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Disclaimer
The views, opinions, claims and statements made in this publication are those of the authors and are not, by publication, necessarily those of the Editor or Persimmons Australia.
Over the last 12 months your committee has continued to work to enhance the future for both it’s members and all grower industry levy payers.

**Current Industry Status**
The Industry continues to grow only slightly, with the potential in the world market remaining large. Thankfully the Australian market continues to grow, even if only very slowly, arguably maintaining market prices in the face of declining export volumes resulting in an increase volume back on to the local market. Our continuing marketing program to grow Australian consumer demand, and a sustained R&D program to enhance production and storage performance should give the industry confidence to grow over the next 5-10 years.

**Industry Information**
I again reiterate, we genuinely need greater industry statistics to make best possible decisions for future levy expenditure, and I continue to appeal to members to assist in this regard

**Marketing Protocols**
Earlier this year I was pleased to be able to assist liaison and coordination with Cameron Tree for Biosecurity Queensland to achieve a pre harvest treatment protocol to ensure Queensland fruit could be marketed in Victoria. There were some very tight time lines developing and I thank Geoff for his significant contributions to make this happen.

Similarly I am pleased to report the process that we engaged in with Glen Bowman of Plant Biosecurity, DAFF in organising (in conjunction with the pome and kiwi fruit industries) to coordinate a Thailand government representatives inspection across a number of states – which will hopefully ensure a protocol can be maintained for export of persimmons from at least Queensland to Thailand.

**Minor Use permits**
This issue has and continues to be an ongoing challenge for small horticultural industries like ours where chemical registration can be very limited. Last year, in conjunction with our HAL R and D project “Minor use Permits for the Persimmon Industry” we engaged and worked with Agware Consulting Pty Ltd, to prioritise our industries need for the future. This has included a “SARS” report (Strategic Agricultural

Chemical Review Process) This process has continued over the past year. Specifically, in relation to permits that were either up for renewal, or essential for our industry (particularly with the withdrawal of Dimethoate- to enable Queensland trade into Victoria) – a new permit was added for Trichlorfon – for fruit fly as a replacement strategy for the loss of Dimethoate. An application for a permit for Maldison is also almost complete as a back up option to Trichlorfon as it is limited in the number of applications per season

**Other Interstate Quarantine Issues**
With the withdrawal of Dimethoate, the above minor use permits have certainly assisted the process for northern fruit to go to Victorian markets. In recent months the Victorian government in particular (and NSW government) have moved down the path to declaring Queensland fruit fly endemic in Victoria –

(Continued on page 4)
with possibly only trying to maintain an exclusion zone around the Sunraysia region. This will likely mean there may not be a continuing ICA requirement for access into Victoria from the northern states.

With pioneering work we commenced with DEEDI on the use of irradiation, more than three years ago, we continue to liaise “work in progress”- noting the overall process has over recent months not proceeded as we had planned or expected. It is also relevant that DAFF is liaising with Thailand officials to use irradiation as a replacement or alternative to cold sterilization for export to Thailand

Industry Strategic Planning
Your executive, as part of its allied responsibilities, and consistent with the Industry Advisory Committee role, has continued to ensure its current “strategic plan” is updated, responding to the needs of its growers, so that levy funds are expended appropriately, and priorities are clearly focused.

Joint HAL Relationship and Operations
Industry levy funded R&D and Marketing programs, are appropriately reported in detail in the 2011/12 HAL Industry reports, and presented to the Levy Payers meeting on the same day as our AGM.

Our current research programs are predominantly being carried out at Queensland DEEDI’s research station at Nambour. With changing QDPI staff structures, we last year welcomed, Grant Bignall in his role for carrying out much of the project work for the current program.- I thank Grant for providing an enthusiastic and professional commitment which has been genuinely appreciated by all associated with his work. Longstanding persimmon researcher at Nambour, Alan George who retired from DEEDI last year has also been helpful in providing specialist support on a contract basis. I Thank DEEDI at Nambour for continuing co-operation with our industry.

HAL has developed a new or modified marketing service/arrangements which we are now conforming to - effectively operating on the principles of cost recovery and user pays. To date, I don’t believe we have been seriously disadvantaged, but I expect the committee will closely monitor this new process over the coming year.

With respect to this year’s marketing program, It was a pleasure for me to liaise with Crossman Communications and particularly to personally meet with Poh Ling Yeow, It was great to appreciate her enthusiasm for our Industry. At the “Bigger Picture” level, PA, as a shareholder member of HAL, I believe our joint relationship has been sound and professional. However it has been indicated strongly to all HAL members, that DAFF is still very concerned at the unsatisfactory level of transparency and integrity that has been occurring particularly in relation to the awarding of projects, and in relation to public advice to members of Industries investment plans and priorities. Although this has resulted from the operation of a minority of industries it will mean, even to industries at our level, a greater degree of scrutiny of our actions and performance of our IAC’s will take place.

The further result of this is that DAFF is now looking at reviewing the Statutory Funding Agreement with HAL – any changes would have major implications for all HAL members. Senior Industry representatives are working with HAL to prepare a case to counter any impact from this. Also, a member sub-committee has been formed to review the constitution of HAL, with options and possible changes to be considered in the coming year.

