



Australian STONEFRUIT GROWER



'Australian Stonefruit Grower' is the official publication of Summerfruit Australia Ltd & Low Chill Australia Inc. – the industry bodies representing the interests of Australian stone fruit growers.



"This project has been funded by Horticulture Innovation Australia Limited using the summerfruit levy and funds from the Australian Government."

IN THIS ISSUE –

Summerfruit Information –

Contacts –	Page 2
2014-2015 Board –	Page 3
From the Summerfruit Chairman –	Page 4
Summerfruit CEO Round Up –	Page 9
Summerfruit Chemical Review –	Page 20

Low Chill Australia Information –

Contacts –	Page 2
2014-2015 Committee –	Page 5
From the LCA President – <i>unavailable this Issue</i>	
Notice of Annual Memberships Due –	Page 5
Membership Application Form 2015-2016 –	Page 6

Industry Information –

Horticulture Innovation Australia Ltd –	Page 7
HIA Membership –	Page 8
The Sticker Co. - QPAK Plastic Thermoformers –	Page 9

Publication Details –

Rates & Deadlines –	Page 11
---------------------	---------

Promotion - Export –

Horticulture CEO Trade Mission 'Now in Season' to Thailand – 8 to 12 April –	Page 12
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Research –

Fruit Fly Numbers: Why do they change? –	Page 21
Other Australian Fruit Fly Species –	Page 23

Industry News –

US University assists Grower Group in Medfly Fight –	Page 25
Mommone Orchards complete FRAs first successful Field Audit –	Page 26
Subscribe to <i>BeeAware</i> for the latest on honey bees and pollination –	Page 26
Determination of stonefruit maturity, quality and volatile pollination –	Page 27
Bees hungry for access to public land –	Page 28

Cover Photo –

Readers: See below. Please feel free to forward a photo for possible use on the cover of this publication. Ed.

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NOTICE – The Mark Napper (Low Chill Australia Inc. President) Report is unavailable for this issue due to other commitments.

Cover Photo: This has been taken from a document prepared for the recent Horticulture CEO Trade Mission 'Now in Season' to Thailand – 8th to 12th April 2015. An edited version of this document is contained within this publication commencing at Page 12.



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To find out more about Summerfruit Australia Ltd, check out the website: www.summerfruit.com.au





From the Summerfruit Chairman -

As the shutters come down on another season it is a common theme in discussions with growers from many regions just how tough a season it has been. From climate extremes of a one in one hundred year rainfall deficit drought combined with record high temperatures in areas of Queensland to much of southern Australia where fruit yields were good and quality excellent but prices abysmal and often below the cost of production, the message has been consistent – *“another season like this past season is going to make it very difficult for many growers to continue”*.

Climate is something that we cannot control, but oversupply on the domestic market is a major issue that has raised its head prominently in three of the past four years. As an industry we need to increase our focus on exports, not just in times of opportunity but every season, by committing to further developing the markets that we currently have with strategies in place to encourage growth and by ensuring markets that reopen to us or are new destinations are reliably supplied.

Never again must we allow ourselves to be put in a position where we can be locked out of markets due to issues that should have been avoided. For this to happen it requires a committed, co-ordinated approach from growers, marketers, exporters and governments.

Both the Australian and the Victorian governments are to be congratulated on the initiative that they have shown in the past twelve months in organising trade visits that have included Summerfruit to China and South East Asia but the good work must continue to keep happening if we are to avoid a repeat of this past seasons result.

As your industry organisation, Summerfruit has been active in its endeavours to promote our fruit into markets offshore, working with both the state and federal governments and working independently, to create the outcomes that will lead to increased trade.

Summerfruit Australia is Australia’s stonefruit growers’ point of contact for both federal and state governments, organisations such as the APVMA and National Farmers Federation, other horticultural Peak Industry Bodies and the Voice of Horticulture, the media and a source of information across a whole raft of issues for growers. However, as an industry body we are now facing the serious challenge of having insufficient funds to continue with our operations.

The changes to funding that have come as a result of Horticulture Australia Ltd (HAL) being replaced by Horticulture Innovation Australia Ltd (HIAL) mean that monies that were previously paid to Summerfruit by HAL, out of the grower levies administered by HAL, to run Summerfruit are no longer available. You will appreciate that in order for your organisation to operate effectively certainty in ongoing funding is essential.

The Summerfruit board is currently investigating options to help secure our long term financial security. As we develop these options further we will try to contact as many growers as possible to seek your opinion and input. For the growers who are on our database, making this contact will be straightforward and, where possible, will be via email for initial information and feedback. We are aware that there are many growers who are not on Summerfruit’s database. If you are reading this issue of the Australian Stonefruit Grower and have not received it direct from the CEO of Summerfruit Australia you are not on our data base. If you would like input and be kept up to date, please send an email to John Moore ceo@summerfruit.com.au and ask to be included.

As growers, if we are not out there looking after our interests and promoting our requirements it is unlikely that anyone else will do it for us.

Andrew Finlay – Chairman





LOW CHILL AUSTRALIA INC.

ABN 283 812 712 44

2014-2015 COMMITTEE

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CHECK OUT THE LOW CHILL AUSTRALIA INC. WEBSITE www.lowchillaustralia.com.au



NOTICE: Low Chill Australia Inc. Annual Memberships are due for Renewal by 30th June 2015. Renewal Notices and Invoices will be forwarded by email to current Members on 1st June 2015. If you are not a member, your membership has lapsed or you wish to become a member, please use the following *Membership Application Form*.



The Taste of Spring



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Email: cm@lowchillaustralia.com.au

MEMBERSHIP APPLICATION FORM 2015/2016

Dear Secretary,

I wish to apply for membership of Low-Chill Australia Inc. I agree to be bound by the LCA Articles of Association and Rules and By-Laws of the association. Below are my contact details.

As we are updating our records, please complete the following contact details when applying for membership: PLEASE PRINT DETAILS SIGN AND RETURN FORM

Name: Company Name:

ABN: Postal Address:

Town / City: State: Post Code: Ph:

Mobile: Fax: Email:
(PLEASE TICK ✓ APPROPRIATE MEMBERSHIP BOX)

Website: ☐ Grower / Researcher (\$110.00) ☐ Corporate (\$275.00)

Annual membership is on a financial year basis from 1st July to 30th June. Annual Membership for growers and researchers is \$110.00 (including GST). Annual Membership for corporate members is \$275.00 (including GST).

The membership fee for growers and researchers comprises \$50 membership fee, \$50 devoted to research and development, plus \$10 GST. The Corporate membership fee comprises \$50 membership fee, \$100 devoted to research and development, \$100 advertising fee for Australian Stonefruit Grower, plus \$25 GST.

Membership Payment Details –

- ☐ **BY CHEQUE** – Please make Cheque Payable to **Low Chill Australia Inc.**
Post Cheque and this Form to –
Greg Foster, Treasurer, L.C.A.
38 Brooklet Road, Newrybar NSW 2479

OR

- ☐ **BY 'ELECTRONIC FUNDS TRANSFER'** –
Account - Low Chill Australia Inc.
Bank - Westpac
Branch - Ballina, NSW
BSB - 032 591
Account No. - 14 8934

Note: Please advise of EFT payment by email to – treasurer@lowchillaustralia.com.au. When paying by EFT –

FAX THIS COMPLETED FORM to 02 6687 2406 or SCAN and EMAIL to treasurer@lowchillaustralia.com.au

Name (please print):

Signature: Date:/...../.....



