

# Persimmon Press

Issue 56 | December 2013

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### **INDUSTRY NEWS** The President's Perspective | Nick Hobbs

The past year, my first as president, has been one of consolidation. With limited uncommitted funding available, the focus has been on the established projects rather than committing to new areas.

We recently have seen a change in industry services manager with Astrid Hughes being seconded to a Sydney finance project and Anna-Louise Cross replacing her. I would like to register our sincere thanks to Astrid for her time with us and welcome Anna-Louise. A country girl, Anna is fitting in well and understands how we think.

Fruit fly and market access have been the two areas that have evolved during the last year. The loss of dimethoate and fenthion has had many industries scrambling for alternatives. Our irradiation protocol was finally approved for interstate access but its use looks to be now highly unlikely.

The Qld members of the committee also put in a lot of time prior to last harvest with Biosecurity Queensland to have the systems approach available for Victorian access. The recent changes to the Victorian protocol has superseded these protocols and should simplify access for next season. SA, Tasmania and WA remain effectively closed to producers from fruit fly endemic areas. Permits for trichlorfon and maldison for pre-harvest use have been put in place and will be available for next season. We have recently had Samurai approved as a third alternative for Q fly. We also achieved a permit for pre harvest use of fenthion in April. The availability of this permit for next year will depend on the finalisation of the fenthion review. Copies of these permits are available on the AVPMA web site. The Strategic Agrochemical Review Process (SARP) has been finalised and a priority list of permits developed. These will be applied for as funding is available. First cab off the rank is the maintenance of the Bravo permit.

The Association worked with DAFF to maintain access to the Thailand market after they moved to put phytosanitary controls in place. Thanks go to Rod Dalton for offering his packing shed and orchard systems for audit. We have unfortunately ended up with a cold sterilisation protocol for fruit fly. We have applied for Thailand to accept an irradiation protocol. At this stage changes to the original protocols do not seem to be a high priority and it is unknown when and if we can get any further treatments accepted.

Our relationship with DAFF QLD continues to be strong and Grant Bignell must be congratulated on his progress. I am excited about the mealy bug work as it is certainly a priority to growers from SA.

A number of changes are occurring with the structure of IAC's in some of the larger industries. Under instruction from DAFF, HAL has moved to de-conflict all IAC's over a certain levy level such that the PIB has less than 50 percent representation. It is yet to affect small industries like us as there is not the financial structure to support the changes. HAL has also instigated a full review of its whole operating structure and I am at this stage unsure of what ramifications this could have.

After many years of dedicated service as secretary of both the IAC and PAI, Jeanette Wilson has resigned. To meet the changing requirements from HAL, the IAC has appointed a contract independent person to undertake the secretariat. That person is Alison Fuss who many of you will know from her many years of work with APEC. We welcome Alison to the role.

Jeanette's retirement has allowed us to take a serious look at the structure and funding of the IAC. Recent changes in HAL's requirements for funding of IAC's has seen the proportion of funds supplied from the marketing levy increase, while those from matched R&D funds have reduced. Any movement of funds from the marketing program is a real negative to its operation. For this reason we have reduced the membership of the IAC from six to five. I do not believe this reduction will have any negative effect on IAC function while helping to keep a lid on overheads. The IAC is also looking at reducing face to face meetings to one per year with greater use of teleconferencing to further maximise efficiencies.

Finally, on behalf of the Committee, I would like to sincerely thank Jeanette for her many years of dedicated service. We will miss her and especially her famous persimmon cake.

### Industry Updates | Alison Fuss

### **New Look Newsletter**

PAI is moving into the 21<sup>st</sup> Century with its first ever electronic newsletter! As mentioned in the previous edition, PAI will no longer be sending out hard copies of Persimmon Press. We hope you like the new format which will allow for the addition of more and better quality photographs, as well as ease of distribution and reducing some of the overheads.

Your feedback on the new style newsletter would be much appreciated and will ensure that the formats used in its preparation deliver you an easy to navigate and professional source of information.

### Membership

PAI thanks those of you who continue to provide additional support to our industry by becoming members of our Peak Industry Body. PAI gives you a voice and also acts as a point of contact for government, researchers and other organisations interested in persimmons. For the small fee of \$82.50 (including GST), PAI would like to encourage other persimmon growers to sign up and reap the benefits of keeping in closer touch with the happenings in your industry.

### AGM

Many thanks to everyone who attended the Annual Levy Payers Meeting, AGM and Field Walk at the Maroochy Research Facility near Nambour Qld, on 31 August 2013. Special thanks also go to Anna-Louise Cross, our Industry Services Manager, Alena Swinbourne, our Marketing Manager, for their updates on their projects. An interesting and informative presentation was also given by Grant Bignell. All of these people provide considerable support to our industry.



Jenny Margetts was a special guest at the meeting. Jenny's role has been to develop a new Persimmon Industry Strategic Investment Plan (SIP) to guide industry investment over the next five years. During the meeting Jenny sought input into the plan from those present in order for it to provide a clear strategic direction for the persimmon industry and, in particular, the persimmon levy investment program managed through Horticulture Australia Limited (HAL). A draft report has been

provided later in the newsletter.

The farewell to Jeanette Wilson was a touching moment. Jeanette has done so much for PAI and the industry as a whole over so many years and there were several very sincere votes of thanks for her contribution. And of course the day would not have been complete without her "signature persimmon cake"! These are big shoes to fill and I am not making any promises of home baking!

