



Cherry

INDUSTRY ANNUAL REPORT
2011/12



Horticulture Australia

Overview

The cherry industry has faced a number of key issues in 2011/12, including: market access and creating workable export protocols; poor fruit quality through adverse weather conditions; and lifting domestic sales through improving the quality and presentation at retail level. During 2011/12, the cherry harvest was affected by cherry cracking in some regions resulting from excessive rainfall events during the later stages of growth. This is now the second successive year of downgraded industry yield. Strategies to reduce the impact of cracking include varietal selection, soil and irrigation management. Australia is continuing to find it difficult to attain openings to new markets such as China due to constraints on market access.

Levy investment

The total levy income received for 2011/12 was \$710,736. The current levy is seven cents per kilogram (4c/kg for R&D and 3c/kg for marketing). A total of \$1,304,291 was invested into Research and Development (R&D) projects and \$251,604

towards marketing projects. The Australian Government provided \$639,146 of matched funding to support 48 R&D projects in the R&D levy program.

In addition to levy funds, \$163,213 of voluntary contributions (VC) was provided to the industry for supplementing levy-funded projects and/or solely funding VC-only projects in the R&D and marketing programs. VC funds are matched by the Australian Government.

HAL is responsible for managing these funds and takes advice on how to invest the funds from the Industry Advisory Committee (IAC). Consultation with the IAC is essential in determining the most critical investment priorities for the industry.

In 2011/12, Cherry Growers Australia acted as the service provider on 12 projects.

The industry also contributes 2% of levy and/or voluntary contributions (matched to 4%) to an across industry program that addresses issues that affect all of horticulture, such as water availability, climate change, biosecurity and market access.

Strategic objectives

The process for determining the industry's priorities begins with the development of the industry's strategic plan. The plan guides future R&D and marketing investment over a five year period. Activities in the 2011/12 period were therefore guided by the *Cherry Industry Strategic Plan 2008–2013*, which can be found at www.horticulture.com.au/industries/cherry.

These plans are developed to reflect both the industry's priorities and the Australian Government's rural R&D priorities. The plans are reviewed regularly.

The industry's objectives, as outlined in the strategic plan, are to:

1. Build a competitive supply of quality Australian cherries to ensure consumers can confidently purchase consistently high quality fresh cherries at retail level
2. Facilitate a profitable production sector by increasing demand for Australian cherries in line with increasing supply
3. Ensure the Australian cherry industry has appropriate and sufficient capacity to manage change and industry expansion.

R&D program

The 2011/12 R&D program includes 48 new and ongoing projects. 38 of those projects are levy funded, five are funded through voluntary contributions (VC) and five are funded with a combination of levy and VC funds.

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The projects in this report have been funded by HAL using the cherry levy and/or voluntary contributions from industry with matched funding from the Australian Government for all R&D activity.



The 2011/12 R&D program has focused on developing workable protocols for continuation of exports in Thailand, gaining market access to the emerging Chinese market and maintaining access to Taiwan and Japan as well as other underpinning work developing industry biosecurity and export plans. Investment continues in the key area of fruit quality, especially reducing the impact of late season rainfall through 'cracking'.

Marketing program

The 2011/12 cherry marketing program focused on:

- Driving consumption for fresh Australian cherries by increasing purchase penetration, frequency and weight
- Promoting the health credentials associated with cherry consumption
- Encouraging impulse purchase of cherries at the point of purchase.

Based on the consumer research conducted by industry the profile of Australian cherry buyers was collated including lifestyle attitudes, purchase regularity and their associated media habits and localities.

In addition, a comprehensive category overview was undertaken for cherries which entailed an analysis of homescan data and sought to build on the principle of 'growing the cherry pie' (selling more cherries across the whole industry).

A summary of the cherry marketing levy activities for 2011/12 includes:

- Public Relations through Crossman Communications
- Public Relations Ambassador
- State specific promotions activities
- Collaborative promotions with supermarkets
- Involvement in Australia Fresh™.

Conclusion

This report provides a snapshot of project activities in the 2011/12 year. The report's sections are divided by the industry's objectives to reflect the activities being undertaken that address these industry issues.

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OBJECTIVE

1

Build a competitive supply of quality Australian cherries to ensure consumers can confidently purchase consistently high quality cherries at retail level

Improving stem retention to meet quality specifications

The aim of this project is to enhance the quality of sweet cherries by understanding the poor stem retention in sweet cherries observed in recent seasons, and to investigate treatments which may help mitigate this effect.

From information gained in the literature review and personal communication with cherry experts and scientists, test protocols were established. In 2009/10, a field trial program was conducted to screen plant growth regulators, which may aid in improving stem retention and other quality characteristics. A number of products were identified as showing promise in reducing this problem and improving fruit quality generally.

In the 2010/11 season, six field studies were conducted by Agrisearch Pty Ltd across three climate zones in Victoria to further evaluate products that showed promise in the previous season, as well as investigating the inclusion of products that might provide an additive or synergistic benefit.

Field trials were carried at Tatura on the varieties Bing and Lapins, at Yarck on Van and Lapins and at Silvan on Ulster and Lapins. At Yarck, the Van trial was destroyed by hail and could not be harvested.

Preliminary data analysis was completed and presented at the AFFCO/Victorian Cherry Association Workshop at Alexandra in March 2011.

A scientific poster of the trial proceedings was prepared by Agrisearch and accepted in the program at the Horticultural Conference in Lorne, Victoria in September.

In season 2011/12, Agrisearch conducted three field studies across three climate zones on the variety Lapins at Yarck, Tatura and a cool climate site at Tolmie.

Data has been collected from the field trials and is being analysed. Improvements in fruit firmness, size, stem pull force and stem colour have been measured.

Les Mitchell from Agrisearch presented information learned from the project at the Fruit Growers Tasmania Conference in May of this year.

Project CY08003

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Improving cold treatment for Q-fly

Queensland fruit fly (Q-fly) is a major quarantine pest for many Australian cherry producers, particularly as treatment to combat infestation can often affect fruit quality and marketing flexibility.

This project examined a range of postharvest disinfestation treatments against Q-fly in cherries. A short-term postharvest, high carbon dioxide (CO₂) treatment in combination with cold treatment was shown to consistently increase the mortality of Q-fly larvae

and hence reduced the time in cold disinfestation. In addition, this treatment did not significantly affect fruit quality after treatment and storage.

The use of alternative treatments, which combined different cold and 'safe' fumigants, were trialled and showed some promise such as the possible use of Vapormate™ (active ingredient, ethyl formate). Vapormate™ is a fumigation treatment that is already registered in Australia for use in horticulture.

