

TALKING AVOCADOS



Qualicado program a Success

Australian "Kangaroo Label" update

Irrigating avocados – all sorted?



Avocados Australia Limited

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Avocados Australia Limited
ABN 87 105 853 807

Level 1, 8/63 Annerley Road
 Woolloongabba, Qld 4102 Australia

PO Box 8005 Woolloongabba Qld 4102 Australia

Phone: 07 3846 6566 Fax: 07 3846 6577

Email: admin@avocado.org.au

Web: www.industry.avocado.org.au

John Tyas j.tyas@avocado.org.au
 Chief Executive Officer

Avocados Australia Directors

Jim Kochi Chairman 07 4054 2188
 North Queensland j.kochi@avocado.org.au

Peter Annand 07 3300 5660
 Sunshine Coast p.annand@avocado.org.au

Daryl Boardman 07 4697 8000
 South Queensland d.boardman@avocado.org.au

Lachlan Donovan 07 4159 7670
 Central Queensland l.donovan@avocado.org.au

Tom Silver 02 6628 8929
 Tamborine & N'thern Rivers t.silver@avocado.org.au

John Walsh 07 4126 8200
 Central Queensland j.walsh@avocado.org.au

Barry Avery 0428 219 186
 Tri State b.avery@avocado.org.au

David Duncan 0409 105 035
 Western Australia d.duncan@avocado.org.au

Neil Shenton 0428 330 619
 Western Australia n.shenton@avocado.org.au

Ian Tolson 0418 262 595
 Central New South Wales i.tolson@avocado.org.au

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Editor in Chief: John Tyas

Managing Editor: Anna Petrou

PO Box 8005 Woolloongabba Qld 4102

Phone: 07 3846 6566 Fax: 07 3846 6577

Email: TalkingAvocados@avocado.org.au

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 PO Box 8005 Woolloongabba Qld 4102 - Phone: 07 3846 6566,
 Fax: 07 3846 6577 Email: TalkingAvocados@avocado.org.au

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We all make mistakes: If we make a mistake please let us know so a correction may be made in the next issue.

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Chairman's Perspective

This year has certainly been a year to remember after a build-up of excellent prices over the Summer supply period and extending through the Queensland crop from February to June.

The success of our avocado crop is the subject of many conversations in other horticulture industries and some may explain the phenomenon to their members as just a lucky streak. It is more than that really. It is because the avocado growers of Australia have decided to pay decent levies for Research and Development and for Marketing over a very long time and have used those funds to build a quality product that will respond to a planned marketing programme.

I preach to the converted here but this sacrifice made by avocado growers (you and others before you) is still not understood by other industries and some Government departments.

On a more positive note I welcome Neil Shenton as the second Western Australian director to the Board of Avocados Australia Limited. The Board had a review of regional representations (as required every 5 years) and the growth of the production in Western Australia warranted a second Board member. Along with David Duncan, Neil Shenton will assist in providing all WA growers with a voice and the means to represent the views of WA growers to the AAL Board.

Also, I am pleased to support the presentation of Graeme Thomas with the Avocados Australia Order of Merit for his services to the industry and especially for his work in

developing the root sampling technique for sampling phosphorous acid levels in roots and the practical use of that information in using phosphorous acid to control Phytophthora Root Rot. Graeme was presented with his award at the South Queensland Qualicado workshop on the 8 May.

The Qualicado Workshops have been a resounding success and the continuation of this programme has been a recommendation from the Board of Avocados Australia to the Industry Advisory Committee. The results from the dissemination of technical information and the grower networking within the regions, is certainly worth the expense and effort. I extend on behalf of the AAL Board our sincere thanks to all AAL staff, researchers, presenters, grower hosts and everyone else for the effort put into these workshops.

So far, this programme has had in attendance some 648 growers, packers, wholesalers, ripeners, providores, and transporters.

Now, our industry's success may be just a lucky streak but I like to think it's more likely to be "the harder we work, the luckier we get".

Jim Kochi

Jim Kochi, Chairman, Avocados Australia



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CEO's Report

Season update

Demand has been fair over the past few months which is typical for this time of year, with supply and demand in reasonable balance. Despite some fruit drop as a result of hot weather in southern Australia earlier in the year, the crop forecast for Spring and Summer remains high with record volumes expected from WA and NZ from September to February. The next six months will be a solid test of industry's ability to manage supply effectively. Infocado is a useful tool that can assist industry to plan more even supply which helps fruit quality (less build up) and category value. This period will also be a test of consumer's demand potential. We know from consumer research that many consumers will purchase more avocados as long as they are good quality (including ripeness stage) and good value and the industry marketing campaign will continue to help build consumer demand.

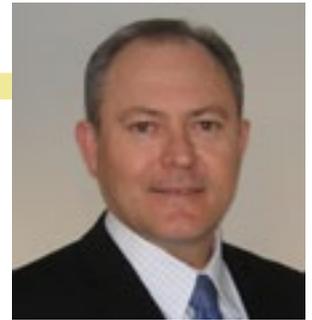
The New Zealand industry has agreed to contribute funding towards the avocado promotion program in Australia this year to help build continued consumption of avocados in Australia.

Avocados Australia welcomes the decision, which will extend the Australian levy-funded television campaign (which is due to run again in September) by three weeks in October/November. This decision follows discussions between AAL, HAL and NZAGA over the past couple of months where a number of options for co-investment were presented.

This is a great outcome for both industries as it will significantly extend the current campaign to build avocado consumption across the spring and summer period this year but also into the future. The Australian levy-funded television commercial (TVC) will be made available under certain conditions for use by the New Zealand industry during this period. The great benefit of this approach is that it builds on what the Australian industry is doing, rather than developing a separate campaign that may have different messages. It also provides maximum expenditure on media, rather than using scarce resources to develop new creative material. By using the same media agency (Ikon) the NZ funding will go further due to the contracted media rates that HAL has already negotiated with Ikon. The TVC will be amended slightly during the New Zealand-funded period to be 'country neutral'. It is certainly a win-win for both industries!

Review of HAL

Since the last edition of Talking Avocados, the final report from the independent review of HAL has been received



by the HAL Board and the Minister for Agriculture, the Honourable Barnaby Joyce. Significant work is now required by industry and government to consider the review findings and implement changes that will lead to better (or at least equivalent) outcomes for industry.

The review recommendations are broad reaching, although much of the detail is yet to be thought through. At a recent HAL Extraordinary General Meeting, the majority of HAL members voted in favour of the first recommendation from the review which is to replace HAL with a grower/levy payer-owned R&D Corporation (as opposed to ownership by Peak Industry Bodies (PIBs) such as Avocados Australia (AAL)). There are significant logistical issues associated with this move, but it is expected that this change will provide levy payers with more direct input to HAL and alleviate concerns around PIB conflict of interest in the current model. How that will work in practice is yet to be determined.

One of the other key recommendations from the review is that more funds should be directed towards whole of industry R&D Programs. While this makes sense at face value, assuming there are no additional sources of R&D funds available, there is a risk that significant funds could be diverted towards whole of horticulture programs at the expense of industry specific programs. Would avocado levy payers prefer to see R&D funds addressing issues such as avocado irregular bearing or directed towards projects that will address things like climate change, or other government priorities that may or may not deliver tangible benefits to levy payers?

There is some urgency around the proposed changes. The administration of industry levies through HAL is managed through a Statutory Funding Agreement (SFA) between HAL and the Australian Department of Agriculture (DA). A new SFA is due to be signed in November this year and the indications are that the DA will not sign a new SFA with the current HAL. It is proposed that a new organisation will be established, with individual levy payers as the shareholders and a completely new set of arrangements for managing the levy programs. The details are expected to be worked through over the next 1-2 years with an interim company established to manage the investments during this period. AAL remains focussed on continuing to maximise the benefits to industry from the avocado levies.

If you have not read the ACIL Allen report, a copy can be accessed from the HAL website at http://www.horticulture.com.au/news_events/Hal_Review.asp once

there click on the words "*Final Report*".

Avocado Export Plan update

An Avocado Industry Export Development Plan has recently been finalised after months of work with stakeholders. The implementation of this plan will be managed by AAL on behalf of the industry. The planning process included an economic analysis of the expected return on investment from domestic versus export market development. It is clear from this analysis that the majority of activity needs to be directed towards longer term market access objectives and this is in line with the current focus. Copies of the plan are available from Avocados Australia's Online Report Centre, members of the Australian avocado industry can access this document by going to the AAL Industry website at <http://industry.avocado.org.au/home.aspx> then move your cursor to and click on "Services Login" (located top right on the menu bar). Once logged in refer to the first document that appears under the "Market Data" heading.

AAL recently arranged an Australian delegation to meet with the Thailand Department of Agriculture (DoA) in Bangkok to progress the request for a revised (workable) protocol for Australian avocados to Thailand. A new protocol was introduced in July last year by the Thailand DoA, but is not commercially feasible. AAL has been working with the Australian Government to negotiate an alternative protocol with the preference being for recognition that avocados are a conditional non-host of fruit fly. The meeting was very successful with potential alternative protocols discussed in detail. AAL is now working with the Australian Government to ensure prompt follow up to provide additional information to the Thailand DoA. The meeting has certainly helped to progress our application but further negotiation will be required before we have agreement on a final protocol that will enable trade to recommence.

Industry Meetings

AAL Board Meeting

AAL Board - The AAL Board met on 18 June in Brisbane. Some of the issues on the agenda included the AAL Budget for 2014-15, review of ANVAS, the New Export Development Plan, the HAL Review. The next Board meeting will be held on 18 Sept along with the AAL AGM and Annual Levy Payers Meeting. AAL Members are encouraged to feed any issues through to your regional director (see inside cover for contact details) and attend these meetings if you are able to. Director positions up for re-election this year are Sunshine Coast (Peter Annand),

Tristate (Barry Avery), South Queensland (Daryl Boardman) and Western Australia (Neil Shenton).

Annual Avocado R&D Forum

Thirty-four people attended the Annual Avocado R&D Forum in Brisbane on 19 June (Researchers, HAL staff, AAL Board & staff, IAC members). In the morning, presentations covered the main R&D projects currently underway. In the afternoon a draft avocado productivity R&D strategy was presented and discussed. The strategy includes proposed R&D and extension projects covering rootstock evaluation, pest and disease management, irregular bearing and crop nutrition. Industry and researchers also provided input to a Strategic Agrichemical Review Process (SARP) which prioritised the industry's requirements for crop protectants. In this edition of Talking Avocados (p.26) you will see a full report on the current R&D program. It is an impressive program and squarely aligns with the priorities set out in the Avocado Industry Strategic Plan 2011-15. We will continue to provide detailed reports on selected projects throughout the year.

Kangaroo Label relaunched

The Kangaroo Label was launched in 2011 to better identify Australian avocados at point of sale. Over the past few months, considerable work has been undertaken to standardise the Kangaroo Label across all licenced label companies so as to improve brand recognition by consumers at point of sale. Through this process, we have been able to achieve agreement from the major chains (Coles and Woolworths) to remove the requirement for the identification of different fruit sizes and to remove the requirement for a barcode (although Coles still has a preference for the barcode). These are significant costs savings for suppliers. In this edition of Talking Avocados we have provided a detailed explanation of the changes and the benefits that will flow to industry. We strongly encourage all Australian growers to get on board with the relaunched Kangaroo Label.

Qualicado program hitting the mark

Significant time and effort has been directed towards the Qualicado program since its launch last year. Qualicado extension events continuing to receive positive reaction from those of the industry that attend, attendees rating highly their usefulness and value of the information presented. An article providing an overview of the results and feedback gleaned so far appears in the Industry Matters section of this magazine.

Around Australia

Central Queensland Report

By Lachlan Donovan and John Walsh,
Avocados Australia Directors for the
Central Queensland Growing Area

Our hot dry summer with very little rain and higher than normal levels of salt out of the surface water has resulted in a fair bit of salt burn on the trees all around the district. This has impacted on fruit size as well.

Overall the season price wise has been very good and most growers have had very similar crops to last year.

AAL's Qualicado Workshop will be happening in our region on Thursday 11 September 2014. The event program is being finalised and once the venue and other details are confirmed growers and pack houses in the region will receive an invitation and a copy of the program in the mail. Timely event updates will also be sent out by email so if you are an avocado grower or pack house based in Central Queensland and you do not currently receive their email updates contact AAL now and provide your contact details, email co@avocado.org.au or call toll free phone 1300 303 971.

Tri State Report

By Barry Avery, Avocados Australia Director
for the Tri State Growing Area

As I write this report winter has finally set in after a very warm Autumn, which has seen tree growth and more importantly, fruit size increase.

There has been only one frost to the end of June, all in all, an incredible growing season, starting with a very windy spring, leading into a summer that saw some of the warmest days ever recorded in this area. Conditions truly tested growers to the fullest, so hopefully we can look forward to a mild July and an early harvest.

I attended the South Australian AGM in May, and it was great to see such a strong turn up. It was also encouraging to see growers prepared to put up their hand and take up positions on the committee. It's always a good sign, but a very rare one, where grower organisations are concerned.

The trip to Renmark was quite amazing, the last time I can remember the Mallee looking so green would be in 1989. Every inch of the country seems to have been sown with



crops that have had just the right amount of rain to ensure a fantastic start for grain growers.

It has been interesting to hear of millions of mega litres of water being allocated to the Hattah Lakes, a system that normally only fills in times of extremely high river levels. Let us hope that we do not have a big flood, as the water that would normally fill that system, will have to go somewhere??

In finishing this report I urge growers to keep a close eye on dry matter levels as large crops in New Zealand and Western Australia will put a lot of pressure on markets from September onward.

North Queensland Report

By Jim Kochi, Avocados Australia Director
for the North Queensland Growing Area



The season has certainly been one to remember for North Queensland growers for three main reasons. This year was the biggest crop ever with 1.922 million trays and the best prices ever despite the high supply. It is amazing how the avocado has come in the past four years. The crop here has grown from 1.2 million trays in 2010 with an average return of around \$15 (Premium Shepard count 23) to 1.922 million trays in 2014 with an average return of around \$42 (Premium Shepard count 23).

Results like this depend on having a product that the consumer wants and is prepared to pay \$3, \$4 and even \$5 for a single avocado.

It is about having a supply of quality product that the consumer can buy and use with confidence.

I am pleased to report that the quality supplied this season was very good in spite of the long bouts of drizzle weather during the harvest.

We should, however, remember that any one of the three devils (over supply, poorly planned supply and poor quality) will very quickly pop your dream bubble.

I am also pleased to report that over 50% of North Queensland growers are using the Best Practice Resource (BPR) on the Avocado website, and 77 of our growers are members of Avocados Australia. For those that are still deciding I would encourage you to join and support your organisation and also sign up and use the BPR.

Like Nike says: "Just do it".

South Queensland Report

By Daryl Boardman, Avocados Australia
Director for the South Queensland Growing Area



As I write this report we are just getting our first touch of winter and it is welcome. The trees do not know what to do with the weather being so warm. I have heard from many growers how the trees are very advanced and need winter to arrive and slow them down.

Picking is well under way and growers are taking advantage of good pricing as well as listening to their packers and marketers and aiming to exit as soon as possible to give a clear run for the large summer crop from WA and NZ.

In the last Talking Avocados there was a brief report on the Qualicado meeting at Mt Binga Orchards at Mt Binga. I would like to thank Barry and Michelle Trousdell for hosting the day and providing a great venue.

Everyone I spoke to thought the day was very worthwhile and the topics were spot on.

Congratulations again to Graeme Thomas on his order of

merit award and for the work and input he has had in the Avocado industry.

I can see that continuing to make sure that future events are as successful we will need lots of ideas from growers on the topics they would like covered. So I urge all growers to provide your topic suggestions to AAL for what you would like to see at the next event.

It's great to see such fantastic support for our product from consumers and maybe we all need to take some credit for this. Whether it be better growing and handling practices, or better coordinated marketing and support from major retailers, to better handling and promoting avocados, whatever it is it's working and everyone in the chain needs congratulating.

We must not become complacent and the need to strive for the best practices and communication is paramount to the industry's continued success.

I believe that the industry is focused on all aspects that I have mentioned above and it will continue to supply the latest and most up to date information to all growers to achieve the best results possible.

I wish you all the best with harvest and for a great fruit set for next year's crop.

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Around Australia continued

Sunshine Coast Report

By Peter Annand, Avocados Australia Director for the Sunshine Coast Growing Area



Writing at the end of June, avocado growing on the Sunshine Coast is looking pretty good. Most growers are finishing a relatively early harvest helped by good weather from flowering onwards. Aquifers are low, though, and we will need regular rain going forward.

In September I will finish my three year term representing the Sunshine Coast on the board of our peak industry body, Avocados Australia. As a relatively new grower I found this an invaluable insight into how the industry works. We are fortunate to have a very effective marketing program that has propelled Australia to a very high level of avocado demand and identified opportunities for further growth. The research program (where the federal government provides funds matching the grower levy) is focused on key issues of delivering quality fruit and protecting against the most serious tree health threats, through both original research and extension programs.

AAL is also taking steps to open export markets where an acceptable return can be achieved, as an insurance against the possible opening of our domestic market to more imports. None of this can be taken for granted. Although each grower is independent, we rely on our industry having a strong strategic plan. While government can and often does play a valuable role, the federal government's role in horticulture is in a state of transition - some might say chaos - at the moment and state governments have wound back their departments of primary industry to a shadow of what they were. The task of steering our industry forward rests firmly on the peak industry body and it is a very exciting one. There are important debates around strategy and priorities and to get the best outcomes all points of view need to be represented and thought through.

I encourage all Sunshine Coast growers to consider putting your hand up for a stint as regional representative - it is a

privilege you will be grateful for, as I am - and generally to take an active interest and involvement in AAL's work to keep us prosperous and clear of the many pitfalls around rural industry.

Tamborine and Northern Rivers Report

By Tom Silver, Avocados Australia Director for the Tamborine and Northern Rivers Growing Area



Good prices, combined with a smaller than average crop, has meant harvest in the Northern Rivers Tamborine growing region is in full swing and rapidly nearing a very early finish. This will be excellent for growers who often have to hang their crop late, and instead will be able to get trees pruned, and orchards tidy and ready for what is looking like solid flowering for 2015.

Water, and a lack of it, remains a big concern for growers in this region over the coming period. Though most farm storages would be full after recent rains, the general trend of below average rain combined with a predicted El Niño system developing, means growers must be thinking about what irrigation needs upgrading, and what soil moisture monitoring and irrigation planning needs to be done. Irrigation is something growers in our region have not had to think about much in recent years, however 'not thinking about it' maybe be the difference between having or not having a 2015 crop.

Central New South Wales Report

By Ian Tolson, Avocados Australia Director for the Central New South Wales Growing Area



The exceptionally dry warm conditions of Autumn have continued into the first three weeks of Winter with a couple of storms promising some relief but not delivering.

Harvesting began in late-June in Coffs Harbour, Bellingen and Stuarts Point areas. Unfortunately for some growers their season was quite short, due to poor fruit set and hail storms. Fruit size and quality has been good and the

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prices may lessen the disappointment. Optimism is a farmer's best friend, the hope of a good or better crop next season keeps us going and that is why no matter how small a crop you had this season you must remain vigilant with your orchard management practices, good quality fruit equals good quality returns. Comboyne and Red Hill growers could begin harvesting early – mid July, with Nelson Bay and Mangrove Mountain to follow.

I would like to send a big "Thank You" to Ernst and Penny Tideman for hosting the recent Qualicado Workshop. It was a fantastic venue and the event had wonderful attendance (70+ people). Growers thirst for knowledge on how to better manage their orchards and the age old problem of bi-annual/irregular bearing is insatiable. Feedback from the attendees has been very positive, all appreciating the efforts and time given by the guest speakers and AAL.

Western Australia Report

By David Duncan and Neil Shenton,
Avocados Australia Directors for the
Western Australia Growing Area



Well, the weather has not yet played any nasty tricks, so we are headed for a big crop. It will be interesting to see how the market handles the expected volume.



The efficacy of AAL's promotional activities and the skills of our marketers will be put to the test. Wish them well.

The main point of interest this issue are the planned Qualicado workshops happening in Western Australia: on 23 July the Perth Qualicado Workshop will target wholesalers, providores, ripeners and transporters and be held at the Perth Market. On the 24 July the WA Qualicado Workshop, tailored to meet the needs of WA growers and pack houses, will be held at Tony Fontanini's orchard at 313 Seven Day Road near Manjimup. AAL has mailed out invitations and a copy of the event program to each WA grower and email reminders will be sent out closer to the event.

I hope you can attend and gain some benefit.

Neil Shenton has attended his first AAL Board Meeting and has been appointed to the Industry Advisory Committee. Here he adds his comments.

As Dave says, we are waiting for the winter storms here, but the long term forecast, as of yesterday, was for a mild few months ahead, but that was yesterday, and most forecasts in this part of the world need to be taken with a large pinch of salt. With everyone wanting to start picking as early as they can, it may be an earlier start than usual.

The main thing that came out of the meetings we attended in Brisbane recently was the huge amount of background work in research, development and extension being done on our behalf, with our dollars, and the practical outcomes are all available through the Avocados Australia websites. If you aren't signed up, get it done to make the best use of your levies. If you do not have access to Avocados Australia's Online Report Centre (that contacts the latest R&D reports, market reports etc.) please email your request to access it to co@avocado.org.au or call toll free 1300 303 971. You can apply to access the Best Practice Resource by completing the online form located on the AAL Industry website here: <http://bestpractice.avocado.org.au/Register.aspx>

You should also have received an invitation to complete AAL's stakeholders communications survey seeking your feedback and comments about how best to disseminate information, so hopefully you have made your requirements known.