### **Upcoming Events**



The International Society for Horticultural Science is proud to announce that August 2014 marks one hundred and fifty years since the first International Horticulture Congress was held in 1864 in Brussels. The 29th IHC, which will be held in Brisbane on 17-22 August 2014, is only the second IHC to be held in the southern hemisphere and, by all accounts, it will be a very successful Congress indeed.

The theme of the 2014 Congress is 'Horticulture – sustaining lives, livelihoods and landscapes' and has been chosen to highlight the unique potential of horticulture to address the key issues of our modern global society – health enhancement, poverty alleviation, increased food production and environmental sustainability. Horticulture and horticultural science matters to us all, whether we are involved in research, extension, education, or servicing of horticulture in a production, amenity, or servicing capacity.

An extensive program of plenary sessions, symposia, workshops, training schools and tours has been developed, covering a wide range of topics on all aspects of horticulture, arboriculture and medicinal and aromatic plants. You will have the opportunity and privilege of hearing from some leading experts in their fields from around the world.

Don't miss your opportunity to be a part of this outstanding horticultural event – <u>register</u> prior to **17 February 2014** for early bird savings or visit <u>www.ihc2014.org</u> for further information.

### Introducing the PAI Executive Team

**Nick Hobbs**, *PAI President and Persimmon IAC Chair*, runs a 55 acre orchard at Renmark in South Australia's Riverland, where he grows persimmons, avocados and mandarins. At the farm they pack and market both their persimmons and avocados. Nick remains confident in the future of both of these crops as demand and consumption continue to grow. So he is aiming at expanding his production over next few years as new plantings coming into cropping.

Nick is married with two children now at university who he says are still bleeding him dry! In addition Nick proclaims to be the "wrong side of fifty"!

**Brett Guthrey**, *PAI Vice-President and Persimmon IAC Member*, grows both astringent and non-astringent persimmons on a 100 acre farm at Cobbitty which is in the Sydney Basin and he has access to the Nepean River. He supplies the Sydney Markets and his orchard holds 3 retail stands at the Flemington Markets on Saturdays where they also sell their produce. They also do farm gate sales. Brett has a great interest in persimmons and has attended International Symposiums on persimmons in Korea and China. He has also travelled to Japan investigating the product.

In addition, Brett is involved with the NSW Farmers Association being the Chairman of the Camden Horticultural Branch, Hawkesbury District Council Representative to the NSWFA Horticultural Committee and sits on the Business, Economic and Trade Advisory Committee to forward Horticulture. Part of this involves representing Horticulture at many forums and at all levels of Government to better the industry.

Off farm his interests include family, fishing and socialising. And he admits that sometimes the priorities get mixed up!

**Stephen Jeffers**, *PAI Secretary and Persimmon IAC Member*, is a director of a family business which not only grows produce but is also involved in retail. Stephen manages a 40 acre orchard growing avocados and persimmons and operates a wholesale nursery producing persimmon trees for growers and the retail market. In addition he runs a retail fruit and vegetable market with shops in Yandina and Maroochydore. On the side he produces herbs and some seasonal vegetables for sale in the shops. Stephen's current challenge is trying to grow tomatoes without the use of insecticides – a big challenge with a dense population of fruit fly on his doorstep!

Stephen could not do all of these things if it wasn't for the wonderful support of his lovely wife, Robyn, who is expecting their fourth child in the middle of next year!

**Kent Andrew**, *PAI Executive Member*, is a third generation "horticulturalist" in the Riverland at Waikerie in South Australia, who has been growing primarily citrus, avocados, stone fruit for over thirty years - and persimmons since 1989. Over that time he has maintained an active involvement as a horticultural industry representative at State and National levels - serving on the Persimmon Australia Executive (and HAL's Industry Advisory Committee) including periods as vice, and President, and as a director of APEC Pty Ltd. The farm is now run by Kent's son Simon, who has reduced citrus plantings in favour of more intensive vegetable crops, including more water efficient "protective cropping". Persimmon plantings of Fuyu, Izu, and Saruga have been maintained along with newer plantings of Jiro. Kent believes the industry has a bright future, with ongoing growth prospects both locally and for export of premium fruit. He has, and continues to be passionate in supporting the importance of, and the efficient use of both R&D and marketing levies as cornerstones for the ongoing enhancement of our industry.

Kent has been a private pilot for many years and continues this as an "extracurricular" recreational activity.

**Rod Dalton**, *PAI Executive Member and Persimmon IAC Member*, is a partner, with wife Jeanette, in "Grantham Orchards" which is located in the Lockyer Valley just outside Grantham. They have owned the orchard (with their bank!) for 25 years. Initially they produced avocados, stone fruit and oranges. Due to market and environmental pressures we now produce persimmons, stone fruit and figs. Now the approximately 20ha orchard is all fully netted for birds, flying foxes and hail. Their focus with the stone fruit and figs is the domestic market whilst for persimmons the focus has been the export markets, S.E. Asia in particular.

Rod has been involved in horticultural industry leadership for many years including involvement with the stone fruit and avocado peak industry bodies. Currently he is the independent Chair of the Mango IAC.

**Tom Dunn**, *PAI Executive Member*, grew up in the UK on a rural property. Since arriving in Australia he has continued to expand his knowledge of agriculture. These days he calls Blackbutt in Queensland home, currently growing macadamias and 1,100 Jiro and Fuyu persimmon trees.

Tom's decision to grow persimmon was a new direction. Tall poles went into the ground, ready to support the trellis and netting which would soon follow. The small trees were planted and the protective netting was next. Automated grading followed as the crop increased yield. Today the farm employs several staff and produces a reliable product for the local and overseas market.