The necessity of finding alternate practical and cost-effective disinfestation treatments for market access of Australian cherries requires more research and adoption of results.

Project CY09006

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Infesting cherry fruit with Q-fly for disinfestation



Preparing for cold and fumigation treatment. The cherries which have been infested with Q-fly larvae are treated with cold and a fumigation treatment in drums

Managing European earwigs with pheromones

This three-year project aims to understand the impact of earwigs in cherry and pome fruit orchards and to manipulate earwig numbers by identifying the aggregation pheromone used by earwigs.

It was hypothesised that tighter fruit bunches provide earwigs with more shelter and that earwig damage occurs while they shelter within the bunched fruit. Experiments were performed in Tasmania and NSW during the 2011/12 season on varieties including Ron's Seedling and Lapin. Preliminary analysis has shown that cherry varieties differ in their susceptibility to earwig damage, often irrespective of bunch size, and that different types of damage can occur

according to cherry variety. Analysis of this data is ongoing.

Field testing of putative pheromone components emitted by earwigs has been completed. Two compound blends provided significant increases in the earwig trap catches. These compounds are known pheromone components and are consistently emitted during earwig aggregation. Laboratory testing of these compounds is ongoing.

Project MT09006

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Improving quality and consistency

The second season of this project surveyed cherry fruit quality in the retail environment from November 2011 to February 2012 and examined ways to improve fruit quality.

A weekly survey was conducted in four stores – two independent stores in Adelaide and two supermarkets on the NSW Central Coast. Adelaide stores were selected to overlap with the concurrent ReTail Activation study.

Although 11% of all the fruit was unacceptable, there was a significant improvement in fruit quality and fruit flavour as the season progressed. The 2011/12 season was particularly difficult for some growers due to substantial rains in most growing areas, especially in NSW where rain caused significant damage. As with the 2010/11 season, the main reasons for the unacceptable fruit were pitting, bruising and rots. These quality issues accounted for over 75% of all defects in the 2011/12 season.

In order to address these fruit quality issues, fruit were carefully sampled from all points along the supply chain from the tree to the packed box with the aim of identifying the causes of pitting, bruising, rots and stem damage that are responsible for downgrading fruit quality. Results show



Measuring fruit firmness

some significant defects may occur during the packing process, which express during storage.

A range of other studies also examined stem browning and the retail display environment. These studies showed that both the packaging type and the storage environment (including temperature, relative humidity of the display) affected stem browning. More work is required

to quantify and improve the fruit quality, but these results will be presented and discussed with industry and retailers to improve the quality of cherries on the retail shelf.

Project CY10012

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Negative effects of global warming on cherry dormancy

Australia's mild climate, the late flowering nature and the low fruit set of 'Kordia' sweet cherry indicates a high winter chill is required for normal growth. The effect of global warming could therefore decline productivity further, making it an excellent cultivar for studying potential global warming impacts on sweet cherry productivity.

'Kordia' cherries in two orchards in the Huon Valley of Tasmania were studied over the winter of 2010, and at one site management practices with potential to improve productivity were applied and their effect on yield measured.

Its late flowering, despite early flower bud activity, implies that flower development in late spring was extremely slow. It is suspected that this slow flower

development was due to insufficient levels of stored nutrients due to active bud development in Autumn compared to other cultivars.

Postharvest tree nutrition to improve levels of stored nutrients and preflowering Ethrel® application to reduce the flower demand for released nutrients in spring both increased fruit set. Conversely, bud break materials that increased the flower demand for released nutrients, while they advanced flowering, reduced fruit set and yield.

Project CY09012

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Measuring the retail storage environment

Optimising cherry fruit set, crop load, fruit nutrition and size

A joint initiative between Washington State University (WSU) and the Tasmanian Institute of Agriculture (TIA) at the University of Tasmania is studying the following key areas to achieve fruit quality:

- Fruit set
- Crop load management
- Fruit size
- Fruit nutrient matrix.

Trials are being run in parallel in Washington State and Tasmania to hasten research progress through two seasons in a calendar year. Trials were set up in the upper (Reid Fruits at Plenty) and lower (Cherries Tasmania at Old Beach) Derwent Valley and Huon Valley (Hansen Orchards).

- Flowering time did not affect fruit quality in Simone, Van or Sweetheart in Tasmania, although in some instances of high crop load in Washington State, fruit from early flowers was better quality.
- Around 75% of fruit set over a four-day window (variety specific).
- Results of AVG and CPA application (at 20 and 80% of full bloom) to improve fruit set yielded no clear results.

- Crop load of around 15 tonnes per hectare was ideal for maximising fruit size, sugar and firmness in Van and Sweetheart.
- Cracking was around 60% of fruit at 10–15 tonnes per hectare but only around 40% at 20t/ha
- Fruit size (and tree carbohydrate reserves) was larger when thinned at dormancy or full bloom compared to two, four or six weeks after full bloom.
- Apical buds (in a spur) yielded better quality fruit than basal buds in Van but not Sweetheart.
- Fruit nutrition matrix varied greatly across seven orchards – fruit zinc and manganese levels were weakly positively correlated with firmness at harvest, and colour was negatively correlated with fruit nitrogen, zinc and manganese levels.

Project CY10002

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Dr Erik Smith from Washington State University and Hawa Puniran, TIA technician, sampling crop load trials



Honours student measuring firmness with the Guss fruit flesh texture analyser on fruit sampled for the nutrient matrix study

Cherry export manual

The *Cherry Export Manual* provides export guidelines for Tasmania, Victoria, NSW, SA and WA. It also incorporates practical production requirements to meet export and quality assurance regulations of pesticide application and minor use permits.

The 2011 manual was developed based on a review of the previous edition in consultation with AQIS, Biosecurity Australia, state quarantine authorities and the Departments of Primary Industry in each state.

Maximum residue levels were reviewed and the limit guide updated together with the preharvest interval guide. Spray guides were reviewed and updated as required for export markets including Taiwan, Korea, United Kingdom, European Union, USA and Japan. Input on the spray guides was sought from other experts as required.

The permit list was also updated. Compliance matters, including the various protocols required by importing countries, product labelling regulations and state registration requirements were taken into consideration.

The 2011 edition was distributed in August 2011 to all levy payers, the Departments of Primary Industry, TIA, AQIS, agronomists and other relevant groups. The manual has become an essential tool in maintaining grower preparedness for export markets and export market opportunities.

Project CY10017

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Data packages for new fruit fly control technology

A project is generating data to support the further development of a new insect control technology using lufenuron as a chemosterilant against pest fruit flies in Australia. Used strategically, this technology has the potential to suppress fruit fly populations in endemic areas and may also be applied to establish and maintain areas of low pest prevalence. The technology is already used against Mediterranean fruit fly in Europe as part of their insect management system.