Good Luck

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Industry Matters

Engaging with Growers:

Qualicado extension events a Success

So far Avocados Australia's Qualicado program has directly reached around 650 members of the Australian avocado supply chain. Avocados Australia's Qualicado program was officially launched on 15 August last year, since then Avocados Australia has been delivering its first series of associated extension events and assisting industry members with accessing free online best practice resources.

The Qualicado Workshops to date have been delivered in seven growing regions (to growers and pack houses) and five metropolitan cities at wholesale markets (targeting wholesalers, providores, ripeners, and transporters). Even with just one more event left in the series program (the Central QLD Qualicado Workshop on Thursday 11 September details – details to be sent out soon) the feedback received so far provides evidence that the Qualicado program is working in terms of effectively reaching members of the supply chain and encouraging their implementation of best practice approaches.

Below is a summary of a few of the results and feedback from growers that we have received about the Qualicado Workshops (for series one) so far:

Overall Workshop attendees (that provided feedback) indicated that they were **very likely to use the information gained from the workshop to improve their practices.**

Consistently so far **100% of those attendees** that provided feedback stated that they **gained value from attending the Qualicado Workshops.**

Overall attendees gave the quality of **speakers that have taken part in the workshops an 8 out of 10** (10 being excellent).

Comments from growers:

CENTRAL NSW:

"Good to catch up with new developments"

SOUTH QLD:

"Excellent range of presenters & key issues covered",

"Great speakers"

"Well organised event",

TAMBORINE/NORTHERN RIVERS:

"Well conducted",

"Thoughtful of our needs"

"Worth travelling for",

SUNSHINE COAST:

"Very good session"

TRISTATE:

"Liked all talks on how things affect fruit quality"

NORTH QLD:

"Top job"

WESTERN AUSTRALIA:

"Thank you for a very informative workshop"

Central NSW Qualicado Workshop draws record crowd



The majority of avocado growers and packers based in Central New South Wales attended Avocados Australia's Central NSW Qualicado Workshop that was held on 11 June near Comboyne. Around 80 people attended the day that included presentations from leading researchers, an overview about the Qualicado program followed by an orchard walk.

The orchard walk began with an overview about the current orchard management practices being adopted by hosts and local avocado growers Ernst and Penny Tideman.



Avocado grower and host Penny Tideman talks with Kim Honan from ABC Rural radio.

Avocados Australia would like to thank the speakers who took part on the day. We would also like to thank Ernst and Penny Tideman for hosting the day and supporting the event.

All of the presentations delivered on the day are available online from the Best Practice Resource (BPR). To access them click enter this website address in your web browser <http://bestpractice.avocado.org.au/Login.aspx> then login. Once you are logged in glide your cursor over the menu bar

to "Growing" then scroll down and click on "Qualicado". Once on the page click on "Central New South Wales". A list of the presentations and their links appear on the page.

Here are some of the other photographs taken from the day.



John Tyas provides an overview of the industry investment program.



Simon Newett from QDAFF talks avocado nutrition and ways to manage tree health.



Growers during the orchard walk asked questions of Dr Elizabeth Dann regarding Phytophthora management.

Western Australian Growers & Packers hear from researchers

The Western Australian Qualicado Workshop took place on Thursday 24 July 2014 at 313 Seven Day Road, Manjimup. All the WA growers and packers who attended this free and informative event were provided with the latest information on how to manage irregular bearing, improve the overall quality of their avocado fruit and ways to improve orchard productivity. See the Spring 2014 issue of Talking Avocados for full coverage of this event. Avocados Australia would like to thank local avocado grower Anthony Fontanini for kindly offering to host this workshop.

Adelaide Qualicado Workshop hits the mark with Wholesalers



Nathan Symonds, AAL's supply chain program manager presented an overview of the Qualicado program to wholesalers at the Adelaide Produce Market on Thursday the 22 May. The wholesalers that attended found out more about how avocado bruising is occurring in the supply chain and ways to get the most shelf life from ripening practices. The half day workshop included a number of key presentations from Terrence Campbell, from the Department of Agriculture, Fisheries and Forestry, Queensland (QDAFF) - who is involved with developing best practice guidelines for avocado ripening - and a presentation about fruit varieties by Denis Roe of Birdwood Nurseries.

Those wholesalers who attended found the session of value and a few of the suggestions for topics for next time included more information about best practice with respect to ripening and physical demonstrations of the different fruit varieties.

Perth Qualicado Workshop targets Wholesalers & Provideores

On Wednesday 23 July 2014 Avocados Australia delivered the "Perth Qualicado workshop", a free informative event for avocado wholesalers, provideores, ripeners and transporters held at Perth Market. See the Spring 2014 issue of Talking Avocados for full coverage of this event.

Industry Matters continued

Acknowledgement of our Qualicado Program Sponsors

Qualicado has been funded by Horticulture Australia Ltd using the national avocado levy and matched funds from the Australian Government. Avocados Australia is also proud to acknowledge the support from Birdwood Nursery, our national sponsor.

Message from Birdwood Nursery - Qualicado National Sponsor:

The Importance of Forward Planning for New Avocado Orchards

By Denis Roe, Birdwood Nursery

It is common knowledge that there is a shortage of avocado nursery trees, leading to waiting periods of two or more years from placing orders to delivery. Place your tree orders well in advance and use the time available to prepare the site for the new orchard.



Preparation of a young orchard is a crucial stage says Birdwood Nursery.

The planting season is important information for the nursery so that inputs are aimed at delivering trees at the desired time. Generally, in areas with warm winters, autumn is a suitable time to plant; trees will grow strong roots through the winter and power away in the spring. In regions with cold winters, it is better to plant in spring, after the last cold but before the heat of summer.

Use can use this time for clearing land, removal of old orchard trees, burning, chipping or removal of stumps, and soil preparation. Soil analysis should be carried out early enough to ameliorate any potential problems. Birdwood nursery can help to interpret these results as a free service to customers. Orchard spacing/layout, installation of drainage, building of mounds/ridges, and irrigation design must be completed.

To make enquiries with Birdwood Nursery see their details on their website visit: www.birdwoodnursery.com.au.

Best Practice Resource Users – Tips for Effective Irrigation!

Did you know that the Best Practice Resource online (BPR) now provides information about the key practices for effective irrigation?

Knowing the true origins of the avocado tree can help to understand and implement the best practice approaches to managing irrigation in an avocado orchard. Included on the BPR’s “Key practices for effective irrigation” webpage are useful details from an irrigation study, details of what the top irrigators have in common and what they do, the lowdown about RAW (Readily Available Water) and more. So if you are a member of the Australian avocado supply chain (are a grower, or packer, ripener or transporter, wholesaler or retailer) you are eligible to access this information for FREE.

To find out more about irrigation best practice in the avocado orchard logon to Avocados Australia’s BPR online. Once you have logged on to the BPR move your cursor over the “Growing” menu option on the maroon menu and then click on “Irrigation”.

If you are an Australian avocado grower, or packer, ripener or transporter, wholesaler or retailer and you haven’t applied to access the Best Practice Resource as yet then apply for access now! Enter this address in your web browser <http://bestpractice.avocado.org.au/Login.aspx> then click on “Apply for access” and complete the online form.

Retail Prices Report

Retail prices continue to be collected on a weekly basis from a variety of stores in Perth, Sydney, Melbourne and Brisbane. Information collected includes: variety, packtype, fruit weight, price, display location and type, country of origin and type of price special (if any).

A range of stores are included in this program including Coles, Woolworths, independent supermarkets, independent fruit and vegetable stores and chain fruit and vegetable stores. This real time information is reported in the Weekly Infocado Reports and on our industry website on a weekly basis. To view the latest retail price data please log onto <http://industry.avocado.org.au> and move your cursor over “Services” on the maroon menu bar and click on “Retail Pricing”.



A comparison of retail prices results:

Retail Prices – June 2014 results:



Figure 1 - Average Retail Hass Sydney June 2014]



Figure 2 - Average Retail Hass Brisbane June 2014



Figure 3 - Average Retail Hass Melbourne June 2014

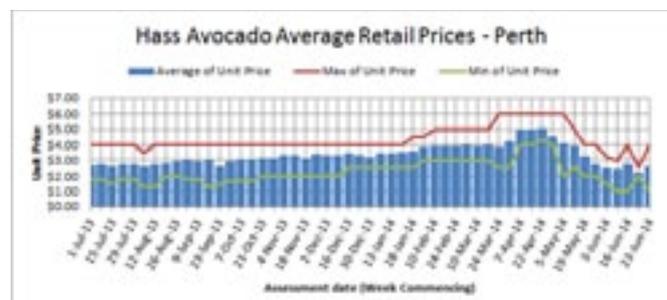


Figure 4 - Average Retail Hass Perth June 2014

Retail Prices – June 2013 results:



Figure 5 - Average Retail Hass Sydney June 2013



Figure 6 - Average Retail Hass Brisbane June 2013



Figure 7 - Average Retail Hass Melbourne June 2013



Figure 8 - Average Retail Hass Perth June 2013

As winter passes the Australian avocado industry looks set to produce record volumes of fruit throughout the coming Spring and Summer seasons. As this is the case now would be a good time to compare current retail prices with last year's levels.

Over the last 12 months retail prices have held quite steady overall. There have been a few variations with inclines and declines across all major cities which only lasted for short periods of time.

Industry Matters continued

As figures 1 to 4 show (from 2013/14) the trends across each major city have largely mimicked the previous year 2012/13 (see figures 5 to 8). The major difference that can be seen from observing figures 1 to 8 is the increase in the highest retail prices recorded in Sydney and Perth. Where in the two aforementioned cities, the high price of avocados monitored has increased on average by \$1.00/fruit. It is also important to note, when viewing the average retail price trend per city, that the average price consumers can expect to pay has remained steady across all cities.

The increase in retail price, within the March-April period across all cities, is largely associated with the reduced available volume of fruit at this period of the year. Conversely the declining price trend in the May-June period coincides with when a few more regions began to harvest resulting in an increased volume of fruit being available for the domestic market. This is also a time of year when demand typically tends to ease.

Retail prices are monitored and conveyed to the avocado industry on a weekly basis and can be found in the Weekly Infocado Report which is available to those who contribute data each week. Should you have any questions or concerns about Infocado please contact Nathan Symonds on supplychain@avocado.org.au or (07) 3846 6566.

Infocado

With the first half of the 2014 year already gone the avocado industry seems set to move into a very interesting period in regards to available fruit volumes within the domestic market sector. Both the Tristate and Western Australian/Northern Territory regions will have coinciding harvest periods for the 2014/15 season. The total volume that has been estimated when combined will result in the largest harvest that either region has ever experienced since the avocado industry began. The New Zealand avocado industry has also indicated that they are potentially set for a bumper crop around the same time (figure 1). For more detail please refer to the 2014 July Quarterly Infocado Report and the AAL industry website <http://industry.avocado.org.au/Growers/Infocado.aspx>.

It is at these high production periods that information systems such as Infocado become invaluable to our industry as it provides the best possible picture of current industry production. Infocado provides high quality industry data about the past 12 months of dispatch as well as the forthcoming 12 months forecast. Together, with the retail pricing data that is included with the Infocado reports, this allows the reader to make better informed decisions.

Another huge advantage the industry gains by having packhouses and consolidators contributing to information systems like Infocado is the ability to have a more succinct picture of infrastructural and industry requirements. The current level of industry participation in the Infocado system is good. Still, we know that industry members have high expectations with this system, therefore we ask the industry's packhouses and consolidators to remain committed to providing data on an on-going basis. The few packhouses and consolidators that do not contribute data (who would like to benefit from Infocado reports) are encouraged to participate. In turn this benefits individual producers and aids in ensuring a healthy and productive industry through better planning.

As the Australian avocado industry continues to grow, industry information systems such as Infocado will increasingly prove their worth. When a clearer picture of the industry is provided by industry stakeholders, better planning for the future can occur and be directed towards the areas which will benefit most. AAL would like to invite all pack houses and consolidators that aren't currently contributing, to participate in contributing their industry data. All data is treated as confidential and only aggregated data is conveyed back to industry. Thus only the AAL CEO and AAL Supply Chain Manager has access to individual data.

For more information regarding Infocado data and participation please contact Nathan Symonds on supplychain@avocado.org.au or (07) 3846 6566.

OrchardInfo

2012 OrchardInfo reports will soon be available to all contributors, following significant improvements to the data reporting process. Although we have a high level of participation

in the OrchardInfo program, the value of the information can only get better with higher level of participation. Ideally, we would like to be able to report data for all Australian avocado orchards.

The major difference people will notice when viewing the reports once they become available is the depiction of varietal data. Due to the Hass tree population dwarfing other varieties, we have modified the way data on other varieties is presented, so that the reports are more useful to readers.



Figure 1: 12 month Dispatch & Forecast Graph

OrchardInfo Prize Offers – Be in on the chance to WIN!

The 2012 OrchardInfo Reports will be available by August this year. Step up to the plate and make sure that you contribute your data for the 2013 season. The appropriate forms will be sent out closer to the date. The following prize offers are available if you provide your survey forms by the deadline. OrchardInfo Forms will include the details of the following offers and will be mailed out soon:

Those who are eligible	Prize Offer
All Growers that get their OrchardInfo forms in to AAL by the deadline.	Two Apple iPads are up for grabs!
Growers who have never contributed before, or contributed in past years, who submit their 2013 data (not including yield information) to AAL by the deadline.	Apple iPad (32GB Wi-Fi) valued at \$649.00.
Growers who contribute their yield information for 2013 to AAL by the deadline will have the chance to win our most valuable prize.	Apple iPad (64GB Wi-Fi and 3G) valued at \$899.00.

If you have any questions regarding the form or the OrchardInfo program please don't hesitate to contact Program Manager Nathan Symonds on 07 3846 6566 or infocado@avocado.org.au

Biosecurity Bill to replace the Quarantine Act 1908

Federal Agriculture Minister Barnaby Joyce has announced the government's plans to progress the Biosecurity Bill 2014 to replace the Quarantine Act 1908.

The Bill will be administered by both the Agriculture and Health portfolios.

Some of the Bill's proposed improvements include:

- a reduction of more than \$6.9 million a year in business compliance costs because of clearer, easier to use legislation and the improved processes it will enable
- new powers to allow the Commonwealth to respond to biosecurity risks within Australia and help state and territory governments manage a nationally significant pest or disease outbreak – including in our marine environment

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Industry Matters continued

- allowing the general compliance history of a business or individual to be considered when deciding whether to let them import a good, or undertake biosecurity activities— whereas the current Quarantine Act only allows for assessment of the risks associated with the goods themselves.

Minister Joyce said the Bill was first introduced in 2012, referred to committee for inquiry, but never reported on, due to a session of Parliament being discontinued in 2013.

“Replacing the Quarantine Act will be the biggest change to our biosecurity system in more than one hundred years,” Minister Joyce said in a statement.



For more information on the Biosecurity Bill 2014, visit daff.gov.au/biosecuritylegislation.

International Horticultural Congress hits Brisbane in August

The 29th International Horticultural Congress (IHC2014) will be taking place in Brisbane from the 17th to the 22 of August at the Brisbane

Convention and Exhibition Centre. The Congress program will include 43 symposia covering a wide range of topics on all aspects of horticulture, arboriculture and medicinal and aromatic plants.

For more information and to view go to their official website: www.ihc2014.org or contact the Congress Secretariat on 07 3255 1002 or email info@ihc2014.org.



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Graeme Thomas receives Order of Merit Award

Avocados Australia's Order of Merit award is awarded to outstanding individuals who have made significant contributions to the Australian avocado industry. In May this year, at the South Queensland Qualicado Workshop, Daryl Boardman presented Graeme Thomas with an AAL Order of Merit award on behalf of the AAL Board.

Graeme's knowledge and practical experience in avocado production is both vast and comprehensive. Importantly he is always willing to pass on to others what he has learned from his 36 years in the industry.



Daryl Boardman, AAL Director for the SQ (left) presents Graeme Thomas (right) with the Order of Merit award.

Graeme commenced work in the industry in 1978 with the chemical company May & Baker, while there he established his own avocado crop and became a grower.

According to Jim Kochi Chair of AAL, "it was this background and

his contacts in the Queensland Department of Primary Industries that helped him to work on the common cause of controlling Phytophthora root rot in avocado orchards".

"Graeme's commitment to this problem led him to collaborate with Agritech to develop a root test to measure phosphorous acid levels in avocado roots, measure application rates and to fine tune application times, application intervals and critical levels of phosphorous acid necessary for effective control."

Graeme's areas of interest in root health management and nutrition were the first areas where he worked and over the years made his greatest contribution.

Graeme has been a huge influence on best practice at all levels of the avocado industry.



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INJECTION UPTAKE VARIES BETWEEN 5-25 MINUTES ALLOWING MULTIPLE INJECTIONS PER DAY

Industry Matters continued

As a farmer Graeme was keen to observe the changes in the orchard and fruit development, weighing fruit from every tree. He also increased awareness of the potential for cloned rootstocks, which in turn led to a Rootstock Breeding Program.

As a Director and Chairman of Natures Fruit Company Graeme provided strong leadership and vision in the evolving market systems. In doing so he communicated with every marketer in Australia.

Avocados Australia thanks Graeme for all of his hard work and dedication throughout the years.

"Avocados Australia wishes both Graeme and his wife Lyn all of the best in the future," said John Tyas CEO of AAL.

Graeme has made an impact on so many colleagues and friends in the avocado industry. Here are just some further words of thanks:

"During the late 80's Graeme became one of the first avocado growers at Hampton where Graeme negotiated with government entities to secure a reliable source of water for horticultural purposes across the district and then went on to serve on the avocado industry's R&D committee entrusted with setting the direction of research priorities and subsequent project approval. Graeme has always recognised the beneficial contributions from research and as a grower freely made his

property available for experimental programs. Last but not least he has provided interpretation and consultancy services to avocado growers across the breadth of the nation and still maintains activity in this area. His encouragement of SGS to develop a rapid analysis procedure to quantify avocado root phosphonate levels following trunk-injection/foliar sprays together with interpretation guidelines has been a signature achievement in improving the management of this critically important technology. Over the past few years Graeme has become addicted to adrenalin with the habit being fed by racing horses. This has recently culminated in winning the "Weetwood Handicap", the premier event on Toowoomba's annual racing calendar. Graeme, congratulations on your Award, you have earned time to "walk on the wild side". May you and Lyn have many happy years ahead."

- Anthony Whiley

"Graeme has a great depth of knowledge and practical experience in avocado production which he is always willing to share, and this coupled with his enthusiasm and a generous dose of larrikinism always makes for entertaining discussions and presentations. Congratulations Graeme on a well-deserved award."

- Simon Newett

Principal Extension Horticulturalist, Queensland Department of Agriculture, Fisheries and Forestry.

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For more information contact **Richard Gloyne** on **0428 528 054** or **richard@draintech.net.au**



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Thailand trade and market access mission to Bangkok

From late April to early May this year a trade mission to Thailand took place with the purpose of seeking to progress changes to the Thailand market access protocol that was introduced in July 2013. The mission was led by Avocados Australia's CEO John Tyas and included the Avocado OHMA (Office of Horticultural Market Access) member, Daryl Boardman and representatives from each of the three major industry exporters (Mark Johnston from Sunfresh, Wayne Franceschi from The Avocado Export Company and Antony Allen from The Avolution).

Prior to meeting with the Thailand Department of Agriculture, meetings were held with the main avocado importers and retailers. While in Thailand visits to other retail stores and a Talad Thai market visit were also undertaken.

Here are some of the highlights from Avocados Australia's trade mission to Thailand with a commentary from John Tyas:

Tuesday 29 April

Makro Cash & Carry meeting and store visit

We met with Ms Nalemon Chutipanyaporn, Senior Merchandise Manager (Fresh Food) followed by a Makro store visit at Ladprao.



There are sixty-six stores in Thailand. Stores are selling about 10 x 10kg boxes per week. Some other stores are doing better. Most customers are European. We observed avocados from USA – price: 69 Baht, they were being supplied by NZ from a new supplier with good quality and supply. Fruit on the chiller shelf was at 1°C. Ripening is done at store but is not tightly controlled. Makro are considering supplying processed avocado until the supply of Australian fresh avocados is restored.

Foodland Ladprao store visit

This is a full scale upmarket supermarket, with a well presented display and a lot of pre-packed produce. The company was established in 1972 and now is a chain of 11 stores in Bangkok which are open 24/7.



Tesco Lotus store visit

At the Tesco Lotus store avocados were retailing at 79 Baht each (AUS\$2.70).

Avocados were displayed in the chiller cabinet and were most likely Hass from the USA (in good condition and well presented).



Choice Foods meeting and store visit

The trade mission members met with Sean Fowler, Retail Development Manager and Khun Lee.

The founder and Managing Director is Bob Coombes who was away overseas during our visit.

Choice foods is an importer and also has one small specialty store at the front of their offices (Food Glorious Food)

which specialises in high quality foods, particularly from Australia. The company supplies supermarkets and food service outlets.



Wednesday 30 April

Global Trade and distribution, Thailand meeting

We met with Wannee Poebaikul (General Manager) & Nuttawut Sinutok (Managing Director). This company is an importer of a range of fruit (particularly temperate fruit) and vegetables. They supply Thai supermarkets, hotel and foodservice outlets and have prepacking facilities for these customers. Wannee and Nuttawut (couple) are the owners of the business. They established the business five years ago and were previously wholesalers in the Talad Thai markets.