**Geoff Patteson**, *PAI Executive Member and Persimmon IAC Member*, farms near Kingaroy in Queensland. A series of droughts and wet harvests lead to a change from dryland, broad acre farming to horticultural crops in the mid-1980s. They have grown native cutflowers, low chill stonefruit, passionfruit and figs. Their first persimmons were planted in 1988 and they now grow some 14,000 trees on 22 ha, for domestic and export markets.

In addition to his involvement with PAI, Geoff was an inaugural shareholder of the Australian Persimmon Export Co and has been a director for many years. He is passionate about the potential of persimmons, believing that his farm is well located to produce fruit of good quality and timely with regard to supplying a range of markets. He is committed to the industry and heavily involved in industry affairs.

**Dr Alison Fuss** has joined the Persimmons Australia Inc. team, providing secretariat services to both PAI and the Persimmon IAC. Alison, originally from South Australia, completed an Agricultural Science degree majoring in horticulture at The University of Adelaide before undertaking a PhD investigating the flowering of two banksia species used as Australian native cut flowers. Subsequently, she spent 4 years as a research officer with the Department of Agriculture in Western Australia continuing her interest in Australian native cut flowers, working mostly on Geraldton Wax.

At the end of 1994, Alison moved to Toowoomba in SE Queensland and started working as a consultant. During this time she has worked closely with the native cutflower industry, collaborated on several export logistics projects, developed quality monitoring systems, coordinated horticultural expos and conferences, and provided payroll services to a lettuce grower, amongst other things.

In early 2006, Alison was appointed Executive Officer for the Australian Persimmon Export Co. This has increased her knowledge on persimmon production and the issues impacting on the industry – and her consumption of these delicious fruits! In this role as EO she has been successful in obtaining funding to take groups of persimmon growers to New Zealand to investigate persimmon production and to several destinations in South East Asia to meet with trade delegates and investigate future marketing opportunities. Whilst Alison is known to many of you already, she is looking forward to the opportunity to get to know more growers and put a face to those names on the database!

### **Review of Mildura Grower's Meeting** | Anna-Louise Cross

Persimmons Australia together with Horticulture Australia and Department of Agriculture, Fisheries and Forestry Queensland (DAFFQ) held a Grower workshop in Mildura on Thursday, 17 October 2013.

The afternoon was well attended with growers coming from as far away as Shepparton and of course Stephen Jeffers from the Sunshine Coast. The workshop included scientific presentations from DAFFQ researchers and an update on the development of the new Strategic Investment Plan.

Grant Bignell, research scientist from DAFFQ, discussed the latest findings from the levy funded project: Australian sweet persimmon industry development –Phase III, providing an update on pest and disease management, postharvest storage and potential new varieties for the industry. This was followed by an update on the management of mealy bug in persimmons, including current management options and new technologies for future research by Lara Senior, DAFFQ entomologist.

"Grant and Lara's presentations were a highlight for me. It was great to see everyone get involved in an open and interactive discussion. It's always good to know and learn from what others growers are doing," said Nick Hobbs.

An overview of the Persimmon industry's Strategic Investment Plan was also presented and discussed, with those in attendance happy with the direction of the plan. "It's imperative to have grower input into the strategic investment plan, after all it's their levy dollars we are investing," said Anna-Louise Cross, HAL. The next grower meeting will occur on 13 December 2013 at Maroochy Research Facility. We look forward to seeing you there!

## Have your say on future levy investment - What's proposed in the next Industry Strategic Investment Plan? | Jenny Margetts

Over recent months the development of a new Strategic Investment Plan to guide expenditure of industry levies has been taking place. The Persimmon Industry Advisory Committee (IAC) and a number of growers and researchers participated in an industry workshop at Nambour in August 2013 to consider the future of the industry, the strategies and action to see the businesses grow and prosper. Growers and other industry stakeholders were also asked to contribute to the development of the Plan via an industry survey that was circulated mid-year and comments were sought from growers at industry meeting held in Mildura in October 2013.

As a result a draft Strategic Investment Plan has been developed, so that growers (levy payers) and other industry stakeholders can further consider how levies might be invested over the next five years. This document is still a work-in-progress, so now is your opportunity to have a say if you would like to see changes made.

The overall objective of the Plan is to increase profitability of the production sector through greater productivity, improved quality, increased demand and providing the skills and information to support decision making and change in the industry.

Before the final Plan is completed a five year budget for levy expenditure (expected to be around \$50,000 per annum for marketing and \$180,000 per annum for R&D) and an accompanying investment analysis of the proposed expenditure will be undertaken to ensure that the mix of investment provides the best return for levy payers. Also strategies will be allocated against the Australian Governments Rural R&D priorities to ensure that the industry can demonstrate investment and achieve outcomes against these priorities.

We encourage you to take time to read the plan. If you have any comments, concerns or inclusions that you would like to see if the Plan or would like further information, please contact the consultant who is working with industry to develop this Plan.