Experimental studies to date have demonstrated that a formulated lufenuron bait station was highly effective in causing egg sterility and larval mortality of Queensland fruit fly under controlled field conditions. The male flies that were fed the lufenuron bait were significantly more successful in mating with female flies than untreated, protein-deprived males.

These findings provide a scientific basis for expanded field trials with the bait station to control fruit flies in orchards with natural fruit fly populations.

Project MT08035

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Ecology and preharvest control of fruit flies for market access

With the regulatory withdrawal of dimethoate and anticipated withdrawal of fenthion, fruit flies pose a major threat for production and market access for cherries and other commodities. Management of fruit fly in the medium and longer term will rely on targeting 'weak points' in the biology of the fly.

This project is identifying and researching such weak points, particularly fruit fly control using protein bait spray and the male annihilation technique (MAT). Fly response to protein is very weak and that protein needs to be applied to the upper canopy of fruiting trees for maximum effectiveness. Flies respond more strongly to protein and MAT devices when humidity is high. In hot dry periods, flies appear to shelter in heavy canopies of both crop and non-crop plants and are more difficult to control using these approaches.

The current project is nearing completion and final results are being analysed. It is anticipated more work in this area will be undertaken as part of ongoing work developing systems approaches for fruit fly.

Project MT08036

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National fruit fly strategy – BCA for the Australian horticulture industry

Plant Health Australia (PHA) have commissioned the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) to prepare a Business Cost Analysis (BCA), including a beneficiary analysis against the proposed implementation plan for the National Fruit Fly Strategy.

ABARES produced a draft BCA in late December 2011, and PHA and the Office of the Chief Plant Protection Officer have been liaising with ABARES to ensure impacts on trade (both domestic and international) and the accurate identification of beneficiaries has been taken into account.

PHA is working with ABARES to ensure ABARES documents the rationale around its assumptions so it can be understood by non-economists. An explanation of 'public good' has been sought so all parties appreciate what is included and what is not included in public good. This is critical for the beneficiary analysis. PHA also asked ABARES to produce some example scenarios to explain issues within the document. The revised document is expected in late April and discussions on how the document can be circulated to key industry and government stakeholders prior to the formal release of the document by ABARES have been initiated.

Project MT09099

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Australian cherry production manual

By world standards, the Australian cherry industry is a small producer of cherries (1% of world production – 12,000 to 15,000 tonnes) but the opportunities for growth in production and productivity exists.

Over the years, Australian growers have been inventive and innovative, at times being quick to take up new ideas, research and varieties and at other times they have been world leaders in their industry.

No matter when growers entered the business of growing, harvesting and marketing cherries, the one constant has been the desire to learn more about their industry.

The new edition of the *Australian Cherry Production Guide* is an up-to-date and practical guide for past, current and future cherry growers to understand and improve their industry.

700 print copies of the manual were published and sent to each levy payer and other key organisations. 250 CDs were also produced and a PDF uploaded to the CGA website, www.cherrygrowers.org.au

Project CY11015

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Cultivar selection: chilling and climate change

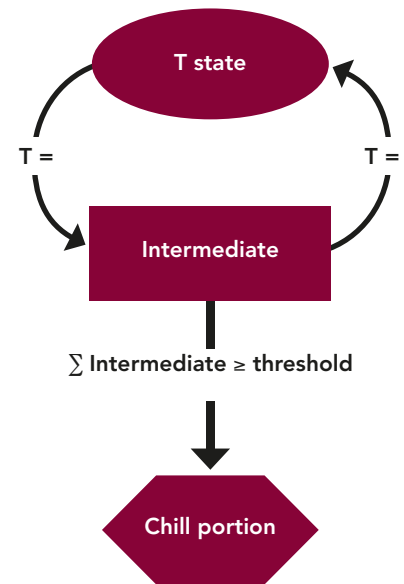
Forecasting future chilling conditions across important Australian cherry production areas will help growers and industry to plan for suitable varieties and incorporate potential chill restrictions as part of management strategies.

Global warming of 2°C is expected to be reached by approximately 2040 and results have showed that this level of warming will negatively affect reliable chill exposure in every growing region investigated. The project's report includes an initial grouping

of chill requirements for different cultivars, a 'chill portion calculator' and another spreadsheet that calculates the likelihood of achieving any chill thresholds on site in current and future years.

The spreadsheets will offer growers a consistent methodology to measure chill and ultimately may help to more clearly define chill thresholds for different cultivars and their suitability at different locations.

Establishing baseline chill threshold data and research on climate change adaptation



Representation of key aspects of the Dynamic model, for hourly temperatures, T (°K).

strategies such as low chill rootstocks, providing artificial chill through evaporative cooling and the use of dormancy breakers is needed.

Project CY11010

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Budbreak on different rootstocks

Advances in Australian cherry breeding

The current breeding project is developing large, well-adapted cherry varieties with improved rain cracking resistance for Australian cherry growers.

This season, good early winter chill was negated by several later warm periods culminating in average chill unit recordings overall. Visual assessment of trees indicated reduced effectiveness of the chill accumulated leading to lighter spasmodic bloom and reduced crops, particularly in early varieties. Climate change and the increasing frequency of warm periods during winter and early spring have the potential to greatly reduce the effectiveness of accumulated chill and severely affect the performance of some varieties. Varieties bred and evaluated in higher chill regions are most likely to be adversely affected.

Several rain events over harvest provided an excellent opportunity to gather good information on the relative rain cracking susceptibility and general robustness of lines within the breeding program.

In 2011, the breeding program contained 5,500 different genotypes, with 850 cropping. Of the cropping trees, 31 were considered promising and a further 120 of sufficient standard to require further evaluation. In winter, 790 genetically inferior trees will be removed based on the previous season's results to focus on those with greater potential.

All promising lines have been grafted for further evaluation on Mazzard F12-1 rootstock.

Solid progress was made this season with many quality fruit lines identified displaying

good levels of rain cracking resistance. Overall, fruit firmness was also good and this is actively monitored using a Firmtech2 device.

Five new advanced breeding lines will be added to National evaluation network field trial sites this winter, building on the fifteen in 2009 and two in 2010. All the new additions are impressive, very firm dark cherries showing good levels of rain crack resistance.

The future looks bright for the release of new varieties with reduced rain cracking susceptibility in the near future.

Project CY11016

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Market access of cherries based on non-host status to Q-fly

This project included three studies identifying Queensland fruit fly (Q-fly) infestation of cherries.