Thanks
Your committee over the last year I believe has worked hard, aiming to add value to our Industry. I again thank Jeanette for her dependable administrative work, Nick for his special work on minor use permits and sharing some of my responsibilities, Stephen for always being available, particularly at Nambour, for that local attention, Geoff for his experienced advice, and Colin for his fresh professional views. I particularly offer special thanks to Colin, as he has indicated he will not be seeking re-election, he has been a valuable contributor.

I also thank our HAL Industry manager Astrid Hughes for her dedicated and professional support. She is indeed a valuable asset and resource to our Industry. Similarly I recognise the valuable contributions from HAL’s marketing staff Elissa Tseng and we welcome back Alena Swinbourne to her former marketing support role with us.

As I will not be seeking re-election as your president, I thank the committee, growers and Industry associates for their confidence and the opportunity to lead and serve with, and for, such a cohesive and committed industry network. I look forward to being able to continue to contribute in a useful way into the future and to another progressive year ahead for our Industry.
A SPECIAL THANK YOU
To everyone who attended the Levy Payers, AGM and Field Day we would like you to know that your Executive appreciates your ongoing support. To Astrid, our Industry Services Manager, a special thanks for all the things she has provided and support that she has given me during the year. A big thank you to Grant Bignell and David Bruun for their continuing research into the Persimmon Industry.

To those who didn’t attend you missed out on a fabulous barbecue thanks to David Wilson and of course the “signature persimmon cake” always appreciated by growers.

We had a great field trip to Ian Graham’s property Mirian, what a dry sense of humour!! Lots of laughs re labour, treatment of trees, wholesalers etc. Thank you especially for doing this Ian. It was great to wander through his orchards and of course extremely social.

Your Executive
The Executive has changed this year and will work hard for you during the forthcoming year. Nick Hobbs is our new President/Chair and Stephen Jeffers our new Vice President. Brett Guthrey, from Cobbitty, south of Sydney has joined the team. Colin Temby has retired and Kent Andrew has stepped down due to other commitments but is remaining on the committee with Geoff Patteson.

As you are aware we hold two meetings per year with Horticulture Australia and if there is anything that you would like us to address please let us know. All the Executive Members have their particulars are on the inside of the cover of the Persimmon Press.

Forthcoming meetings
HAL Forum Nick and I will be attending the HAL forum and AGM in Sydney on 21st and 22nd of November.

Our Next Industry Meetings will be held in conjunction with our February Advisory Committee meeting on 7th February 2013. This will also be our opportunity to work with Alena at the commencement of the Persimmon Season’. Our meeting will be with Alena Swinbourne, our Marketing Manager and Astrid Hughes, our HAL Manager.

While in Sydney this November Nick and I will take the opportunity to speak with the Agents and Wholesalers at the Flemington markets

Can we help!!?
If you have any considerations or ideas and you think your Executive can help, please get in touch so your thoughts can be relayed to the Executive for further discussion. Our Research and Development Project is ongoing and our Public Relations and Promotion/Marketing Project will commence the second week in February. We have retained the services of Poh for this forthcoming marketing season and this is pretty exciting and I believe she has raised the awareness level of persimmons hugely. Thank you to Elisa Tseng for originally coming up with this idea and putting it into practice.

Alena is back from Maternity Leave and has resumed her role as our Marketing Manager and we welcome her to our team once again.

MEMBERSHIPS NEEDED
Our membership is diminishing - the Executive works on your behalf because they feel strongly about our industry. There are times when we will need to get in touch with our members, insurance and other unforeseen expenses. If you are not a financial member please seriously consider joining us. The fee is $82.50 per year. Thank You

Wine tasting
At the conclusion of our IAC meeting we were able to have a little persimmon wine tasting. The first bottle was from a customer who had taken fruit from Rossmount two seasons ago, maybe it could remove varnish – those who threw the remainder in the garden shall be responsible for replacing the plants that they killed. The second bottle was much nicer and was given to Grant by a Korean Researcher, thank you for sharing this bottle, I still have half a bottle left – it isn’t quite Grange, but there is no doubt grapes make better wine.

REQUEST Please watch for any persimmon publicity during this next season and please let us know if it is in any of the journals, magazines or newspapers that you read. I have been archiving everything that I receive.

(Continued on page 6)
Our orchard
Well Queensland is incredibly dry, different for a change, and we are afraid to mow in case we kill the grass. It is time for us to start irrigating for the season.
The leaves of our trees of course are absolutely gorgeous and soft and pale green. This is a reminder that it is time for us to fold up the easy chairs. It is so dry that I know that so far there definitely is a mango crop this year. – We are coming into my favourite time of the Year when there is so much fruit.
Good harvesting folks

HAL Update

Horticulture: The Next Generation
The Across Industry leadership program "Horticulture: The Next Generation" is now offering 100 people the opportunity to conduct two online development courses completely free of charge. One hundred positions will be made available on a first-come, first-serve basis for those who work within Australia’s 40 horticulture industries. The courses have been selected from the international consulting company, Mindshop, to improve the skills and strategic planning and leadership capacity of participants.

Successful applicants will be able to choose two courses from a list of eight, including:
1. Business Improvement Process
2. Continuous Improvement Process
3. Marketing and Sales Process
4. Sales Performance
5. Self Confidence
6. Personal Improvement Process
7. Team Development Process
8. Leadership Development Process

This is a unique opportunity to build the next generation of leadership across the horticulture industry, so your support would be greatly appreciated.