Horticulture Innovation Australia Limited (HIA) uses grower levies, investor and government funds to invest in Research and Development (R&D) and Marketing for the Australian horticulture industry.

Membership is free and brings many benefits for business entities, individuals and the wider Australian horticulture sector.

Membership gives growers:

- greater direct influence in the future direction of HIA and how levy funds are invested
- a strong voice in a nationwide, multi-sector research and development organisation that works

on cutting edge projects with the best researchers in the country

- timely access to industry events, information and news that could be vital to the future success of growers' businesses
- invitations to express views via HIA's regular consultation processes.

Ultimately it's about giving growers the knowledge and services to build a profitable and sustainable business.

A key feature of membership is that those members who pay levies have the right to vote at Annual General Meetings.

**JOIN HIA.
IT'S FREE**
and only takes a few minutes.

Apply online: www.horticulture.com.au
Call: 1300 880 981* or 02 8295 2395
Email: membership@horticulture.com.au

**Horticulture
Innovation
Australia**

*Calls to this number are charged the cost of an untimed local call from fixed landlines. Calls from mobile phones will be charged at the rate set by the caller's mobile carrier. Callers from overseas should dial +61 2 8295 2395



Industry Information ...

Horticulture Innovation Australia Limited (HIA) is a not-for-profit, grower-owned Research and Development Corporation (RDC) for Australia's \$9 billion horticulture industry.

HIA invests more than \$100 million in research, development and marketing programs annually.



HIA's vision

Through innovation, HIA strives to increase the productivity, farm gate profitability and global competitiveness of Australia's horticulture industries.

What we do

HIA uses grower levies, investor and government funds to invest in research and marketing for Australian horticulture industries to improve on-farm efficiency, increase productivity and boost sales. Ultimately it's about giving growers the knowledge and services needed to build a profitable and sustainable business. The government currently contributes a dollar for every levy dollar spent on research and development, effectively doubling the funds available to industry to address pressing issues like pest incursion control, biosecurity and improving market access.

HIA transition phase in 2015

HIA was declared the industry services body for horticulture in November 2014, replacing Horticulture Australia Limited (HAL). HIA is now undertaking a major business transformation to a grower-owned company with a new operating model.

Features of the new model will include direct consultation with levy payers and other stakeholders, member and levy payer registers, new and flexible advisory mechanisms, and better evaluation of the performance of levies and strategic investments.

A key change to the organisation will be implementing a two-pool funding model which will allow HIA to invest in industry based R&D and Marketing projects on behalf of levy paying industries (Pool 1) and in longer term and larger strategic projects with co-investment from other sources (Pool 2).

HIA has implemented a series of interim advisory arrangements that will operate during this transition phase. The inclusion of growers and relevant Industry Representative Bodies (IRBs) are fundamental to these interim arrangements as is the flexibility to tailor them to any particular industry as and when they are needed.

If you would like more information about HIA's transition phase and to have your say on the proposed features of the new model, call **02 8295 2300** or email transform@horticulture.com.au.

Grower and industry consultation

A key priority for HIA is consulting extensively with growers and other industry stakeholders. HIA is implementing a three stage approach to consultation around:

- regional grower meetings – the annual 'Between the Rows' meetings will be held in all major horticulture growing regions around Australia, giving you the opportunity to meet with HIA, be informed about current R&D and Marketing activities and updates on HIA's transition phase, and share your feedback and ideas on investment priorities
- industry specific consultation programs, including engaging with IRBs
- individual grower/grower group consultation as required.

Join us

Registering with HIA is free and brings many benefits for business entities, individuals and the wider Australian horticulture sector including being kept up to date with industry news, upcoming events, project outcomes, funding opportunities and recently published final reports.

Visit www.horticulture.com.au/membership to find out more and to register your interest, or just Email membership@horticulture.com.au or call the membership team on 1300 880 981 or 02 8295 2395.



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Summerfruit CEO Round Up ...



It's time to take stock of our destiny – Do you want some control of yours?

I wish to draw your attention to some housekeeping and urge you to encourage as many of your fellow orchardists to make themselves known by sending a simple contact address and details to ceo@summerfruit.com.au and I will include them in our Industry database. This is a most URGENT TASK for everyone reading this edition to attend to.

If you all spoke to at least 2 or 3 or more fellow orchardists and ask the question – ‘Are you on the Summerfruit Australia Limited (SAL) data base or do you receive this newsletter’; don’t be surprised, there are so many people not in the loop. It would be a great boost for knowing who is actually producing fruit and the numbers help for demographic locations and of course, communication.

I particularly ask the regional associations to promote the need for recognition of producers. Please take this on board and help grow your own industry by recognising the urgent need for a strong database. Of course we are more than happy to welcome exporters and other key supply chain persons to be a part of the SAL family. All too often there is an air of complacency and, only when the chips are down, you might take notice – albeit too late!



We really need this database for canvassing ideas, testing the water and for self-preservation. I would like to be very clear and up front. Your details or anyone's details will not be passed to any other organisation.

This is Summerfruit Australia Ltd call to arms.

SAL Election Process ...

Another matter that may have been of interest to you is the SAL election process; the call for nominations of Directors-closed 1st May 2015. **No nominations were received.** The current Directors retain office and commence their new term, 1st July 2015.

We are acutely aware of the state of the Industry and as a much as the Chair, Board members and myself 'bang' away at building strength in numbers, it your willingness that will help to rebuild our once dynamic Industry – enough said.

Export ...

I have recently been fortunate to participate and gain further insight for the export destinations of **Thailand, Philippines and Indonesia**. The **Victorian Government** recently undertook a '*Now in Season*' campaign featuring stonefruit and other fresh fruit categories in season. Most of you are well aware of the issues facing current access into Thailand and the frustration caused by the impediments that are reducing the once burgeoning trade. Industry is working in collaboration with DoA to resolve these difficulties encountered. For instance, no longer are mixed container lots permitted whereas, prior to December 2011, mixed containers of fruit were permitted. We are still waiting for deliberation on airfreight protocols and onshore cold treatment requests; presented to Thailand in November 2012.

However, despite these frustrations, a trickle of fruit is arriving and in very good condition and eating well. The *Riverland Region* of South Australia is ideally positioned for growing this market utilizing the *fruit fly freedom* status they enjoy.

Intransit Cold Treatment is in play for others outside of South Australia and Tasmania – a 20-day odyssey and has seen a number of containers arrive. In every instance, our exporters would love to have airfreight capability. Needless to say, DoA is acutely aware Industry desperately needs approval for onshore cold treatment and airfreight protocols (T108a-USDA treatment schedule) to be made available to encourage smaller fruit consignments rather than full container lots that can make a retailers inventory control difficult – similarly for all export destinations.

Both Agricultural Departments within Australia and Thailand are critically short of personal to satisfactorily manage the raft of issues plaguing trade efficiencies with Thailand – not withstanding staffing shortages both here and across other ASEAN and Northern Asian countries.

