural living zone.
- An audible bird scaring device should, where possible, be directed away from the nearest noise sensitive receiver to minimise the impact of any noise.
- An audible bird scaring device should only be used in conjunction with other methods of bird control. Primary producers should have a written bird management plan that outlines the various methods of bird control being implemented on the property.

## Fire Risk

Most audible bird scaring devices detonate a flammable gas to create a noise to scare birds. Precautions must be taken to ensure that the operation of such devices does not create a fire risk, especially during the fire danger season.

A person must not, during the fire danger season, use a gas-fired device as a bird scarer unless:

- The space immediately around and above the device is cleared of all flammable material to distance of at least 4m;
- The device is constructed to prevent the escape of fire or burning material, and is clean and in good working order, so as to avoid a malfunction that could cause a fire;
- The person using the bird scarer takes all reasonable precautions to ensure the bird scarer cannot fall over or be knocked over or otherwise interfered with by animals.
- If these conditions are not met, an expiation notice can be issued with a fee of \$315.



## Further Information

Further information about the guidelines for the operation of audible bird scaring devices is available by phoning the District Council of Loxton Waikerie's General Inspectors on 08 8584 8000 or the EPA on 08 8204 2004 or from the EPA website at [www.epa.sa.gov.au](http://www.epa.sa.gov.au)



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# POLLINATION Update

## Neale Bennett ABA Chairperson

**As growers we are all aware of the old saying: “No bees = no almonds”. With the constant threat of a Varroa mite incursion, the price of honey bee hives for pollination, the health of honey bee hives and the availability of bees for pollination is always at the back of our minds. What can we do to improve our pollination prospects? Our counterparts in California place a strong emphasis on this part of their operations and part of that is centred around bee health and availability.**

Whilst the beekeepers have learnt to cope with the Varroa Mite problem, the Almond Board of California (ABC) have been encouraging growers to interact with their beekeepers and together develop strategies which are beneficial to all parties involved. Small things such as only spraying fungicides at night or late afternoon while honey bees are on the orchard, never adding surfactants to these sprays and putting water sources out for bees have now become the norm. Open communication between both beekeepers and growers regarding orchard practices that could be either detrimental, or have a positive effect on bees, are the way of the future.

In the last few years an enormous amount of research has been centred around honey bees and pollination by either the ABC or privately funded bodies such as Project Apis M – [www.projectapis.org](http://www.projectapis.org).

For years there has been a belief that growers need to get rid of flowering weeds or cover crop as this would stop the honey bees from pollinating the almond flowers by distracting them. Recent research has shown that this is purely a myth. The fact is having either flowering natives or flowering cover crops in or around the orchards are proving to be very beneficial to not only the health of the hive but it also encourages the bees to forage/ pollinate for longer. Cover crops that contain flowering mustards, daikon radish, clovers that flower as well as flowering

natives planted close to the orchard have all been found to improve the efficiency of pollination as well as improvement in hive health. Studies have shown that hives fed with pollen supplements only have 62% of the worker bees out pollinating. Compared to hives that have access to natural floral resources such as the flowering cover crops and natives, the workers increased to 80% out pollinating the almond flowers. Scientific evidence has shown that not only does it increase the work rate of the honey bees but it improves the pollination chances of the crop. It is now starting to be seen that growers who plant a floral cover crop or natives that flower at the time of almond pollination are negotiating a discount on their hive rental.

Colony Collapse Disorder (CCD) of honey bee hives in California has led to annual losses of up to 27% of the hive numbers. Healthy diets from natural forage help to control CCD and improve the retention rate of the hive. As almonds are the first crop to be pollinated each year, having a healthy hive is becoming harder to achieve for the beekeepers. Approximately 2.7 million hives are overwintered in the Northern Great Plains of the Dakotas, however land and floral sources for the bees are being depleted by the increase in agriculture at an alarming rate. From 2006 – 2014 approximately 2.96 million acres were cleared and planted to corn and soy beans taking vital floral resources away from the bees. Studies have shown that honey bee hives over a two week period can increase in weight by up to 34kg where floral resources are plentiful compared to hives over the same time period that can lose up to 2kg in areas with limited floral resources. The end result can be the difference of two extra frames of bees produced per hive.

Research continues on the honey bee as the importance of not only good weather for successful almond pollination is being realised, but also the initial hive strength and health to complete the job.