### To provide feedback on the draft Plan please email, fax or phone, by Wednesday 15th January 2014:

- Jenny Margetts, Plant & Food Research Australia
- **B:** 07 3040 2250
- M: 0418 215 276(if calls not answered please leave a message with your details and your call will be returned)
- **F:** (07) 3319 6410
- E: jenny.margetts@plantandfood.com.au

### An Overview of the Persimmon Industry Strategic Investment Plan 2014 /15 – 2018/19 (DRAFT ONLY)

Strategic Intent:	To increase grower profitability by providing the knowledge required to improve industry productivity and by building consumer awareness and demand for Australian persimmons.			
Key Aspirations	<ul> <li>The Australian Persimmon industry aspires to improve the profitability of persimmon production businesses by:</li> <li>Maintaining industry R&amp;D and support services and improving on-farm productivity</li> <li>Increasing demand for Australian persimmons by: <ul> <li>Positioning and promoting Australian persimmons effectively,</li> <li>Delivering a product that meets customers' requirements and expectations; and</li> <li>Providing consistent supply throughout the season.</li> </ul> </li> </ul>			
Objective 1	Ensure profitable and consistent supply of Australian persimmons to meet consumer demand			
Strategies	<b>1.1</b> To ensure that the industry can profitably supply product that meets consumers expectation	<b>1.2</b> To have appropriate information systems and risk management strategies to secure supply		
Objective 2	To increase demand for Australian persimmons whilst achieving sustainable returns to growers			
Strategies	<b>2.1</b> Conduct research to support the positioning of Australian persimmons	<b>2.2</b> Drive demand in the persimmon market channels through effective market development and promotion		
Objective 3	To ensure the Australian persimmon industry is sufficiently resourced to support the advancement of the industry			
Strategies	<b>3.1</b> Facilitate adoption of R&D through effective extension and communication	<b>3.2</b> Ensure the industry has appropriate leadership, structures and resources to provide sound industry stewardship		

Full details of the Persimmon Industry Strategic Investment Plan objectives and strategies are provided on the Persimmon Australia website, <u>www.persimmonsaustralia.com.au</u>.

### HAL Forum | Brett Guthrey

Horticulture Australia's annual, 2-day Forum was held in Sydney on 22 and 23 November 2013 and Nick Hobbs and Brett Guthrey were amongst the record number of participants from across all of the horticultural industries.

"Global Outlook" was the theme for the first day, with Chris Russell from The New Inventors hosting proceedings. Senator Richard Colbeck, Parliamentary Secretary for Agriculture, gave the industry address which was followed by an impressive array of speakers covering topics such as getting the basics right (Costa Georgiadis, Gardening Australia), international case studies (including Chile and Israel), a focus on Asia with an emphasis on doing business in China, and update on various international R&D projects and their application to horticulture.

In the afternoon a Q&A style panel session on Market Sustainability was compered by ABC National Rural Reporter, Sarina Locke, fostered a lively discussion. The panel included Michael Croft from Australian Food Sovereignty Alliance, Greg Davis from Coles, Harry Debney from Costa, Paul Harker from Woolworths, Marcel Moodley from Costco and Tim Reid, Farmer of the Year and Rural Leader of the Year.

"The Forum was a great opportunity to network," said Brett Guthrey. "It was interesting to hear about the activities of other peak industry bodies and their position on broader Horticultural Industry issues, like the establishment of the Horticulture Taskforce due to commence on 1 January 2014."

### **RESEARCH & DEVELOPMENT**

### Life-cycle and seasonal activity of mealybug in persimmon | Dr Lara Senior, DAFF QLD

### Life-cycle

Three species of mealybug are pests of persimmon in Australia: longtailed mealybug (widely distributed), citrus mealybug (QLD/northern NSW) and citrophilous mealybug (Riverland and Sunraysia regions).

Citrus and citrophilous mealybugs produce an egg sac, whereas longtailed mealybugs produce live young, deposited under the female's body. The first instar nymph (the 'crawler') is the most mobile stage. It moves away from the female to find a feeding site. Nymphs moult several times before reaching the adult stage. Adult females look like larger versions of the nymphs, whereas the males have a pupal stage, emerging as small, winged adults.

The length of the life-cycle (egg to adult) is dependent on species and temperature. It can be as little as 6 weeks in summer, and up to 4 months in winter. In warm areas generations begin to overlap as the season progresses, whereas in cooler regions the generations can remain broadly synchronised.

### Seasonal activity

There is a lack of information on seasonal activity of mealybug in persimmon in Australia. Current understanding is largely based on research carried out by Bob Nissen, working on persimmon in Vietnam and south east Queensland (ACIAR Project AGB 2006/066 'Improving productivity and fruit quality of sweet persimmon in Vietnam and Australia') and on earlier work on citrus in Portugal (Franco, 1992).



Figure 1. Overwintering mealybug at base of trunk. (*Photo by Bob Nissen*)

produce the first generation of crawlers, which disperse to new feeding sites (Figure 3). At this time of year nymphs are found on the leaves, and eggproducing adults in more sheltered spots at the bottom of shoots and leaf stems.

At fruit set mealybugs move to the fruit, often sheltering under the calyx. There is a rapid increase in population as the fruit develops, peaking as the fruit reaches maturity.

An understanding of the life-cycle and seasonal activity of mealybug is important for effective

Mealybugs overwinter as slowly developing juveniles, reaching the adult stage in late winter / early spring. Overwintering insects are found in sheltered sites, e.g. in crevices in the bark on the trunk and base of large branches, in the top layer of soil at the base of the trunk, or on the roots (Figure 1). Mealybugs have also been observed sheltering in the crotches of trees amongst frass produced by borers (Figure 2).

As new growth appears in the spring, overwintering adults settle at the bottom of young shoots and



Figure 2. Mealybug sheltering in frass produced by borers. (Photo by Grant Bignell)

monitoring and good control. Many insecticides are much more effective against specific stages. For instance Applaud (buprofezin) targets only immature stages, and many contact insecticides are more effective against the younger stages, particularly the dispersing crawlers. Crawlers are more active than older stages and therefore more likely to be exposed to spray, and have yet to develop the waxy coating that protects the older stages.