To assist you to promote this program, and for more information, please forward this email throughout your communication channels and download the promotional flyer.

To apply for the program, applicants will be required to submit an expression of interest via this link no later than 5:00pm, 31 October 2012.

DAA response to draft National Food Plan
The Department of Agriculture, Fisheries and Forestry recently released its draft national food plan and invited comment from the public. The Dietitians Association of Australia (DAA) has prepared a draft response to the plan, which it has made available to HAL Members under the Across Industry Partnership with the DAA.

Please click here to download the DAA’s draft response to the National Food Plan as well as the media release distributed by the DAA.

If you have any queries or comments regarding the DAA’s submission, please feel free to contact Luke Westley on luke.westley@horticulture.com.au.

Jane Wightman wins HAL Employee Service Excellence Award
Jane Wightman, Industry Services Manager at HAL, is the winner of HAL’s Employee Service Excellence Award presented at our September Staff Forum. Jane has been commended by Members for her competence, passion and dedication in always going the extra mile to meet the needs of our Members.

Thank you to all our Members who took the time to nominate – I hope you will join me in congratulating Jane on this well-deserved recognition.

The next Service Excellence Award which will be awarded in December – more information on the Award can be found on the HAL website.
From the Farms

Southern Aspect
By Nick and Sally Hobbs

After two wet and mild seasons I wonder if we will return to a more normal summer. Winter has been dry as it was last season in the Riverland. Trees have come away well and I think generally we are due for an on crop. How big will depend on how hot the summer as the lack of heat waves has shown how heat stress can reduce fruit size. The Murray River storages are all full and irrigation allocations high but nothing grows and sizes fruit like rain.

I am also hearing of some substantial levels of new plantings occurring along the river in Victoria and SA. Some of these will be starting to come into production so I am expecting production to expand continuously in coming years.

Inland Queensland
By Geoff Patteson

At the time of writing this report, local weather conditions are hot and dry, following a long, cold winter. Maybe we are approaching a “normal” summer season. Most growers should have ample water supplies after the last two years. A hotter, drier summer will enhance fruit quality.

Last season was a big crop for many growers, so I would expect lighter crops this coming year. Trees are slow “pushing bud” and with erratic budburst.

For the first time in 25 years, we saw an overlap in production between the North and the South. North was later and South earlier. Normally there is a gap in supply. This put pressure on markets, but it was encouraging to see the volume of fruit sold in that period. If this had happened 10 years ago, we would have had a major problem.

Obviously the market is expanding, but we need to push on with “introducing more and more people to PERSIMMONS.” For example, rural regional centres don’t see many Persimmons.

As we move into another season, let it be a good one for us all

Mumballup WA - Phomopsis - What a Shocker Part 2
By Colin and Therese Temby

To recap. In early December 2010 we noticed new growth turning black at the tip and the dropping of mature leaves. We pruned out most of the infected wood – impossible to get all of it – and sent samples off for plant pathology tests which confirmed our worst fears that we had an infection of phomopsis. The result for the May – June 2011 harvest was no great loss of crop size but a pack out rate of about 35% compared to a usual rate of better than 70%.

On to season 2011 – 2012. The trees simply didn’t grow. Many laterals died completely and the total crop was only 1.5 tonne. Disaster!

In glorious hindsight we believe that we have had some phomopsis in the orchard for some years. We have noticed a small number of sub-laterals dying each year and showing a charcoal grey colouring in the cambium layer. This was very obvious in the dead wood broken off this winter. We strongly recommend that all growers carefully observe any wood that dies off for the tell tale charcoal grey colour in the cambium layer.

At this stage – September 2012 – we have some hope of recovery. During season 2011 – 2012 we followed a regular program of fungicide sprays and at finish of pruning we have a reasonable amount of new fruiting wood. Time will tell! So good luck and we hope that you don’t suffer as we have!

Don’t forget to visit the Persimmons Australia website at www.persimmonsaustralia.com.au
A HAL funded project, led by DAFF (QLD) entomologist Lara Senior, is currently underway to review management options for mealybug in persimmon. Mealybug contamination is responsible for losses in persimmon export revenue due to phytosanitary failure, and represents a major hurdle for access to profitable export markets. Management options are currently constrained due to the limited number of registered insecticides. The project aims to review worldwide research into management strategies for mealybug in persimmon and other cropping systems, including: potential new pesticides, methods of optimising spray application, feasibility of biological control, and developing better monitoring techniques. Management strategies will be evaluated in order to identify those techniques with the most potential for practical use in the Australian persimmon industry.

As part of the project, Lara recently met with researchers at Plant & Food Research New Zealand (Auckland and Hawke’s Bay). A report on these meetings has been submitted to HAL. Some key findings are summarised below:

**Chemical control**
- Broad spectrum insecticide use has been almost completely phased out in several crops, including apple: mealybugs are no longer considered an issue in this crop.
- An IPM system has been developed for persimmon (Green and Gold®), however broad spectrum organophosphates and synthetic pyrethroids are still heavily used.
- Trials by Plant & Food Research Hawke’s Bay have demonstrated the efficacy of Calypso (thiacloprid), Confidor (imidacloprid) and Movento (spirotetramat) for control of mealybug in grape. A HAL funded project led by Grant Bignell (DAFF QLD) is underway to trial some of these chemicals for mealybug control in Australian persimmons.
- Timing of insecticide application is crucial for effective control.