Last season they handled NZ fruit from Avanza. Their main customers are Big C, Makro, Tesco and some food service customers.

While there we saw that the business is currently building state-of-the-art facilities which we were invited to inspect, a proposed new global trade and distribution facility in Talad Thai.

Industry Matters continued

Talad Thai Markets

These produce markets are open all day. There are about 20 sheds handling a wide range of fresh produce, both locally grown and imported. Temperate fruit were in high supply (apples, grapes and citrus in particular). There is no cool chain in these markets. No avocados are handled through these markets as they are managed directly to store by the importers.



Vachamon Food Co Ltd

We met with Wipavee Watcharakon (Managing Director). Vachamon Food Co Ltd is located near the Talad Thai Markets, this business imports fruit and fruit products to supply supermarkets (60%), the wholesale markets, hotel and food service, particularly temperate fruits. They handle Australian tablegrapes and stonefruit and previously handled Australian avocados (up until 2012).

The business is interested in handling Australian avocados in the future but acknowledges that the market is becoming more competitive.

Thursday 1 May

In preparation for our meeting with the Thailand Department of Agriculture (DOA) we met with the Australian Department of Agriculture (DA) and Austrade: Tom Black (Counsellor – Agriculture, Australian Embassy); Apinya Buakla (Research Officer, Australian Embassy); and Ms Thipwadee Suwanying (Business Development Manager, Bangkok, Australian Trade Commission (Austrade)).

Later we met with the Thailand Department of Agriculture at their premises, with Mr Udorn Unahawutti (Advisor, DOA), Mr Surapol Yinawapun (Chief of Plant Quarantine Research Group, DOA), and Ms Natthaporn Uthaimongkol (Senior Agricultural Scientist, DOA).

John Tyas delivered a presentation which was followed by group discussion on the key issues.

DOA indicated that it agreed that avocados are a conditional non host of fruit fly (no differentiation of species was suggested). However, the Australian ICA 30 protocol (conditional non-host of fruit fly) is not the same as that used for Peru and Mexico to access the USA market. In Peru and Mexico, packing establishments are sealed/screened to prevent fruit fly entering fruit once it has been packed. Australian delegates confirmed that this would not be possible in Australia for existing packing sheds.

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The recent cold disinfestation work on Shepard was discussed. This research has confirmed that a short cold treatment (3°C for 7 days) is efficacious against Queensland Fruit Fly (QFF) in Shepard avocados. As Shepard is a thin skinned variety with some susceptibility to QFF, it is reasonable to assume that this treatment would be equally or more efficacious on Hass.

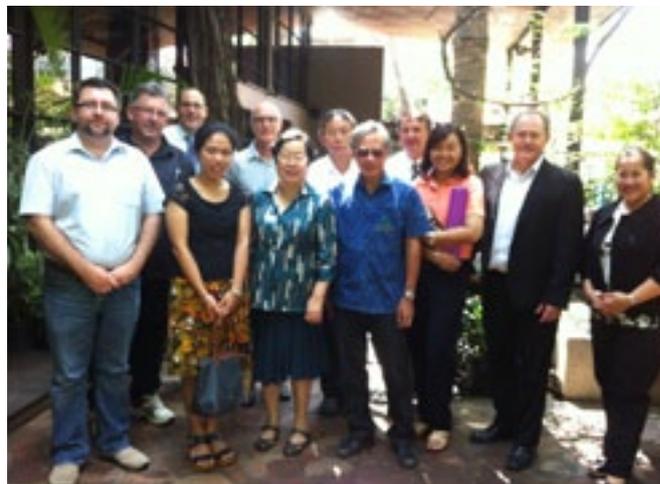
It was mentioned that the recent Fruit Fly Symposium held in Bangkok (mid-May) could provide an opportunity to identify a suitable scientist who could peer review the Australian data if this was felt necessary or useful.

It was agreed that a suitable way forward could be to establish a protocol that combined the conditional non-host procedure (ICA 30) with the short cold treatment (3°C for 7 days) for all varieties.

The potential for a low dose Methyl Bromide treatment as outlined in the USDA Schedule (T108a) was discussed. It is a protocol that other Australian exporting industries would be keen to use as an air-freight protocol. Although the protocol has been in place for many years, the DOA questioned what data was available confirming the efficacy of the treatment. The Australian DA will seek to access this data if it is available. Otherwise, specific research would need to be undertaken. The Australian avocado industry sees the Methyl Bromide protocol mainly as an interim measure until the preferred protocol is in place. However, the DOA does not have a mechanism to put in place interim arrangements and would need to go

through the same lengthy process for any protocol that is to be implemented.

During the trade mission Avocados Australia hosted an informal networking lunch with all participants.



From left, members of the Australian avocado industry that were present included: Antony Allen (The Avolution), Wayne Franceschi (The Avocado Export Company), Mark Johnston (Sunfresh), Daryl Boardman (AAL Director), and John Tyas (AAL CEO).

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Industry Matters continued

Friday 2 May

Tops Supermarket was previously a major handler of Australian avocados, but the company currently does not stock any avocados. A Tops Supermarket was visited in the Central Food Hall.



Central Food Retail Company Limited (CFR) is the largest supermarket chain in Thailand operating since 1996 and is one of the business units under Central Retail Cooperation Limited (CRC). The company is currently operates 212 branches nationwide with 129 stores in Bangkok and 83 stores located in upcountry.

In 2006, the company is successfully repositioning its family chain and represent the variety of customers shopping lifestyle through four different retail formats;



PMA Australia-New Zealand Fresh Connections



Photo supplied courtesy of PMA Australia + New Zealand.

The PMA Australia + New Zealand Fresh Connections conference was held in Auckland on 25 to 26 June. It was attended by about 1,100 delegates and was the first time it has been held in New Zealand. It was a fantastic event with a great line-up of speakers, excellent trade display and opportunities for networking.

Not many Australian avocado industry members attended so John Tyas CEO of Avocados Australia provides below a summary of some of the highlights and encourages anyone who has not

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attended a PMA conference to consider making the time to attend the conference next year (the PMA Fresh Connections 2015 event will be held 12-14 May at the Melbourne Convention & Exhibition Centre).

John Anderson 'Blue Print – Blue Sky'

The morning breakfast session was held in a hard stand boatshed of all places. Luckily no-one needed to get their boat out – the weather was lousy anyway.

John was the founder of Contiki. He talked about his amazing journey which started with 25 pounds back in 1962. As a young Kiwi in London, he wanted to travel Europe but couldn't afford to do it alone so he set out to put a group together so he could share the costs to fund his 3 month European tour. That was the start of an amazing journey which eventually led to the internationally renowned company Contiki. What an amazing story, which included so many lessons of business. He is a very articulate and passionate speaker, and I couldn't resist buying his book (Only Two Seats Left) after his inspirational presentation. If you ever get the chance to hear the story, I recommend that you do.

Allan Ryan, Hargraves Institute Work different: Achieve real business improvement through Innovation 3.0

I have heard Allan speak before, but there is always something new to learn. A few quotable quotes from his presentation that you may or may not have heard before:

'If a picture is worth a thousand words, then an insight is worth a thousand pictures'

'If you are not going forwards, you are going backwards'

'Culture eats strategy for breakfast'

He talked about tackling innovation in small steps – the key being to look for lots of small innovations rather than that 'big idea'. It is less risky because if one of your small innovations is not successful, the down side is not so bad.

Patrick Vizzone, National Australia Bank Asia Taking trade and investment linkages with Asia to a new level

The opportunities in Asia have been talked about for a couple of decades now, that I can recall. But the opportunity is much closer to reality these days and the avocado industry is making inroads into new Asian markets. Some of the key points that Patrick talked about were:

- There will be massive opportunities in Asia to meet future demand
- The Australian and NZ dollar is expected to reduce over the next 12 months
- China cost of production is increasing
- Fruit prices in China are rapidly increasing (this was

something I particularly noticed when I visited Beijing last year, similar to Australian retail prices)

- Food safety is the number one concern for Chinese consumers with concerns about Chinese produce (but the Chinese government are working to address this). Soil contamination is a major problem which is difficult to mitigate.
- The ability to support the market will require significant production increases (the new Australian Avocado Export Development Plan identifies that Australia should target one city in China as we would struggle to supply enough fruit for other regions).
- The importance of foreign investment to achieve the production growth required. Apparently, of all foreign investment in Australia, 75% is in the mining industry and only 2% in agriculture.
- In Australia, returns to producers have not kept pace with CPI which makes Australia less attractive for foreign investment. (However, Avocados are one exception to this rule and in fact, returns have exceeded CPI over the past few years.)

Leonie McKeon, Chinese Language & Cultural Advice "Lure the tiger down the mountain" – strategies to negotiate your way around Chinese business culture

This was an insightful presentation that would have been great to have heard before Daryl Boardman and I went to China last year to advance our China market access strategy. Leonie has a detailed understanding of the Chinese culture and how to manage this in business.

From a young age, Chinese people play games that hone their skills in strategic moves (e.g. Mahjong, Chess, etc.). However, Australian children are more likely to play an active sport such as footy or netball. This difference in early development must have an impact on future behaviour. Leonie says that in China "everything is negotiable; the environment has helped to shape their skills in this regard".

Leonie introduced us to the "36 Chinese Strategies". Google it! They have been described as "gems that speak to the cores of Chinese society." Although there was not enough time to cover all 36, Leonie mentioned a few key ones and explained how these can be played out in negotiations.

For example, #4 – "Wait leisurely for an exhausted enemy". You may be asked what time you will be leaving China. To give this information away may give your negotiating partner an advantage by giving the 'time and place for battle'. Most of us would think nothing of giving this information, but it may be used to leverage a negotiation and put you in a weaker position.

#6 – 'Make noise in the east and attack in the west'. This can result in your attention being diverting during a negotiation. For example, an issue may be highlighted that is not the *real* issue. Leonie also talked about *Guanxi* which can be best described

Industry Matters continued

as your 'social capital' within your network. I'm not sure I fully get it yet, but I think it is about face, credibility and respect. You may be in a situation where you have been continually wined and dined and may feel that the hospitality has been unbalanced. In Australia we are more inclined to go 'tit for tat' and return a favour. However, in China, this may go on for some time and you may eventually be asked to do something that is beyond your realm of expertise. You must do whatever you can to deliver, in order to maintain the *Guanxi*! No Guanxi, no business!

#10 – 'Hide your dagger behind a smile'. Apparently 'yes' can mean 'no', and often that can be the case. Saying 'no' will break the relationship, so it is strongly avoided. 'Yes' can often mean 'no' as it saves face.

#15 – 'Lure the tiger down the mountain'. This was the title of the presentation and includes 4 key points in relation to negotiation:

- Firstly, negotiate on your own home ground if possible
- Secondly, negotiate on neutral ground
- Third option is to negotiate at a Chinese location that you are familiar/comfortable with
- Worst case – negotiate at their premises

Other things that were discussed included the hierarchy and importance of appointing a 'king' in your group and be aware who their 'king' is. Seating – make sure the important one sits in the middle of the table (otherwise you will offend). Drinking/cheers – need to click glasses every time you sip.

This session highlighted that Chinese culture is a very complex and interesting culture. Although it is well known that the Chinese strongly value friendships and good business relationships, the practical examples really explained it well.

I don't pretend to know much about this, but the presentation was fascinating and the take home message for me was - anyone planning to do business in China would benefit from understanding the culture better!

Dr Adam Fraser, The Third Space

Promoting a high performance work culture

We all know the world is going faster, no-one wants to wait for anything. Apparently there are now '1 Minute Bed-time Stories'. All the great kid's stories have been condensed into a fast version for busy professionals. For a split second I thought –'what a great idea' - and then I realised how sad that really is. Busy professionals can't even find the time to read a bedtime story to their kids. Technology is driving a faster world and supporting decision making. Apparently there is a 'Cry Translator App' which can tell you what your baby needs by recording the sound of the cry (good luck!). Also, on KLM airlines you can choose who you sit next to based on their Facebook or LinkedIn profile.

Dr Fraser's presentation was about culture and performance in the workplace. Apparently, there has been a lot of work done on Happiness. Studies have shown that Happiness can best be described as: when you have challenges that are just above

your skills/ability (stretch) to provide you with a strong sense of achievement when you accomplish them.

I have heard a presentation before about the next generation – my kids. I have heard this generation also referred to as 'cottonwool kids' and I can relate to that. The next generation are so protected. Adam showed photos of playgrounds 40 years ago compared with the playgrounds today – you can imagine the difference. As one example, if you fell in the playground of 40 years ago, you left some skin on the bitumen; not today, all rubber aggregate surface. In a running race 40 years ago kids were awarded 1st, 2nd or 3rd place and the rest were 'losers', but now they might get awards to 10th place or an award just for finishing. So what does our cottonwool culture mean for the next generation and their development? Will they know how to fail? Will they know how to struggle? Will they appreciate that real sense of achievement?

Adam, who has a strong background in sports psychology also talked about choking. What causes it? Is it self-doubt, fear of failure, focusing on the outcome rather than execution, imposter syndrome (Google that too) overthinking, etc. Using overthinking as a cause of choking, he gave a great tip of how to use psychology to put your opponent off in your next social golf competition – ask them to explain how they are playing a particular shot so well and next shot they will be over-thinking it and mess it up for sure – brilliant!

He talked about work-life balance, but is that a reality in this day and age? The phone is never turned off. Emails keep rolling in (even over the weekend). The world is just going faster. It is important to have good strategies to deal with this changed environment and Adam talked about finding your 'Third Space'. Based on sports psychology, what that means is really about transition periods between one phase and the next. Transition between one point in a tennis match and the next; transition between the frantic work environment and home time so that when you are at home you are truly 'in the moment'. Studies with sports players have shown a 41% improvement in performance with those who were able to effectively manage the transition from one phase to the next. For example, they may have lost a point but then they are able to quickly compose themselves for the next phase of play. Relating that to the work environment, how can we better transition from 'work mode' to 'home mode' so that we give our families the attention they deserve. There is a process that Adam talked about using the 'third space' which is about the transition phase from work to home so that you are properly prepared to be 'present' and 'in the moment' when you get home. It is also a useful process for any transition from one activity to the other in day to day life.

It was fascinating to see how you can apply sports psychology to the workplace – I guess it's all about performance in one form or another.

Tim Reid, The Small Business Big Marketing Show

Marketing on a shoestring

This presentation highlighted the opportunities for effective, low cost marketing using web-based technology that is readily available today.

Tim asked a question of the audience. This question is a bit like the glass half empty/half full question. He showed the audience this string of letters: opportunityisnowhere. He then asked "what do you see?", the answer is: opportunity is now here. Did you get it right?

Digital marketing is very cost effective and there are many things you can do that only require your time and effort, plus a few dollars.

Google wants relevant, unique, helpful content produced regularly – that is what makes the likes of Google a popular search engine. Tim provided some examples of businesses that have used these 'free' mediums effectively. For example, RiverPools is a business that sells pools. However, they have developed a list of Frequently Asked Questions (FAQs) with detailed information to help prospective customers to be better informed about pools including an ebook guide on buying a pool. The concept is called 'helpful marketing'. Basically, you upload useful content that people are chasing and link it to your own brand. They may or may not end up buying your product, but more often than not, they will because you have engaged with them.

Tim provided many examples where companies provide free useful information related to the products they are selling. The benefit of the digital medium is that it is so extendable/transferable. Many are familiar with 'word of mouth' advertising. Tim introduced the term – 'word of mouse'. Just a click of a mouse and your story can be spread far and wide.

Other key tips that Tim left us with:

1. Work out the FAQs for your business, product or industry
2. Create engaging content- fact sheets, videos, podcasts etc.
3. Lean in (surfing term) – i.e. Do it!
4. Give it a 6 month timeframe to have an impact.

This is just a summary of some of the presentations that resonated with me at the PMA Australia + New Zealand Fresh Connections conference this year. They are always a great event with plenty of new information to get you thinking. I would recommend that all businesses should consider attending the next PMA Australia + New Zealand Fresh Connections conference in 2015 and similar events. There is so much to learn!

To keep up to date on PMA's activities visit their website at: pmafreshconnections.com.au.



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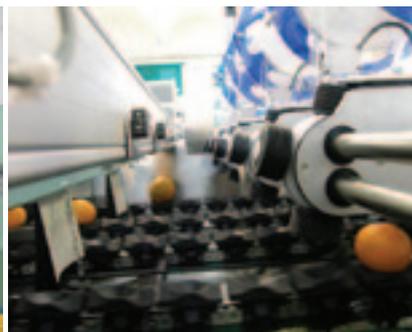
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Avocado R&D program overview

Prepared by Craig Perring
Industry Services Manager, Horticulture Australia

Horticulture Australia Limited (HAL) is a national research development corporation (RDC) and marketing organisation. HAL is an industry-owned company that invests more than \$100 million annually in research and development (R&D) and marketing projects for the benefit of horticulture. HAL works in partnership with the horticulture sector to invest in programs that provide benefit to Australian horticultural industries, and, it is the third-largest of 15 Australian RDCs.

HAL currently has over 40 members, covering 43 separate industries and more than 80 commodities, including fruits, nuts, vegetables, mushrooms, nursery, turf and cut flowers. The gross value of production of the Australian horticulture sector is in excess of AUD\$9 billion per annum.

HAL's investments are funded by levies and voluntary contributions from industry that are matched dollar-for-dollar by the Australian Government. Of the \$100 million invested approximately AUD\$80 million is invested in industry-aligned R&D projects, AUD\$17 million in marketing projects, and AUD\$2.5 million in broader strategic and transformational R&D.

The investment of R&D and marketing funds is based around three primary strategic priorities, as outlined in the HAL Strategic Plan 2012-2015:

Deliver new information and knowledge,
Build consumer demand, and
Enhance industry skills.

The avocado industry invests through HAL in R&D and marketing programs mainly using avocado grower levies and voluntary contributions (VC). Multi industry (MT) projects where the avocado industry jointly funds a project with one or more industries and Across Industry (AH) projects that are funded by all horticultural industries including avocados are also mechanisms by which the avocado industry leverages funds.

The avocado investment program is reviewed and adjusted annually in line with the industry's strategic plan. The strategic plan is based on three key objectives:

Objective 1 - To build a sustainable and competitive supply of Australian avocados to meet consumer needs

Objective 2 - To increase demand for Australian avocados

Objective 3 - To ensure appropriate organisation, resourcing and management of the affairs of the Australian avocado industry to support the development of the industry on an ongoing basis

Projects relevant to the avocado industry are funded through four different mechanisms and these are:

1. Avocado grower levies
2. 'Voluntary contributions' (VC projects)
3. 'Multi industry' projects where the avocado industry jointly funds a project with one or more industries (MT projects)
4. 'Across industry' projects that are funded by all horticultural industries including avocados (AH projects)

VC projects that relate to avocados can be found below with the grey shaded background.

MT or HG projects funded by avocado levies can be found below with the yellow shaded background.

AH projects can be found below with the blue shaded Background.

Following is a snapshot of the current avocado program funded through HAL. For further details on the specific projects, we encourage you to contact the relevant Project Leader.

Objective 1: To build a sustainable and competitive supply of Australian avocados to meet consumer needs

AV09024 Mechanisms of cultivar- and race-based disease resistance in avocado

Service Provider: The University of Queensland

Project Leader: Dr Andre Drenth

Start Date: 30/08/2010

End Date: 01/07/2014

Funding Type: Levy

SUMMARY

While it is well established that rootstock influences resistance of avocado (*Persea americana*) to anthracnose in fruit (*Colletotrichum gloeosporioides*) and root rot (e.g. *Phytophthora cinnamomi*), little is known about the physiological, molecular or biochemical bases underlying this resistance or tolerance. The aim of this project is to determine key characteristics among rootstocks from the three ecological races of avocado which correlate with disease resistance. Once these characteristics are identified, we can use them as markers to screen and select for higher levels of resistance among cultivars or races of *Persea* sp. The outcome of this project is to help significantly speed up breeding and selection for superior material for the Industry. The project has linkages with existing HAL/AAL funded projects on avocado disease management and rootstock evaluation.

AV13005 Investigating tree mortality during early field establishment

Service Provider: The University of Queensland

Project Leader: Dr Elizabeth Dann

Start Date: 01/08/2014

End Date: 31/12/2016

Funding Type: Levy

SUMMARY

The aim of this project is to increase our understanding of disease causing tree deaths after out planting, and provide



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Avocado R&D program overview continued

practical management procedures for nurserymen and growers.

Plant diseases are rarely static and in the future the number and types of disease affecting avocado will change. We have become aware of two disease issues within recent years affecting the success of our plantings. One is a species of fungus, *Calonectria* (also known as *Cylindrocladium*), which infects roots of plants in the nursery (possibly during the high humidity phases of clonal propagation) and causes severe destruction of roots of nursery trees. The other problem encountered by some growers is the decline and death of young trees from a dieback and canker disease, most likely caused by species of *Botryosphaeria genera* of fungi.

AV10001

Improving yield and quality in avocado through disease management, Phase 2

Service Provider: The Department of Agriculture, Fisheries and Forestry, Qld

Project Leader: Dr Elizabeth Dann

Start Date: 31/12/2010

End Date: 31/12/2014

Funding Type: Levy/VC

SUMMARY

The loss in productivity due to poor tree health and sub-standard quality fruit is a continuing concern for individual avocado growers and the entire Avocado industry alike. The aim of this project is to enhance avocado fruit standards by optimising fruit yields, fruit quality and tree health, by improving management of insidious diseases affecting fruit, roots or whole trees. Strategies which reduce the reliance on chemical fungicides will be assessed, in accordance with public and regulatory attitudes and policy both in Australia and overseas, and the adoption of effective 'softer' options encouraged where possible.