I am not alone when I say that until the Australian Government addresses our single most important trade impediment, namely staffing levels within Plant Biosecurity and Plant Exports, we will not see any substantial improvement to export capacity. The Summerfruit Industry has had no new market access for 17 years (Canada) and market maintenance / improvements are at a standstill largely due to the diminished bureaucratic process.

The Thai fresh produce market is enjoying rapid growth due to high demand from the retail, food service and food manufacturing sectors and the less inhibiting factors, the greater exponential growth within Thailand and across all of North and Southern Asia for Australian producers.

As an Industry, we need to focus on developing opportunities and I mean seriously concentrating on Philippines and Indonesia – both countries with fewer impediments than Thailand at this point in time. Consumer capacity to purchase, the willingness of importers and retailers to embrace collaboration and their thirst for learning of how to handle summer stonefruit must be in your favour as viable alternatives to new markets. Use the website www.MICor.com.au. This is the Department of Agriculture's site for easy, user-friendly access to provide information and the detailed requirements for all permissible export destinations. In any new venture, the Austrade network www.austrade.gov.au/ (enter/type either Indonesia, Thailand, Philippines or other countries of destination after the back slash), is invaluable.

The *Bureau of Plant Industry – Philippines* is so proactive and willing. They demonstrate the '*we are open for business*' cliché. As with all of the ASEAN countries the cool chain has been inadequate but internal and foreign investment is quickly



turning this around. Similarly, Indonesia is rapidly improving and the advantages to have a nation at your doorstep with a population greater than 260 million accessible by all of the key production areas within Australia, another no-brainer.

I am more than happy to provide contact details for you to engage with key persons whom I had contact during the 'Now in Season' promotion. (see Page 12 an edited version of the document prepared for the recent Horticulture CEO Trade Mission 'Now in Season' to Thailand

Moving to an update for China market access ...

Since the last edition of the *Australian Stonefruit Grower*, how things have changed. From anticipating trial shipments to have commenced following years of negotiations, I am bemused at our current position. The trial shipments did not come to fruition and the diplomatic airwaves are quiet.

Readers may have seen that DoA announced they have commenced work on an *Import Risk Analysis* (IRA) for Chinese stonefruit to enter Australia in the near future. The SAL Board has acknowledged to DoA that Industry is willing to work with them on this issue. In fact a working group has been formed and has met with DoA. Industry is in a position and grasp the opportunity during this 'wintering period' to demonstrate universally the technologies and world best practices that are a common daily routine in Australian orchards to secure and reinforce the message that Australia stonefruit producers have 'the clean green environment and fresh water' for top class stonefruit production. The solidarity and intensity of commitment amongst the major players (exporters and growers) for allegedly Australia's largest phytosanitary market is crucial to establishing a secure foundation. This will be the pleasing outcome for all stonefruit producers to have less congestion in the domestic market. **John Moore** CEO – *Summerfruit Australia Ltd*

For any further assistance, please contact - John Moore – CEO – Summerfruit Australia Ltd. – Ph: 02 6041 6641; +61 419 305 901; Mobile: 0419 305 901 - Email: ceo@summerfruit.com.au – Address: 8/452 Swift St., Albury NSW 2640

Australian Stonefruit Grower

incorporating the Low Chill Stonefruit Grower

- 2015 Publication Timetable -

Contributions are invited for the next scheduled publication - **MAY 2015.**

FEBRUARY	MAY	AUGUST	NOVEMBER
<i>Advertising Deadline</i> 7 February	<i>Advertising Deadline</i> 21 April	<i>Advertising Deadline</i> 31 July	<i>Advertising Deadline</i> 31 October
<i>Copy Deadline</i> 10 February	<i>Copy Deadline</i> 28 April	<i>Copy Deadline</i> 21 August	<i>Copy Deadline</i> 7 November

Note: Publication Dates are subject to change at the discretion of the Publishers.

Advertising in this publication are very reasonable and provide a cost effective way of informing members about your products and services.

ADVERTISING RATES – Please request an ADVERTISING BOOKING FORM.

Full Page - \$250.00* Half Page - \$175.00* Quarter Page - \$100.00*

**Rates are subject to GST if applicable. Advertisers will be invoiced following the publication issue and the terms are Strictly 30 Days.*

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Email: cm@lowchillaustralia.com.au



Promotion - Export ...

Following is an edited version of the document prepared for the recent Horticulture CEO Trade Mission 'Now in Season' to Thailand – 8th to 12th April 2015. For more information contact - John Moore *CEO* – Summerfruit Australia Ltd. – Ph: 02 6041 6641; Mobile: 0419 305 901 - Email: ceo@summerfruit.com.au







THAILAND FRUIT AND VEGETABLES PROFILE

Trends and opportunities

The market

The Thai fresh produce market is enjoying rapid growth due to high demand from the retail, food service and food manufacturing sectors.

Thailand is the region's food manufacturing hub, catering to both the domestic and international markets. There has been an increasing demand for quality raw materials, particularly for export markets which have high food standards.

The market for imported produce is expanding due to changing consumption patterns and increasing income levels of Thai consumers. Many key retailers have imported fresh produce sections all year round to serve this rising consumer group.

Although imported produce is viewed as a luxury item, it is gaining in popularity due to:

- changes in Thailand's consumer spending patterns
- increasing tourist numbers and expatriates living in Thailand
- the expanding food service sector
- the rapid growth of modern retailers.

Domestic tropical produce is also very popular, as it is suited to local taste and retails at significantly lower prices when compared to imported produce. But changes in climatic conditions are resulting in inconsistent production of seasonal domestic produce and higher market prices for domestic produce, creating a wider window of opportunity for imported produce.

Generally, domestic produce is in season during the summer, April to June, which often means a drop in the purchase of imported produce by Thai consumers. However, major supermarkets, especially those catering to middle-high income earners, carry imported produce all year round.

Opportunities

Based on the current demand of consumer preferences and competitors, the Thai market is particularly receptive to Australian table grapes, mandarins, summer fruit, apples and pears.

Key factors that make these and other fresh produce exports from Australia attractive for Thai importers and consumers include:

- Australia is seen as a 'clean and green' destination and buyers have expectations that the produce will yield better quality, a longer shelf life and have a better taste when compared to imported produce from other countries.

- Greater awareness among Thai consumers regarding food safety issues - Australia is perceived as a quality supply source due to the low usage of chemicals in the production process.
- Australia's relatively close proximity to Thailand allows for a short shipment time that maintains the quality and freshness of produce.
- The Thailand Australia Free Trade Agreement (TAFTA) gives many Australian produce items a competitive advantage over produce imported from other countries.

Competitive Environment

Produce from the USA has been exported and heavily marketed in Thailand for many years. As buyers gain a greater understanding of the counter seasonality of produce from the northern and southern hemispheres, they are able to make sourcing plans to have a full year's supply of fresh produce sourced from all over the world.

Produce that can be supplied from a single country all year round, factors such as quality, price competitiveness, supply consistency and the buyer/exporter relationship become more important.

China still supplies large volumes of fresh produce to Thailand due to its competitive pricing, but as food safety awareness is becoming an increasingly important factor in purchasing, Chinese produce is being replaced with produce perceived to be 'cleaner and greener'.