Ability of Q-fly to infest cherries in Young, NSW

Adult lab-reared Q-flies were presented to caged harvest ripe 'Summit' cherries whilst still on the tree in December 2011. Five cages, each with 11 to 13 female flies and about 50 fruit were set up. Temperatures were monitored every 15 minutes.

Daytime temperatures ranged from 17°C to 26°C inside these cages. Fruit flies became sexually mature and were able to infest cherries successfully during this time. If there are sufficient flies in the orchard during these temperatures, they would infest harvest-ready ripe cherries. The experiment will be repeated earlier in the harvest next season to be correlated with trapping and temperature data.

Physical barriers to Q-fly

Feijoa trees at Gosford were surrounded by 3m high fences of 50% shade cloth (white or green) or completely covered with green 50% shade cloth or left completely uncovered and unfenced.

The fence, whether white or green, had no effect on fruit fly infestations inside the

fence when compared with non-fenced trees. The complete covering gave 100% control, although feijoa maturity was delayed by the cover. In areas of lower fruit fly populations, such as Young, where the walls of existing hail netting could be used to enclose orchards, there may be a beneficial effect but it appears unlikely unless in combination with baiting or similar. It is planned to test this with commercial protein baits in the 2012 season.

Sugar floatation to rapidly demonstrate freedom from fruit fly infestation

This method is an end-point demonstration used in the US for cherries and berries. All Q-fly eggs and larvae infesting fruit can be rapidly separated from fruit pulp following a standard procedure. This could be used as part of a systems approach for market access of Australian cherries. A standard operating procedure is being set up for possible use in the future.

Project CY11022

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Improving marketable yield of premium quality cherries

The most promising outcomes from previous seasons (crop load, spraying and pruning) were prioritised and built into the experimental design. The major trial combined these factors, involving a large number of trees in order to assess the interactions between individual treatments, and to determine if combinations of treatments could be more effective than individual treatments. Another large trial investigating pruning strategies in more depth was also undertaken, as well as further trials looking at top pruning of extension growth with a cutter bar late in the season.

Trials occurred on three commercial orchards in Tasmania – Bushy Park, Huonville and Old Beach, and involved six different varieties. All trials received rainfall in the three weeks prior to harvest, except the irrigation trial.

Along with a determination of cracking levels, fruit quality from all trials was assessed. This project shows that it is possible to increase fruit yield through practical orchard management techniques which reduce cracking. Furthermore, it shows that this increased yield does not necessarily mean a reduction in quality. Most treatments seem to show little impact on fruit quality – in fact in some cases, treatments have had a positive effect. Therefore, reduced cracking levels and maintained fruit quality can improve marketable yield of cherries.

Results from this season are currently being analysed and are due for completion by the end of June. Results from all seasons of the project will be considered in relation to seasonal climates.

Project CY09002

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2 Facilitate a profitable production sector by increasing demand for Australian cherries in line with increasing supply

Marketing program 2011/12

The cherry industry's long-term vision is to increase the consumption of fresh Australian cherries by encouraging the impulse purchase of the fruit and by promoting the health credentials of cherries.

The industry launched its new campaign 'Cherish the Moment' in the 2011/12 season, enlisting a new brand ambassador, the young Australian yachting sensation, Jessica Watson, who has a broad appeal across different demographics.

To maximise the industry's levy investment, R&D levy funding was used in the marketing program, where relevant. The 2011/12 marketing campaign included:

- The launch of the new branding and 'Cherish the Moment' slogan
- Enlisting a high profile industry ambassador, Jessica Watson
- An integrated public relations (PR) program
- Retailer collaborative activities
- State promotions
- Consumer research, benchmarking and marketing program evaluation (R&D funding)



Jess Watson Eats Cherries

- National category management across the chain stores and the independent green grocer channel (R&D funding).

A comprehensive media package was developed, including fresh looking images of Jessica Watson, vibrant and tantalising recipes to promote the versatility of cherries, the Australian cherry report, developed by the industry's nutritionist ambassador, Kathleen Alleaume, from the 2010/11 season to outline the healthy benefits associated with cherry consumption and industry information.

A media launch event was held at Sydney's Cruising Yacht Club in Rushcutters Bay to introduce Jessica as the industry's ambassador, build awareness around the campaign and to generate media excitement in Australian cherries. The event was extremely well attended and had representation across not only traditional food media, but there was keen interest from mainstream lifestyle, dailies, consumer and business publications. The choice of having Jessica Watson as the industry's spokesperson proved to be a success in attracting the media, generating a more than significant amount of interest in cherries. The campaign continued with a strong emphasis on media engagement in strengthening the value perceptions of cherries and to prevent negative publicity.

Some of the media highlights included:

- A dedicated 10-minute section on Channel Nine's national *Weekend Today* show outlining the health benefits associated with cherries and the excellent season forecast
- A cooking segment on Channel 10's *The Circle* with Maggie Beer making a Cherry Fool
- Season launch stories on television news bulletins across key growing areas
- Ambassador profiles and health-related cherry mentions in key consumer titles.

The PR campaign achieved great success in terms of the reach, range and depth of coverage across all different media including mainstream TV, radio,



Jess Watson – Cherries Ambassador

newspapers, magazines, nationally and regionally syndicated outlets and online.

For 10 weeks during the Australian summer, a merchandising team visited around 160 stores across Woolworths, Coles, IGA and the independent green grocers nationally each week. This team proved when the fruit is properly handled, wastage is reduced, the quality of fruit goes up and turnover increases, contributing to improved profitability. This is especially crucial to cherries as they are largely an impulse buy and the buying decision is mostly made at the point of purchase.

The latest consumer research revealed that:

- Cherries are largely an impulse buy.
- Consumers associate cherries with stonefruit.
- The key drivers for purchasing cherries are quality and price, followed by the firmness of cherries, whether the fruit is blemish-free and the colour of cherries.
- The way cherries are displayed also has an impact on the consumer.
- Cherries are largely consumed fresh (86%), however nearly seven in 10



consumers have indicated they also include cherries in fruit salad and around four in 10 consumer have suggested that they have cherries for breakfast. Additional usage options should help drive purchase frequency leading to further consumption.

- Consumers have low awareness of the origin of cherries. However, most consumers buy cherries in summer while the Australian fruit is in season and they tend not to buy cherries during winter when the US fruit is in season.
- Locally sourced cherries, better understanding of the health benefits of cherries and attractive cherry displays have been identified as drivers that would encourage consumers to buy more of the fruit.
- People who currently do not buy cherries have indicated reasons for not buying are centred around price, quality and value perceptions.
- Supermarkets continue to be the preferred purchasing channel.
- Generally speaking, consumers have a very low level of awareness of any fruit advertising (less than 10%). When the research was done in March 2012, Apples and Avocados were rated as the highest recalled.
- The availability of point of sale material at the retail level would increase the exposure of the cherry brand.
- Consumers have indicated a strong liking towards the newly developed 'Australian Cherries' brand.
- Regular cherry buyers are more inclined to be female buyers aged 35+.