Benefits to Industry will include:

1. Improved management of Phytophthora root rot, via resistant rootstock material and more effective applications of phosphorous acid
2. Enhanced fruit quality and yields, via improved integrated management of postharvest diseases
3. Investigation of management options for brown root rot, caused by *Phellinus noxius*

AV13020

Review of the Avocado Nursery Voluntary Accreditation Scheme

Service Provider: Keith Bodman

Project Leader: Keith Bodman

Start Date: 11/11/2013

End Date: 14/02/2014

Funding Type: Levy

SUMMARY

Pathogen-tested plant material schemes are critical elements of any industry's approach to minimising the impact of priority diseases that impact on productivity. The avocado industry requires a thorough review of the Avocado Nursery Voluntary Accreditation Scheme (ANVAS). The original guidelines for ANVAS were developed in 1996 and a review of all aspects of the scheme including technical, administration and resourcing are necessary to ensure the scheme remains an essential part of the avocado industry's approach to improved productivity. The review will request input from key stakeholders in the scheme, including representatives of the nursery sector, avocado growers, the peak industry body, researchers, industry consultants and nursery accreditation inspectors.

Recommendations from the review will be developed for consideration by the Avocado Industry Advisory Committee (IAC) and Avocados Australia Limited (AAL).

AV13021

Exploring alternatives for managing Phytophthora root rot in avocado

Service Provider: The University of Queensland

Project Leader: Dr Elizabeth Dann

Start Date: 25/03/2014

End Date: 31/05/2016

Funding Type: VC

SUMMARY

Protection of the avocado trees from pests and diseases will always be a prime concern to growers. Industry must remain vigilant and prepared to evaluate new products, such as mandipropamid and potassium silicate, to ensure delivery of high quality fruit from healthy trees. This will enhance productivity and maintain competitive advantage at the grower and whole of Industry level.

The aims of the project are to evaluate:

- 1) The efficacy of mandipropamid to control PRR under glasshouse conditions, as a 'proof of concept' prior to extensive field trials
- 2) The effect of soil drench or foliar applications of potassium silicate on tree health, fruit yield and quality and root regeneration under high PRR field conditions

This research hopes to achieve:

- A 5-10% increase in avocado yields where these additional management options have been adopted, within 3-5 years
- Superior fruit quality (and larger fruit), with 5-10% increase in first grade pack outs
- More successful establishment of new plantings and increased tree health

AV14000**Achieving more consistent yields of quality fruit in the Australian avocado industry**

Service Provider: The Department of Agriculture, Fisheries and Forestry, Qld

Project Leader: Mr Simon Newett

Start Date: 01/11/2014

End Date: 31/12/2017

Funding Type: Levy

SUMMARY

The aim of the project is to provide Australian avocado growers with the knowledge required to implement practices that will lead to more consistent high yields of good quality fruit.

Grower adoption of best practices will result in a more consistent supply of Australian avocados to the market. To encourage greater grower adoption the avocado industry is seeking an extension project that addresses issues of inconsistent supply of Australian avocados.

There is a perception that irregular bearing is primarily an issue in the southern (cooler) states of Australia (e.g. Victoria, South Australia and Western Australia) but it affects all producing states including Queensland where some of the worst cases have been recorded (West Moreton region) and it is a regular issue in the temperature sensitive 'Shepard' variety which is grown in Central and Northern Queensland.

The project will focus on educating growers about practices and conditions that can lead to alternate bearing, and how to reduce its severity. Other on-farm topics that are important to the sustainable and competitive supply of Australian avocados will also be accommodated in the project.

MT10021**Determination of cold tolerance in immature stages of Australian pest fruit fly species**

Service Provider: The Department of Agriculture, Fisheries and Forestry, Qld

Project Leader: Mr Peter Leach

Start Date: 01/11/2010

End Date: 15/12/2014

Funding Type: Levy

SUMMARY

By developing testing procedures to determine the cold tolerance of Australian pest fruit fly species, this project aims to reduce existing risks to current and future export protocols. The major focus of cold treatments research has been limited to the Queensland fruit fly and Mediterranean fruit fly but Australia has over 10 species of fruit fly which could be categorised as serious quarantine pests. The fact that there is no data on the tolerance of tropical fruit fly species to cold treatment is a major risk to current and future export protocols.

By developing testing procedures, it will be possible to negotiate

robust protocols based on science rather than relying on trading partners' interpretation of a particular species pest status (e.g. Taiwan and the efficacy of cold treatment against Queensland fruit fly). The data packages will also have benefits for producers in fruit fly free areas should an incursion by a tropical fruit fly species occur. Under such circumstances trade would be able to continue (using a cold treatment) until the incursion is eradicated. Without data packages on cold tolerance, trade may be lost until eradication is complete.

MT12011**National honey bee pest surveillance program**

Service Provider: Plant Health Australia

Project Leader: Mr Rodney Turner

Start Date: 15/05/2013

End Date: 30/04/2015

Funding Type: Levy/VC

SUMMARY

Australia's freedom from many of the exotic pests that affect honey bees overseas provides the honeybee industry advantages in honey production and its ability to deliver paid pollination services. This freedom also provides plant industries reliant on, or responsive to, pollination by honey bee's yield, advantages both through access to managed pollination services and the presence of feral bee populations that contribute a significant amount of incidental or 'free' pollination.

A system of national surveillance for early detection of a key pest threat of honey bees such as Varroa mite is an important tool in preventing its establishment. The earlier a new pest can be detected, the greater the chance it will be restricted to a limited area and that eradication will be technically feasible. This project will undertake surveillance for honey bee pests through support for a national program of sentinel hives and sweep netting for foraging bees at high risk ports of entry. This program will have benefits for both the honey bee industry and plant industries dependent on honey bees for pollination.

MT12049**A model for industry planning and preparedness for an incursion of Varroa mite**

Service Provider: Plant Health Australia

Project Leader: Mr Brad Siebert

Start Date: 17/06/2013

End Date: 30/05/2015

Funding Type: Levy/VC

SUMMARY

Australia is the last major honey producing country in the world to not have Varroa mite and the almond industry, which in 2011 had an estimated farm gate value of more than \$250 million and exports totalling \$100 million, has an opportunity

Avocado R&D program overview continued

to be better prepared and cope with the potential arrival of this pest.

Australia's current freedom from the Varroa mite ensures bee and hive numbers are stable and are able to move within and between all regions of Australia. With a very real threat of Varroa entering Australia complacency is not an option for an industry where production levels are directly related to the availability of bees.

Biosecurity planning and preparedness for a potential incursion of Varroa will provide a mechanism for growers, industry stakeholders, and governments to assess current biosecurity practices, identify gaps and opportunities, and ensure the continued growth and stability of the almond industry in the event of Varroa becoming widely established in Australia.

MT13002

Protecting pollination for the Australian horticultural industry Stage 3

Service Provider: Horticulture Australia Ltd

Project Leader: Mr Peter Whittle

Start Date: 01/07/2013

End Date: 30/06/2016

Funding Type: Levy/VC

SUMMARY

A major challenge facing Australia's beekeeping industry is being prepared for an incursion by exotic pests or diseases, with the Varroa mite (*Varroa destructor*) posing the most significant threat. Along with the mite's impact on beekeepers, it would destroy the population of escaped European honeybees which currently provides incidental pollination on which many horticultural industries now largely rely.

The Protecting Pollination Program is jointly funded by the Rural Industries Research and Development Corporation (RIRDC) and Horticulture Australia Limited (HAL). This program aims to continue the R&D funding by various horticultural industries which are dependent on pollination.

Research activities are based on the Pollination Five-Year Research and Development Plan 2009-2014, which has a goal to 'support research, development and extension activities that will secure the pollination of Australia's horticultural and agricultural crops into the future on a sustainable and profitable basis'.

MT12028

OHMA Operational Support 2012 to 2015

Service Provider: Horticulture Australia Ltd

Project Leader: Mr Peter Whittle

Start Date: 01/10/2012

End Date: 31/05/2015

Funding Type: Levy/VC

SUMMARY

Opening new markets and maintaining access to existing markets is critical to increasing horticultural exports.

The Horticultural Market Access Strategic Plan, as developed for the Office of Horticultural Market Access (OHMA):

- Identifies priority commodity and country targets and access outcomes for the industry with respect to quarantine and non-quarantine market access barriers
- Presents industry and across-industry strategies, priorities and related matters over a rolling five-year period
- It seeks to monitor developments and wherever possible actively progress outcomes
- Acts on behalf of all the horticultural industries for which market access is significant and covers all individual markets where market access is important

The strategies developed under the Plan, and the supporting activities, address and work within multi-lateral and bi-lateral trade contexts and support international inter-governmental negotiations in a cooperative fashion between the government negotiators and the industry.

The objective of the market access operational support project for the period mid-2012 to 2015 is to ensure sufficient resources are available to allow OHMA meetings, travel to OHMA meetings by committee members and costs associated with an independent OHMA Chair.

MT12029

Horticultural Market Access Manager 2012 - 2015

Service Provider: Langley Consulting

Project Leader: Mr Chris Langley

Start Date: 01/10/2012

End Date: 30/09/2015

Funding Type: Levy/VC

SUMMARY

The Office of Horticultural Market Access (OHMA) is an industry managed, commercially oriented and industry based committee of HAL established to provide industry advice to government agencies for the negotiation of quarantine and non-quarantine market access. The OHMA undertakes this advisory role principally based on identification of industry priorities and key strategies from industry's perspective. Focus of OHMA is on access for horticultural exports in the context of new and improved market access and also of market maintenance. The OHMA can also address import access particularly where this may have connection to or impact on export access.

The OHMA reports to its funding committee which is the AIC as well as to industry as investors and stakeholders.

This project covers the costs for an OHMA Coordinator, whose role is to manage the Office and Work Program, reporting in the first instance to the OHMA Chair and HAL, and more generally to the members of the OHMA committee and ultimately to the AIC and contributing and supporting industries and other stakeholders principally government.

The OHMA's tasks include co-ordination of OHMA meetings, developing the annual market access business plan, developing and managing work programs within the scope of market access and market access R&D, preparing submissions to government on horticultural priorities for access negotiations, and coordinating government meetings with industry (phone, face to face and international meetings) on matters of market access developments and importance.

MT13028

Deployment and refinement of bait box remote surveillance system

Service Provider: National Centre for Engineering in Agriculture (NCEA)

Project Leader: Ms Cheryl McCarthy

Start Date: 01/11/2013

End Date: 01/09/2014

Funding Type: Levy/VC

SUMMARY

Honeybee biosecurity would be greatly enhanced by automatic surveillance of bait boxes.

Conventionally, bait boxes installed at Australian ports for the purpose of attracting and intercepting exotic bees have been inspected manually by apiary officers.

NCEA's recent HAL project MT10063 demonstrated a proof-of-concept technology for remote camera surveillance of bait boxes. Two bait boxes with remote camera surveillance and solar power have been deployed at Brisbane and Cairns and have been operating reliably in 2012/2013. This proposal describes a phased rollout in which a further 20 remotely-monitored bait boxes are deployed provisionally, evaluated and refined at ports around Australia. Specifically, the project will perform:

1. Smartphone software development
2. Onsite testing and system refinement leading to development of system specifications for commercial development
3. Database software development

Following this project, it is expected that a full-scale deployment of the system can commence using external contractors at locations with Telstra Next G coverage.

AV12007

Data Collection to Facilitate Supply Chain Transparency

Service Provider: Avocados Australia Limited (AAL)

Project Leader: Mr John Tyas

Start Date: 01/09/2012

End Date: 31/08/2015

Funding Type: Levy

SUMMARY

With the Australian avocado industry experiencing an extremely large growth phase in production, creating an environment in which market forces work efficiently to clear product quickly through the market is essential. Presently the industry produces approximately 49,500 tonnes of fruit annually and this is expected to increase to 63,500 tonnes by 2015/16.

In the past the retail avocado market tended to operate independently from these market forces, creating unclear market signals and fruit becoming backed up in the system. The precursor to this project, AV07023: Avocado Retail Price Surveys has helped to remedy this situation with weekly price monitoring across all major markets.

This information allowed an indicative prevailing retail price across each market to be determined and made available to producers. This information assisted in identifying disproportionate profit taking at the retail level and evened up the balance of market power between consumers, retailers and producers by providing clarity around the price consumers are paying for fruit.

Although growers have a good understanding of the prices they are receiving for fruit, until AV07023 there was not an up to date retail price reporting system to alert them when market forces weren't operating to clear the market. It is vital that this work be continued to provide a data collection system to facilitate supply chain transparency.

AV12012

Coordination of Data Management and Avocado Quality Improvement & Extension Program

Service Provider: Avocados Australia Limited (AAL)

Project Leader: Mr John Tyas

Start Date: 02/03/2013

End Date: 31/03/2016

Funding Type: Levy

SUMMARY

Improving issues relating to fruit quality and irregular supply through ongoing data management is the main aim of this project. The project has the following two objectives:

1. To expand on the results from AV09001: National Avocado Quality & Information Management System. Specifically this will entail:
 - a) Ongoing coordination of a suite of supply chain projects

Avocado R&D program overview continued

that AV09001 managed or participated in. These and other projects have provided industry with valuable information relating to a range of issues including internal fruit quality, fruit maturity and supply chain education to improve handling. This information has enabled industry to identify and begin to rectify issues relating to fruit quality and irregular supply into the market. These factors strongly influence consumer demand and industry's ability to anticipate and meet that demand.

b) Establishment, maintenance and improvement of a quality improvement and extension program, the template for which was developed as a part of AV09001. The goal of this system is to put support and monitoring systems in place to enable the supply chain to improve fruit quality and thus the end consumer's experience. It will be focused on education, training, identification of issues and continuous improvement.

2. Ongoing data management

Infocado is the avocado industry's crop forecasting system and the OrchardInfo system collects production and productivity information. These two systems provide industry and individual businesses with accurate production, sales and productivity data on which to make future R&D and marketing and promotion decisions. This program will fund their continued running and maintenance.

This data collection is particularly important as the Australian avocado industry is experiencing an extremely large growth

phase in production. Presently the industry produces approximately 49,500 tonnes of fruit annually (2010 -11) and this is expected to increase to 63,500 tonnes by 2015/16.

AV13003

Australian Avocado Benchmarking Program Development Rounds II and III

Service Provider: Pinnacle Agribusiness

Project Leader: Mr Howard Hall

Start Date: 15/07/2014

End Date: 29/07/2016

Funding Type: Levy

SUMMARY

The value of enterprise benchmarking increases exponentially, as data from multiple years is collected and analysed. An industry benchmarking data base compiled from just one financial or data year/period will capture inherent differences between management practices, regions, seasonal conditions and many more aspects of any broadly distributed business activity.

Std FEATURES	 	OPERATIONAL CHARACTERISTICS
<ul style="list-style-type: none"> • Compliance to AS-NZS 14.18.10 • Continuous 360° slew • Variable width and rating • 22 deg rating @ 2.3m wide • 25 deg rating @ 2.5m wide • Full proportional controls • Articulated booms • Large work envelope • Side levelling chassis • On screen slope readout • Cage load indication • Over slope alarm • Dual oscillating axles • 'Bump' reduction technology • Auto stabilise locks • 4x4 (Hi-torque drives) • All drives include braking • Rough terrain tyres • Emergency descent • Multi failsafe • Auto/manual throttle • Diesel or Petrol engine • Hour meter • Cage cover • Easy cage access • Phone tray • 200kg & 220kg SWL 		<ul style="list-style-type: none"> • The unique DOAS (Dual Oscillating Axles Suspension) system reduces the 'bump' effect of obstacles by up to 80%. • DOAS continuously auto-stabilises on-the-run, and when static. • DOAS also side levels (up to 20 degrees) the main chassis. • All directions Maximum operating Safe Slope limits of 25 degrees and 22 degrees (width dependant) will warn when exceeded. • All operating slopes and angles are displayed on the screen, as well as monitoring cage SWL (Safe Working Load). • The 360° continuous rotational slew is a feature that when used with the articulated booms, provides a massive 'work envelope'. • Within the work envelope, ATP machines are recognised for their wide 'outreach'. Up to 6.2m away from the base machine. • The outreach means the base machine does not need to enter the tree for fruit harvest or pruning, therefore no suffering of root structure damage beneath the tree canopy. • Perfect for Terraces. • Whilst the performance of many common access platforms fades significantly on slopes and bumps, ATP harvest performance can remain constant right out to the operational rating. • The drive system is 4x4 with high torque drives, and each drive includes braking, and counterbalance to stop run-away on hills. • Engine throttle is load controlled, which means the engine will automatically throttle to match only the load required. As a normal day brings many varied load cycles, this translates to significant fuel savings • The ATP Super series has a SWL (Safe Working Load) of 220 kg, and the ATP Lite series has a SWL 200kg.
OPTIONS	<p style="text-align: center;">INCREASED PRODUCTIVITY AND SAFER ACCESS ON DIFFICULT TERRAIN</p> <p style="text-align: center;">ATPs have 'bump' reduction technology, chassis levelling, & auto-stabilisation</p> <p style="text-align: center;">If terrain is a problem get an ATP</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-top: 10px;"> <p><small>CONTACT DETAIL</small></p> <p>Ph: +64 (0)7 5490766 Email: info@allterrainplatforms.com Web: www.allterrainplatforms.com</p> </div>	<p style="text-align: center; color: #f4a460;">SOME OPERATOR COMMENTS</p> <ul style="list-style-type: none"> • "regardless of terrain I know I am coming home safe at the end of the day" • "with an ATP I can pick fruit I could never get at before" • "you can drive over really big things and not even realise" • "you always feel safe"

This project is the continuation of the Australian Avocado Benchmarking Program Development, commenced in Project AV 11026. This project is the further development of an industry database and benchmarking process that will enable growers to identify and strive for Australian best practice in production, packing and marketing of avocados. By participating in this project and / or learning of and adopting findings from this process, growers will be able to improve farm productivity, produce quality and sustainability.

Insights arising from this project will assist growers to understand relationships between key farm and business practices and the primary outcomes they are aspiring to achieve, namely improved productivity, cost efficiency, quality and consistency of produce.

The outputs from this project will enable comparisons between growers based on a combination of location, business size (turnover, volume or tree numbers) and principal varietal type, over multiple years. Motivated growers will then be in a position to identify those areas which impact greatest on their productive and financial performance.

MT10049

A multi target approach to Fruit Spotting Bug management

Service Provider: NSW Department of Primary Industries

Project Leader: Dr Ruth Huwer

Start Date: 01/03/2011

End Date: 01/04/2016

Funding Type: Levy

SUMMARY

Providing new options for growers to manage the native pest Fruit Spotting Bug (FSB) is the intended outcome of this project. A major native pest in a number of subtropical and tropical horticultural crops in Australia, FSB is known to cause significant damage to more than 25 different tree fruit and nut crops and some vine fruits through the coastal and sub-coastal areas of Queensland, northern NSW, the Northern Territory and north west Western Australia. Most damage is manifested as spots or cracks on developing or mature fruit, or as splits, water-soaked marks or wilting in the vegetative growth of crops such as papaya, cashews and table grapes. Crop losses of more than 50% have been attributed to FSBs, and while overall losses to them are difficult to quantify they could amount to tens of millions of dollars annually across all industries.

Until now, using a single targeting approach, namely broad-spectrum insecticides, has been the only management option for growers. This approach is not sustainable in the long-term. In addition, it has also become apparent that a single strategy approach from different research teams has not been able to find a solution for FSB management and therefore a multi-target approach is suggested.

This project is developing management techniques based on a combination of tools including pheromone traps, biological controls, trap crops and new insecticides.

MT10066

Project Coordination for MT10049

Service Provider: RCR Agri Pty Ltd

Project Leader: Ms Chaseley Ross

Start Date: 14/03/2011

End Date: 31/05/2014

Funding Type: Levy

SUMMARY

This is an allocation for the project coordination of the project MT10049. The project coordination role has an initial term of 2 years from the date of contracting. The project coordinator holds a consultants agreement with HAL, and the lead agency also hold a separate contractual agreement with HAL (NSW I&I).

AV11021

An analysis of FSB activity in avocado crops from fruit-set to harvest

Service Provider: The University of Queensland

Project Leader: Dr Ian Newton

Start Date: 24/01/2012

End Date: 31/01/2016

Funding Type: Levy

SUMMARY

Developing a broader range of options to manage the major pest FSB (*Amblyopelta lutescens* and *Amblyopelta nitida*) is the main aim of this project. FSBs are major pests of tree fruit, nut and vine crops through the coastal and sub-coastal areas of tropical and subtropical Australia. The nymphs and adults feed on fruit and nuts causing external scarring and internal damage, which results in loss of pre-mature crop or an unmarketable product.

Avocados are perhaps the most affected crop, as bugs will attack newly set to harvestable fruit over a 5-6 month period. Fortnightly sprays of endosulfan have been used by some growers to control bugs, but the recent deregistration of this product has left a serious challenge for the avocado industry. It is hoped that the challenge will be largely met by HAL project MT10049 - A multi target approach to FSB management, but there is a limit to what this project can investigate at the specific crop level.

There is some data on bug damage levels, hotspots, edge effects and varietal susceptibility in avocados. However, expanding the management options for this pest requires a more detailed understanding of:

- Bug activity within the crop and how this relates to damage epidemiology

Avocado R&D program overview continued

- The importance of immigration versus within-crop breeding
- The utility of the newly determined *A. lutescens* pheromone as a monitoring tool
- The significance of egg parasitism within-crop
- The potential role the pheromone has in enhancing parasitism

The project plans to address these areas in the varieties Shepard and Hass in north Queensland to provide a better understanding of FSB activity in avocados.