Australia faces strong competition from other southern hemisphere countries such as Peru, Chile, South Africa and New Zealand. It is important to provide support to retailers for promotional activities, to generate awareness of Australian fresh produce and establish it as top of mind amongst consumers versus these competitors.



Tariffs, Regulations and Customs

TAFTA gives Australian produce a competitive advantage as import tariffs have either been eliminated already or be phased down to zero percent by 2015, whereas produce from other countries without a trade agreement with Thailand is subject to import tariffs of 10 to 40 per cent.

Although table grapes and mandarins have zero import tariffs in 2015, they are subjected to Special Agricultural Safeguards (SSG). Once the supplied volumes for table grapes and mandarins exceed specified trigger levels, normal Most Favoured Nation (MFN) tariffs are applied to these products:

- 30 per cent for table grapes
- 40 per cent for mandarins.

SSG for the above will be eliminated in 2016.

The import of horticulture products must comply with Thailand's Plant Quarantine Act. Commodities classified as regulated products, including fresh fruits, are subject to pest risk analysis and need to comply with the stipulated import conditions.

To date, Thailand has established import protocols for the following Australian fruits:

- table grapes
- citrus
- apples
- pears
- avocados
- strawberries
- persimmons
- kiwi fruit
- cherries
- plums
- nectarines
- apricots
- peaches

Australia's Department of Agriculture continues to work with Thailand's Department of Agriculture to gain improvements to existing import protocols that will make them more commercially meaningful. For further information regarding import conditions for the Thai market, please visit the www.agriculture.gov.au.

Marketing your products and services

Market entry

Market entry strategies will vary according to products and segments being targeted. Exporters promote Australia's unique advantages such as counter seasons, the diverse climate, soil variation and its established image of a clean and safe environment and TAFTA benefits where they exist.

There are a number of strategies that will improve your business dealings with buyers from Thailand:

- Where possible secure local representation through local importers who will take care of your produce and market it on your behalf. However, major retailers will usually have an import division for purchase of fresh produce and prefer to have direct contact with Australian exporters.
- Establish and maintain business relationships with buyers and set aside a sufficient budget for regular visits to study market trends and meet with key buyers to discuss expansion plans, supply availability, seasonal advice and any other issues. Buyers appreciate being kept informed so that they can plan accordingly.
- Provide packaging options and suggest new trends.
- Set a promotional budget for your produce in market. Thai retailers concur that the most effective promotional means is through fresh sampling. Importers/retailers are increasingly looking for this kind of support from their suppliers in order to generate awareness of product or increase sales.
- Training is an essential element in promotional activities in Thailand. It enhances the efficiency of store managers/staff in handling, storing and promotion of Australian produce which in turn provide useful information to the consumers. Training equips buyers, store managers/staff with necessary knowledge about Australian fresh supply capabilities and seasonality.

Distribution Channels

Traditional importers/wholesalers are the main import contacts. Major retailers have begun to set up direct import divisions that source fresh produce worldwide, in addition to a portion of goods purchased from local importers.

Please visit Austrade website to view full market profiles :
<http://www.austrade.gov.au/Export/Export-Markets/Countries/Thailand/Industries/Fruit-and-vegetables>



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Promotional Retail Profiles

Makro

Established in 1988, Makro is a cash and carry retail format and pride themselves as the first and only wholesale centre for professional business operators in Thailand

Currently focusing on individual customers as well as HORECA customers who would purchase in bulk.

They are very keen to develop the fresh produce segment in their stores and have a wide variety of imported produce to offer to their customers.

Currently there are 80 Makro stores of varying sizes, 13 stores are located within the Greater Bangkok area and 67 stores are in the provinces and continue to expand. Currently Makro is a part of the CP conglomerate (www.cpthailand.com)

TESCO

Tesco Lotus is a hypermarket chain in Thailand operated by Ek-Chai Distribution System Co., Ltd.

Tesco Lotus stores currently operate in five formats: Extra, Hypemarket, Department Store, Talad and Express.

The hypermarket format is the main format that conducts in store promotional activities.

Tesco has started to look into carrying a wide range of Australian produce at their stores, compared to previously where they tend to source for products based on price.

This is because they feel that promotional activities such as in store sampling would generate more awareness and increase volume of quality produce for their customers

Currently Tesco has total 1756 stores

Big C Supercentre

Big C Supercenter operates business in the form of "Hypermarket" or "Supercenter", a modern retail business which is managed under the umbrella of Big C Supercenter Public Company Limited and its subsidiaries.

Big C is direct competitor to TESCO in the hypermarket format. But they are segmenting their stores to meet the consumer demands and demographics.

Big C is price sensitive and tends to purchase based on price. However, they are keen to develop relationship with countries that can provide marketing support for their in store activities as they feel that this is one of the best ways to draw customers to their stores.

Big C store format : Big C Supermarket 103, Big C Extra 15, Big C Jumbo 3, Big C Market 30 and mini Big C 300

Foodland Supermarket Co., Ltd

Foodland was founded in 1972.

Foodland caters to middle to high income earners.

Australian produce profile fits in with this retailer and they carry a wide range of Australian seasonal produce on their shelves. They have their own restaurant chain "Took Lae Dee" meaning – "cheap and good" is a favourite among the consumers.

They are keen to conduct promotional activities at their stores and this year have requested for support for store incentive program to create healthy competition among their stores.

Currently Foodland have 16 stores

Central Food Retail Company Limited

Central Food Retail is the largest supermarket chain in Thailand. Their continuous expansion plan includes now owning Family Mart stores as well as retail stores overseas.

They carry a wide range of Australian products, and Australian fresh produce is one of their main highlights at their stores.

They take active role in promoting fresh at their stores and in the past have been active supporters of Australian produce through various promotional programs at their stores.

They currently have 1366 stores with the following formats: FamilyMart, Central Food Hall, Tops market, Tops super, Tops daily, Central Wine Cellar, Segafredo, Super khum, Tops Super Store

RimPing Supermarket

Established in 1950 this retailer is located in north of Thailand and is considered one of the premium retails in Thailand.

Rimping carries a wide range of imported items worldwide and they continue to create promotional activities to engage their customers.

They carry a wide range of seasonal Australian produce and are keen to receive support for promotional activities at their stores.

They currently have 9 stores all located in Chiangmai, north of Thailand.

The Mall Group

The Mall Group is one of Thailand's largest supermarket chains and established in 1981.

It has basic The Mall formats which spreads out of the city center and more premium formats situation in the heart of Bangkok such as The Emporium, Paragon Department stores, The EmQuartier – which has just recently opened.

These premium outlets are the ones that carry a wide range of imported produce world wide and caters to high income earners.

Currently the Mall has 12 branches

We have just started to work with them on providing promotional support and their recent food promotional event had a very good mention in major media in Thailand



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Australian Government
Australian Trade Commission





Summerfruit Chemical Review ...

Summerfruit: Potential Chemical Review impacts

The table below was circulated to industry through this publication in August 2014 and your feedback is urgently required.

Outlined below is a listing of the currently registered pesticides for use in Summerfruit. Highlighted in the list are those chemicals either the subject of a review or nominated to be reviewed. **Could you identify specific pests or diseases where regulatory action, involving the chemicals identified, could have an adverse impact on crop production and provide feedback ASAP.** As an industry we need to prioritise which pest and disease species are likely to require alternative treatment options.