Based on the season's data review, an additional of 226,800 Australian households (there are around 8.1 million Australian households in total) bought cherries over the Australian summer comparing to the season prior.

Project CY11500

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Developing and maintaining market access for Australian cherries

Market access, market maintenance, biosecurity preparedness and maintenance of disease and pest free areas (project CY11014) are the highest priority within the Australian cherry industry. A regular and ongoing focus by CGA and other key stakeholders in the industry is needed to ensure new market access and maintain all existing overseas markets, which is currently about 30 countries.

Visits within Australia and overseas to participate in government and industry meetings to achieve market access or ensuring market maintenance have occurred. The project also assists with visits to Australia such as the China-Australia Horticultural forum in Melbourne in April 2011 and AQSIQ in November 2011, that ensure we gain access to the Chinese market in 2012/13.

This project gives CGA and state bodies the required resources and capacity to build on and expand the activities across all markets we currently access

and new ones we need to continue to push for, such as Thailand, Korea and Japan.

The Australian cherry industry needs to show that it is free of specific pests and diseases that are of concern to our trading partners and must also continue to ensure that the industry is ready for an outbreak of an exotic plant pest, if it were to occur. If the industry is not prepared, it will fail to fulfil its responsibilities and leave the growers vulnerable to market failure and closure.

A new three-year project will commence in 2012/13 (CY12007) to carry on this work, linked to the Export Roadmap that is part of the new five-year Strategic Investment Plan (see CY11011 and CY11013).

Project CY11017

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CGA Annual Conference 2011

The national annual conferences for apple and pear and cherry growers were held simultaneously in Adelaide in August 2011. The conferences included the Annual Levy Payers Meeting, Members Forum, formal conference proceedings, HortExpo (incorporating trade displays) and networking events.

The theme of the conferences, 'Growing smarter, growing stronger' emphasised practical and applied research, grower case studies and experiences, and practical demonstrations.

The conferences were well attended with a high participation from the growers. The contributing factors may have been:

- Combining two conferences minimised the time and expenses of attendees who would normally go to both.

- Content was specifically aimed at growers.
- The program was kept tight so that time away from the orchard or business was minimised.
- The large number of exhibitors allowed growers to access many relevant trade exhibitions in one place.
- Conferences are held bi-annually, which seems to suit growers better than having a conference every year.

Project CY10703

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Expanding cherry exports for NSW by attending Asia Fruit Logistica 2011

The mainland cherry industry produces approximately 75% of Australia's cherries and NSW is a major producer of these. A large volume of cherries is produced in a short time, so domestic market failure from oversupply can occur in December.

Growers attended Asia Fruit Logistica 2011 and market visits throughout Hong Kong and China, providing an opportunity to re-acquaint with former trading partners, meet potential new trading partners and see the changes that have taken place in these markets.

The main enquires for mainland Australian cherries came from mainland China, Taiwan and Thailand, which have been the largest buyers of Australian cherries and offer the greatest potential.



To reach full potential to export cherries to the Asian market, areas that need further investment are:

- A suitable air freight protocol for Australia's three main markets
- The development of a cherry matrix to see that the right cherries get to the right market
- The development of an Australian export standard
- Encouraging the development of export standard varieties.

Project CY11005

For more information contact:

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Hong Kong Asia Fruit Logistica



Guangzhou Fruit 2011



Hong Kong markets

Category management program 2011/12

This project aimed to address quality issues of Australian cherries, which are largely an impulse buy. Based on findings from consumer research, 70% of consumers currently buy the fruit at the point of purchase. Two key factors influencing consumers buying cherries are quality and price. When the quality of the fruit is high, Australian cherries turn over quickly and price is based on the consumers' perceptions of value.

The Australian cherry industry conducted a category management program over a 10-week period during the 2010/11 Australian cherry season.

The industry identified the need to conduct a field program that would provide an opportunity to influence and educate key store personnel across the grocery and green grocer channels

on cherry handling and storage to raise the quality and therefore minimise wastage of Australian cherries.

The objectives of the program were to:

- Improve and maintain the quality of cherries through store-level education
- Collect meaningful and measurable data to be used to understand key issues, identify trends and opportunities around fruit quality and handling and the effectiveness of point-of-sale (POS) materials:
 - Fruit placement in store
 - Fruit colour, size and consistency
 - Price monitoring
 - Implement best practice (refrigerate fruit, maintain quality and extend shelf life and reduce shrinkage/wastage.

- Use program findings to implement best practice and build a business case to demonstrate that category management does have a positive impact on volume sales and profitability
- Assess what training tools are required by retailers, e.g. colour guide, varietal chart
- Assess the effectiveness and requirements of POS in store.

The category management program delivered tangible returns to industry improving the quality of the Australian cherries at retail to improve profitability.

Project CY11024

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Ensure the Australian cherry industry has appropriate and sufficient capacity to manage change and industry expansion

Consumer research

The Australian cherry industry needs to develop a baseline for the annual consumption and consumer awareness and perception of cherries across Australia and to develop a new branding and marketing campaign for the 2011/12 season and the next few years.

Sprout Research in Brisbane carried out online surveys of Australian consumers in May 2011. The questionnaire took approximately 10–15 minutes. The sample size of 1,200 respondents were from Brisbane (200), Sydney (300), Melbourne (300), Perth (150), Adelaide (150) and Hobart (100).

The key findings were:

- Three in four people (74.2%) usually buy cherries.
- Cherries are considered closer to a stone fruit than a berry.
- The biggest barriers are price and quality, so an opportunity exists to look for ways to improve perceived value without cutting price.
- Most decisions to buy cherries occur at point of purchase (70%).
- Supermarket and green grocers are the main purchase channels. Farmgate is less than 10%, except in Tasmania.

- 75% of buyers normally eat cherries predominantly on their own. 12% add them to a fruit salad in breakfast meals, providing an opportunity to promote different usage occasions.
- Awareness and understanding of the difference between US cherries and Australian cherries is low and confused, so promotion of the availability of local cherries should drive purchase.
- Awareness of any cherry marketing activity is very low (less than 3%).

From these results, the Australian cherry industry adopted a new slogan, 'Cherish the moment', with a tag line of 'The Australian Cherry Season Lasts Just 100 Days'. A new logo was created and Jessica Watson was signed up as the new Cherry ambassador (see page 9 for more information).

A new three-year consumer research project will follow on from this initial project to track progress.