**Monitoring**
- Visual monitoring is time consuming and often unreliable. Mealybugs are very difficult to spot early in the season, which is when insecticide applications may be most effective.
- Pheromone traps attract male mealybugs. They are a simple and effective method of monitoring mealybug populations.
- Plant & Food Research NZ also plan to evaluate pheromone traps for mating disruption.
- The citrus mealybug pheromone is commercially available in Australia and is currently being assessed by DAFF (QLD). The longtailed mealybug pheromone is available in the USA, however trials in Australia (Stewart Learmonth, Department of Agriculture and Food WA) and New Zealand (Plant & Food Research) have had mixed success. The citrophilous pheromone is currently being commercialised by Plant & Food NZ.

**Post harvest disinestation**
- In New Zealand, exported persimmons are harvested, put into modified atmosphere bags, subjected to cold storage (-0.8°C for 8-10 weeks), then exported via sea freight.
- Some growers use a hot water dip (20 minutes at 51°C). This is primarily for phytosanitary purposes, but is claimed to also kill mealybug.

A grower survey appeared in the December edition of Persimmon Press. **We would like to encourage growers who have not already done so to complete and return this survey, even if not all questions can be answered** – it will give us an understanding of the impact and significance of mealybug in different growing regions, as well as the control measures currently employed and environmental factors that may influence infestations. The survey can be completed as a paper copy and returned via fax/post/email, or online using the following link: [http://www.surveymonkey.com/s/VW3FNK8](http://www.surveymonkey.com/s/VW3FNK8)

If growers have any questions regarding the survey they are very welcome to contact Lara directly on 0427 600744.
The second phase of the sweet persimmon industry development project concluded in June 2012. The objective of this three year project was to improve fruit quality of Australian persimmons and to develop improved post-harvest handling methods. The project focussed on evaluating key pre- and post-harvest management factors affecting fruit quality.

A range of scientific methodologies were used including national surveys of pests and diseases and statistical and observational trials to evaluate key management factors affecting fruit quality and post-harvest storage life.

The project involved research, extension and industry development officers from Queensland Department of Agriculture, Fisheries and Forestry (DAFF) and commercial growers from Persimmons Australia Inc. (PAI).

The project has produced important results for the Australian persimmon industry, as listed below.

**Girdling and scoring**
- We found that trunk scoring with the South African 3 blade scoring tool 3-4 weeks before flowering (bud break) is effective in increasing fruit set and fruit size and reducing shoot elongation.
- Scoring entails a knife cut through the phloem and cambium, whereas girdling entails the removal of a 2-mm ring of phloem and cambium to the depth of the secondary xylem.
- Therefore, scoring is potentially less damaging to the tree than girding and the wound heals more rapidly.
- Longer term studies are needed to see if the practice can be sustained without damage to tree health.
- Worth trialling but only on a few trees and at your own risk.

**Sunny®**
- We found that the growth retardant Sunny® applied when new season’s growth was about 20-30cm long was highly effective in reducing shoot extension growth by about 25-30%.
- Large fruit drops were observed in one year of this trial resulting in over 80% loss of yield in some treatments.
- Currently not registered for use on persimmon. Further trials are needed.

**Calcium nutrition**
- We have shown that uptake of calcium can be improved through the application of mycorrhizae (Mycormax®), bacillus subtilise and amino acids (Fulzyme®) humic/fulvic acid (Cal Humate).
- We recommend mycorrhizal fungi be applied in spring (bud break) and reapplied in November and January.
- Regular applications of micro-fine gypsum or lime at 50kg/ha in spring and throughout the fruit development period (November and January) will increase leaf and fruit calcium concentration. Application may need to be made over many years to reach recommended leaf nutrient concentrations for calcium.
- Growers should maintain soil pH between 6.5 and 7.0 and soil calcium at greater than 8.0 meq/100g which will allow beneficial biological products such as Mycormax® and Fulzyme® to facilitate calcium uptake.

**Reflective mulching**
- We found significant increases in fruit set, fruit size, fruit quality and storage life from using under-tree Extenday® reflective mulch.
- Reflective mulch significantly increased average fruit weight by about 11%.
- Economics still to be determined.
- We found reflective mulch increased fruit colour and reduced blemish. We observed that fruit in the lower canopy of the reflective mulch treatment had more even colouration at harvest.
- Worth trialling on a limited scale.
- Extenday® mulch can be purchased from E.E. Muir and Sons, 16 Raymond Rd., Laverton North 3026; ph 0438509954.