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Corrine Jasper  
Relationship Manager  
Hort Innovation

## **Meet the almond industry Relationship Manager and see how she can support you.**

Corrine is keen to chat with you. She is your link to the latest R&D developments and how these can help your business grow. It's easy to request a phone call – just go to the 'Contact Me' form at [horticulture.com.au/contact-me](https://horticulture.com.au/contact-me). Alternatively, call 02 8295 2300 or email [membership@horticulture.com.au](mailto:membership@horticulture.com.au) and let us know you would like Corrine to call you.

[horticulture.com.au](https://horticulture.com.au)

**Hort  
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## Strategic Investment Advisory Panel (SIAP) update

The Strategic Investment Advisory Panel (SIAP) met via teleconference on the 12th January to provide Hort Innovation with advice on a number of project variations and concepts. The next meeting of the SIAP will be held in Mildura on the 14th March. The panel will be prioritising areas for consideration of investment in pollination. Alok Kumar will also be presenting and taking almond industry advice for consideration by the EAP for possible future investment in the "Advanced Production Systems" and "Pollination Funds".

For further information on Hort Frontiers Funds, please go to [www.horticulture.com.au/hort-frontiers](http://www.horticulture.com.au/hort-frontiers).

SIAP meeting summaries can be accessed from Hort Innovation's Almond Fund page, [www.horticulture.com.au/grower-focus/almond](http://www.horticulture.com.au/grower-focus/almond)



## Research & Development Project Update

### The following projects have been contracted by Hort Innovation:

- Almond Rootstock – Stage 2
- Integrated Pest Management
- Integrated Disease Management

### Current and recently completed Almond Fund projects:

You'll find details on all new, current and recently completed almond levy investments in the new edition of Hort Innovation's *Hortlink* (2017, edition 4). The publication is available at [www.horticulture.com.au/grower-focus/almond](http://www.horticulture.com.au/grower-focus/almond). To be notified when it's available, and to receive other timely updates from Hort Innovation, become a Hort Innovation member for free at [www.horticulture.com.au/membership](http://www.horticulture.com.au/membership).

Projects detailed in the publication include:

- Identifying factors that influence spur productivity in almond (AL14005)
- Almond productivity: Tree architecture and development of new growing systems (AL14007)
- Advanced processing of almonds (AL12003)
- Australian almond industry innovation and adoption program (AL16001)
- Australian almond variety evaluation and commercialisation program (AL12015) and Development of high health status mother planting for new Australian almond varieties (AL16004)
- Management of Carpophilus beetle in almonds (AL15004)
- Better tree performance and water use efficiency through root system resilience (AL13009)
- Managing almond production in a variable and changing climate (AL14006)
- Australian almond industry conferences and field days 2017-2021 (AL16700)
- Almond industry statistics and data collection 2017-2019 (AL16003)
- Australian almond industry communications program (AL16000)
- Almond minor use permit program (AL16002)
- Horticulture trade intelligence reporting 2017-2019 (MT16011)
- Enhanced National Bee Pest Surveillance Program (MT16005)
- Almond study tour (AL16701)

### What's happening in Hort Frontier's

New projects are constantly in development, with a number of projects being developed for both the Advanced Production Systems Fund and the Pollination Fund. Keep a look out for new projects on the Frontiers Funds page of the Hort Innovation website or contact Alok Kumar or Sharyn Casey for further information.

### Hort Frontiers Projects under contract

**Leadership Fund:** Building capacity through investment in programs which support ongoing leadership development for people at all stages of their careers.

- LP15000 Horticulture Nuffield Scholarship 2016
- LP15001 Global Masterclass Horticulture
- LP15006 Attracting New Entrants into Australian Horticulture
- LP15007 National PhD scholarship coordinator
- LP16000 Leadership training for women in Australian horticulture
- LP16002 Churchill Fellowship

**Health, Nutrition and food safety fund:** Driving growth by delivering safe, nutritious and healthy horticultural products to consumers.