Project CY10026

For more information contact:
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E ceo@cherrygrowers.org

Biosecurity preparedness

A regular and ongoing focus on gaining new market access and maintaining all existing markets is crucial. A key component for this is to ensure all biosecurity processes are in place.

This project gives CGA and the state bodies the required resources and capacity to build on and expand biosecurity preparedness activities that will benefit future options for market access and market maintenance and ensure the industry is well equipped for biosecurity issues that might arise.

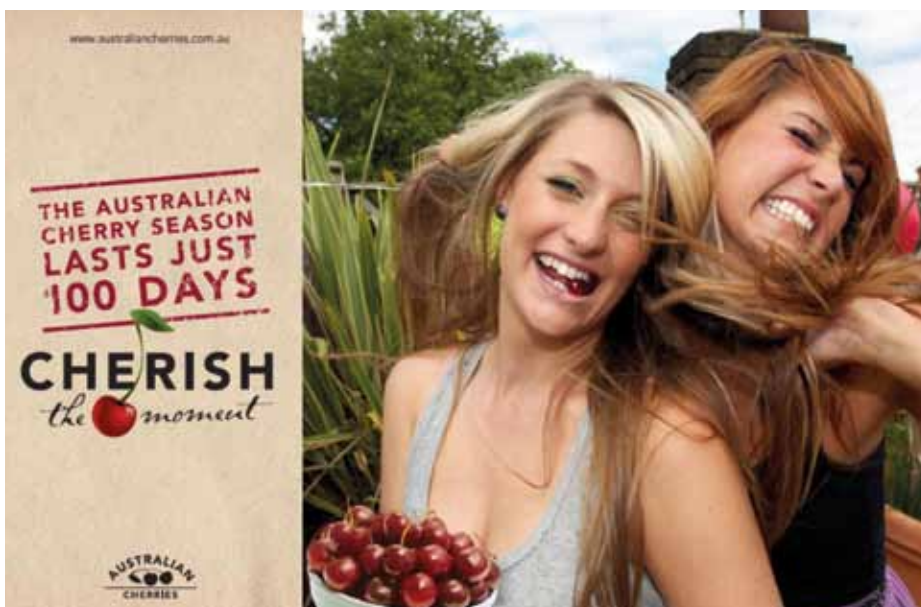
The recent release of the updated *Industry biosecurity plan for the cherry industry* and the *Orchard biosecurity manual for the cherry industry* by Plant Health Australia and CGA in August 2011 provides a great basis for work to be carried out in cherry production areas across Australia.

The industry must continue to ensure that it is prepared for an outbreak of an exotic plant pest and show our trading partners that it is free of specific pests and diseases that are of concern. If industry is not prepared, it will fail to fulfil its responsibilities and leave growers vulnerable to market failure and closure.

A new three-year project will continue to implement the *Cherry industry orchard biosecurity plan* at a grower level as required under the *Emergency plant pest response deed* and the *Cherry industry biosecurity plan*.

Project CY11014

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Improving communication in the Victorian industry

A variety of communication is being used by the Victorian Cherry Association (VCA) to help Victorian growers keep abreast of rapidly changing technologies in cherry production.

Newsletters

Print newsletters evolved into a more frequent e-newsletter during harvest as there was a need and demand to provide growers with immediate information on and responses to market prices, climatic conditions and other issues that affected harvest.

This was most evident and crucial during the damaging rains and floods that caused havoc on the majority of cherry orchards throughout Victoria in the 2011 season, where nearly all Victorian growers suffered substantial losses. The e-newsletter was able to quickly get information out to growers regarding managing the situation in the orchard as well as updates on available financial assistance. The newsletter was also a vehicle in retrieving crop damage estimates from growers and this information was provided to Government agencies, CGA and HAL.

The e-newsletter's circulation has now surpassed the circulation of hard copies.

Website

The VCA website, www.cherries.org.au, continues to have a mix of information for consumers and growers that includes VCA information and history, consumer information, orchard management etc. The website continues to evolve.

Daily traffic to the website and email traffic from the website increases during the harvest season.

On-farm demonstrations, workshops, seminars and orchard walks

The ability to demonstrate best practice in orchard management by on-farm demonstrations has been instrumental in initiating and implementing change on orchard. Orchard walks and outdoor demonstrations have been hands-on for growers to see benefits in changing their orchard practices.

Workshops, seminars and orchard walks have always been well attended by

Victorian cherry growers with the End of Season Review always attracting the most attendees and the most discussion. With this in mind, the VCA trialled a two-day Victorian conference in March to incorporate the review, workshops, guest speakers and on-farm demonstrations.

The conference exceeded expectations with over 100 attendees despite some of the worst floods in living memory occurring in the north east of Victoria during both days of the conference. The floods did hamper a few growers from the north attending and also made the orchard tour of Wandin Valley muddy and plans needing to be hastily changed, however, growers are used to dealing with adverse climatic conditions and the conference was very successful despite the weather.

Gauging from evaluation data, growers gained a lot from speakers, particularly the key note speaker, John Warmerdam, a grower, packer and marketer from California. John spoke about the similarities in climate conditions, growing cherries in a warmer climate and what varieties are best suited to these conditions, early season varieties and rootstocks, packaging trends, marketing, market access, fruit fly and fumigation. He did a further presentation on monitoring, using chill units and the benefits and potential pitfalls of Dormex application.

Project CY11004

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CGA strategic investment plan and research framework 2012–2017

As part of reviewing its Strategic Investment Plan (SIP), the industry has a key component to develop a more robust research framework in collaboration with HAL and the Tasmanian Institute of Agriculture, who are the lead agency for cherry research under the new National Horticultural Research Network.

The framework will allow for a better approach to research to take the industry forward through to 2020 and link to future calls for research projects using both levy funds and voluntary contributions.

This project will allow for all the key players such as HAL, the Tasmanian Institute of Agriculture, growers and others in the cherry industry to have input into the new framework and will also complement the other components of the new SIP, which are:

- Industry R&D framework/investment plan
- Strategic marketing plan/investment plan
- Export roadmap
- Industry communications and extension plan.

These plans will be managed by CGA and HAL and will assist the industry in directing its efforts and achieving the overall outcomes of the SIP.

Project CY11013

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Combined IDO for CGA and FGT

One Industry Development Officer (IDO) supports the cherry, apple and pear and summerfruit industries. Working with Cherry Growers Australia (CGA) and Fruit Growers Tasmania (FGT), the IDO helps to effectively achieve research, development and extension activities. National benefits of the IDO role include commitment to issues such as market maintenance, access and development.

At the state level, benefits to Tasmanian growers include assistance and co-ordination of export registrations and MRL samples, plus facilitation of information to growers via newsletter articles, seminars and conferences.