If there is no feedback it can only be assumed that there will be no impact on production if these chemical groups are lost or their use patterns changed.

Chemicals highlighted in **red** are currently subject to an APVMA review, i.e., in progress.

Chemicals highlighted in **bold** are on the APVMA review priority list

Pest/Disease		Approved Chemicals	Priority
Aphids (Black citrus aphid, Black peach aphid, Cherry aphid, Green peach aphid)	<i>Toxoptera citricidus</i> , <i>Brachycaudus persica</i> , <i>Myzus cerasi</i> , <i>Myzus persicae</i>	Clothianidin, diazinon , imidacloprid, maldison , methomyl , petroleum oil, piperonyl butoxide + pyrethrins, pirimicarb, pymetrozine, sulfoxaflor, thiacloprid	
Oriental fruit moth	<i>Grapholita molesta</i>	Azinphos-methyl , carbaryl, chlorantraniliprole, clothianidin, fenthion , indoxacarb, maldison , pheromones, spinetoram, thiacloprid.	
Fruit flies	<i>Bactrocera</i> spp. & <i>Ceratitis capitata</i>	Chlorpyrifos , clothianidin (PER14252), fenthion , thiacloprid (PER14562), spinetoram (PER12590), trichlorfon	
Apple weevil, Fuller's rose weevil	<i>Otiorhynchus cribricollis</i> , <i>Asynonychus cervinus</i>	Alpha-cypermethrin, azinphos-methyl , indoxacarb	
Bryobia mites	<i>Bryobia</i> spp.	Azinphos-methyl , bifenazate, clofentezine, dicofol, fenbutatin oxide , petroleum oil, sulfur, tetradifon	
Budworms (Heliothis)	<i>Helicoverpa</i> spp.	Carbaryl, indoxacarb, methomyl , piperonyl butoxide + pyrethrins	
Bugs (Rutherglen Bug)	<i>Hemiptera</i> (<i>Nysius vinitor</i>)	Maldison , piperonyl butoxide + pyrethrins, trichlorfon	
Carpophilus beetle	<i>Carpophilus</i> spp.	Bifenthrin	
Codling moth	<i>Cydia pomonella</i>	pheromones	
European earwig	<i>Forficula auricularia</i>	Carbaryl	
European red mite	<i>Panonychus ulmi</i>	Clofentezine, dicofol, fenbutatin oxide , hexythiazox, maldison , oxythioquinox, petroleum oil, propargite , pyridaben, sulfur, tebufenpyrad, tetradifon	
Grapevine moth	<i>Phalaenoides glycinae</i>	Piperonyl butoxide + pyrethrins	
Green treehopper	<i>Sextius virescens</i>	Carbaryl	
Lightbrown apple moth	<i>Epiphyas postvittana</i>	Azinphos-methyl , Bt, carbaryl, chlorantraniliprole, chlorpyrifos , fenthion , indoxacarb, piperonyl butoxide + pyrethrins, spinetoram, sulfur	
Mealybugs	<i>Pseudococcus</i> spp.	petroleum oil, Natrasoap	
Orange fruitborer	<i>Isotenes miserana</i>	Carbaryl	
Oriental fruit moth	<i>Grapholita molesta</i>	Azinphos-methyl , carbaryl, chlorantraniliprole, clothianidin, fenthion , indoxacarb, maldison , pheromones, spinetoram, thiacloprid	



Pest/Disease		Approved Chemicals	Priority
Pear and cherry slug	<i>Caliroa cerasi</i>	Azinphos-methyl , carbaryl, piperonyl butoxide + pyrethrins, spinetoram	
Red shouldered leaf beetle	<i>Monolepta australis</i>	Carbaryl, methomyl	
Rust mites	<i>Eriophyidae</i>	Dicofol, tetradifon	
Scale insects	<i>Coccidae/Diaspididae</i>	Azinphos-methyl, diazinon, methidathion , petroleum oil, sulfur	
Thrips	<i>Thysanoptera</i>	Methomyl , piperonyl butoxide + pyrethrins, tau-fluvalinate	
Two-spotted (Red spider) mite	<i>Tetranychus urticae</i>	Bifenazate, chlorfenapyr, clofentezine, dicofol, etoxazole, fenbutatin oxide , hexythiazox, Milbemectin, oxythioquinox, petroleum oil, propargite , pyridaben, sulfur, tebufenpyrad, tetradifon	
Whiteflies	<i>Aleyrodidae</i>	Natrasoap, piperonyl butoxide + pyrethrins	
Yellow peach moth	<i>Conogethes punctiferalis</i>	Azinphos-methyl	
Brown rot—fruit	<i>Monilinia spp.</i>	Captan, chlorothalonil , copper, cyprodinil, dithianon, fenbuconazole, fludioxonil, iprodione, mancozeb , penthiopyrad, propiconazole , sulphur, thiram, ziram	
Blossom blight	<i>Monilinia spp.</i>	Captan, chlorothalonil , cyprodinil, dodine, iprodione, procymidone, propiconazole, ziram	
Leaf curl	<i>Taphrina deformans</i>	Chlorothalonil , copper, dithianon, dodine, ziram	
Prune rust/Stone fruit rust	<i>Tranzschelia discolor</i>	Chlorothalonil , copper, dithianon, mancozeb Propiconazole ,	
Shot-hole	<i>Stigmia carpophila</i>	Chlorothalonil , copper, dithianon, mancozeb , sulphur, thiram, ziram	
Collar rot	<i>Phytophthora cactorum</i>	Fosetyl-Al	
Freckle/Scab	<i>Cladosporium carpophilum</i>	Chlorothalonil , copper, dithianon, mancozeb, ziram	
Grey mould	<i>Botrytis cinerea</i>	Fludioxonil	
Rhizopus rot	<i>Rhizopus stolonifer</i>	Fludioxonil	

Please direct your responses to John Moore email: ceo@summerfruit.com.au

Research ...

FRUIT FLY NUMBERS: WHY DO THEY CHANGE?

Fruit flies are not equally abundant throughout the year, while overall abundance can also change from year to year. Explaining such variation, and more importantly predicting it, is still an area of weakness for fruit fly research and management. Dealing only with Queensland fruit fly, this article identifies some of the reasons why fly numbers change within and across years. As Qfly seasonality differs quite markedly depending on whether you are in a temperate or tropical/subtropical district, the two climate types are addressed separately.

Qfly seasonality

In tropical and subtropical districts

In the tropics and subtropics Qfly populations are greatly reduced during the winter months, but can be trapped in very low numbers at most times. At the end of winter, populations dramatically increase in mid to late August and peak in late spring, declining over summer and into autumn, i.e. the population peak is spring, not summer. The cause for the dramatic early spring increase is unclear, but it is known from data sets collected in the 1940s, 1990s and 2000s, so it appears to be a fixed part of the biology of the fly and not driven by agricultural practice. Independent of the innate population cycles, the main factor influencing total Qfly abundance in the tropics and subtropics is fruit availability for breeding. Temperatures do



not drop to levels that stop the fly entirely and breeding can occur in all seasons, although the total population is greatly depressed from mid-autumn through winter. From spring through to autumn, multiple population peaks can occur in tropical districts if there are distinct fruiting peaks of major hosts.