(Continued on page 10)
Control of clearwing moth

- The incidence of clearwing moth damage is strongly variety and regionally dependent.
- Growers in regions free of the pest should carefully check/quarantine nursery trees introduced from high infestation regions before planting.
- Heavily infested regions appear to have higher minimum temperatures which probably increase the number of population cycles and duration of potential damage. There appear to be two orders of magnitude of damage; those orchards with no damage and those that are heavily infested.
- The most heavily infested orchards are surrounded by significant area of open forest with many potential host trees. The location of persimmon orchards away from heavily forested areas may be beneficial.
- Top-working trees in the field results in a surge of infestation of clearwing moth with moths attracted to wounded plant tissue. This practice should be avoided. We also suggest that wounding as a consequence of winter pruning may also attract moths and should be delayed until the coldest months of July/August.
- In subtropical regions severely affected by clearwing moth, plant only relatively resistant varieties such as ‘Jiro’. Order of susceptibility is Izu>Suruga>Fuyu>Jiro.
- Do not plant susceptible varieties such as ‘Izu’ together with relatively resistant varieties such as ‘Jiro’.
- Use of quad netting will reduce severity of infestation. Orchards should be enclosed in netting before end of August to prevent entry of first wave of moths.
- Use of under-tree sprinklers, compared with drip irrigation, will reduce severity of infestation.
- Growers should check their tree annually for clearwing moth damage starting at two years after planting. Check every tree. Use hot spot treatments on infected trees only e.g. water-blasting for control.
- Annually, monitor clearwing moth throughout the orchard by using pheromone baited sticky traps. These need to be placed in the orchard in mid-August. Check traps weekly and record and graph numbers to determine peak activity periods.
- Apply pheromone dispensers for mating disruption twice a year, in late August and again in January. We recommend that pheromone dispensers be placed in every tree for ‘Izu’ and ‘Fuyu’ and every second tree, staggered down each row for ‘Jiro’. The number per hectare will depend on tree and row spacing but we recommend that between 1 000-1 500 dispensers be used per hectare.
- We found that the 9 and 12 month old pheromone dispensers were as effective as new pheromone dispensers in attracting moths. Pheromone dispensers may have a life of at least 12 months; however, the rate of usage of pheromone in the dispensers may decrease depending on their orientation and exposure to rain and light. Some growers prefer to place their dispensers inside the tree canopy so they are protected by leaves.
- Pheromones are available at E.E. Muir & Sons Pty Ltd, Gatton, Queensland Ph: 0407 047 024
- For small orchards, also place dispensers in the bush surrounding the orchard.
- Based on trap catches, and in addition to pheromone dispensers for mating disruption, also apply chlorpyrifos for additional control. Between 1 to 5 applications may be needed. Two of those applications will be needed in the early spring period during the peak activity period. A third application may be needed in early autumn and a fourth and fifth application in late autumn and early winter.
- We found that soil applied systemic insecticides have the potential to minimise levels of clearwing larvae damage, however the best level of control still resulted in 25% of new shoots being damaged. Further trials are needed to evaluate the use of systemic insecticides over consecutive seasons.
- Clearwing larvae collected from orchards in S.E. Queensland and grown out to adults in laboratories have been positively identified I. Chrysophanes.

Mealybug

- We found that soil applied systemic insecticides are effective in minimising mealybug in persimmon. Products such as Confidor, Movento, Acatra and Samurai have shown to provide some level of control. Further studies are required to establish the optimum application rates and timing for these chemicals. These products are currently not registered for use on persimmon.
- Current insecticide registrations and permits
for mealybug in fruit trees (including persimmon) are buprofezin (e.g. Applaud), fenthion* (e.g. Lebaycid), Methidathion (e.g. Supracide) and Fatty acids.

- For most effective control, insecticide sprays must be targeted against the younger stages, and good coverage is required. Fenthion* and methidathion are toxic to natural enemies.
- Good control can be achieved by releasing natural enemies such as the mealybug ladybird (Cryptolaemus montrouzieri) and parasitic wasps (Leptomastix dactylopii and Anagyrus fusciventris). These biological controls are available from a number of companies (see www.goodbugs.org.au for a list of suppliers).

*Please note the use of fenthion (Lebaycid) on persimmon is currently under review by the APVMA and it is recommended that you check the registration status of fenthion before using the chemical during the coming season.

Integrated pest and disease manual
- An integrated pest and disease manual has been written containing nine chapters. The manual describes 11 diseases and 28 pests in detail. The manual has chapters on:
  - Majors pests
  - Major Diseases
  - Orchard management strategies
  - Monitoring
  - Insecticides and fungicides
  - Pest and disease management programs
  - Pesticide application methods

1-MCP (Smartfresh)
- Cultivar ‘Jiro’ is highly sensitive to chilling injury even at 15°C. Many growers are currently cool storing ‘Jiro’ at temperatures from 8°C to 15°C for short durations of between 2-5 days before sending to domestic markets. This practice could be potentially devastating to eating quality as chilling injury is most likely to be expressed by the time the fruit reaches the retailer and consumer.
- Chilling injury could be nearly totally alleviated by application of the ethylene inhibitor 1-MCP at 500-1000 ppb.
- Our findings indicate that ‘Jiro’ fruit treated with 1-MCP could be successfully air- or sea-freighted to Asian export markets with a minimum storage life of 1 month at 0°C.

Modified atmosphere bags
- Modified atmosphere bags in combination with ethylene absorbers can reduce the percentage of softening by 26% after six weeks storage at 0°C.
- The inclusion of ethylene absorbers may have increased sensitivity to chilling injury.
- Fruit must be placed into MA bags at ambient to allow the build-up of appropriate gas levels before being placed into cool storage at 0°C. Further studies are needed to determine the correct temperatures to insert fruit into MA bags.