- HN15000 New Technology for Sanitising Fresh Produce and Nuts
- HN15001 Naturally Nutritious
- HN16001 Consumer Insights into Nuts
- HN17002 Nuts for Life Educating Health Professionals

**Asian Markets Fund:** Driving growth through sustainable investment in high value and high growth Asian markets.

- AM15000 Now! In Season
- AM15002 Serviced supply
- AM15007 Australia Fresh (Taste Australia)
- AM15010 Australian Fresh Collaborative Market Development Program (Nuts)
- AM16001 Asian Market Intelligence & Data Insights
- AM16002 Asia Fruit Logistica 2016-17 (Hong Kong)
- AM16003 Fruit & Vegetable Fair – FVF (Beijing)

**Pollination projects:** Ensuring sustainability through cutting-edge research in pollination technology and practice.

- PH16004: Securing pollination for productive agriculture: guidelines for effective pollinator management and stakeholder adoption
- PH15001: Healthy bee populations for sustainable pollination in horticulture
- PH16000: Stingless Bees Effective Managed Pollinators for Australian Horticulture
- PH15000: Strengthening and Enabling Effective Pollination for Australia
- MT16005: Enhanced National Bee Pest Surveillance Program 2016-2021
- PH16001: Increasing yield and quality in tropical horticulture with better pollination, fruit retention and nutrient distribution

If you would like to read more on the Hort Frontiers Fund projects please go to [www.horticulture.com.au/hort-frontiers/](http://www.horticulture.com.au/hort-frontiers/) or contact Frontier Fund Business Development Managers Alok Kumar on Email: [Alok.Kumar@horticulture.com.au](mailto:Alok.Kumar@horticulture.com.au) or Sharyn Casey on Email: [sharyn.casey@horticulture.com.au](mailto:sharyn.casey@horticulture.com.au).

### Projects recently tendered (yet to be contracted)

**Pollination Fund:**

- PH17000: Nation honey bee breeding program

**Advanced Production systems:**

- AS17000-National tree genomics program

Become a member. Sign up today to receive the latest project updates for the Macadamia Fund and the opportunity to have your say go to <http://horticulture.com.au/membership-application-form/> or give me a call to discuss on 0439 433 885.

If you have any questions or would like to discuss anything related to the almond program, you can also contact the industry's Relationship Manager at Hort Innovation, Corrine Jasper, on 0439 433 885 or at [corrine.jasper@horticulture.com.au](mailto:corrine.jasper@horticulture.com.au).



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# IN THE ORCHA

Harvest is rapidly approaching and it's time to start thinking about the jobs that need attention before the hectic harvest schedule starts.

## Harvest machinery

Check all machinery to make sure there are no residues of last year's old crop that can contaminate this year's new crop. Residues from the old crop that are mouldy and/or full of insects will put this year's crop at risk. Mould spores could be transferred to the new crop if conditions are suitable and likewise storage pests can move from the old crop to new crop. Even if the new crop is not directly contaminated, there's always potential for quality downgrades at the processor if some of the old crop is mixed in with the new crop.

Ensure any new staff are well trained in the use of machinery prior to harvest starting.

## Food safety

Australia has built a reputation for producing quality almonds which helps our industry maintain a marketing edge over our competitors. Food safety starts on farm, can't be fully rectified by the processors and financially impacts everyone in the supply chain.

Similar to the comments regarding harvest machinery above, ensure areas around stockpads are free of debris from last year's crop. Any trash containing almonds should be incinerated or buried deeply. Carpophilus Beetle can fly long distances so dumping the trash on another part of the property is not an option. Make sure to check the kernels for any signs of insect or beetle activity as this could be a warning sign for storage pests in this year's crop. If you do see signs of insect or beetle activity, consider setting traps to monitor populations before control methods are considered. Likewise, all mummies and windfalls in the orchard from last year should have already been swept into the midrow and destroyed by flail mowing. It's critical to remove the habitat and food source for Carob Moth and Carpophilus Beetle before hull split and this year's harvest.

Ensure all irrigation system repairs are completed, especially drip lines, submains and around valve/filter assemblies. If these items are constantly leaking, ruts can be formed in the row causing problems with sweeping and picking up at harvest. Any crop that is harvested into excessive wet areas (even if the area is small) can cause staining or promote Salmonella or Aflatoxin contamination. Another factor that is often not thought about is tree stress. Excessively wet soils (even if only around one tree) can cause long term tree decline through the introduction of secondary pathogens. Tree stress caused by overwatering can lead to a weakening of the trees' defence mechanisms and allow the entry of Phytophthora and Bacterial Cankers.