In temperate districts

In contrast to tropical and subtropical districts, and so long as hosts are available, temperature appears to be the key driver of Qfly populations in temperate areas. The fly enters an adult reproductive diapause during the winter months, during which time eggs may be resorbed by the female. During occasional days of unseasonal warm weather, the flies can become active and forage for food: otherwise they will stay dormant in well-sheltered sites. There is some anecdotal evidence that flies may aggregate for overwintering, but how commonly this occurs is unclear. Grower observations have recently been made of live larvae being found during winter in late-season packing-shed fruit dumps. If such larvae fully develop through to adults during the winter is not known.

After the winter period, Qfly in temperate areas build up slowly in number during the spring and summer, peaking in late summer and then declining into autumn. Assuming that fruit for breeding is always available, then the population cycle for Qfly in temperate areas can be reasonably well predicted using temperature only as the key population driver.

Why this matters

Predictable seasonality in Qfly populations is important for at least two reasons. Fruit picked during periods of cold weather has the opportunity to gain market access through seasonal low pest prevalence (see Dominak et al 2015). This is not a great help for stone-fruit production, but can be important for other crops. For example, SE Queensland strawberries have a winter window access into southern states for fruit picked before August based on the very low winter prevalence of flies. Knowing when populations peak also will drive long term management decisions.

For low chill stone-fruit producers in coastal SE Queensland and far northern NSW, local fly numbers peak just as the crop becomes ripe – this is a really bad reality that we can't do anything about. The Stanthorpe growers, in contrast, have low fly numbers at harvest because their region has a more temperate climate due to the altitude. In contrast to the stone-fruit producers, Stanthorpe apple growers have more of a fly problem because flies have built up all season when their fruit is picked in autumn.

Changing abundance over years in the southern states

A question regularly posed to fruit fly researchers is what has caused Qfly numbers to explode so dramatically in south-eastern Australia over the last few years. The honest answer is we don't really know, but we can make an educated guess.

It is most likely driven by a combination of the breaking of the long running drought through the 2000s, the loss of regulatory controls, and possible climate change effects. Qfly is a tropical/subtropical insect and is adapted to environments where humidity is routinely above 70%, particularly during the summer months. In contrast, humidity (especially during drought) in inland south-eastern Australia is very low, and lowest during the summer when temperatures are very high.

The combination of very low humidity and very high temperature is bad for the fly, and so increased rainfall and irrigation following the breaking of the drought will have helped fly numbers build up. In the late 90s, two ecological modellers predicted that in the absence of regulatory controls and in the presence of irrigation, Qfly would do extremely well in the FFEZ (Yonow & Sutherst 1998): unfortunately this prediction has been shown to be true. Climate change induced longer warm seasons will also be helping populations build up, as shorter winters and longer summers will allow more fruit fly generations to occur in a given year. The same modelling team predicted these changes also, as well as an increase in suitability of the FFEZ for fruit fly due to fewer extreme cold days in winter (Sutherst et al. 2000).

Are flies adapting to the southern areas? We don't know. We do know insects are capable of extremely rapid adaptation to local conditions, but so far the research has not been done to see if southern flies are becoming selected to local conditions – but research on this is underway.

Interpreting trap catch numbers

Fruit fly trap catches have been used to inform regulatory management (e.g. area freedom, ALPP), but unfortunately there are no general recommendations for linking trap catch with fruit infestation at the orchard level. Too many variables (crop/variety type, stage of crop maturity, presence of alternative hosts) influence the relationship between the number of



flies in an area and crop damage to make this possible to do in a general way. This relationship must be developed at a local level, either by individual growers or their crop consultants.

One caveat to remember with traps is a fairly obvious, but often overlooked point: flies have to fly into traps to be caught.

The flight threshold temperature for Qfly is quite high, at around 17-18 °C. Below this temperature flies will not fly, and so will not be caught. In summer this is not a problem, but early or late in the season it may become one. If there are substantial hours during daylight where temperatures are below 18 °C, then the traps may be giving an under estimation of the local fly population. The absence of flies in traps in winter also does not mean that there are no flies in your district, just that they are not active.

Summary

Fruit fly numbers rise and fall during the year in partially predictable ways. In tropical and subtropical areas, the timing of fruiting peaks and the abundance of (unprotected) fruit are going to be the biggest drivers of fruit fly numbers. In temperate areas, additional to fruit availability, fly populations are driven by local temperature and humidity conditions. Climate-change induced longer warm seasons and milder winters, plus increased rainfall/irrigation and loss of regulatory controls, are all likely contributors to the build-up of Qfly in the southern states over the last few seasons.

Further reading

Dominiak BC, Wiseman B, Anderson C, Walsh B, McMahon M, Duthie R (2015) Definition of and management strategies for areas of low pest prevalence for Queensland fruit fly *Bactrocera tryoni* Froggatt. *Crop Protection* 72: 41-46.

Sutherst RW, Collyer BS, Yonow T (2000) The vulnerability of Australian horticulture to the Queensland fruit fly, *Bactrocera (Dacus) tryoni*, under climate change. *Australian Journal of Agricultural Research* 51, 467-480.

Yonow T, Sutherst RW (1998) The geographical distribution of the Queensland fruit fly, *Bactrocera (Dacus) tryoni*, in relation to climate. *Australian Journal of Agricultural Research* 49, 935-953.

Acknowledgements



This article was written by Tony Clarke of the Queensland University of Technology as part of Horticulture Innovation Australia Limited Project SF12013 “Fruit fly IPM for Summerfruit, with a focus on developing an effective female lure-and-kill device”. This is the fifteenth of a series of articles providing information on fruit flies. This project has been funded by Horticulture Innovation Australia Limited using the summerfruit industry levy and matched funds from the Australian Government.



Research ...

OTHER AUSTRALIAN FRUIT FLY SPECIES

Most Australian growers are used to dealing with only one pest fruit fly, i.e. Queensland fruit fly or Mediterranean fruit fly. However, there are 301 species of tephritid fruit fly recorded from Australia. While the great majority of these are non-pests, breeding in sites as diverse as the seed-heads of daisies, under rotting bark, or in native fruits of the rainforest, nearly ten have been recorded from commercial fruit. This article lists these other pest fruit flies of Australia and then explains why these ‘lesser’ or ‘tropical’ species (as they are often referred to) need to be taken more seriously by growers, researchers and regulators.

The fly species ...

Jarvis’s fruit fly (*Bactrocera jarvisi*): Found across the top-end from Broom to the Torres Strait and then down the east coast to the Sydney region. Many of its hosts are non-commercial (especially cocky-apple, *Planchonia careya*), but it is recorded from a large number of tropical and temperate commercial fruits, including mango, citrus and stone-fruit.



Lesser Queensland fruit fly (*Bactrocera neohumeralis*): Found along the tropical and subtropical east coast as far south as northern NSW. Its commercial host fruit range is almost as extensive as Queensland fruit fly.

Mango fruit fly (*Bactrocera frauenfeldi*): Endemic to Papua New Guinea, this fly invaded Cape York in the 1970s. It is now well established and abundant north of Townsville. In Papua New Guinea it is the most common fruit fly pest, while in Australia it has been recorded from numerous tropical fruits and citrus.