Pre-conditioning
- Pre-conditioning may eliminate some chilling injury when fruit are stored at temperatures below 15°C.
- Pre-conditioning significantly eliminates expression of physical damage caused during packing.
- Suggested temperature and duration for pre-conditioning is 2 days at 23°C.
- Pre-conditioning is useful to eliminate damaged or diseased fruit before long-term storage.

Short-term Storage (2 weeks)
- Periods of glutting on domestic markets can be reduced by short-term storage at 15°C
- Fruit can be stored for short periods at 15°C and perhaps at slightly lower temperatures (12°C) with minimal or no chilling injury
- Length of storage at 15°C is regionally dependant but can vary between 1-3 weeks
- Treatment with 1-MCP can extend storage life at 15°C by 30-50%

Long-term storage (1-3 months)
- Persimmon can be stored for up 2 months at 0°C
- Storage life is regionally dependant
- Fruit stored at 0°C are highly susceptible to chilling injury
- Fruit stored at 0°C must be treated with 1-MCP to avoid chilling injury

The third phase of the industry development project started in July 2012 and will run until May 2014. The major objective of this project is to complete pre- and post-harvest management studies initiated in Phase 1 (Continued on page 12)
and 2 of the project and to make firm recommendations for pest and disease control and post-harvest management.

Issues identified as having high priority for completion as well as for future research and development, include:

- improving fruit quality through varietal selection
- increasing post-harvest and long term storage life using cold storage treatments in combination with 1-MCP
- developing firm recommendations for post-harvest handling and management protocols for inclusion in a post-harvest manual

- identifying improved control measures for mealybug using systemic insecticides, establishing efficacy of pheromones for controlling clearwing moth and the use of fungicides for controlling leaf and fruit diseases (e.g. phomopsis).
- dissemination of R&D findings through a series of field and training days for growers, in different Australian growing regions.

I would like to thank all growers who have allowed us to conduct trials on their orchards. If growers have any issues pre- or post-harvest or would like further information on results from the project please do not hesitate to contact me.

Queensland Fruit Fly

Last season was a challenge for northern growers looking to send into Victoria with the loss of the post harvest application of dimethoate for fruit fly. We were fortunate to end up with a revised ICA protocol to allow access even if it was far more difficult to undertake.

More recently we have seen the removal of the pre harvest registration of fenthion for persimmons (there was no post harvest application registration for persimmon and fenthion). This loss could be serious when growers have a high pressure fruit fly season as it removes one of the more effective options for in field control and applications are under way to obtain permits for alternative chemicals for in field fruit fly control.

A permit for trichlorfon is now current and an application is pending for Maldison. Also currently the Victorian government is proposing to declare fruit fly as endemic in all of Victoria except the Sunraysia fruit fly free area and deregulate fruit fly access to the state. If this goes ahead then it looks like the ICA issues of last year for northern growers will evaporate.

It is important for growers to note that the possible opening up of ICA access is for Victoria only and with the loss of dimethoate access for fruit from northern states to the other southern states is effectively closed as the only option is Methyl Bromide. The effect on Victorian growers looking to supply into Tasmania and SA is unclear.

Permits

In the last year permits for the use of Chlorothalonil and Methidathion were renewed. The permits for Petroleum Oil and Chlorpyrifos expire this year and we intend to reapply for these.

Work on new permits is continuing. A priority list has been formulated after the association undertook a strategic review of permit requirements and will be worked on as funds allow.

For growers that require them all the current permits are available from the AVPMA web site: (www.avpma.gov.au). Go to the permit section and use the search function

Don’t forget to contact your Executive if you have issues you wish to be addressed
The 2011/12 marketing program for Persimmons Australia was a great success. In summary, the campaign included the following exciting activities:

- A public relations program which included a celebrity ambassador, Poh Ling Yeow, series 2 Masterchef contestant and creator of Poh’s Kitchen on the ABC.

- Point of sale material development and distribution

- A retail development program in selected IGA stores in QLD.

- A merchandising program in 26 green grocer stores in NSW and VIC.

**Ambassador:**
Poh is a household name and was runner-up in the first Master Chef in 2009. She is the host of Poh’s Kitchen on the Road on ABC TV and has two book deals with ABC Books and Harper Collins (her first book sat at the top of the best sellers list for six weeks in 2010) and received a 2011 Logie for the Most Popular New Female Talent. As a fifth generation Chinese Malaysian, Poh adores persimmons and is a keen consumer of the fruit.

As part of Poh’s ambassadorship, the following activities were carried out:

- Attending a photo shoot with persimmons

- Participating in one television cooking demonstration

- Completing of six interviews for other media

- Developing four recipes featuring persimmons for future media outreach

The work with Poh was very successful, it helped the industry get the following coverage that they may not have achieved without being connected to Poh:

- A dedicated cooking segment on Channel Ten’s The Circle that lasted over 10 minutes.

- A comprehensive interview on 2UE which was syndicated nationally.

- And mentions of both Poh and persimmons in mainstream publications such as Who, Woman’s Day and Good Health.

**Public Relations:**
A season launch media kit using quotes from Poh along with the latest growing and production information to highlight the strength of the season and the difference between the Sweet and Original persimmon varieties was distributed to key media. In addition, a product fact sheet and two persimmon recipes were included in the kit.

Poh also developed four new enticing persimmon recipes which will be used in the media activity for the 2012/13 marketing program.