AV10019

Reducing flesh bruising and skin spotting in Hass avocado

Service Provider: The Department of Agriculture, Fisheries and Forestry, Qld

Project Leader: Dr Daryl Joyce

Start Date: 01/07/2011

End Date: 28/11/2014

Funding Type: Levy

SUMMARY

Gaining a better understanding of where and how avocados are bruising before hitting the supermarket shelves will ultimately lead to increased consumer purchasing. Up to 80% of 'Hass' avocados on the retail shelf have defects in the flesh which can reduce consumer purchasing with bruising and rots the two most significant defects. Reducing rots in avocado fruit has received considerable attention, but there is no clear understanding of how to reduce flesh bruising. Recent research and anecdotal evidence indicates that typical skin spotting severity on partly-coloured Hass fruit can also significantly reduce consumer intent to purchase, incur occasional rejections and discounting by agents / DC / importers, and cause some importers of Australian 'Hass' fruit to deem levels of skin spotting unacceptable.

The first year of the project constitutes a scoping study to develop and apply a methodology for identifying the critical steps where fresh bruising is occurring, start developing a suitable decision tool to assist industry to reduce bruising, and better understand the commercial impact of skin spotting.

Critical evaluation of project results will be held at the end of the first year to determine priority areas for continued R&D in years 2 to 4.

Project objectives and methodology will be developed in close association with our commercial project partners. This intimate interaction throughout the project will ensure direct communication of findings and immediate and ongoing relevance of project methodology to commercial outcomes.

AV12009

Understanding and managing avocado flesh bruising

Service Provider: The Department of Agriculture, Fisheries and

Forestry, Qld

Project Leader: Dr Daryl Joyce

Start Date: 06/12/2012

End Date: 30/12/2014

Funding Type: Levy

SUMMARY

The expected outcomes of this project will generate real interest by the retailers looking to invest in practices and technologies that minimise bruising in avocados. In turn, increased consumer confidence to repeat purchase should pull-through to increased avocado production and sales opportunities.

Up to 80% of Hass avocados on the retail shelf have defects in the flesh which reduce consumer purchasing. Bruising and rots are the two most significant defects leading to losses in sales and ultimately production opportunities.

Reducing rots in avocado fruit has received considerable attention, but there is no clear understanding how to reduce flesh bruising. The requirements to achieve this are detailed knowledge of where and how bruising is occurring and the tools to help retail businesses to reduce bruising and thereby sales pull-through for avocado producers.

AV12031

Avocado Rootstock Commercialisation Plan

Service Provider: TechMac Pty Ltd

Project Leader: Mr Dallas Gibb

Start Date: 17/09/2013

End Date: 20/01/2014

Funding Type: Levy

SUMMARY

This project aims to develop a rootstock commercialisation strategy for the industry, with specific focus on the commercialisation of rootstock SHSR-04 identified through the ten - year rootstock development project undertaken by Dr Tony Whiley.

AV11015

Avocado industry fruit quality benchmarking

Service Provider: Avocados Australia Limited (AAL)

Project Leader: Mr John Tyas

Start Date: 07/03/2012

End Date: 26/02/2016

Funding Type: Levy

SUMMARY

Avocado quality can impact significantly on consumer purchase behaviour. With the overall aim of meeting consumers' requirements, recent research now allows us to quantify the negative impact on purchases, specifically in relation to maturity, ripeness and internal quality.

The updated Avocado Industry Strategic Plan (2010 - 2015), focuses on ensuring that consumers can confidently purchase consistently high quality fresh avocados at retail level. One of the outcomes required from research and development in the next five years is to increase the percentage of fruit sold at retail level meeting consumer requirements from 75% to 90%.

This project will continue on from those projects (using the same methodology) to track and quantify changes in quality and use that information to track and measure the success of projects (as above) aimed at improving quality. The results will also be provided to members of the supply chain to illustrate the beneficial impact of improved quality on overall profit.

AV12013 Implementing Improvements in the Avocado Supply Chain

Service Provider: Avocados Australia Limited (AAL)

Project Leader: Mr John Tyas

Start Date: 20/12/2012

End Date: 30/11/2015

Funding Type: Levy

SUMMARY

The overarching goal of this project is to improve the quality of Australian avocados in the market place. A continuation

of AV10006, this project aims to build on the materials and systems established in phases one and two which will be achieved by:

- Continued promotion of the existing supply chain education materials and programs developed in AV08017 and AV10006
- Revision and further development of existing supply chain education materials as needed to include new science and recommendations for handling avocados
- Continuing the rollout of a retailer training program established in AV10006 aimed at educating retail staff on how best to handle and store avocados and thus improve or maintain fruit quality
- Ongoing maintenance and promotion of the Best Practice Resource (BPR) which houses online, interactive adult learning modules and best practice reference materials
- Additional new modules to the BPR as new information become available

AV11025 Cryopreservation of somatic embryos and shoot tips towards development of a Cryo-Bank for Avocado Germplasm (CBAG)

Service Provider: The Department of Agriculture, Fisheries and Forestry, Qld

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Avocado R&D program overview continued

Project Leader: Dr Neena Mitter

Start Date: 28/06/2012

End Date: 30/05/2014

Funding Type: Levy

SUMMARY

Avocado genetic resources across the globe are being maintained ex situ in field repositories. These repositories have the advantage that one can physically evaluate and characterise the accessions for parameters like yield, tree height, and disease resistance.

Currently, we do not have a dedicated field repository for avocado germplasm in Australia.

The current proposal focuses on conservation of avocado genetic resources and is aimed at Cryopreservation of avocado somatic embryos and Cryopreservation of avocado shoot tips (novel approach for avocado).

Cryopreservation will address all the constraints associated with field gene banks. It will be useful not only for germplasm conservation but also to have avocado somatic embryos available as research material for genetic improvement.

AV13000

RNA silencing based Phytophthora root rot resistant avocado rootstocks – Phase 2

Service Provider: The University of Queensland

Project Leader: Dr Neena Mitter

Start Date: 15/09/2013

End Date: 31/07/2016

Funding Type: Levy

SUMMARY

Phytophthora root rot (PRR) is considered the most important and most widely distributed disease of avocados.

Avocados are cultivated in tropical and subtropical regions of more than 50 countries and from a production point of view PRR caused by *Phytophthora cinnamomi* is the single most important disease of avocado.

Phytophthora root rot is the most serious pre-harvest disease and it is estimated to cause losses in the region of about \$40m in lost production and fruit downgrading (mainly sunburn and small size) per year. Growers are estimated to spend \$3.4m/year on chemical prevention practices alone, excluding the cost of other cultural practices designed to reduce the effect of the disease such as mulching, drainage work, and careful irrigation management.

The current proposal aims to deliver *Phytophthora* root rot tolerant avocado rootstocks by:

- Extending the outputs of AVO8002 from glasshouse screening to a field trial evaluation of PRR tolerance of transgenic rootstocks
- Designing, planning and executing the field trial (discussions initiated with OGTR as well as Andersons Horticulture)

- Satisfying OGTR requirements and confirm the absence of the transgene in the scion
- Evaluating non-target effects of the technology on plant growth characteristics
- Clonally propagating identified PRR tolerant transgenic line/s
- Continuing to generate more independent transgenic lines/constructs and include other rootstocks as recommended by the Industry

AV13018

Avocado rootstock assessment and improvement – Interim

Service Provider: The University of Queensland

Project Leader: Dr Elizabeth Dann

Start Date: 02/09/2013

End Date: 30/09/2014

Funding Type: Levy

SUMMARY

The Australian avocado industry, through HAL, has funded a series of projects over the last decade which focused on evaluating the effect of rootstock on tree growth, fruit yield and postharvest quality. This work had an independent review conducted, with recommendations for future research finalised in August 2013.

However, detailed statistical analyses of data generated in the program, growth assessments of a late-planted rootstock trial, maintenance of the avocado variety block need to be conducted as a matter of urgency. These activities are not currently covered under any other projects.

The aim of this project is to ensure basic maintenance, data collection and analyses are undertaken in 2013-14.

AV13017

Minor Use permits and Strategic Agrichemical Review Process for the avocado industry

Service Provider: Horticulture Australia Ltd

Project Leader: Ms Jodie Pedrana

Start Date: 10/12/2013

End Date: 30/06/2014

Funding Type: Levy

SUMMARY

Pesticides are a valuable tool for the avocado industry. The use of pesticides is being modified through the increasing uptake of integrated pest management- specific pesticides are being used more strategically.

Pesticide companies submit use patterns for registration to the APVMA and the avocado industry is generally provided with significant registrations because of its major crop status. Minor use permits are required in the avocado industry where the market size is considered too small and therefore not

adequate commercial returns for the research and development investment by the pesticide companies.

The minor use programme through Horticulture Australia Limited (HAL) has initiated the strategic agrochemical review process (SARP) to give strategic direction to the minor use programme investments and reduce the impact caused by pesticide residue violations in any market and accessing pesticide options for long term sustainable pest management practices.

The avocado industry is undertaking the SARP to provide a more strategic approach to accessing the appropriate pesticides for present and future needs. It will also give the industry a better understanding of the investments required for this issue.

The aim of this pay-on-invoice project is to provide funding for all minor use work for the avocado industry so that appropriate access to pesticide is maintained. These minor use funding requirements will be in the areas of:

1. Funds required conducting the Strategic Agrochemical review process (SARP)
2. Desktop permit applications - collation of available data, writing up and submitting permit applications and following the applications through the APVMA permit application process until the permit is achieved
3. The payment of APVMA permit application fees for new and/

or renewing minor use permit (present but expiring permits)
Objective 2: To increase demand for Australian avocados

AV12025

Avocado Export Development Plan

Service Provider: Oliver and Doam

Project Leader: Mrs Agnes Barnard

Start Date: 01/06/2013

End Date: 28/02/2014

Funding Type: Levy

SUMMARY

The current Avocado Industry's export development plan will be updated to develop the strategies required to expand exporting opportunities while still maintaining a strong domestic market presence. The avocado industry wants to assess the costs and benefits of expanding exports to provide more diverse market opportunities as well as protect against severe domestic price depression and strengthen industry sustainability.

This will involve assessing the returns that can be expected from an investment in developing export markets for Australian avocados, relative to investment in further expanding the domestic market.



Costa Farms is the central market presence of the Costa Group where we market our own Avocados from our farm in Renmark (SA) alongside that of our closely aligned 3rd party grower base. We follow the principle of providing our aligned Avocado growers with quality service and strong financial returns because we understand the challenges of growing from the grower's standpoint due to our direct investment in the industry, from growing to ripening to marketing within our national footprint. Costa Farms maintains a solid commitment to the grower base and we continually strive to provide our growers with the latest industry information. We support our growers from the standpoint of being a grower ourselves and work diligently to develop long-term, trusting and sustainable relationships that are mutually beneficial. Costa Farms strives to be known by our customer base for consistently the highest quality products in the marketplace.

 **Melbourne Wholesale Market**
West Melbourne VIC
Contact: Simon Owen - 0401 711 606

 **Brisbane Wholesale Market**
Rocklea QLD
Contact: Ryan O'Keefe - 0427 604 211

 **Adelaide Wholesale Market**
Pooraka SA
Contact: Andrew Christophides - 0400 177 594

Avocado R&D program overview continued

AV13014

Strategic market development research

Service Provider: BDRC Jones Donald Pty Limited

Project Leader: Mr Duncan Sinclair

Start Date: 02/06/2014

End Date: 31/05/2014

Funding Type: Levy

SUMMARY

This research involves a quantitative assessment of consumer awareness of and response to new Avocado communications activity, launched into market in May 2014. Consisting of two waves of research (timed to follow each burst of media activity), each wave will involve a 15 minute structured online interview, collecting a nationally representative sample of n=1,300 Main Grocery Buyers.

With a focus on delivering insights into the effectiveness of the communications campaign, the research will assist in achieving Objective 2 of the avocado strategic plan and guide the optimal communications activities moving forward.

MT14013

Australia Fresh - Core Export Market Development Program 2014 – 2017

Service Provider: Oliver and Doam

Project Leader: Mrs Agnes Barnard

Start Date: 01/07/2014

End Date: 30/06/2017

Funding Type: Levy

SUMMARY

There is a growing concern among local horticulture industries on the oversupply in the domestic market due to increased production trends and competition. Furthermore increasing imports has raised interest within the sector into developing new viable markets outside of Australia. Australia Fresh program has therefore been reviewed and remodelled to address current export needs among industries.

Australia Fresh is the umbrella program for multi-industry export development for Australian horticulture. The new Australia Fresh model has been structured to provide the flexibility for industries to plan the extent of their participation depending on their current and future needs. Participation is through the core program (export market development) and the user pays program (export marketing promotions).

This project focuses primarily on the export market development aspect of wider Australia Fresh program and is a continuation of the 2013 - 2014 Australia Fresh core program.

MT14014

Multi Industry Fruit Tracking Study 2014 – 2015

Service Provider: Edentify

Project Leader: Mr Dan Banyard

Start Date: 01/07/2014

End Date: 01/08/2014

Funding Type: MK/Levy

SUMMARY

Marketing industries with significant investment budgets require the ability to access 'real time tracking.' Subsequently this service provider has recommended the use of a market research tool utilising an on line tracking survey. Online surveys are an extremely useful methodology for collecting quantitative data from target respondents within a very consistent collection of data that is representative and measurable, hence allowing robust tracking of the audience behaviour.

Advantages of online surveys in particular are the ability to include broad geographic representation of specific respondent targets, and the ability to display images or attachments.

In addition survey results can be tracked in real time using an online reporting tool and can be easily shared within HAL enabling a much higher degree of visibility of the research conducted. As this is a continuous tracking study it is essential that the core questions within the survey remain consistent. It is also essential that each wave of the research be conducted at similar times within a year.

AV14006

Continuation of health professional education and research program

Service Provider Lisa Yates Consultant Dietician

Project Leader Ms Lisa Yates

Start Date 01/07/2014

End Date 30/05/2015

Funding Type Levy

Summary

The 2014/15 program will build on the success already achieved over the past 2 years of educating health professionals about the key avocado health messages of:

- Folate for healthy babies
- Healthy fats for healthy hearts
- Nutrition consultation to other Australian avocado agencies

The program aims to educate health professionals who give 'permission' to consumers (their clients) directly to enjoy regular avocado consumption as part of a healthy diet.

This project aims to expand the program in 2014/15 to include the role that healthy fats play in managing Diabetes.

The program includes the addition of diabetes educators as a

new health professional target audience to complement the existing audiences. As there is a degree of overlap between diabetes educators with the current audiences this is a complementary extension.

MT13061 **Understanding the Purchase Behaviour of Fresh Produce Consumers**

Service Provider: Nielsen
Project Leader: David Chenu
Start Date: 26/06/2014
End Date: 30/06/2016
Funding Type: Levy

SUMMARY

To increase consumption, industries recognise they need effective market research to better understand consumers.

This market research carried out in this project will include the use of Homescan Consumer Data, Woolworths Retail Scan Data, professional analysis of the data collected and reporting of industry trends and market development strategies associated with the insights gained.

Retail Scan Data analysis and Homescan Consumer Data analysis will be analysed in tandem by external experts to optimise their value. Participating industries will receive customised service, analysis and reports from a contracted analyst. This project has been structured to appeal and add value to HAL's diverse range of large and small horticultural industries, with analysis being driven by each industry's unique needs.

AV10008 **Avocado Industry Communications**

Service Provider: Avocados Australia Limited (AAL)
Project Leader: Mr John Tyas
Start Date: 01/05/2011
End Date: 01/10/2014
Funding Type: Levy

SUMMARY

To remain competitive in domestic and overseas markets the Australian avocado industry needs to be constantly informed about emerging information, trends and issues that can impact on the commercial returns of producing/supplying avocados.

The Avocado Industry Communications project strives to inform and engage all stakeholders ranging from growers, suppliers, exporters and importers, wholesalers, retailers, decision-makers from government and non-government organisations, the media and the general public. This project is responsible for producing and implementing numerous communications vehicles that directly target these stakeholder groups.

Through effective communication, avocado growers (levy payers), receive up-to date information regarding challenges

confronting the industry, available opportunities, along with research and development outcomes which will benefit the profitability and sustainability of the Australian avocado industry.

AV10002 **Avocado best management practices and internet based information delivery**

Service Provider: The Department of Agriculture, Fisheries and Forestry, Qld
Project Leader: Mr Simon Newett
Start Date: 01/11/2010
End Date: 31/05/2014
Funding Type: Levy

SUMMARY

This three year project will focus on the creation of clear, concise, up-to-date information products to assist Australian avocado growers to grow premium quality avocados at a competitive cost. A new internet based content management system will provide the framework for delivering information for producers both during and beyond the life of this project. A full colour hard copy field guide will also be published to allow growers to identify problems in the field.

The information generated in the previous avocado extension project (AV06003) will form the basis of these information resources for growers, together with additional input from other technical experts.

A check list of recommended best management practices will be developed against which growers can compare their own management practices. AVOMAN software users will continue to be supported and hands-on training will be provided where possible.

MT12009 **Export-Import Market Intelligence 2012 - 2014**

Service Provider: Global Trade Information Services Inc.
Project Leader: Mr Russell Patterson
Start Date: 15/07/2012
End Date: 30/06/2014
Funding Type: MK/Levy/VC

SUMMARY

The Export-Import Market Intelligence project will assist industries interested in export/import markets and associated market dynamics/structure/demographics, trade volumes, values, prices and on impending opportunities in export markets. The project study in-depth the emergence of export market trends, demographics, retail and wholesale trade within export markets and in the analysis of opportunities for both moving into new or emerging markets and making the best of existing markets.

Avocado R&D program overview continued

This project will also go beyond the analysis of the global trade data made available in the GTIS and will use other international trade reports, and key contacts in export markets to delve deeper into the landscape and development of global trade.

**AV12700
International networking**

Service Provider: Avocados Australia Limited (AAL)
Project Leader: Mr John Tyas
Start Date: 14/06/2013
End Date: 29/05/2015
Funding Type: Levy

SUMMARY

This international networking project will provide opportunities for the leaders of the Australian Avocado Industry to make contacts and connections with various stakeholders within the trading, importing, exporting, food service and retail sectors globally.

The information and communication networks that are gleaned from global congresses, and key research areas that can use and leverage limited resources from different countries, are invaluable and will enable the Avocado Industry to keep connected with global markets and across industry issues and trends.

It is vital to develop opportunities for the Australian industry through international networking, as it will provide links to potential export markets for Australian growers. Importantly, it will also provide an insight into how overseas markets and supply chains operate. Other benefits of international networking include:

- Reaching growing markets overseas
- Allowing the Australian Avocado Industry access e.g. overseas technological advancements with the information enabling

local growers to improve the efficiency and effectiveness of their operations. These advancements will benefit growers, members of the supply chain, as well as distributors of produce. The project will help the industry create links with world leaders in Research and Development. Contacts made through overseas networking activities will be made available to Australian growers and presented to them through various mediums such as the industry magazine, e-newsletter and levy payers meetings.

**AV14910
Avocado Consultation Funding Agreement 2014-15**

Service Provider Avocados Australia Limited (AAL)
Project Leader Mr Craig Perring
Start Date 01/07/2014
End Date 30/06/2015
Funding Type MK/Levy

Summary

Funding of activities for IAC Meetings, Annual Levy Payer Meeting & Consultation on Levy Program.

**AV14800
Avocado Industry Advisory Committee Annual Report 2013/14**

Service Provider: Horticulture Australia Ltd
Project Leader: Ms Barbara Knezevic-Marinov
Start Date: 01/07/2014
End Date: 30/06/2015
Funding Type: Levy

SUMMARY

Reporting on all industry projects that had funds expended in 2014/15.

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Across Industry Program

The across industry R&D program is funded through matched R&D levies and voluntary contributions. A contribution of three percent from all HAL-funded R&D projects is allocated to the across industry program to fund much needed R&D that is of

benefit to all horticulture industries. Below are the projects that were endorsed for inclusion in the 2012-13 Across Industry program. Further information is available from Warwick Scherf, Horticulture Australia Limited, warwick.scherf@horticulture.com.au or call 02 8295 2323.