Cucumber fly (*Bactrocera cucumis*): Distributed across the Northern Territory and down the east coast to northern NSW. While considered primarily a cucurbit pest (melons, pumpkin, cucumbers, etc), it is also recorded from a range of other host types, especially pawpaw and tomatoes.

Banana fruit fly (*Bactrocera musae*): A specialist on wild and cultivated bananas (*Musa* species), this fly is restricted to far northern Australia and Papua New Guinea. A true tropical species, it is unlikely to be a pest of anything except banana.

Krauss's fruit fly (*Bactrocera kraussi*): Restricted to Queensland north of Townsville, this fly has a very large host range of predominantly rainforest species, but has been reared from citrus and a small number of tropical commercial species.

Bactrocera bryoniae [no common name]: Extending across the entire top end and down the east coast to Sydney, it is unclear if this species is actually a pest. The fly called *B. bryoniae* has been reared in large numbers from chilli and capsicum in Papua New Guinea, but its pest status in Australia is unclear and it may be that the flies in Australia and PNG are different biological species.

Halfordia fruit fly (*Bactrocera halfordiae*): Found from central Queensland south to around Sydney. Generally regarded as restricted to non-commercial host fruits, it has been recorded from loquat and number of citrus types.

Island fly (*Dirioxa pornia*): Found from Cape York Peninsular all the way down to South Australia, and introduced into Western Australia. It has a very large host range of commercial and non-commercial fruit, but is generally only considered a problem of over-ripe, damaged and/or fallen fruit. However, it has turned up recently in export fruit.

Why worry about these other species?

With the exception of mango fly, which was introduced 40 years ago, these flies are all native to Australia and have not been previously regarded as a serious problem, except perhaps cucumber fly to the pumpkin and melon industry. Why is this likely to change? There are several reasons why at least some of these species will become increasingly important over the next five to twenty years.

Trade: That these other pest fruit flies occur in Australia is well known to our trading partners. Increasingly, major importing countries are asking for biological and distributional data on these flies so as to carry out import risk analysis. We can often not supply this information and this may well lead to the loss of some markets. A recently completed large project by Queensland DAFF has provided cold-temperature treatment data for nearly all of these species and this is a great step in the right direction, but much more needs to be done. That QDAFF, for their project, were the first to rear several of these species in the laboratory illustrates how little we know about most of them.

Climate change: The true tropical fruit fly species (e.g. banana fly, mango fly) are unlikely to move much further south, even under climate change scenarios. However, flies such as Jarvis's fruit fly, lesser Queensland fruit fly and cucumber fly, which already extend well into NSW, may well start moving into cooler temperate regions under climate change. Just as Qfly is moving into areas which were traditionally thought to be outside its normal geographic range, so these other species may also spread. If they do a much larger number of growers will be affected.

Loss of cover-sprays: While it is essentially impossible to get data on this, it is reasonable to assume that the 'lesser' flies have been previously managed concurrently, if unknowingly, through the application of cover-sprays to control Queensland fruit fly. The regulatory loss of broad acting pesticides may not only increase the problem posed by Qfly, but also these other species.

Specialist Qfly control: New controls which target Qfly specifically, e.g. SIT, will have no impact on these other species. Thus these flies will still need to be managed, even if they are at low densities. Further, based on international experience, it may be that the species specific control of Qfly will see increased pest impact by these other flies. This is because there is evidence suggesting that some dominant pest fruit flies (such as Qfly and Oriental fruit fly) out-compete other fruit flies and so reduce their numbers. In the absence of such dominant species, other 'lesser' species can become more prevalent and damaging. This has not been recorded previously, but the reverse (where a newly introduced dominant species suppresses a previously important local pest species) has been documented in several countries.

Summary ...

The information provided here will not change fruit fly management or market access decisions in the immediate term. Rather, as with other articles in this series, the information is provided so that more informed decisions can be made by the industry and individual growers moving forward. The 'lesser flies' will become increasingly important for subtropical and temperate Australia and investment in research, and pre- and post-harvest controls, needs to recognise this. If we spend the



next five years getting perfect control of Qfly, only to find another fly has taken its place, then we will be behind the eight-ball once again. Clearly Qfly control is a current priority, but some ongoing effort must also be given to the 'lesser' flies.

Acknowledgements ...



This article was written by Tony Clarke of the Queensland University of Technology as part of Horticulture Innovation Australia Limited Project SF12013 “*Fruit fly IPM for Summerfruit, with a focus on developing an effective female lure-and-kill device*”. This is the fourteenth of a series of articles providing information on fruit flies and their control. This project has been funded by Horticulture Innovation Australia Limited using the summerfruit industry levy and matched funds from the Australian Government.



Industry News ...

US University Assists Grower Group in MEDFLY FIGHT

The Hills Orchard Improvement Group (HOIG) is going to an international level in order to find a solution to Mediterranean Fruit Fly. Medfly, is the world's worst economic pest and it is said to attack over 250 types of fruit, vegetables, nuts and flowers.

The international search comes on the back of an invitation to HOIG from the *Central Washington University* (CWU), in Washington State. Agriculture is a significant business in Washington State, valued at more than \$US4.5 billion and fruit production accounts for 12% of the state's income.

A delegation of HOIG members to travel to Washington State was unanimously approved by members at the HOIG AGM.

Mr DelSimone said, “It is an unprecedented honour for HOIG to receive an invitation from such a prestigious University, our membership is buzzing with excitement. It demonstrates that Medfly is not just a concern in the Perth Hills, or even just in Australia, but it is a destructive pest globally. We thank our friends in Washington State for reaching out in an effort to assist our membership grow fruit in a manner that is consistent with ‘best practice’.”

CWU Dean, **Kathryn Martell**, has offered the University's assistance to get HOIG access to the state's major growers and value adding enterprises. There will also be the opportunity to meet some of the country's leading researchers in fruit fly management at Washington State *University's Tree Fruit Research and Extension Centre*.

In Western Australia, Department of Agriculture and Food WA put the state's damage bill from Medfly damage at around \$40 million per annum.

Mr DelSimone said, “Over the past few years DAFWA's Medfly research has predominantly revolved around implementing *Area Wide Management* (AWM) which, perplexingly, the Department says it will not implement.”

“The US Government implemented AWM thirty years ago and have supported it with billions of dollars,” he added. DAFWA continues to talk and trialling programs that were implemented decades ago in 30 other countries worldwide. It is now time for growers to lead the way to a cutting edge solution that involves the latest uses of technology,” Mr DelSimone said.

The HOIG delegation is making arrangements to travel to the US in August and will compile a full report for its members.

Mr DelSimone finished by saying, “This is a once in a lifetime opportunity for a small grower group to be invited to visit world leaders in fruit fly management. We plan to bring back the very best of solutions and will lobby the State Government hard to implement these modern solutions to ensure the survival of our valuable food producing businesses.”

For Further Information on this Delegation, contact Mr Brett DelSimone Mobile: 0413 343 227.



Industry News ...

Mammone Orchards complete FRA's first successful field audit.

Fruit Rights Australia Inc. (FRA) would like to congratulate Steve and Ross Mammone, of Mammone Orchards, Woodwood, Victoria, for successfully completing FRA's first field audit.