# rd

**Brett Rosenzweig,**  
Industry Development Officer

## Harvesting

It's important to maintain the food safety theme during harvesting operations as well as preparing for harvest. Once the crop has been shaken onto the ground, avoid unnecessary wetting of the nuts by sweeping away from the drip line. This will enable irrigations and early season fertigation to continue without risking the development of mould on wet nuts. Conditioning is becoming an important step in the harvesting process to not only speed up the harvesting process but to also improve the quality of product delivered for hulling and shelling. Conditioning is where the crop is windrowed prematurely, passed through

the pickup and then dropped back into a windrow. Conditioning removes dirt, leaves and other debris from the windrow leaving the crop to sit on top of the soil and thus enables more rapid drying. Conditioning is especially important for late harvesting varieties like Monterey.

Figure 1: Unconditioned windrow with leaves, dead sticks and dirt.

Figure 2: Conditioned windrow with crop sitting on top of the soil surface and free from debris.

In addition to accelerated drying time, conditioning also enables the final pickup step to occur more quickly. Less debris on the windrow allows for faster travel

speeds when picking up which could be the difference between successfully harvesting crop on the ground before rain events or running out of time.

Even with the use of crop conditioning, late harvesting varieties or pollinators with thick overgrown canopies may take too long to dry in the orchard. If this occurs, the best method is to remove the crop from the orchard and lay out windrows along headlands or vacant exclusion areas to accelerate drying. This is preferable than leaving the crop in the orchard being subjected to cooler temperatures, dewy mornings and autumn rains at the end of harvest.



Figure 1



Figure 2







The Almond Board of Australia appreciates the support of the following bodies and businesses in establishing the Almond Centre of Excellence Experimental Orchard:



Australian Government



Government of  
South Australia

**Horticulture  
Innovation  
Australia**





# 2018 Events

## JANUARY

SUN	MON	TUES	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

### January

- 1** New Years Day Public Holiday: AUS
- 2** ABA office reopens
- 18** Almond Centre of Excellence Committee Meeting, Loxton Research Centre
- 26** Australia Day Public Holiday

## FEBRUARY

SUN	MON	TUES	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

### February

- 5** ABA Market Development Committee Meeting, Production Committee Meeting, Conference Committee Meeting & ABA Board Meeting, Mildura
- 6** ABA Plant Improvement Committee Meeting & Pollination Committee Meeting, Loxton Research Centre
- 7** New Australian Varieties Pre-harvest Field Day, 9.30am SA time, Lindsay Point
- 18** Gulfoods begins, Dubai
- 22** Gulfoods ends, Dubai

## MARCH

SUN	MON	TUES	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

### March

- 6** Foodex begins, Tokyo
- 9** Foodex ends, Tokyo
- 12** Labour Day Public Holiday, VIC; Adelaide Cup Public Holiday, SA
- 14** Horticulture Innovation Strategic Industry Advisory Panel Meeting
- 30** Good Friday
- 31** Easter Saturday



# Chocolate, Cherry & Almond Icecream Cake

## Ingredients:

1.5 kilograms vanilla ice cream  
450 grams cherries  
1/3 cup water  
1 packet chocolate biscuits (250 grams)  
50 grams butter  
80 grams raw almonds, chopped roughly  
20 grams slivered almonds

## Method:

Leave ice cream to soften on kitchen bench.

De-stone cherries and place into saucepan with water.

Bring to boil and then simmer over medium heat for 12 minutes. Leave to cool.

Meanwhile, get on with base. Pulverise chocolate biscuits in food processor or by bashing with a wooden rolling mallet or pin whilst in a heavy duty plastic bag. You want them fine like breadcrumbs.

Spray a Springform cake pan with cooking oil.

Melt the butter in the microwave (about 15-20 seconds).

In a bowl, mix the cookie crumbs and the melted butter until thoroughly combined.

Spoon into cake pan and then press down firmly with your fingers. Use an offset spatula to create an even surface.

Spoon ice cream into a large mixing bowl and add 3/4s of the cherries and the raw almonds. Mix thoroughly and then turn out into cake pan.

Cover with clingwrap and freeze for two hours.

Add reserved cherries and continue freezing for another one hour or overnight.

To serve, remove from freezer 10 minutes before serving.

Stand (water-tight) cake pan in a couple inches of water for a minute to loosen.

Then gently remove cake from cake pan, using a spatula to neaten sides if necessary.

Sprinkle slivered almonds on top and serve.