The public relations activity was a great success with all set key performance indicators being achieved. The campaign achieved a total audience reach of 25 million based on circulation figures.

**Point-of-Sale Development and Distribution:**
There were 990 A3 double sided posters and 1130 A6 recipe pads developed and distributed nationally to independent stores. This was done through our contacts at the central markets. (See page 10)

**Retail Pilot and Merchandising Program**
Due to over 85% of the persimmons in Australia being sold through the independent green grocer channel,
IGA was identified as a strategic partner to conduct a focussed retail pilot program.

HAL negotiated a program with IGA which involved merchandising and sampling. The program commenced in April and was held in six different QLD based stores in total. Each store that participated received 2 sampling sessions each, in total there were 12 sessions.

The IGA retail pilot was a success and returned a high sales conversion rate of 25% and the approach of having a combination of both merchandising and sampling allowed for maximum impact.

The campaign also included a separate merchandising program which was held in NSW and VIC stores. In total there were 26 stores in NSW and VIC merchandised in the week commencing 26th March. This activity helped create in-store theatre and buy-in from retailers. All the green grocers visited were receptive to the POS materials. Some stores indicated that’d like to organise sampling in-store.

Overall, the 2011/12 program was a great success for the industry. It provided us with some strong key learnings moving forward. HAL is looking forward to another exciting campaign which is currently being planned for the 2012/13 season!

For any further information on the marketing program, please don’t hesitate to contact HAL marketing manager for Persimmons Australia: Alena Swinbourne Horticulture Australia alena.swinbourne@horticulture.com.au 02 8295 2335

Picture 1 (above) : A3 Poster : Lime poached persimmons with white chocolate mousse

Picture 2 (below) : A6 Recipe Cards (front and back) : Persimmon and watercress salad with gorgonzola and toasted walnuts
Initially I set up here in 1984 and put the first fruit on the market in 1988. I just had a small block of Fuyus down by the creek – pity we didn’t get the same returns now as what we got then because I can remember averaging $14.00 per tray in the early 90’s. I think I got $2-4 a tray in 1988 until the agent I had in Sydney which I’ve still got, developed basically his Korean clientele which we’re still servicing. I planted about 1500 Fuyu and they’ve been gone for some time – I haven’t got any Fuyu on the place so that’s what I think of them! And that’s what the agent thought of them!

Now it’s all Jiros except for 440 Izu and the thing they do is act as a trap crop for the Fruit Fly, the Clear Wing Moth and the flood! We had 3 metres of water down the bottom of the property. I spent a bit of time thinking whether I’d stand the trellises up or come in with a bulldozer and get rid of the rest of them but I decided to stand them up. But if another flood washes them over, that’s where they’ll stay!

The Jiros in this block were planted in 1998 – dryland although once I irrigated them by running spray lines through when they were 4 or 5 years old and they had a crop on them. I think we’ve had one season where I think we lost out badly because they were dryland. Rainfall is around 40-45 inches although we have the odd year where we get 90 inches but by mulching and keeping our weeds under control, the only thing that worries me now is that if we don’t get rain in the next month or so, it means I can’t spray with the orchard blaster because the mulch hasn’t settled down and it’s still dry but I’ve never been caught for too long.

The other issue is that fertiliser has gone on and we’ve dropped our nitrogen level and dropped their vigour obviously but there’s a balance there somewhere.

Sheryl: Why don’t you irrigate?

Ian: I simply refuse to water young trees. Let their root system develop. Under that system, those young trees will have roots out into the roadway already. Let them fight their way! We’ve replaced 6 trees in the whole block and I don’t think it would have been lack of water. Under dryland farming, they’ve cropped heavily every year since 2002. There’s always a difference in butt size – whether it’s a rootstock issue or a graft issue or incompatibility issue – I’m not too sure.

Member: How are you going with Clear Wing Moth:

Ian: It’s only in the last couple of years that they seem to have started worrying some of the Jiros. This is only the 2nd year that we have painted the big cuts after we’ve applied about 4mls per litre of Lorsban. It’s specific to the big cuts because that’s where you get all your water shoots from and we seem to be getting pretty good control. We’re not to the stage yet where we are with the Izu where we go back through them in January and try and scratch out all the moths plus all the rest of the grubs. Sometimes you’ll see Clear Wing Moth in all the prunings. We throw out the prunings in the centre and just run over them with the 5 foot slasher – even the fairly big bits of timber so I don’t think too many grubs would survive that. I’d prefer to buy a mulcher but you can’t buy a narrow mulcher that is heavy duty enough.

Member: Are you using any Pheromones?

Ian: I haven’t used Pheromones for years. We used them when we had the Fuyu. With Fruit Fly we do use Amulets at double the rate.

Member: How much growth are you getting out of them by the end of summer?

Ian: Not above the crossbar. Sometimes when we do

(Continued on page 16)
the thinning and you have four people doing the thinning, next time you come over and check to see what they are doing, there’ll be none left! It’s all or none! We do fudge it and leave it there. We do get a bit of hail here occasionally. We still get colour in our fruit, lessen our sunburn during the sizing up period where the laterals are hanging out and they drop and expose fruit that hasn’t been exposed to the sun – we can get 39°C. Rows run more or less north south. I didn’t buy the block specifically to grow Persimmon but the slope lined up beautifully for big long rows. I have to stay awake at night when spraying as it’s 3.6km an hour.