Key activities for the 2011/12 financial year include:

- Annual review of the *Cherry export manual*, including review and updating of MRLs, export withholding periods, spray guides, protocols and applying for APVMA permits
- Review and update of the *IPM calendar for cherries*
- Co-ordination and collection of stone and pome fruit samples for MRL testing
- Co-ordination of export registrations for Tasmanian stone and pome fruit growers
- Conducting food irradiation trials as a potential means of disinfestation and extending shelf life
- Assistance with running various information seminars
- Desktop research on alternatives to fumigating apples.

Project MT07058

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Developing communications, engagement and capacity across the industry

With the cherry industry continuing to expand and develop, CGA needs to provide ongoing communications that provide access to the most up-to-date information on cherry production here and overseas. It also needs to provide opportunities for engagement and capacity building development to ensure that growers are at the 'leading edge' of technology and information and have the capacity to grow to meet industry demands.

CGA aims to ensure this by:

- Identifying topics of interest, effective delivery methods and timelines for extension-style activities
- Promoting effective planning, communications, extension and adoption relating to R&D and marketing projects
- Creating an evaluation feedback system so that CGA better understands which pathways influence growers most effectively

- Upgrading the industry website and maintaining the national database in cooperation with the state associations
- Refining communication pathways to state associations to improve and optimise industry development needs and assist in putting on training and field days relevant to grower needs and education
- Developing a new national newsletter and other specific mailouts to communicate all information to growers
- Working with state associations on developing their capability to work with their state's growers and other key stakeholders so they can adapt to change and a growing industry.

Project CY11018

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Export-import market intelligence

Since Australia is a small player in the global fresh produce market, gathering reliable market intelligence is vital for setting realistic market access and development objectives and understanding the growth opportunities and competitive environment in which the cherry industry is operating in outside Australia.

This project gathers export and import trade statistics from both Australian and international sources and analyses the data providing critical trade information for industry leaders to monitor the industry's position against development objectives relative to competitors and other industry trends. This analysis includes: monitoring of volume, value and dollars per kilogram by market; and annual, monthly and season-to-date measures. By active participation, the project also gathers market intelligence information from the Southern Hemisphere Association of Fresh Fruit Exporters (SHAFFE) and other international links at Asia Fruit and Produce Marketing forums.

During January to December 2011, the total exports of Australian cherries were 1,438 tonnes valued at \$17.2 million. Australian cherries accounted for 5% of Australian fresh fruit exports that were valued at \$347 million in 2011.

Hong Kong, Taiwan and Thailand were the top 3 market destinations accounting for 62% of the exported volume in 2011. Chile and New Zealand were Australia's main competitors for cherries. Overall, Australian cherries accounted for 2.3% of some 60,000 metric tonnes of cherries imported by Asian markets in 2010.

The project delivers six reports each year in addition to ad-hoc analysis when needed by industry leaders. The project concluded in June 2012 and a new revised project is planned from July 2012 to deliver on going analysis.

Project MT10022

For more information contact:

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Cherry industry research plan 2011–2014

The *Cherry Industry Research Plan* aims to institute a levy funded evaluation program that will provide the industry with the ability to assess its levy investment in addressing the industry's strategic objectives.

This project is to be carried out in three stages, coinciding with the corresponding cherry seasons, using a combination of qualitative and quantitative research methodologies:

- The first stage in 2012 is using a national phone survey and an online survey designed to ascertain purchase frequency as well as to gain an in-depth understanding in the areas of the industry's return on marketing investment.
- The second stage in 2013 will include focus group research followed by an online survey to investigate a number of key industry strategic investment areas as well as benchmarking against key industry objectives.
- The final stage in 2014 will be developed to evaluate and benchmark industry strategic priorities. The research will also be integral to the development of future industry plans.

The new consumer research report will provide the industry opportunity to develop and tailor a future marketing investment program for the cherry industry.

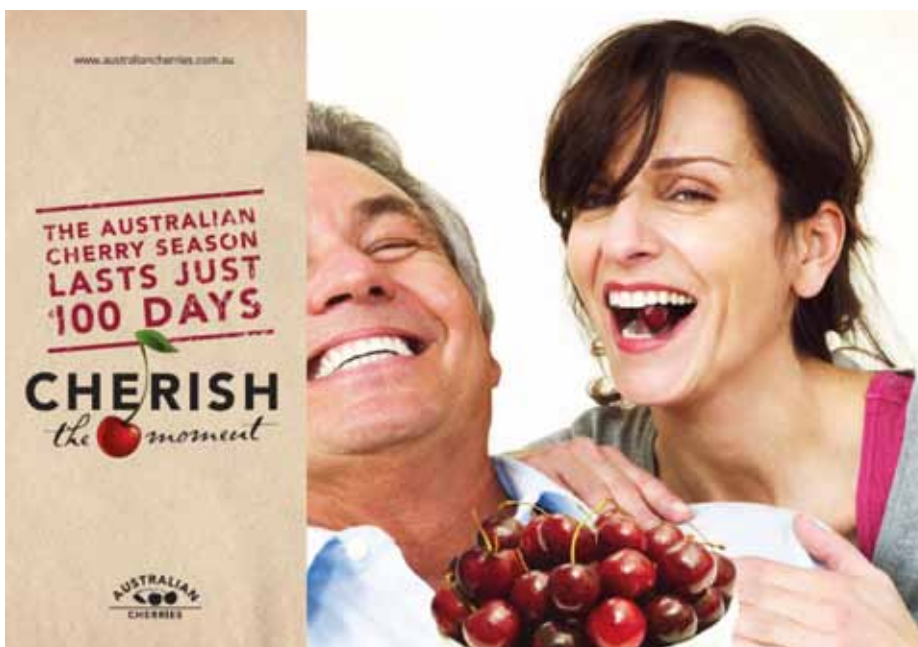
Project CY11023

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Protecting pollination

The Pollination Program is currently managing a number of research projects to secure the pollination of Australia's horticultural and agricultural crops into the future on a sustainable and profitable basis. The Pollination Program is a jointly funded partnership with the Rural Industries Research and Development Corporation (RIRDC), HAL and the Australian Government Department of Agriculture, Fisheries and Forestry.

The impact of an exotic pest or disease incursion is considered to be the most significant risk to the beekeeping industry and therefore the industries reliant on pollination. One of the key threats is the Varroa mite and much of the activity in the year the program has been running is focused on this pest. If Varroa mite or similar bee pests reach Australian shores and become entrenched, it's expected to cost between \$21 million and \$50 million per year over 30 years. This is not just from lower honey production, but the impact of the loss of pollination by both managed and wild European honeybees on a range of fruits, vegetables and pastures.