Figure 3. Mealybug at base of new shoot. (Photo by Bob Nissen)

A project proposed by Grant Bignell, DAFF QLD, hopes to gain further understanding of mealybug seasonal activity in different persimmon growing regions in Australia, using this information to determine optimum timing of insecticide application.

### Reference

Franco, JC (1992) Citrus phenology as a basis to study the population dynamics of the citrus mealybug complex in Portugal. International citrus congress (7th: 1992: Acireale, Italy), Acireale, Italy, International Society of Citriculture 3: 929-930

For more information contact Lara Senior, Department of Agriculture, Fisheries and Forestry (DAFF) by phone 0427 600 744 or email <u>lara.senior@daff.qld.gov.au</u>.

### Persimmon defects, blemishes and disorders | Grant Bignell, David Bruun and Alan George

Persimmon fruit are particularly susceptible to blemishing, which is the major cause of non-marketability, followed by factors such as fruit size. In the past, the percentage of marketable fruit has been reduced by as much as 60%. This is due to blemish marks (wind rub, water marks, petal adherence marks, sunburn, spots and speckles), calyx separation and apex cracking. The causes of blemishing are varied including:

- environmental (e.g. sunburn)
- nutritional (e.g. green blotch)
- pests (e.g. thrip)
- diseases (e.g. anthracnose)
- physiological (e.g. calyx cavity)
- mechanical (e.g. wire rub)

The major blemishes identified in persimmons in Australia are:

- wind rub
- water marks
- anthracnose
- sunburn



Picture 1. Leaves have been removed around the fruit to reduce leaf to fruit contact.

The seasonal incidence of blemishing (excluding sunburn) varies considerably between regions and seasons with a large proportion of fruit affected with more than one type of blemish. Blemishing severely reduces the percentage of fruit suitable for exporting. Consequently, considerable research effort has been directed to reducing their incidence by better orchard management.

### Current grade standards for blemish

The current FreshSpec grade standards used by industry were set many years ago. Since then most growers have improved their orchard management practices. In our surveys, some growers have suggested that the maximum blemish levels of 2 sq. cm for domestic markets and 1 sq. cm for exports are currently set too high. They suggest that new blemish standards could be set at a maximum of 0.5 sq. cm for both domestic and export markets.

### Orchard management methods to reduce blemishing

Orchard management practices can have a big impact on reducing blemishing. Some of the more important practices that can be used to reduce blemish are described below.

### **Training systems**

Persimmon trees are best trained onto trellising systems such as open V and palmette. An open canopy reduces shading and maximises fruit temperatures throughout the canopy. New Zealand studies (Jackman et al., 2003) have shown that open canopies increase air flow and sun exposure of fruit, consequently reducing "black blotch" (black marking of the fruit). This generally leads to a significant increase in pack-out rates, particularly in seasons with rain during harvest. An additional benefit of increased exposure of fruit is reduction in external disorders following long-term storage (>10-12 weeks).

### Summer pruning

New Zealand studies by Jackman et al. (2003) showed that orchards which maintained an open canopy by summer pruning in December and February had 5 to 10 % higher export pack-outs before heavy rain, and 10 to 15 % higher after rain than orchards that had omitted summer pruning. Summer pruning removes unwanted shoots and shortens shoots that have second-flushed back to the base of that second flush.

### Leaf plucking (thinning)

Excessive watermarking of fruit caused by prolonged periods of rainfall during harvest is, unfortunately, an annual reality for many persimmon growing regions. To combat these significant drops in pack-out, most growers now carry out routine "leaf thinning" before harvest. The aim is to remove any leaves that are directly in contact with fruit (Picture 1), and if possible, leaves which are close to the fruit. The theory behind this practice is to change the microclimate around the fruit so that fruit can dry as rapidly as possible. In addition, it results in good skin development (no micro-cracks and good wax layer development).

### **Reflective mulch**

Extenday<sup>™</sup> reflective mulch is a product that increases light intensity, particularly in the lower canopy (Picture 2). We have shown in several trials that reflective mulch can increase fruit weight and size in persimmon. The use of reflective mulch results in increased maximum and mean daily air temperatures within the canopy compared with grass or bare soil under the trees. In addition, it reflects light up into the canopy. Mulches tend to advance maturity by increasing colouration, but also reduce the variability in colouration of fruit, especially in lower canopy locations. We have also observed that reflective mulching reduces the expression of blemishing due to black blotch (Picture 3).



Picture 2. Reflective mulch improves the bloom on fruit and produces more uniform colour development

### **Pre-conditioning**

Pre-conditioning is related to holding fruit at near or above ambient temperatures for 24-48 hours prior to cool storage. Pre-conditioning appears to stimulate genes and activate heat shock proteins (HSPs) that increase the fruit's cold tolerances at low temperatures. Similar to reflective mulch, pre-conditioning of fruit after harvest can reduce the expression of some blemish symptoms during and particularly after removal from cool storage.



Picture 3. Left: fruit from trees with no reflective mulch. Right: fruit from trees with reflective mulch. Note reduction in blemish expression.

### Types of blemishing

Over 40 different types of blemishing have been identified and documented (Table 1). There are still many other types of blemishing which are yet to be correctly identified.

### References

Jackman, R., Lupton, T., Coppock, P., Mowat, A. and Woolf, A. (2003). Best practice guide for improving persimmon taste. Ministry of Agriculture and Forestry, New Zealand.

*For more information contact Grant Bignell, Department of Agriculture, Fisheries and Forestry (DAFF) by phone (07) 5453 5947 or email grant.bignell@daff.qld.gov.au*.