Project No.	Title	Project Start	Project Completion	Organisation
Objective 1: To enhance the efficiency, transparency, responsiveness and integrity of the supply chain.				
AH12016	Partnering Fresh Produce with Retail: Quality Assurance Harmonization	15/05/2013	30/06/2015	Kitchener Partners
Objective 3: Position horticulture to compete in a globalised environment				
AH09027	Investing in Youth Successful Scholarship Applicant	31/05/2010	31/03/2015	Rural Industries R&D Corporation (RIRDC)
AH11009	Autonomous Perception Systems for Horticulture Tree Crops	1/05/2012	27/11/2015	University of Sydney
AH12019	Horticulture Leaders - Across Horticulture Leadership Training - 2013 and 2014 programs	3/06/2013	31/05/2015	Strategic Business Development Pty Ltd
AH13020	Horticulture Information Unit	1/08/2013	28/02/2016	Horticulture Australia Ltd
AH14006	Horticulture Nuffield Scholarships 2014/2015	10/07/2014	30/06/2016	Nuffield Australia Farming Scholars
AH13033	Investing in Youth Successful Scholarship Applicant	26/06/2014	30/06/2017	Rural Industries R&D Corporation (RIRDC)
MT12029	Horticultural Market Access Manager 2012 - 2015	1/10/2012	30/09/2015	Langley Consulting
Objective 4: Achieve long term viability and sustainability for Australian horticulture				
AH10003	Horticulture component of the National Climate Change Research Strategy for Primary Industries	30/11/2011	1/07/2015	Horticulture Australia Ltd
AH11011	Horticulture funding of the CRC for Plant Biosecurity	30/06/2012	30/05/2018	CRC For National Plant Biosecurity
AH11029	Provision of independent technical and secretarial services to the National Working Party for Pesticide Application	20/12/2011	31/05/2015	Plant Health Australia
AH13023	Industry Development Forum with International Horticulture Congress	17/02/2014	30/06/2015	Horticulture Australia Ltd
AH13027	Plant protection: Regulatory support and co-ordination - Continuation of AH09003	31/05/2014	1/07/2018	AKC Consulting Pty Ltd
MT10029	Managing pesticide access in horticulture (cont. from AH04009 and MT07029)	1/07/2010	2/07/2015	Horticulture Australia Ltd
MT10049	A multi target approach to fruitspotting bug management	1/02/2011	6/05/2014	NSW Department of Primary Industries
Objective 5: Other				
AH11023	Graham Gregory Award and Function	1/07/2011	30/06/2016	Horticulture Australia Ltd
AH14007	Support Function for AIC continuation of AH11003	1/07/2014	30/06/2017	Horticulture Australia Ltd
AH14008	Across Industry Program Administration continuation of AH11026	1/07/2014	30/06/2017	Horticulture Australia Ltd
AH14800	Across Industry Annual Report 2013/14	1/07/2014	30/06/2015	Horticulture Australia Ltd
MT12028	OHMA Operational Support 2012 to 2015	1/10/2012	31/05/2015	Horticulture Australia Ltd

Changes to the Australian “Kangaroo Label”

The label that brands Australian Avocados

The Australian ‘Kangaroo Label’ was developed by Avocados Australia in 2011. Avocados Australia created the on-fruit sticker at a time when the industry wanted to provide a better means for consumers to be able to identify and choose home-grown avocados in retail stores. The sticker clearly identifies the avocado country of origin at point-of-sale. Though the use of the label is optional, registered label users have overwhelmingly supported the Kangaroo Label.



Why use the Kangaroo Label?

Nearly three years on the Australian ‘Kangaroo Label’ has become an established brand in the marketplace at point of sale. The Kangaroo Label clearly identifies country of origin at point-of-sale to reassure shoppers they are buying Australian avocados and supporting Australian growers, and the regional communities across Australia in which they operate.

Growers/packhouses must be registered to use the Kangaroo Label. The Packhouse Registration Number (PRN) printed on the label as part of the specifications, provides a useful traceability mechanism which can assist with quality improvement and monitoring. This traceability mechanism is also strongly supported by the major retailers and is only available with the Kangaroo Label.

The Kangaroo Label includes the Australian Avocados website address (avocado.org.au) where consumers can be directed to hundreds of recipes, nutritional information, useful information about how to get the best value from Australian avocados, and more.

Improved efficiency and effectiveness of the Kangaroo Label

Avocados Australia has reviewed and refined the Kangaroo Label specifications for the production of the label to ensure uniformity, efficiency and effectiveness for the industry. This process took into account the technical needs of the licensed Kangaroo Label Suppliers and the needs

of Registered Label Users. At the same time this process also provided the opportunity for Avocados Australia to negotiate with major retailers to simplify their label requirements.

“Both Coles & Woolworths have now agreed to remove the requirement to identify different fruit sizes, so there will only be one label type required for each variety.” Both chains have also agreed to remove the requirement for a barcode on the label”.

Both Coles and Woolworths have now agreed to remove the requirement to identify different fruit sizes, so there will only be one label type required for each variety. Both chains have also agreed to remove the requirement for a barcode on the label. However, Coles still has a preference for a barcode on the label, unless label size constrains the use of a barcode. In this situation a Price Look Up (PLU) code is acceptable. Avocados Australia recommends that packhouses use a PLU instead of a barcode wherever possible, as it provides maximum exposure of the Australian Avocados brand. In view of this the Kangaroo Label designs are available with and without a barcode.

Registered Label Suppliers & Registered Label Users informed

The Registered Kangaroo Label Suppliers who are licensed to produce the Kangaroo Label (Aldine Printers, J-Tech, Label Press and Warehouse Design & Packaging), and all of the current Registered Label Users have been provided the relevant details concerning the new Kangaroo Label specifications. Any organisation that has questions or queries regarding the Kangaroo Label changes can contact the Avocados Australia office (contact details appear at the end of this article).

Royalty arrangements stay the same

The royalty that applies to the Kangaroo Label is set at 40 cents per thousand labels (equal to approximately 1 cent per tray of avocados). This rate has not changed since the system was introduced over ten years ago (when it was set for the first label that was provided by Avocados Australia). The royalty covers the costs of administering the label registration program, registration of barcodes with GS1 and also assists in covering the costs of programs that are unable to be funded by the national levies managed by Horticulture Australia Limited (HAL). Examples of this work include; State and Federal

Government representation/Agri-political work and other issues management that is outside the scope of levy-funded projects, such as negotiating the above mentioned changes with Coles and Woolworths.

The **new Australian Kangaroo Label specifications come into effect from 1 August 2014**. However, in order to assist Registered Label Users through this transition, any Kangaroo Label stock on hand produced prior to 1 August 2014 can be used on fruit until it is depleted. Any Kangaroo Labels produced from 1 August 2014 must adhere to the new specifications.

Kangaroo Label Enquiries:

To order Kangaroo Labels through our Registered Label Suppliers, grower/packers or packhouses need to be issued with a Packhouse Registration Number (PRN) (formally known as a Barcode Registration Number) by Avocados Australia. There is no cost involved in registering

to use the Kangaroo Label.

If you would like to find out more information about the Kangaroo Label, or apply for a PRN, please visit the Avocados Australia Industry website (industry.avocado.org.au) move your cursor over the top maroon menu to "Services" and click on "Kangaroo Label". Once the page opens, click on the Packhouse Registration Number Application form link and complete the form. Alternatively you can call the Avocados Australia office on toll free phone number 1300 303 971 and request a copy of the form.

For more information:

For more information about Avocados Australia's Kangaroo Label please contact Maree Tyrrell email admin@avocado.org.au or call toll free phone number 1300 303 971.



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Irrigation all sorted? ... sure about that?

Simon Newett

Department of Agriculture,
Fisheries and Forestry, Nambour, QLD

Email for correspondence: simon.newett@daff.qld.gov.au

Avocados are not an easy crop to grow, especially after the first few “honeymoon” years, and like the management of root rot and boron nutrition, irrigation of avocados requires special attention.

A recent study of the practices of five top Australian avocado irrigators shows that maintaining optimum soil moisture for avocado is a top priority and needs a high level of management.

Compared to other crops, avocado is much less forgiving of mediocre irrigation practices. For reasons explained below, it is a delicate balance to irrigate avocados effectively, but it pays off when you get it right.

The avocado irrigation conundrum

The dilemma is that avocados have a high water requirement but at the same time are sensitive to wet conditions.

Origins of avocado

It is useful to bear in mind the conditions under which the avocado is believed to have evolved as this helps understand the species and the conditions to which it is adapted.

The subtropical Mexican and Guatemalan races of avocado, upon which the modern industry is based, evolved under very benign conditions in the highland montane cloud forests of Central America. The soils are of volcanic origin, very deep with excellent structure, drainage and aeration. Extreme temperatures are absent and a deep mulch of decaying leaf litter would have been present on the surface. It is also important to note that they evolved in the absence of *Phytophthora* root rot which is believed to have had its origins in the New Guinea region and therefore have very little resistance to this pathogen.

The avocado root system doesn't have root hairs (significantly limiting the moisture and nutrient absorption area), has a very shallow feeder root system (about 90% of roots occur in the top 15cm) and can extract little water from soil that is drier than -20kPa (drier than a reading of 20kPa on a tensiometer). On the other hand the feeder roots have a high oxygen requirement (trees drown after just 48 hours of inundation) and are very susceptible to the water-loving *Phytophthora cinnamomi* root rot disease.

These facts point towards the need for very careful management of soil moisture for optimum results in yield and fruit quality.

The study

Five growers (from Far North Queensland, Gatton, Victoria, South Australia and Western Australia) who are considered top avocado irrigators were interviewed in depth about their irrigation practices and approach.

What the top irrigators had in common:

- A very high priority given to avocado irrigation.
- A strong belief in the importance of soil moisture management for avocado.
- A reliable soil moisture monitoring system (capacitance probes and/or tensiometers used)
- A means of double-checking what soil moisture probes were indicating, either another type of instrument or simply a physical examination of soil moisture using a hand auger or spade.
- An efficient, uniform and effective irrigation system with ample capacity to deliver daily water needs to the whole orchard during peak demand.
- Soil moisture monitored at least daily from spring through till autumn and several times per day during periods of high water demand.
- Soil moisture full points (field capacity) and refill points (the point at which the avocado can no longer easily extract moisture from the soil) established for individual orchard conditions.
- Irrigation managed to keep soil moisture between full and refill points, trying hard not to exceed the full point and not to drop below the refill point.
- Applied irrigation as soil moisture approached the refill point, even if it meant irrigating several times per day.
- All used fertigation.
- Four out of five of the growers used under tree mulch.
- All followed weather forecasts and factored this information into their scheduling decisions.
- And last but certainly not least: these growers achieved **yields and fruit size well above industry averages** (naturally, other aspects of the orchard need to be well managed too to get these results).

Some quotable quotes from the five growers:

NQ: "Irrigation is critical 365 days of the year. Follow what the probes are saying."

"Close attention to irrigation produces bigger fruit."

SQ: "Don't hold back when the trees need moisture. Everyday is critical, especially during hot weather."

VIC: "Need to have a complete handle on the water needs of the avocado and an understanding of the tree. They are not like grapes and need to be managed differently. For many Tristate growers avocados are not the main source of income so they may not be managed to the high standard that avocados demand".

"Fifty percent of the crop load can be lost if you don't irrigate properly".

SA: "Don't leave the farm on a hot day."

"The cost of power and water are small compared with the returns from good yields of quality fruit."

WA: "Understand where the sprinklers are depositing the water in relation to where you place the monitoring probe. Maximise wetted root zone out to the drip line of the tree."

"Irrigation is more than just about water; it is also about making nutrients available."

The concept of 'Readily Available Water' (RAW)

Not all the water in the soil is available to plants and different crops have different abilities to extract soil moisture. 'Readily Available Water' (RAW) is a useful concept on which to base your irrigation scheduling, it takes into account the depth of the main feeder root zone and the point at which the particular crop can no longer extract moisture with ease.

Avocado is one of the least efficient crops for extracting soil moisture. As mentioned above its feeder root system is very shallow and the lack of root hairs means that its absorptive surface area is small. RAW is the difference between the amount of water held at the 'full point', also referred to as field capacity (about -8 kPa), and the 'refill point' (about -20 kPa for avocados, compared with grapes that can extract moisture down to -40 or -60 kPa).

In this range, avocados are neither waterlogged nor water stressed. (Note: if the soil moisture tension is 0 kPa then it is inundated and the time spent at this level this should be minimised especially with avocado which requires good soil aeration. Researchers have actually measured a slowing of growth in avocados during irrigation and this is believed to be the result of temporary lack of air in the soil).

Table 1. Readily Available Water (mm/cm) stored between -8 and -20kPa

Soil texture	Soil water extractable between -8 and -20kPa vacuum pressure (mm of water per cm of soil) Note: assumes very low (0.5%) soil organic matter
Sand	0.33
Loamy sand	0.45
Sandy loam	0.46
Light sandy clay loam	0.45
Sandy clay loam	0.39
Clay loam	0.30
Clay	0.27

Adapted from: *Waterwise on the farm, Fact Sheet, Readily available water (RAW), NSW DPI 2004*

This means that in a sandy loam soil there is only 0.46 mm of water readily available to avocados per cm of soil depth. This may appear to be a very small amount but soil is mainly made up of particles such as sand grains, organic matter, clay and silt, and it is only the spaces between these particles that can be occupied by air or water. Some of this water is held too tightly by soil particles to be available to plant roots and some is not held tightly enough and drains through.

Example:

For avocados growing in a sandy loam and with 90% of their feeder roots in the top 15cm of soil:

$$\text{RAW} = 15 \text{ cm} \times 0.46 \text{ mm} = 7 \text{ mm.}$$

So in this example, the amount of water that is readily available to the avocado when the soil is at field capacity (full point) is only about 7mm!

For avocado, the amount of readily available water (RAW) in the soil is probably a lot less than you think so you must establish the full and refill points for your soil (this may involve getting some expert advice) and manage your irrigation carefully to keep within this narrow range.

Benefit of increasing soil organic matter

Improving soil organic matter can increase the RAW by about 3 or 4 mm in the top 15cm of soil for every 1% increase in soil organic matter. This is a significant amount and illustrates one of the benefits of the long term use of mulch and compost.

Deeper irrigations

Note that deep irrigation is still needed from time to time to replenish water storage at depth as a backup in

Irrigation all sorted? ... sure about that? continued

extreme conditions, to encourage development of roots for good tree anchorage and, where salt build up is an issue, to leach salts from the root zone.

Some of the direct consequences of under or overwatering

Sub-optimal growth and production

Can be caused by both under- and over-watering. Under-irrigation results in closure of stomata which stops photosynthesis and also restricts nutrient uptake. Over-irrigation causes waterlogging of the feeder roots affecting their ability to take up nutrients and water. Over irrigation also leaches soil nutrients away from the feeder root zone.

Smaller fruit size

The cells in the fruit are most rapidly dividing during the first six weeks following fruitset; water stress during this time irreversibly limits final fruit size.

Water stress can also cause the death of the seed coat. Since the hormones responsible for fruit growth are made in the seed coat, the affected fruit stops growing.

Poor fruit quality

Calcium content has a large part to play in fruit robustness and shelf life. Calcium is taken up in the water stream and deposited in the developing fruit only until the point when the stomata in the fruit skin turn into lenticels. This period lasts for about 11 weeks from fruit set, after which it is near impossible to increase fruit calcium levels. Any moisture stress during this period will reduce the fruit calcium content and thus negatively affect fruit quality.

Long term reduction in productivity

Research has shown that more severe water stress



Insufficient water can kill the seed coat and this stops fruit growth. The seed coat in the right fruit has died. This is compared with an unaffected fruit left.

causes avocado to adopt a survival strategy which results in permanent blocking of the water conducting tissue (xylem) with woody plugs called 'tyloses'. This results in long term slowing of water delivery to the canopy until sufficient new wood can develop and this can take more than one season.

Fruit shedding

There are typically two distinct stages when developing fruit will be shed from the tree, the first is about a month after fruitset, and the second when the fruit is almost full size. Water stress at either of these times will lead to heavier than necessary fruit fall. Sometimes fruit are partially abscised (part of the fruit stem dies) and this results in a symptom we know as 'ringneck', these fruit do not reach their size potential.

Phytophthora root rot

Free water in the soil (as a result of over irrigation or heavy rainfall) allows *Phytophthora* zoospores to move through the soil and infect more roots and more trees. In addition, trees that are stressed for any reason (can include both under and over irrigation) are more susceptible to infection by *Phytophthora* root rot. Thus there is a need to maintain soil moisture within the optimum range.

Note: Sometimes overlooked is the fact that *Phytophthora* affected trees use less water than healthy ones so growers must reduce irrigation (e.g. install smaller emitters) to these trees otherwise the situation will be made worse.

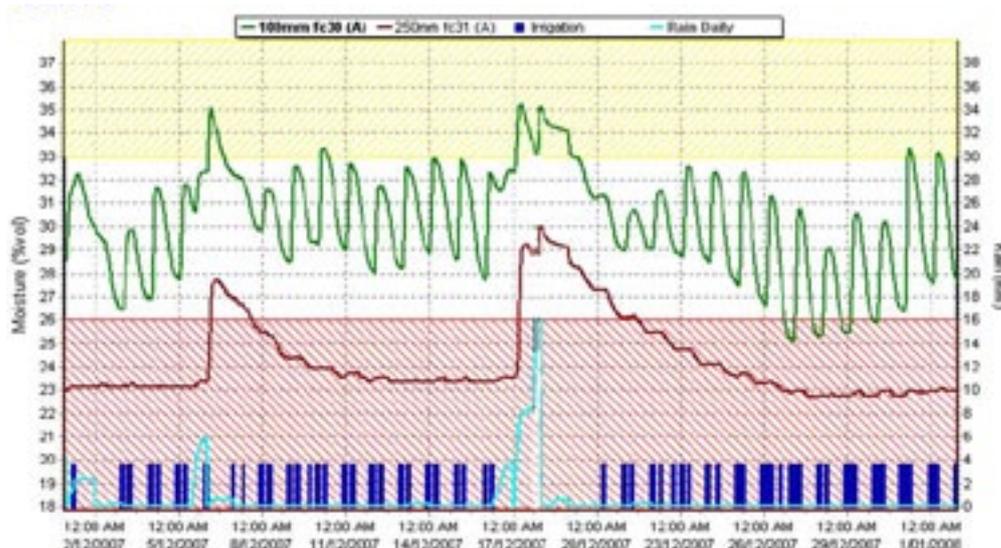
Conclusions

A more focussed and responsive approach to moisture monitoring and irrigation is required and is emerging as a key component to achieving high yields of good quality avocados in Australia.



Insufficient water within the first 11 weeks after fruit set can result in poor shelf life from low calcium levels in the flesh.

Figure 1. Graph showing soil moisture data from a GrowPoint probe where the grower is trying to keep the soil moisture at 100mm depth (indicated by the green line) between the full point and refill points (within the uncoloured band on the graph between 33% and 26% soil moisture respectively in this example) during the month of December. This is requiring daily irrigations (shown by the dark blue vertical bands) except when rain (light blue lines) is received. Rain on 6th, 17th & 18th December resulted in soil moisture at 100mm exceeding the full point whilst a heat wave on 27 & 28 December resulted in soil moisture at 100mm dropping below the refill point. The brown line shows soil moisture at 250mm depth. (Graph courtesy of Paul Bidwell)



by the Queensland government, Horticulture Australia Ltd and Avocados Australia Ltd.

After *Phytophthora* root rot management, the maintenance of optimum soil moisture is probably the next most limiting factor on Australian avocado orchards.

The conundrum is that avocados have a high water requirement but at the same time are sensitive to wet conditions. Avocados are easily stressed by insufficient water but are equally easily stressed by an excess of soil moisture; both must be avoided to achieve good yields and good fruit size and quality.

It is essential that growers realise that avocados are one of the more difficult crops to irrigate effectively but once this is acknowledged and the right steps are taken it can pay big dividends.

Further information

For the full report of the irrigation study go to the 'Irrigation' section of the **Best Practice Resource (BPR)** and click on the article called "What the good irrigators do" which is listed in the "Article resources" box on the right of the screen.

A whole suite of information about irrigation has been prepared for the BPR including two **YouTube videos**, the first called "**Tensiometer installation**" and a new one just released entitled "**Checking irrigation uniformity in avocado orchards**".

This article produced as part of AV10002, which is funded



Insufficient water during the natural fruit shedding events will cause greater fruit loss. Excessive soil moisture can also lead to fruit drop.



*Too much soil moisture usually leads to *Phytophthora* root rot (left) or in extreme cases to tree death from asphyxiation/drowning (right).*

Member profile

Crescent Plateau Holdings, Tabulam NSW



Alan Hartley and Ai Tee Loh work together at their orchard in northern NSW.

Crescent Plateau Holding's Alan Hartley has been an avocado grower since 1979. Before establishing their avocado orchard, both Alan and Ai tee worked overseas in professional careers – Alan was involved with international land use planning and environmental impact assessment. In this member profile Alan shares his perspective on being an avocado grower as well as the benefits of being members of Avocados Australia.

What prompted you to become a member of Avocados Australia?

I was a family grower when agents knew more about your inner secrets and orchard performance than your closest neighbours and they used that to great advantage. I was with a group of growers who decided to use a common pack shed and price negotiator (Richmond Avocado Producers) and from there it was a logical step to get with the strength of Avocados Australia.

What value do you gain in being a member of Avocados Australia?

As a member I gain access to a one stop shop of current technical guidance and a superb market research and development team.

Would you encourage other avocado growers to join Avocados Australia?

All progressive avocado producers should be members.

What attracted you to the idea of becoming an avocado grower?

I was in Papua New Guinea working and saw prices surge after the 1974 flood devastation, and from what I read it seemed a pretty easy tree crop to handle!!! Oh, naivety!!

What avocado varieties do you grow and why?

We grow only Hass now to satisfy dominant supermarket demand.

How many orchards do you own and manage?

One orchard at Pretty Gully, 430-500 metres ASL and 130 km inland from Ballina, located high in the Border Ranges of northern NSW. Of the 131.4 hectares around 25 hectares of this is orchard infrastructure and the rest is native forest. There are about 5000 trees, all Hass.

Where did you obtain your rootstock when you set out to grow avocado?

Most of the planting came from Andersons at Durambah on a mix of rootstock, but the most recent 600 came from Birdwood Nursery to get away from Reed rootstock.

What is the most valuable lesson you have learnt about growing avocados?

Just when you think you are on top of the game, the trees creep up and give you a solid boot in the bum.

What approach do you take in deciding time of harvest?

We take fruit from the orchard for a few weeks before

harvest to be sure they are mature and eating well.