Lorikeets are a bit of an issue. I used to have Lychees and Mangoes and that’s when we did have some problems so basically I solved the problem by getting rid of other fruit crops around that attracted them. Only had a problem with Flying Fox one year but you’ll notice there are no large trees around, no eucalypts and there was a purpose in doing that because Flying Fox will perch up in the big trees but with Persimmons they can’t rip them off. I think there is a camp up in the forest but I think the only ones we get are the old ones that can’t be bothered going too far. One year when it was very showery for weeks on end we seemed to have a bit of a build up of numbers. I got one quote for $150,000 and couldn’t really see that I wouldn’t have been better off in putting it into a house in town.


Member: You still have some Izu. Do you think it would be an advantage to get rid of them?

Ian: I’ve thought about it but it provides a couple of weeks of extremely high prices mid to late February where if you have someone employed full time, it gives them a little bit of work but once you’ve got your Jiros, the agent doesn’t want your Izu which is understandable. I’m not sure how long I’ll be in Persimmons but the trees still have life in them – we’re getting pretty large fruit and we’re averaging around size 15-16 most years. The year before we had huge fruit and I used 800 flex trays size 10 out of a crop of 6500 and we hardly packed a 16 - 10, 13 and 15. We thin these trees to about 140 fruit and spread evenly over the tree and we’d prune about 70% - 80% of the canopy. They don’t seem to do a real significant fruit drop of their own. They do two drops and they’ll do a third after Christmas which you don’t want. It happens in cloudy overcast conditions. Interestingly enough half of this block has a row spacing of 4.25 metres and over the other side the spacing is 3.8 meters and the 3.8 side always drops more heavily than the 4.25 so it has to be a light issue.

Sheryl: To be continued…need to locate the other cassette tape!

Export Market Access to Thailand

*By Geoff Patteson*

As many are aware, access to Thailand (one of our better export markets) has come under pressure in the last year. Persimmons Australia have been discussing with DAFF (Australian Department of Agriculture, Fisheries & Forestry) who in turn have been negotiating with the appropriate THAILAND officials.

A request by Thailand for an audit of Australian packing facilities, and an orchard inspection was conducted at Grantham Queensland. DAFF personnel were also present at this audit.

The above request was part of developing new export protocols for Thailand.

At this stage, we are hopeful of obtaining a satisfactory outcome to allow continued access to the Thai market.
Fruiting Trees a risk for Hendra Virus

New research has confirmed keeping horses away from fruiting and flowering trees can significantly reduce the risk of Hendra infection. The research has validated the longstanding belief that the risk of Hendra virus infection is increased by exposure to flying fox excrement and food debris on or around fruit trees. Biosecurity Queensland researcher Dr. Hume Field said scientists from the Queensland Centre for Emerging Infectious Diseases had undertaken two studies into the levels and distribution patterns of Hendra virus excreted by flying foxes. “The investigation has found that all flying fox urine and almost all faeces and fruit debris or spats fall directly under the canopy of fruiting trees in which they are feeding” Dr. Field said. “Therefore, it is clear that unstabled horses should be kept in open pastures and away from trees in flower or fruit.”
**Your Orchard …..What to Do During the Coming Months**

*By Department of Agriculture, Fisheries and Forestry Horticulturalists*

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**October**
- Steadily increase water application.
- Thin fruit just after fruit set.
- Start monitoring for spotting bug and yellow peach moth damage and for mealybugs and thrips. Treat as required.
- Spray trunks and soil around trunks with a registered insecticide to control ants.
- Commence protective sprays for cercospora leaf spot when half of the flowers are open. Continue at 14 day intervals until four sprays have been applied.
- If a clearwing moth mating disruption strategy is not used, check for adult clearwing moth activity using pheromone traps and if present apply a registered insecticide spray.

**November**
- Approaching peak water need.
- Continue monitoring for spotting bug, yellow peach moth damage, mealybugs and thrips. Treat as required.
- Spray trunks and soil around trunks with a registered insecticide to control ants.
- Continue protective sprays, using a registered chemical, for leaf spot at 14 day intervals.
- Summer pruning (Queensland) of water shoots to improve light penetration and stop excessive vegetative growth.

**December**
- Peak water need.
- 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).

**January**
- 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 note 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.
February
- Water needs start to decline at this stage.
- No nitrogen during this period.
- Weekly bait sprays or fortnightly cover sprays (see note below) for fruit fly.
- Spray trunks and soil around trunks for ants.

March
- Water needs continue to decline until after harvest.
- 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 (see note below) for fruit fly until harvest.
- Apply fungicides for leaf spot if needed.
- Check for clearwing moth activity – apply insecticide if needed.
- Commence harvest for early varieties.

Other comments
Regularly check for signs of stem girdler damage. If detected, scrape clean infested areas and seal the wounds with plastic paint or a tree sealer.

NOTE: The results of an Australian Pesticides and Veterinary Medicines Authority (APVMA) review regarding the use of fenthion (Lebaycid) as a cover spray to control fruit fly in a number of crops, including persimmon, are expected to be made available at the end of October 2012. The APVMA website www.apvma.gov.au will provide details of the outcome of the review and detail any changes in registration status. It is recommended that you check the registration status of fenthion before using the chemical during the coming season.