# Contact your executive if you have any questions or issues you would like to have addressed.

Class of blemish	Type of blemish	Severity	Tolerance level (Class 1)	
			Domestic	Export
Pest	Mealybug	Major	Small numbers	Nil
	Qld and Med fly	Major	Nil	Nil
	Yellow Peach Moth	Major	Nil	Nil
	Fruit spotting bug	Major	Nil	Nil
	Thrips	Minor	2 sq. cm	1 sq. cm
	Mites	Minor	2 sq. cm	1 sq. cm
	Fruit piercing moth	Minor	Nil	Nil
	Caterpillar	Minor	Slight	Nil
Disease	Anthracnose	Major	Slight	Nil
	Grey Mould	Major	Slight	Nil
	Sooty Mould	Major	Slight	Nil
	Black spot	Major	Nil	Nil
	Sooty blotch	Major	Nil	Nil
	Calyx browning	Minor	Slight	Slight
Mechanical	Wind rub	Major	2 sq. cm	1 sq. cm
	Wire rub	Major	Nil	Nil
	Bruising	Major	Nil	Nil
	Bird scratches	Minor	2 sq. cm	1 sq. cm
	Puncture rots	Minor	Nil	Nil
	Polishing damage	Minor	2 sq. cm	1 sq. cm
Environmental	Sunburn	Major	Slight	Slight
	Water marks	Major	2 sq. cm	1 sq. cm
	Humidity marks	Major	2 sq. cm	1 sq. cm
	Uneven colouring	Major	Slight	Slight
	Fruit creasing	Minor	Slight	Slight
	Internal staining	Minor	Slight	Slight
	Wrinkle skin	Minor	Nil	Nil
	Spray damage	Minor	Nil	Nil
Physiological	Calyx cavity	Major	Slight	Nil
	Apex cracking	Minor	Slight	Nil
	Basal cracking	Minor	Slight	Nil
	Petal adherence	Minor	Slight	Slight
	Calyx adherence	Minor	Slight	Slight
	Flesh browning	Minor	Slight	Slight
	Carpelloidy	Minor	Slight	Slight
	Stamen spikes	Minor	Acceptable	Acceptable
Nutritional	Green blotch	Minor	Slight	Slight

TABLE 1. Various classes and types of blemishing and their suggested market tolerance levels.

\*The current maximum limits for blemish per fruit are set at 1sq. cm for export markets and 2 sq. cm for domestic markets. These are the maximum additive areas for all types of blemish

### MARKETING

### Marketing Program Update | Alena Swinbourne, Horticulture Australia

In April 2013, Persimmons Australia commissioned Sprout Research to conduct online consumer research to determine the current knowledge levels that exist for Australian Persimmons. In particular, the research aimed to:

- 1. Measure category and varietal awareness of persimmons.
- Better understand consumer knowledge of persimmons usage and health benefits.
- 3. Determine consumer perception of where persimmons fit within the fresh fruit category.
- 4. Better understand the purchase triggers and barriers.
- 5. Measure how frequently consumers are buying persimmons and determine what has to be achieved to increase purchase frequency.
- 6. Measuring appeal of the PR campaign amongst consumers.
- 7. Help with the development of the next 3-year strategic plan.



The results proved very interesting. It showed that currently, familiarity with persimmons as a fruit is low with 48% claiming that they did not know anything about the fruit and 71% being unsure of their seasonality.

We also looked into the purchase frequency, that is, how often people purchased the fruit, these results certainly gave us something to work on with almost 80% claiming they did not purchase persimmons last season, however those that did usually bought on impulse, meaning that consumers usually decide to purchase while they are in the supermarket or greengrocer.

This allows us to have a huge influence on their purchase decision, and by utilising eye-catching point of sale material we should be able to get their attention. This was supported further by consumers requesting more information in store about the fruit, in particular the health benefits.

The research results have been used to develop a strong marketing plan for the industry moving forward, key components of this is keeping the relationship going with Ambassador Poh Ling Yeow. This next year, we will expand on the activities done with Poh, utilising social media to help get our main messages across.

Also being conducted next year is an in-store merchandising project where we will directly speak with key retailers in Brisbane and Sydney, ensuring the point of sale material is correctly displayed and also communicating the best ways for them to display and promote Australian Persimmons in their stores. A separate business case document has been developed and will be used to communicate these messages to the retailers. This next year is going to be an exciting one for the industry. If you have any questions please don't hesitate to contact your marketing manager, Alena Swinbourne, by phone (02) 8295 2335 or email alena.swinbourne@horticulture.com.au.

### Update on Exporting to Thailand | Rod Dalton

The Thailand market has been an important market for Australian persimmons for many years. The market has been prepared to pay a premium for large good quality fruit and significant volumes of Australia's production of top quality fruit has gone to Thailand in the past, either directly from pack houses or via the central markets, where the fruit was sourced by exporters and shipped with the growers normally unaware of where their fruit was going.

The recent changes to the access protocols for Thailand will end this trade. Cold disinfestation is the only protocol accepted by Thailand.

"As a grower, who has packed for Thailand, I will not be risking my persimmons in a cold disinfestation process," said Rod Dalton.

"Persimmons are just too variable in their response to cold, particularly the Jiro variety."

"We were advised that an irradiation protocol would be acceptable, however to date there has been no provision for this."

Research has shown that an irradiation treatment will be much lower risk than cold and thus should be workable.

"Until the access to Thailand changes the large, good quality fruit we produce will predominantly have to be consumed domestically," Rod surmised.

"Unfortunately I doubt the domestic market will pay the premium that the Thailand market did!"