The Mammone field audit was based on on-the-ground counts of tree numbers, in the various blocks of their orchard and comparison of these counts with data previously supplied in a desk audit of the Mammone plantings.

Steve Mammone said they were pleased to have been the first grower to successfully complete a field audit. "Our position on proprietary varieties has changed over the years. We want the best varieties, at the right times of the year, and are prepared to pay for them."

Fruit Rights Australia Inc. (FRA) was formed in 2014 to help educate Australian fruit growers about the advantages and obligations associated with proprietary fruit varieties.

FRA has also completed a number of desk audits with leading growers in all Australian production regions. The desk audits are based on a declaration from the grower covering the varieties grown and the number of trees of each. This data is matched with the records held by the nursery or rights holder. **Rocky Varapodio**, a leading grower from Ardmona, said that it only took a couple of hours to assemble the data required. "After that, FRA did the rest."

FRA's desk audit is designed to maintain the confidentiality of the data provided.

Mr Russell Soderlund, FRA's Executive Officer said, "Our desk audit process ensures that information about the grower's varieties/trees from one FRA member is not seen or accessed by any other FRA Member."

Those growers who have been audited have been very positive about the audits and the role of FRA. "Growers who pay their royalties don't want to see others *free riding* via illegal propagation of proprietary trees or other means," Mr Soderlund said.

Mr Ian McAlister of *SunFruit Orchards*, a leading apricot grower at Lake Boga said, "I have to pay royalties for the varieties I grow. I understand why and am happy to pay in exchange for access to the best varieties but I don't like the idea of other growers using the same varieties and getting away without paying anything."

Mr McAlister also said that with orchard acquisitions, tree removals and tree deaths, records can get out of date - so it was reassuring to see that our records matched those of the various nurseries we deal with.

FRA aims to complete more, free, desk audits over the next few months. Audits can be arranged by contacting the Executive Officer.

For further information contact Russell Soderlund, the FRA Executive Officer, on 0400 117 360 or email: russell.soderlund@bigpond.com

Subscribe to *BeeAware* for the latest on honey bees and pollination

There are big benefits to be had from honey bee pollination, according to Plant Health Australia (PHA), and the best way to find out how is to check the crop-specific information on the *BeeAware* website and keep up-to-date by signing up for the monthly e-newsletter.



BeeAware is a hub of information for growers and beekeepers about honey bee biosecurity and pollination of a variety of horticultural and agricultural crops. The *BeeAware* newsletter helps beekeepers and growers get the latest news and



information about beekeeping and pollination. **Subscribe before 3 July 2015 and you will go into the draw to win a range of honey bee and pollination manuals and publications.**

According to PHA's honey bee specialist, **Sam Malfroy**, *BeeAware* provides all of the information that growers need to know about pollination: how it works, use of pesticides, pollination agreements, how to prepare for Varroa mite and how to promote a healthy pollinator ecosystem in a farm or orchard.

"It's also a great place to learn more about honey bees, their biology, and the pests and diseases which affect them, Mr Malfroy said.

A wide variety of crops including almonds, passionfruit, apples and pears, berries, cherries, stonefruit, melons, avocados and some vegetables are known to benefit from pollination by honey bees. Broadacre crops such as faba beans, sunflowers and canola also receive major benefits from honey bee pollination. *BeeAware* explains exactly how growers can gain maximum benefit from these helpful insects and receive valuable yield and quality improvements in the produce that they grow.

"Each crop has a page of its own," added Mr Malfroy, "which details the pollination requirements of the crop as well as giving useful links and fact sheets from Australia and around the world."

Honey bee and pollination books up for grabs

Subscribers who sign up to the *BeeAware* newsletter before 3 July go into the draw to win a copy of the highly sought after RIRDC publications which cover major areas such as honey bee biology, pests and diseases and crop pollination in Australia. "These books are a must-have resource for any beekeeper or grower in Australia," Mr Malfroy said.

The site was developed by a partnership between the Australian Government, the honey bee industry and pollinator-reliant industries through the Pollination Program which is managed by the Rural Industries Research and Development Corporation and Horticulture Innovation Australia. **Visit the *BeeAware* website at www.beeaware.org.au**

Industry News ...

Determination of stonefruit maturity, quality and volatile composition

Comparing Stonefruit Maturity, Quality and Volatile Composition - Project

Variable quality in summerfruit has been identified as a major impediment to producer profitability and sales in both domestic and export markets. The ability to optimize fruit maturity at harvest to meet expectations of the market of choice; to understand how fruit maturity affects storage and the impact on fruit composition and quality, particularly sugar content, firmness and volatiles profile, will greatly improve fruit consistency and quality.

DA-Meter Measuring harvest maturity



Dario Stefanelli



Variable maturity at harvest affects fruit responses to shelf life, cold storage and consequent quality through the handling chain. Fruit composition and flavour volatiles in particular, are a fundamental element of fruit quality and therefore consumer acceptance. The fruit volatile profile is affected by fruit maturity on the tree, during postharvest storage and consequent ripening.

This project aims to generate knowledge of the interaction between harvest maturity measured by the DA-Meter, storage and ripening behaviour and resultant effects on soluble solids content (SCC i.e. brix - fruit sweetness index), firmness and volatiles profile. This project is linked to the stonefruit trial orchard in Tatura and to 'optimal ripening protocols' to which will



deliver preliminary data on the varieties used and will add important information for the protocols.

This project will identify maturity classes to optimize harvest timing depending on the market of choice, with particular emphasis to export, for up to 10 nectarine and peach varieties. The project will generate cold storage and ripening protocols. The results will provide knowledge to optimise fruit quality and consistency on domestic and export markets. Consistent, high quality fruit will increase consumer demand and provide a point of difference for Victorian stonefruit increasing both domestic and export markets by at least 5% equating to an increase in export value alone of \$15 to \$20 million per annum.

Industry News ...



Help is now available for beekeepers trying to negotiate access to public land – a vital source of pollen and nectar for the bees that provide essential pollination services to agriculture.

Around 70 per cent of Australian honey production comes from native flowers, many of which are prolific on public lands, but access is increasingly being restricted in state forests and national parks because European honey bees are not considered native to Australia.

A series of fact sheets have been developed to identify the registration, permit and/or licensing requirements for beekeepers seeking access to public lands in each state, as well as the restrictions and criteria for interstate movement of hives and equipment.

The fact sheets will not only help beekeepers better understand the rules and regulations that impact where they can place their hives, but will also allow them to be better informed when seeking permission for the relocation or movement of hives in locations that require government agency approval.

The series of fact sheets and a full report were developed through the Honey Bee and Pollination RD&E Program, which is funded by RIRDC and Horticulture Innovation Australia Limited (HIA).

Beekeeper and spokesman for the Program's Advisory Panel **James Kershaw** says given the level of complexity, beekeepers should take full advantage of the research in order to ensure their operation's sustainability.

"If the bees are not in good health, it's harder to put their pollination services to work, and many horticultural and agricultural products rely on European honey bee pollination," Mr Kershaw said.

To download the fact sheets or for more information about the Honey Bee and Pollination RD&E Program, go to www.rirdc.gov.au/honeybee-pollination.

Source: Rural Diversity in Brief – News from the Rural Industries Research & Development Corporation – 5 May 2015 Issue