What in your opinion is the main challenge that you need to overcome in successfully running an avocado farm in your region?

Drainage, drainage, drainage.

What are the soil types like in your growing region?

Well structured, red brown clay loam and light clay of volcanic origin.

What do you do to assess fruit maturity and dry matter levels prior to harvest?

We rely mainly on our own kitchen rather than dry matter alone.

How do you obtain fruit pickers to assist you at harvest time?

We draw on local residents.

How long does it take to harvest your fruit and when do you do it?

We harvest during Winter and into Spring depending on the crop size.

Which pests are of most concern to you in your orchard at the moment?

Mainly fruitspotting bug.

What do you think are the biggest opportunities for the avocado industry in Australia?

Our opportunities are avenues for growing domestic demand, having a product that is recognised as a highly nutritious food, and exploiting high end Asian outlets. On the down side our cost structure is crippling for wider world market competition.

Have you received your copy of Avocados Australia's "Avocado Problem Solver Field Guide"? Is the content of value to you?

Yes - a great initiative and worthy of the compilers.

Do you enjoy eating avocados yourself?

We are big avocado eaters - mainly salad but we explore a range of recipes - the Avocados Australia website is a great place to visit.

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Benchmarking the Australian Avocado Industry



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This is the first of two articles discussing results from the Avocado Industry Benchmarking Program that was commenced in the 2011- 2012 financial year. This program is currently continuing at least until the 2014-2015 financial year.

The use of Benchmarking as a tool for improving business performance has been around for a long time. In its more formal form it developed in the last century, during the seventies and eighties. Today warehousing and distribution, manufacturing, financial services and health care are just a few of the major commercial sectors that today use benchmarking and continuous improvement as core elements of sound business practice.

Benchmarking your business is a way of measuring your performance against similar businesses in your industry. It gives you essential information about how you can improve your business. Benchmarking helps you to:

1. See where you can reduce costs and improve efficiency,
2. Assess the productivity of your business compared to others,
3. Identify areas for change and prepare for growth and future challenges, and
4. Assist you to prioritise areas to focus on.

The Avocado Industry Benchmarking Program involves

collecting business information from a 'benchmarking group', analysing this information and comparing the performance of those businesses in key areas. The resulting comparative information is then used to identify where to look to improve your business.

To do this effectively and to also protect the confidentiality of the information about individual participants in the program a number of steps and rules are followed, being:

1. Decide what to measure,
2. Decide how to measure it,
3. Collect the raw data from individual businesses,
4. Convert the raw data into truly comparative measures, Key Performance Indicators (KPIs) and:
 - a. Decide how to report the information so as the confidential information about individual businesses is protected,
 - b. Provide each participant with information about their business' performance, the overall performance of the participating group, the highest and lowest performance found in the group, and where their business stands ("Ranks") compared to others.

Key Performance Indicators or KPIs convert raw information like how much a business spends on labour or key inputs (e.g. chemical, power and gas, packaging) into a ratio measure such as an amount per unit of production or output. For example, money spent on picking labour becomes \$ per 5.5 Kg tray equivalent, or \$ per producing Ha.

Commercial avocado production in Australia is spread from

north of Mareeba (far north Queensland) to Pemberton (south west Western Australia), and from about 5 metres above sea level to about 750 metres above sea level. Seasonal conditions also vary significantly from year to year in each of the eight producing regions.

In the first year of collecting data highly successful producers were identified across the entire industry from North to South and East to West. The top ten (Top 10) most profitable participants in Year 1 included producers in seven (7) out of the eight (8) avocado growing regions.

Table 1.
Location of Top 10 Most Profitable Businesses in Year 1

Avocado Growing Region	Top 10 Most Profitable (Per 5.5 Kg Tray Equivalent) Producers in Avocado Benchmarking (2011-2012)
North Queensland	2
Central Queensland	1
Sunshine Coast	
Southern Queensland	2
Northern New South Wales	1
Central New South Wales	1
Tri States	2
Western Australia	1
TOTAL	10

This confirms what industry members already know, that there is more to successful avocado production than location, climate and altitude. There are clearly many variables that impact profitable avocado production.

In the second, third and fourth years of operation the program aims to exponentially increase the understanding about what the key variables are in avocado growing businesses and investigate how they are successfully managed. Also possible correlations and relationships between major variables and profitable operations will be investigated

With only one year of data collected and analysed some caution is warranted about making assumptions regarding trends, issues and relationships between farm practices and decisions and outcomes for producers. With this in mind, this article provides some information that came out of the program in the first year of data collection.

The Benchmarking Group in Financial Year 2011-2012 (Year 1)

Fifty five (55) avocado producing businesses or growers participated in the program in this first year of data

collection (Year 1). The number of participating growers that participated across the eight (8) regions is provided in Table 2.

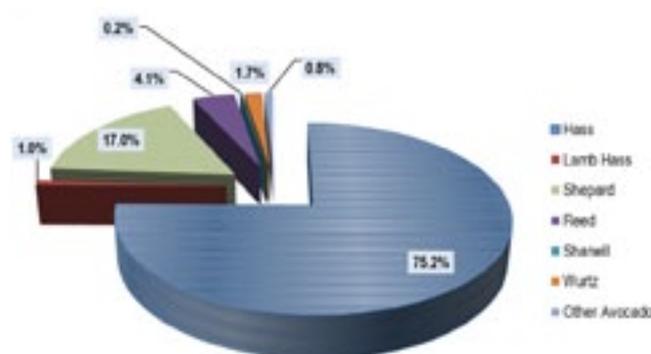
Table 2.
Year 1 Participating Growers in Growing Regions

Region	Participants in Region
North QLD Region	8
Central QLD Region	6
Sunshine Coast Region	4
Southern QLD Region	9
Northern NSW Region	7
Central NSW Region	9
Tri States Region	5
Western Australia Region	7
Total Benchmarking Group	55

The benchmarking group produced a total of 3.7 million 5.5 KG trays of avocados (20,000 tonnes) which was estimated to be approximately 38% of total Australia production in that year. This volume was produced on 2,225 hectares and 415,000 producing trees. The group also employed more than 300 full time employee equivalents of labour (FTEs) and achieved gross revenue from avocado sales of \$70 million.

The benchmarking group grow a mixture of varieties that include 75% planted to Hass, 17% planted to Shepard and 4% planted to Reed as in Figure 1.

Figure 1.
Varieties Planted (% of Total Hectares) in Year 1



Avocado Production in Year 1

The variation in production volumes that is familiar to avocado growers was clearly demonstrated in the Year 1 data. The average yield achieved by the benchmarking group was 9 tonnes per producing hectare and 8.79 5.5 trays (of 5.5 Kg) per producing tree.

However, the yield that was achieved by individual

Benchmarking the Australian Avocado Industry continued

participants ranged from 4.7 tonnes to 13.9 tonnes per producing hectare (and 3.5 trays to 18 trays per producing tree) after excluding some outlying data, as shown in Figure 2. Forty two percent (42%) of benchmarking participants achieved a yield equal to or better than the average for the group.

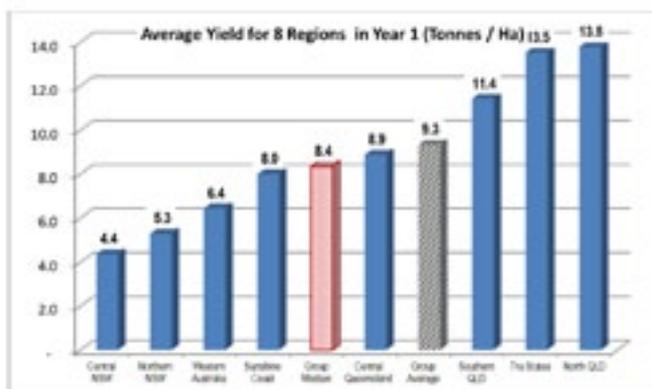
Figure 2. Range of Production per Producing Hectare in Year 1



It is a little premature to make wide ranging comparisons between growing regions due to the variability of annual avocado production that is widely recognised in the industry. However productivity per hectare may be one area worth taking a preliminary look at .

The highest average yield was achieved in the North Queensland region followed by the Tri States region and Southern Queensland as can be seen in Figure 3. However, at the time of writing significant differences in yield had been experienced in many of these regions in the following year.

Figure 3. Average Yield per Hectare in Growing Regions in Year 1



Participants were also categorised into four size categories and these four groups then analysed. Participants that produced between 21 and 50 hectares of production recorded the highest average yield, across all regions, and those with less than 10 hectares of production recorded the lowest average yield.

Costs of Production in Year 1

The lowest average cost per tray of produce sold was recorded in businesses that manage between 21 and 50 producing hectares.

Labour costs were the largest cost for the group and averaged 29% of the total costs incurred. The top 6 cost items for this group of growers made up 87% of total costs. The same costs are consistently appearing at the top of the list in several horticultural industries, being labour, marketing and ripening, freight, chemicals and fertilizers and contractors for some industries.

In the avocado industry contract packing also features amongst the largest cost items. However, some clarification is needed here. The avocado data collected and analysed in Year 1 treats contract packing costs as a standard cost at the group level. As a result average contract packing fees have been calculated across the whole group.

Of the Year 1 benchmarking group 49% used a contract packer including those parties that operated a contract packing operation for their own use as well as for packing fruit for other growers. Contract packers packed 62% of the volume produced by the Year 1 benchmarking participants.

Table 3. Year 1 Average Costs per 5.5 Kg Tray Sold

Cost Category	% of Total Costs	Cumulative % of Total Costs
Labour Costs	29%	29%
Marketing and Ripening Costs	18%	47%
Packaging Costs	12%	59%
Freight Costs	10%	69%
Contract Packing Costs	9%	78%
Chemical and Fertiliser Costs	9%	87%
Rates, Levies, Licenses, Memberships, Registrations	3%	
Repairs & Replacements	5%	
Other Costs	5%	

Profitability is one area where care must be taken in using averages across a wide and diverse data set. Therefore, this information will only be reported when multiple years of data have been analysed.

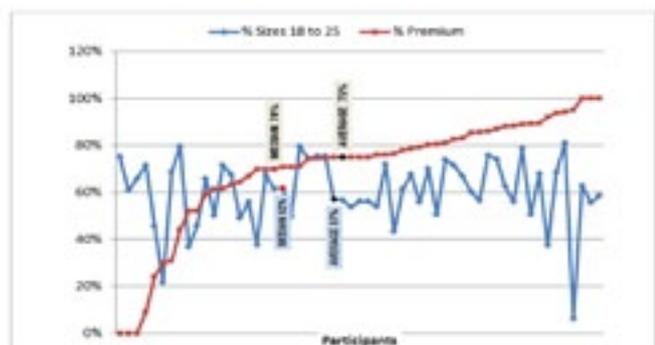
Fruit Quality (Grade & Size) in Year 1

The average percentage of fruit packed into premium grade in Year 1 was 75% (Median 70%) and on average

57% (Median 62%) of produce was packed into sizes 18 to 25 as illustrated in Figure 6

There were significant differences in the average quality levels achieved in regions and also the percentage of produce packed into sizes 18 to 25. When multiple years of data have been collected and analysed it may be possible to investigate if quality and sizes achieved is impacted by any region specific factors.

Figure 6. Grade and Size Results for Year 1 Participants



On Farm Practices

Data was collected regarding several key operating areas including; sources of labour, irrigation practices, nutrition practices, some key areas of pest and disease management, and pruning practices. The responses regarding some of the key areas are summarised as:

Irrigation practices:

1. 58% of participants utilise Tensiometers, Enviroscan or similar water monitoring technologies
2. 67% water every day, every two days or more often than weekly when irrigating
3. 53% use Fertigation as the dominant delivery mechanism for applying nutrition

Pruning Practices:

1. 42% of participants undertake canopy management (manual pruning) annually to some degree on their entire orchard
2. 25% undertake canopy management annually to some degree on at least half their orchard

Phytophthora Management:

1. 58% of participants mound when planting new trees
2. 36% apply mulch to root zones annually and 49% do not apply mulch to root zones
3. 51% treat for phytophthora by stem-injection or other means at least once per year and 36% do not treat for phytophthora as part of annual practice.

The second instalment of this article (Talking Avocados, Spring 2014), will look more closely at the differences and similarities found between successful businesses (Top 10

most profitable avocado growers in 2011 – 2012) and the total benchmarking group in that year.

Year 2 and 3 Data Collection Starts July 2014

Commencing in July 2014 data collection will commence for the financial years 2012-2013 and 2013 – 2014. Each participant in the benchmarking program receives an individual report for each year of data collected. The report contains their results and the overall results of the total participating group. Reports are also available that compare each individual business to other participating businesses in the same region. Once data covering a number of years is available, the aggregated data will also be useful in determining areas of focus for R&D and/or extension programs to improve industry profitability. It will also provide industry performance benchmarks for future reference.

Regardless of the report configuration produced and supplied, reports **do not** disclose any specific information about any business to anyone other than the owner of that business. Once data covering a number of years is available, the aggregated data will also be useful in determining areas of focus for R&D and/or extension programs to improve industry profitability. It will also provide industry performance benchmarks for future reference. Confidentiality of individual business information is central to the benchmarking program and directs and mandates all processes, decisions and activities at all times.

Reports provide information on Key Performance Indicators in your business (KPIs) in the areas of; productivity, cost management and returns, quality and fruit size, labour use and efficiency of labour use. Cost and returns measures are provided on a 'per producing hectare' basis and a 'per 5.5 kg tray equivalent' basis. Graphs also illustrate group performance in key areas. Information about each KPI is presented in a form similar to the illustration in Figure 7.

Figure 7. Format of individual Benchmarking Report Tables

Key performance Measure	Unit of Measure	Your Value	Group Average	Group High	Group Low	Your Rank in Group	Number in Group
Example							
Kg Fresh Fruit Harvested per Producing Ha	Kg / Ha	10,023	9,500	10,023	3,300	1	23

To participate in the next round of benchmarking and receive your individual report comparing key aspects of your business to that of other participants in the program please contact the program manager.

Industry Communications Update

Avocados Australia Limited's industry communications activities strive to grow and improve the business prospects of Australian avocado growers by providing the Australian avocado industry with a mix of communication tools that share factual and timely industry-related information and supporting two-way communication flows connecting AAL with its industry stakeholders (the key stakeholder group being Australian avocado growers).

This article provides you with a bit of insight into Australian avocado industry stakeholders' communications preferences as well as the latest stakeholders' views on how well Avocados Australia is performing in terms of its industry communications.

Avocados Australia (AAL) knows from the results of our 2013 and 2014 stakeholders' surveys that our stakeholders rely on our communication program for information and value this resource. It is for this reason that AAL strives to track our communications performance, regularly consults with our stakeholders, and works to foster a constant cycle of improvement.

This year's stakeholders survey found that the overall satisfaction with AAL's Industry communications has increased to 91%.

Here is a list of the communications vehicles, tools and strategies utilised and/or managed by Avocados Australia's industry communication program to date:

- Media Liaison – providing the Australian avocado industry with a news bureau function:
 - > Responding to media requests, providing the latest industry facts & figures.
 - > Coordinating media interviews with AAL's spokespeople (CEO John Tyas, and the AAL regional directors)
 - > Producing & distributing industry-related media releases
 - > Daily media monitoring & maintaining media contacts list (regional, national & international media)
- Print – development, production & distribution:
 - > "Talking Avocados" - the Australian avocado industry's quarterly printed magazine
 - > Factsheets – electronic & print (event fact sheets, Industry fact sheet, export fact sheets, Facts-at-a-glance, etc.)
- Extensive email communication:
 - > Guacamole (the industry's regular e-newsletter)
 - > Industry, grower and member updates
 - > Maintain and update Electronic Direct Mail (EDM) templates & contacts lists

- Digital communications – mobile & digital content for use by industry:
 - > SMS Communications
 - > Online video & sound channels
- Websites – maintaining & updating content & access:
 - > AAL Industry website (www.industry.avocado.org.au)
 - > Online Reports Centre – all reports: R&D, Marketing, Export, Member
 - > Best Practice Resource (<http://bestpractice.avocado.org.au>)
- Stakeholder engagement & consultation activities:
 - > Face-to-face events & on-going engagement via all two-way communication channels
 - > Annual Stakeholders' Online Survey
 - > Study tours (e.g. Australian-New Zealand Avocado Growers Conference 2013)

AAL's Industry Communications Performance

Last year an independent review of Avocados Australia industry communications found that 82% of the avocado industry stakeholders surveyed were either "Very Satisfied" or "Satisfied" with AAL's overall communication with industry. Knowing that there is always room for improvement, AAL now conducts the online communications survey annually targeting all our stakeholders. This year's stakeholder survey found that the overall satisfaction with AAL's Industry Communications has increased to 91%. This increase is largely due to AAL acting on and implementing the suggestions and feedback that we received from stakeholders last year. We value and appreciate the time that stakeholders take in responding to this survey and the above result provides proof that your responses not only count, but make a real difference. Thank you again to all of you that took part in the survey.

AAL would also like to take this opportunity to congratulate again Ivan Philpott from Childers QLD, the winner of the \$500 FlightCentre travel voucher. This voucher was the main prize incentive for our communications survey and Ivan's name was drawn at random from the 127 people who had responded.

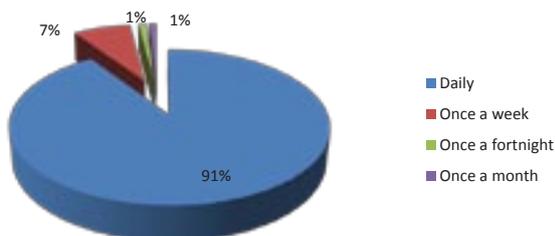
Stakeholders' communication preferences

Avocados Australia's Online Communications Survey for 2014 gleaned some very interesting results. Here are just a few of the key findings.

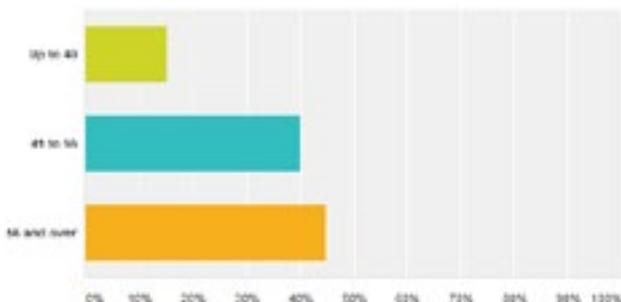
The top five AAL communications channels that industry stakeholders use and most prefer (in order):

1) Talking Avocados magazine, 2) Guacamole regular newsletter, 3) Email, 4) Events, and 5) AAL Industry website.

Industry stakeholders' frequency of use of the internet:

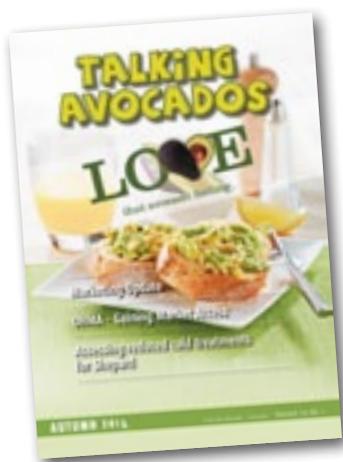


The age group breakdown of industry stakeholders:



When industry stakeholders were asked which parts of Talking Avocados magazine they value the most the top five responses were (in order):

1) R&D articles, 2) Best practice articles, 3) All parts, 4) Industry Matters, and 5) Around Australia (the regional director's reports).



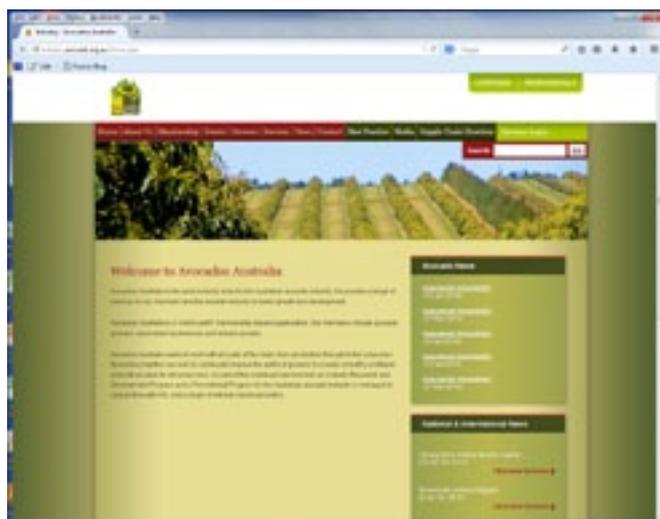
When industry stakeholders were asked which sections of Guacamole (AAL's regular newsletter) they valued the most the top five responses were (in order):

1) All of the sections, 2) Grower update, 3) Industry news & update, and 5) the marketing update.



The top five pages on Avocados Australia's Industry website that industry stakeholders said they valued the most were related to (in order):

1) Growers pages, 2) News, 3) Services pages (i.e. Infocado, retail prices, maturity monitoring, 4) Events, and 5) the front page featuring the national & international live newsfeed.



Avocados Australia's industry webpages at <http://industry.avocado.org.au> will be refreshed to take into account industry stakeholder feedback.

When Industry stakeholders were asked the likelihood of whether they would use social media (e.g. LinkedIn, Facebook, etc.) only 20% said they were either likely or very likely to use social media.

For more information:

For more information about Avocados Australia's Industry communications please contact Anna Petrou, AAL Communications Manager either by email co@avocado.org.au or call 07 3846 6566.