## **NEW MEMBERS NEEDED!**

Do you know a grower who might wish to become a member?

Get them to contact Persimmons Australia Inc. P: (07) 4637 9925 E: <u>amfuss@bigpond.net.au</u>

### HAL UPDATES

### **HAL Review**

By now you will all be aware that the HAL Review is underway. An update of the status of the Review will be presented at the November Forum by the independent reviewer, ACIL Allen. The presentation will include an overview of ACIL Allen's stakeholder engagement plan, which is part of the Review process.

Comments, submissions and discussions on the Review should not be directed to HAL, HAL employees or Board Directors. The Review process is independent of HAL and so those wishing to comment will need to contact ACIL Allen directly, as advised in their stakeholder engagement plan.

The findings and recommendations of the Review are scheduled to be available in time for the May 2014 Forum. Provided the report has been published within this timeframe, HAL will devote the May Forum to discussing and workshopping the recommendations with Members.

### Stakeholder survey

Currie Communications has now finished collecting surveys submitted by Members and other stakeholders and are currently preparing a report of the survey outcomes.

The survey is designed to provide an assessment of:

- perceived outcomes of the HAL investment by stakeholders, including how widely HAL funded R&D is being distributed;
- how well stakeholders understand the HAL mechanism and HAL's roles and responsibilities;
- HAL's strategic and organisational performance; and
- the strength of stakeholder relationships with HAL.

The results of the stakeholder survey are expected to be considered by the Board prior to the end of the year. Some preliminary insights found so far include:

- there is an overall positive sentiment towards HAL;
- HAL serves a need and provides a service that would otherwise be unavailable to smaller industries;
- there is a desire for HAL to remain focused on its core activities (the effective and efficient implementation of levy funds);
- sector advocacy is not HAL's role, although a small number of stakeholders see advocacy and industry representation as a HAL role;
- there is a view that HAL is becoming too bureaucratic and needs to take a more flexible approach; and
- a dichotomy exists between HAL's industry stakeholders and its government stakeholders – the former wanting a bottom-up industry-focused approach, with the latter wanting strategy to be delivered from the top down.

Further details of the outcomes of the survey will be provided once they are available.

Article taken from "HAL Update from John Lloyd", Thursday 7 November 2013.

### Meet Your Team Support Manager | Anna-Louise Cross

Anna-Louise Cross joined HAL in September 2012 and took over the Persimmon, Chestnut and Custard Apple portfolios from Astrid Hughes in May 2013.

Prior to joining HAL, Anna-Louise worked at Queensland Dairyfarmers Association as an Industry Development Officer.

"I really enjoyed working directly with farmers and helping them implement positive change which aimed at increasing their profits."



Anna-Louise's love of agriculture has been instilled from an early age, having grown up on a Cotton farm in Goondiwindi and graduating from the University of New England with a Bachelor of Agriculture and Law. She is passionate about all things ag!

"Working with HAL has provided me with opportunities to develop my skills further and

increase my knowledge of horticulture industries."

"I am excited to be working with Persimmons. Having visited a number of farms and working with PAI, I can see that the industry is dynamic and enthusiastic about its future. I'm especially enjoying the development of the new industry Strategic Investment Plan."

Before, Anna-Louise joined HAL she had very little knowledge about the industry and sheepishly admits she had never tried a persimmon before - like the majority of the respondents in the consumer research survey.

"However I am now pleased to tell my friends that they are delicious. I am a big fan of the chicken, walnut and persimmon salad recipe!"

## DON'T FORGET TO VISIT THE PERSIMMONS AUSTRALIA WEBSITE AT

### GROWING

### From the Farms | PAI Grower Members

### From SE Queensland

We have had a very dry season so far in SE Queensland but with good irrigation supplies there is potential for a good crop in 2014. Our Izu and Fuyu have good fruit loads and the Jiro should be an average crop. In fact all across Queensland persimmon crops are looking good which is encouraging as 2013 was an "off" year for a lot of growers.

There is no doubt that if you have access to good irrigation in a dry season then you can produce good quality fruit. Last year the intense heat lead to better quality and shelf life as the fruit were more like cricket balls. Persimmons don't like cool, cloudy weather and heaps of rain as these cause the fruit to be big but they are too "pumped up". However the heavy fruit set now means that we are busy thinning! And with the dollar back around 91cents US it is making export far more attractive than in recent years. Fingers crossed everything keeps heading in the right direction. *Best wishes, Geoff Patteson* 

### **From South Australia**

The southern winter will be remembered as one that was not very cold and hence a lack of chilling. Crops requiring high chill units have struggled to set fruit with many cherry and apricot crops being very light. Fortunately this is not the case for persimmon with fruit sets being good.

The warm winter and September have resulted in an early start with persimmon crops looking to be about ten days early at this stage. October and November have been cool so I am unsure how early harvest will be. The biggest issue this spring has been the wind. We have had many windy days with a couple of severe events. One in particular produced winds of 110 km per hour and did significant damage to the new shoots stripping many from the trees. This has left the orchard looking tattered and battered but most of the wind occurred before fruit set so at this stage marking of fruit does not look to be any more severe than normal. Will the loss of photosynthetic area result in smaller fruit at harvest?? Do not know but I am sure to find out. *Cheers, Nick Hobbs* 

### From NSW

In NSW we have had a very dry lead up to summer with some weird weather thrown in. Just a day after the devastating bushfires around the Blue Mountains (and other parts of the state) many areas received frost. This led to a lot of damage, mainly on grapes and cherries in horticulture but also for many grain crops. Thankfully persimmon damage appears minimal. Heavy flowering appears the norm and at this time we are "in drop". Water storage appeared to be an issue but as I type it's raining on top of 70mm received over the last week. As always it is a case of wait and see! Wishing all a perfect season. *Regards, Brett Guthrey.* 

### **From Victoria**

Persimmon production in Victoria has been fairly stable over the past 6-8 years, the main variation stemming from crop seasonality which has been quite unpredictable. Our own production dropped to 51% in 2012, then even further to 23% in 2013. The alternate year bearing influence was not to be! We have just finished flower thinning our 2014 crop and are quite happy at this stage with what looks like an 80% crop, based on our target of 30 tonnes per hectare. Pests and diseases are rarely a problem in our part of Victoria although we have seen an increase in mealybug over the past 2 seasons.

Wholesale market prices over recent years have been disappointing with several volume growers happy to move lots of small fruit at quite low prices, setting a very low price benchmark. Over the same period however, supermarket interest has increased, as has the return to growers of premium fruit who can comply with the high and constant demands of these tough customers. Our YV Fresh marketing business is currently undergoing our annual 3 day audit, one of the costly compliance issues.

There has been an increase in production in the northern areas of Victoria where they are showing they can produce very nice fruit and get to the market a little earlier than us southerners. There is room for higher production of Persimmons as long as fruit is high quality and the marketing is well managed. *Kind regards, Mark Chapman* 

### Your Orchard .... What to Do During the Coming Months | DAFF Horticulturalists

• Peak water need.

December

January

Februarv

March

April

May

- Apply 60% of annual N, P and K fertiliser through the period from late December to early January.
- Continue monitoring for spotting bug and yellow peach moth damage and for mealybugs and thrips. Treat as required.
- For early bearing varieties, start monitoring for fruit fly with traps. Apply bait sprays as required.
- Continue protective sprays, using a registered chemical, for leaf spot at 14 day intervals until about mid-December.
- Summer pruning (SA and Victoria) to improve light penetration and stop excessive vegetative growth.
- Leaf pluck around developing fruit from early December to help prevent rub damage (except in areas where sunburn problems occur).
- Peak water need.
- Complete application of 60% of annual N, P and K if not finished in December.
- Continue monitoring for spotting bug and yellow peach moth damage and for mealybugs and thrips. Treat as required.
- For early bearing varieties start weekly bait sprays or fortnightly cover sprays (see below) for fruit fly.
- For mid-season and late bearing varieties start monitoring for fruit fly with traps. Apply bait sprays as required.
- If a mating disruption strategy is used to control clearwing moth put out a second round of pheromone wicks.
- Begin to decrease water from peak in January.
- No nitrogen during this period.
- Apply weekly bait sprays or fortnightly cover sprays for fruit fly.
- Monitoring for yellow peach moth damage and for mealybugs and thrips. Treat as required.
- Spray trunks and soil around trunks for ants.
- Continue to decrease water.
- No nitrogen during this period.
- Best time for leaf and soil analysis (6 weeks before intended harvest)
- Continue weekly bait sprays or fortnightly cover sprays for fruit fly until harvest.
- Apply fungicides for leaf spot if needed.
- Monitoring for yellow peach moth damage and for mealybugs and thrips. Treat as required.
- Commence harvest for early varieties. Harvest fruit when full coloured and when sugar levels reach a Brix level suitable for your intended market. Use a refractometer to check Brix level.
- Water needs start to decline until after harvest.
- Apply 20% of annual N, P and K fertiliser requirement to maintain leaf health.
- Apply liming materials and trace elements as indicated by leaf and soil analysis results.
- Weekly bait sprays or fortnightly cover sprays for fruit fly until harvest.
- Apply fungicides for leaf spot if needed.
- Check for clearwing moth activity apply insecticide if needed.
- Monitoring for yellow peach moth damage and for mealybugs and thrips. Treat as required.
- Harvest fruit when full coloured and when sugar levels reach a Brix level suitable for your intended market. Use a refractometer to check Brix level.
- Apply only enough water to prevent excessive water stress once harvesting is complete.
- Apply fungicides for leaf spot if needed.
- Weekly bait sprays or fortnightly cover sprays for fruit fly until harvest.
- Check for clearwing moth activity apply insecticide if needed.
- No fertilising is normally necessary, though small amounts of nitrogen may be applied to replace losses from any heavy leaching rains.
- Regularly check for signs of clearwing moth borer damage. If detected, scrape clean infested areas and seal the wounds with plastic paint or a tree sealer.

- Minimal watering required at this time.
- No fertilising is necessary during this period.
- Regularly check for signs of clearwing moth borer damage. If detected, scrape clean infested areas and seal the wounds with plastic paint or a tree sealer.

*Note: Fertiliser recommendations are taken from the 'Sweet persimmon grower's handbook'.* For detailed information on persimmon management refer to the **'Sweet persimmon grower's handbook'** (published 2005 by the Queensland DEEDI) which is available online <a href="http://era.deedi.qld.gov.au/2210/">http://era.deedi.qld.gov.au/2210/</a>.

For more information on managing your orchard contact Department of Agriculture, Fisheries and Forestry's Research Scientist, Grant Bignell at Maroochy Research Station near Nambour in Queensland by **P**: (07) 5453 5947 or **E**: grant.bignell@daff.qld.gov.au

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### **Publishing Details**

*Persimmon Press* is published using persimmon grower levies which are matched by the Australian Government through Horticulture Australia Limited.

*Persimmon Press* is the official newsletter of Persimmons Australia Inc. and is arranged and produced for Persimmons Australia Inc. by Dr Alison Fuss.

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