Avocados Marketing Update

A large number of exciting activities have been happening as part of the current avocado marketing program. This issue's marketing update provides coverage, a round-up if you will, about the range of recent Australian avocado initiatives.

Heston Blumenthal Talks Avocados

{Best Bites} is a bi-annual newsletter produced by Australian Avocados for the food service industry. Developed as a communication tool by the Chef Training Program (AV13011) this newsletter primarily aims to keep food service professionals informed on Australian Avocado master-class training events that will be occurring in the coming months. Targeted at chefs the newsletter also serves as an inspirational reminder about usage ideas for fresh avocados to keep them on the menu. The newsletter is sent as both a printed flyer and as an EDM to the 2,000 strong food service database that has been built over the last 4 years of the program. The latest Winter Edition is particularly inspirational featuring an interview with internationally renowned chef Heston Blumenthal and his views on the simple avocado. Known as a culinary scientist Heston sums up avocados as "potentially one of the most versatile pieces of produce you can have". And who could argue with that?

Here is an excerpt from the Winter issue of 'Best Bites' featuring their interview with Heston:

As with any piece of fresh produce he turns his hand to, you fear Heston Blumenthal is in danger of making the avocado a rather complex beast.

The owner of London restaurant Dinner – named at the end of April as number five in The World's 50 Best Restaurants list – Heston is renowned for a brand of food fanaticism and innovation that, at times, belies the simplicity of some of his ingredients.

"I think if you look at the core of ingredients it is all very simple."

"Yes, in the lab and in the kitchen we'll add all manner

of treatments, but at the heart of it we're dealing with the same raw materials as anyone else. What we're exploiting, and what any good home or professional chef should look to exploit, is colour, flavour, texture... those sorts of things. That's where the magic comes from."

Can the same be said of the avocado?

"Oh definitely," Heston fires back.

"It's potentially one of the most versatile pieces of produce you can have. I'm not sure it has ever been better received – I think people used to think avocado was a bit bland, but probably backed by its health benefits, it's now taking on something of a new persona."

"Think about starters, think about sides, think about snacks – I've mixed avocado with marmite to use the texture of one with the taste of another."

Blumenthal has a few other tips on how best to go about incorporating the fruit into any meal that you are preparing. The first thing to remember, he says, is that avocado comes as a blank canvas and can be used as such.

"It's also one of those unique foods that can be used at any time of the day."

"I think people believe my use of avocado will always be something really ambitious, but it doesn't need to be. Exploit the texture if you don't want to do too much with the taste."

Blumenthal also puts avocado into drink form, using it as a core ingredient in smoothies.

"I do make avocado smoothies... they're delicious, and so simple as well. You can add any type of seasoning or flavour you want – pepper, spice, whatever – and it's such a healthy snack at any time of the day. And yes, it can go into desserts as well. I made avocado rice, adding caster sugar and vanilla. Add lemon juice and whipped cream and you can serve with a sweet. Try it!"



Australian Avocado Nutrition Program Update



Australian
Avocados
Nutrition

The key roles of the Australian Avocado Nutrition Program are to: review and update the nutritional science as it relates to avocados; to advocate the nutritional importance of avocados with Australia's principal health regulatory bodies; and to educate health professionals as to the importance of recommending avocados to their clients.

During the 2013-14 program, the two fundamental nutritional attributes of avocados have been consistently highlighted: the importance of folate in avocados and the role of avocados' healthy fats.

FOLATE FOR
HEALTHY
MUMS AND
BABIES.

HEALTHY
FATS FOR
HEALTHY
HEARTS.

The Australian Avocado Nutrition Conference Program



One part of the annual Australian Avocado Nutrition program is educating targeted health professionals at their major conferences. The two health professions we are addressing are dietitians and fitness trainers. Australia's dietitians are the 'idea leaders' in the world of nutrition and key contributors to the media in both the traditional and social media realms. Fitness professionals have a growing influence on Australian consumers but have limited training in the area of nutrition.

During the past quarter, the program has presented the Australian avocado nutrition message to three major health professional conferences: the filex fitness conference, the Exercise and Sports Science Australia & Sports Dietitians Conference and the Dietitians Association of Australia conference.

Across the three conferences, through the program the healthy avocado messages have been directly communicated with over 3,000 health professionals. Fact sheets were distributed along with samples of some freshly-made avocado dip served on rice crackers.

The consistent feedback from the conference delegates that visited the avocado exhibition was clearly positive:

"I love avocado"

"Think avocado is terrific"

"Avocados are really healthy and great part of my diet"

The reality check though came in a follow-up question that was asked to Australia's dietitians: *"Do you recommend avocado to your clients?"* Their responses were invariably: *"no probably not"; "no don't really think of avocado when I'm with clients"; "not specifically - just tell my clients to eat more fruit and veg".*

The only 'push-back' against the message of advocating avocado consumption was from a small segment of the fitness professional audience who were concerned about the fat level in avocados and its role in helping their clients lose weight. There is an on-going place in the Australian Avocado Nutrition Program to specifically address these misconceptions and is included in the program's fact sheets on the essential role of healthy fats and in the fitness-oriented program: "Nutrient Rich Fitness".

Aside from this issue, the role of the Australian Avocado Nutrition Program's conference exhibitions lies in raising the profile of the nutritional value of avocados. It is principally about providing health professionals with 'REASONS TO RECOMMEND' avocados. Currently, while avocados are considered a healthy food, they are not consistently recommended.

One of these 'reasons to recommend' is the folate available in avocados. Across all the health professional audiences, there is very little understanding of the value of avocados as a source of folate which is essential for healthy pregnancies. Encouraging women who are thinking about becoming pregnant to be more aware of the amount of folate they consume resonates with health professionals who work with women over the age of 25. Avocados are the great tasting 'green' food that is a

rich source of folate. (Note, there is a general awareness amongst dietitians that folate is found in 'green leafy vegetables', but a similarly widespread lack of awareness about avocados).

Another key 'reason to recommend' avocados rests in the scientific evidence surrounding the role of the plant-based unsaturated fats and improved heart health. There has been over 20 years of rigorous, peer-reviewed research published in world-recognised journals that clearly link the positive role these healthy fats found in plants play in lowering LDL cholesterol and improving heart health outcomes.

The third major 'reason to recommend' avocados takes these two major nutritional attributes of avocados and places them within the context of 'Nutrient Rich Fitness'. This is a program developed specifically for fitness professionals through the collaboration of Lisa Yates, the program's Australian Avocado Nutrition Program dietitian and Matt O'Neill. Matt is the fitness industry's fat loss guru and Director of the SmartShape Centre for Weight Management. He is the Nutritionist on Channel 7's Sunrise and Morning Shows and the weight loss coach for Men's Health magazine Australia. The program 'Nutrient Rich Fitness' provides up to date information on the health and fitness benefits of natural, nutrient-rich foods – such as avocados – for weight loss and weight management. As mentioned above, this program specifically addresses the concerns of a segment of fitness trainers around the fat and calorie content of avocados and the goal of losing weight.

Australian Avocados participated in three key conferences in the last quarter this included:

1: The Filx Conference and Fitness Expo at the Melbourne Convention Centre from April 4 to 6. Filx is the fitness industry's leading annual conference featuring over 250 concurrent sessions.



Members of the Australian Avocado Nutrition Program communicated with over a 1,000 fitness trainers and generated a database of 106 health professionals. This was the first time Australian Avocados participated at this event. The focus of our communication and key 'reason to recommend' was our theme: 'Nutrient Rich Fitness'.



2: The Exercise and Sports Science Australia and Sports Dietitians Australia Conference at the Adelaide Convention Centre from April 10 to 12. This conference was attended by over 1,000 accredited exercise physiologists, applied sports science practitioners and sports dietitians. 110 health professionals were gathered together who wanted to be part of our health professional database and receive regular e-updates.

3: The Dietitians Association of Australia's annual conference (DAA) held in Brisbane from May 15 to 17. This conference was attended by approximately 900 dietitians and the program developed a database of almost 200. A competition was created for this conference in which the winner won a tray of avocados. This was the second year in which Australian avocados has exhibited that the DAA conference.



Avocado Chef Masterclass Events

Australian Avocados' Avocado Chef Masterclasses are dedicated to working with some of the country's most innovative chefs for the benefit of other chefs. Through this program of special chef lunches and demonstration events Australian avocados have become one of the growing on-trend ingredients. The emerging clever use of avocados in dishes is clear evidence of chefs thinking outside the culinary square.

June marked the first month of winter – and a month of fun, informative and lip-smacking avocado masterclass

lunches across the country. This year, Sydney, Brisbane and Melbourne are not the only cities that will enjoy the masterclass; for the first time, Perth and Adelaide are part of the green tour. Stephen Clarke of Clarkes at North Beach, unleashed his take on fresh Australian Avocados on 9 June in Perth.

These lunches showcase the varied and often eye-opening possibilities for fresh Australian avocados. From canapés and entrées to mains and desserts, avocados are perfect – and much more than an addition to a salad, a wrap, guacamole and an unadorned side ingredient.



Versatile, delicious and healthy, fresh Australian avocados are available all year and contrary to the summer avocado dish thinking – they are in peak season during these colder months. As Heston Blumenthal said, it can easily be incorporated across the whole menu from casual to fine dining.

From the results of recent consumer research we know that consumers love avocados. In fact Australia has the highest avocado consumption rate per capita than any other English speaking country in the world. Australians eat around 2.7 kilograms of avocado per person annually and growing. So savvy chefs should play to the house – and put Aussie avocados on their menus.

For more avocado recipes refer to the Australian Avocados consumer website - <http://www.avocado.org.au/professionals/food-professionals>.

Australian Avocados Social Strategy: New “Content Series”

When creating a social strategy for Australian Avocados, we need to ensure that we’re reaching and engaging our target audiences in a variety of different ways and with a mix of different types of content. The ability to be agile and relevant is more important than ever when it comes to engaging our consumers online.

To ensure we are able to do this, our media agency Ikon created a social strategy that allows us to utilize different types of content. The goal is to ensure we appeal to different audiences across various digital platforms. The most recent social media campaign is a video content

series that will be active across the Australian Avocados owned channels of Facebook and YouTube.

Video is the most shared content type online right now. It is also one of the fastest growth formats. According to Cisco, by 2017 video content will account for 69% of all internet traffic. The opportunity is to take advantage of this growing trend, and engage our Australian Avocados audience with some high-quality and entertaining content. According to Forrester’s researchers, if a picture paints 1,000 words then one minute of video is worth 1.8 million.

Ikon, has been working together with HAL and production company, Radical Love, to produce a video series around Australian Avocado recipes. This series was developed to take advantage of the engaging and viral nature of online video. The online video provides a platform to engage our audiences and encourage them to “spread the word” by sharing our campaign.

The video series aims to encourage our consumers to love avocados at any time of the day. This is being achieved by creating a series of videos that make avocados the hero of any mealtime. The series includes 6 videos that cover different avocado recipes for each mealtime: breakfast, morning snack, lunch, afternoon snack, dinner and dessert. It also provides added tips to increase consumer knowledge around handling and versatility.

Well-known chef and editor at Delicious Magazine, Warren Mendes, is the host of each of the videos, bringing expertise and personality to the cooking-show style episodes. He walks our audience through each recipe he makes, giving advice and tips on how to utilize Australian Avocados for both health and taste.



These videos are designed to be entertaining as well as educational and useful. Each video features an explanation on how to cook an avocado recipe, but also includes tips and tricks on handling, picking and storing Australian avocados.



The result is quick, snackable content that engages our audience and teaches them new and delicious ways to use Australian Avocados, without feeling like a recipe demonstration. Our goal is that consumers will see this as a reminder that Australian Avocados are not only delicious, nutritious and versatile, but also able to be used at any time of day.

Each of the 6 videos will be shared across Facebook and YouTube to our current audience, as well as those who fit within our target demographic.



To ensure our audience is engaging with our content, we'll also be running a media campaign across Facebook to target avocados lovers and enthusiasts, as well as engage our current Facebook fans. This means pushing each of the 6 videos out through the Facebook newsfeed where consumers can watch them from their own Facebook feed.

We will also be investing media spend behind these videos to ensure we achieve the high viewership to make these a success. This series will be in the marketplace at a time when we have been active with the major TV campaign and will extend and support the overall theme of Love that Avocado feeling.



News from Around the World

Chile to export avocados to Chinese market

On July 7, the Agricultural attaché of the Embassy of Chile in China, Alvaro Aspee, and the deputy director of the Chinese Animal and Plant Quarantine Supervision, Chen Hongjun, signed in Beijing the Initial Protocol for Chilean avocado exports to China.

Ronald Bown, president of the Fruit Exporters Association of Chile AG (ASOEX), explained that the signing "was the initialization of the document that will be formally signed by the Minister of Agriculture, Carlos Furche, during his visit to China in early September."

The representative of ASOEX said the signing of the initial protocol for Chilean avocado exports to China was the result of the joint work between the Chilean public and private sector, represented by the Ministry of Agriculture, the Agricultural and Livestock Service (SAG), the embassy of Chile in China and ASOEX, with the support of the AQSIQ.

"The signing of this initial protocol is very good news for the industry," Bown said.

"As an industry, we thank the support of the authorities, especially that of the Ministry of Agriculture and the SAG, who supported us in our desire to open China as a new market destination for Chilean avocados," he added.

Bown said that, to make it official, this protocol was only missing being signed by the Ministers of Agriculture of both countries. However, he said, "avocado exports might start on the date of the initial document."

Source: www.freshplaza.com

PERU: Sizing big, quality good on 2014 avocado crop

According to a July article posted on ThePacker.com website importers of Peruvian avocados are reporting that the quality of the fruit is excellent and they are in large sizes.

In mid-June this year, about 125 million pounds of Peruvian avocados were expected to be shipped in the United States, up from about 53 million pounds in 2013.

Apparently these figures are up from earlier estimates of

110 million to 120 million pounds, said Mr Ron Araiza, vice president of sales for Oxnard, from California-based Mission Produce.

Peruvian avocados are coming in at larger sizes than avocados from Mexico and California, with an abundance of 40s and larger, say importers. So much more product is coming in this summer, said Araiza, that processing was taking longer at some ports because of the sheer volume, though he characterized that problem as "minor."

Mission began shipping Peruvian avocados at the end of May, said Araiza.

The majority of product has been shipping east of the Mississippi, but some markets in the west also have been open to Peruvian product thus far this season, Araiza said.

"The size profile fits nicely to match the size, or rather lack of size, in California and Mexico," he said. "There's an abundance of 40s and larger from Peru."

Fruit from California and Mexico in June, by contrast, tilted more towards 48s and smaller.

Even some retailers in California looking for bigger avocados were taking Peruvian fruit in June, Araiza said. Chicago and other Midwestern markets also were pulling well, though the majority of fruit was still shipping on the Eastern seaboard and in the southeast, he said.

Araiza added that there were plenty of 48s from Peru to supply its Eastern customer base.

Mid-June estimates of 2014 Peruvian avocado imports put the number at 125 million pounds, compared to 53 million pounds in 2013. The larger size profiles are likely due to younger avocado trees, said Araiza.

"As they mature, sizes should start to more closely resemble the size profiles of avocados shipping from Mexico and California", he said.

Index Fresh Inc., of Bloomington California, began bringing in Peruvian avocados at the end of May, said president and CEO Dana Thomas in late June.

"We began ramping up in June and are about hitting our stride," said Thomas.

"We anticipate going with fairly decent volumes through July."

Index Fresh's deal will likely begin tapering off in August before finishing in late August or early September.

The company is importing Peruvian fruit through Los Angeles, Houston and Philadelphia, said Thomas.

"Peruvian avocado quality is excellent", he said.

Grower Member Application Form

Avocados Australia Limited

ACN 105 853 807

For Associate and Affiliate membership application forms please go to www.avocado.org.au or call 07 3846 6566

Member Details

Business name and/or trading name:

ABN:

Key contacts:

Preferred address (postal):

Address of property (if different):

Contact Details

Business phone:

Home phone:

Fax:

Mobile:

Email:

Corporate Structure

How would you describe the nature of your operations (please tick)?

Individual Partnership Company Trust

Lessee Cooperative Other (please specify) _____

Please indicate the area of property that you crop for avocados (please tick)

0.5 - 5 ha 6-19 ha 20-49 ha 50-99 ha

100-149 ha 150-199 ha 200-499 ha 500 ha+

Special Interests

Please tick your main areas of interest from any of the following:

Consumer information Production management

Environmental management/
sustainability Quality Assurance

Organic farming systems Technology/innovations

Water management Marketing

Field days Supply chain management

Pest management Key political issues

Food safety Other (please specify) _____

Grower Member Application *continued*

Payment Options

Grower Membership of Avocados Australia is \$143 pa (including GST). You can pay your membership by cheque or credit card. To pay your membership fee, please choose one of the following options:

Cheque

Please find enclosed a cheque for \$143.00 made payable to Avocados Australia Ltd.

Please charge \$143.00 to my credit card. Details are listed below.

Credit card (please circle):

MasterCard Visa

Credit card number: _____

Name on credit card: _____

Expiry date: _____

Signature: _____

Once you have completed this form please place it in an envelope addressed to:

Avocados Australia
Reply Paid 8005
Woolloongabba Qld 4102

(no stamp required within Australia):

For more information or assistance please go to

www.avocado.org.au or call on **07 3846 6566**



News from Around the World *continued*

“It has high maturity, it’s ripening well and eating well.”

Up to 40% of Index Fresh’s Peruvian fruit is pre-conditioned in California, Texas or Philadelphia before it ships, Thomas said. That percentage is lower than the percentage for avocados from other growing areas.

Source: www.thepacker.com

Colombia focussed on opening up US market

According to a press release issued by the Instituto Colombiano Agrario (ICA), the Animal and Plant Health Inspection Service (APHIS) is preparing a draft sanitary protocol which should enable the Colombian Hass to enter the United States. The key points are control of three pests (the moth *Stenoma catenifer*, and the two beetles *Heilipus trifasciatus* and *Heilipus lauri*), and traceability. The press release does not mention any date for the possible opening of the market. Meanwhile, the sector continues to grow: there are now four packing stations in operation, and surface areas are growing rapidly, especially in northern and western Caldas. Also the regional government of Antioquia has allocated a 6 million USD budget over three years to set up various projects aimed at developing the industry.

Source: FruitTrop, Professional sources, ICA

Chile to continue to appeal against the entry of Peruvian avocado

Chilean avocado producers expressed their discontent after Santiago's Court of Appeals rejected the appeal against the Ministry of Agriculture, the Agricultural and Livestock Service's (SAG's) ruling, which authorized the entry of avocados from Peru.

Gonzalo Bulnes, chairman of Chile's Hass Avocado Committee, recently spoke about this resolution and the steps that will follow.

The Fifth Chamber of the Santiago Court of Appeals rejected the appeal for protection, filed by indigenous communities and associations, against the decision of the SAG, which authorized the entry into the country of Hass avocados from Peru. The Court ruled that the authorization given by the SAG wasn't an arbitrary or unlawful act of authority.

The indigenous communities are seeking to stop the

spreading of the PSTVd virus while Chilean avocado producers are demanding that the Peruvian fruit be supplied from certified orchards free of the Sunblotch virus.

Regarding this, the ruling states that "the SAG has taken measures that, in their opinion, are necessary to prevent the entry of pests or diseases that endanger the country; measures which, in any case, have not been contested by way of this action, as this appeal only contested those phytosanitary measures on fruit flies that were adopted via Resolution No. 8.186-2013."

Thus, according to the Court of Appeals, the SAG "acted according to the law and authorized the entry of Hass avocado from Peru based on a Risk report. Hence, as it wasn't an arbitrary or illegal act, they have not broken any alleged constitutional guarantees," so the writ of protection must also be rejected.

Following this, Bulnes expressed his dissatisfaction, ensuring that the resolution did not take into consideration several key factors related to the entry of Peruvian avocado to Chile.

"They say we have been importing avocado since 2006 and that nothing has happened, but they don't take into account the volume being imported nor where the avocado entered the country, which is critical because if most of the avocado (more than 60-70%) is coming from the north, (Arica, Iquique, Antofagasta), then, because there is a desert in between, we have no reason to be concerned that it will cause any damage. However, if it comes in bulk from the central area, where the avocado plantations are, then there is a risk," he said.

"Of course we will appeal, there is a 10 day period for us to do so. We are convinced that we will reverse this in the Supreme Court because the argument that the Court of

Appeals has very little weight. I hope the Supreme Court reverses this decision," he said.

Bulnes said that they already knew they would have to go to the Supreme Court to resolve the matter and that he expected they would take into consideration the documents showing the risk involved in the entry of Peruvian avocado to Chile.

"The Court of Appeals did not go into the merits of the situation and didn't attend the unanimous reports of Chilean universities that have studied the issue and the unanimous report of prestigious foreign technicians who have reported on the matter. They took the easy road, saying that the Peruvian avocado had been entering the country during some time without analysing where it had entered, and in what quantities. Ultimately, as producers, we see that this was a very light resolution," said Bulnes.

Source: www.freshplaza.com

Israel: Possible bumper 2013-14 Season in the EU

Israel is benefiting from the growing appetite of European consumers for the avocado during the 2013-14 winter season according to an article published in FruitTrop magazine (No. 221, April 2014). With exports to the EU estimated at between 42,000 and 44,000 tonnes, Israeli producers registered their biggest season since 2006-7. The volume increase of just over 10% from the four-year average is to be credited to the surge of Hass production. Exports of this variety to the EU have risen by approximately 1.5 million boxes in four years.

Source: FruitTrop, Professional sources, Eurostat

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