RIRDC funds for the program are provided by the Honeybee Research and Development Program, with industry levies matched by funds provided by the Australian Government. Funding from HAL for the program is from the apple and pear, almond, avocado, cherry, vegetable and summerfruit levies and voluntary contributions from the dried prune and melon industries, with matched funds from the Australian Government.

Several projects are continuing their work to raise awareness of the importance of pollination, and the need to plan and prepare for Varroa.

'Bee Force' – Improving surveillance and sentinel hive traps and developing the model for other regions

Ports have been identified as one of the most likely entry points for bee pests such as the Varroa mite, which has devastated bee colonies around the world. Australia is the last major country free of the pest, and with 65 per cent of our horticultural and agricultural crops requiring pollination, its arrival would cause devastation. When Varroa mite was first reported in New Zealand in 2000 by a hobby beekeeper, it

was already endemic and found to have likely been in the country for up to three years.

Bee Force is a community engagement pilot project aimed at recruiting confident beekeepers located within close proximity of high risk points of entry, and to train them to conduct in-hive surveillance for early detection of exotic honeybee pests such as Varroa mites. The objective is to determine if the involvement of carefully handpicked beekeepers is of any value to the current surveillance programs managed by the Department of Primary Industries Victoria.

This two-year pilot project, to be completed in 2012, will evaluate the level of engagement and reliability of non-professionals, their willingness to be involved in a biosecurity project and test their level of commitment to a relatively long-term pilot project that requires discipline and a moderate level of expertise.

The pilot project in Melbourne with ten hobby beekeepers has worked exceptionally well, and another ten are now in place in Geelong. The beekeepers around the shipping ports of Melbourne and Geelong complement the National Sentinel Hive Program and similar programs designed to quickly find and identify both bees and pests that might come into the country.

The project will be assessed to determine what it takes to make it work and if it can be implemented nationally. The project is gathering detailed information on costs, level of engagement and commitment by participants, potential issues, as well as strengths and weaknesses.

The project is managed on the ground by DPI Victoria. Sabine Perrone, an expert in biosecurity, will assess how Bee Force could be designed to be rolled-out nationally.

Projects MT09086 and MT09087

For more information contact:
Dave Alden, RIRDC
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Developing a honeybee and pollination CRC bid

This project was designed to determine whether sufficient support (including co-investment funding) existed to develop

a bid for a Honeybee and Pollination Security Cooperative Research Centre for submission in June 2012.

Early in 2012 it became clear that in addition to a shortfall of cash co-investment, the absence of obvious key stakeholders from the bid appeared certain to undermine the credibility of the bid. Under those circumstances, it was decided that the intended bid would not be viable.

Nevertheless, the bid development process identified a program of high-quality R&D and extension activities, covering enhanced bee breeding and genetics, pest and pathogen control, and pollination enhancement and sustainability that would deliver important outcomes. Participants in the bid development agreed that alternative routes to seeking funding support for the work would be explored.

Project MT09090

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Implementing biosecurity to strengthen honeybee and pollination-responsive industries

To assist industries in identifying the biosecurity risks associated with new pests of honeybees, prioritisation of risks and mitigation activities through the development and implementation of a Honeybee Industry Biosecurity Plan (IBP), is a critical biosecurity preparedness activity. Implementation of the IBP will be assisted by development of a Honeybee Biosecurity Manual (HBM).

An IBP, a HBM and contingency plans for four pest threats of honey bees is being produced. An Industry Biosecurity Group has been established and drafts of these documents have been prepared and circulated to this group for feedback. All documents are expected to be completed by the end of September 2012.

Project MT10058

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Pesticide and bees booklet

A booklet that will help beekeepers and horticultural producers to manage the risk of honeybee pesticide poisoning – a major barrier to the increased supply of commercial pollination services – was developed.

The booklet contains:

- A list of pesticides known to be toxic to bees
- Information about the Australian Pesticides and Veterinary Medicines Authority's (APVMA's) pesticide registration regime
- Recommended practices for beekeepers and growers
- A pesticide poisoning risk management plan that growers and beekeepers can work through prior to each pollination job.
- A pesticide poisoning investigation form designed to help facilitate the calm and accurate investigation of suspected poisoning events.

Verifying the accuracy and completeness of pesticide toxicity information provided by other sources has revealed errors and gaps in previous work of a similar nature, and this in itself has been a significant outcome of this project. The result is a list of 349 pesticides registered for horticultural and broadacre use in Australia that the APVMA has assessed as being toxic to bees.

Hard copies of the book can be purchased online, or downloaded as a free PDF at <https://rirdc.infoservices.com.au/items/12-043>

Project MT10060

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Remote sensing of beehives to improve surveillance

Currently, apiary inspectors routinely and manually check bait boxes at ports around Australia for the incursion of an exotic swarm. This project aims to develop an automated detection system that notifies apiary inspectors when a swarm has arrived at a bait box.

Controlled trials conducted at an apiary site in the first year of this project have demonstrated that temperature, weight and relative humidity sensors and camera imagery are all responsive to the presence of a swarm in a bait box. Further testing

has enabled the identification of the sensitivity of different sensors to different swarm sizes arriving in a bait box under controlled conditions. A solar-powered bait box instrumented with a remote access camera that is viewable online has been deployed to the Port of Brisbane as an initial installation.

Project MT10063

For more information contact:
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Monitoring the arrival of a swarm of bees to a bait box instrumented with cameras and weight, temperature and relative humidity sensors in controlled trials



Bees clustered on the top bar inside the instrumented bait box



Photo captured inside the bait box as the swarm arrives

Understanding the purchase behaviour of fresh produce consumers

Reliable information on consumer purchase patterns helps the cherry industry to gain a better understanding of shopping behaviour and empowers better demand and promotion planning throughout the year.

Nielsen's Homescan™ Consumer Panel has been designed to monitor and understand household purchasing of packaged grocery and fresh produce. With 10,000 demographically representative households, the panel is now the second largest per capita in the world providing household level data on a continuous basis.

In the analysis prepared for the cherry industry, this vital market information is being used to track performance, demographic consumption and to help define strategies to improve cherry performance.

During 2011, an additional 761,000 households bought cherries, almost half of Australian households. At the same time, we now understand that the average Australian household is now buying cherries three times per year and senior couples are the most important lifestage from a value perspective.

Project MT10017

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ACROSS INDUSTRY PROGRAM

The cherry industry contributes funding towards an across industry program that addresses issues affecting all of horticulture. Details of the current program are listed below. A full report of the program can be found at http://www.horticulture.com.au/industries/across_industry_program.asp

Project No.	Project title	Levy or VC	Project start	Project finish	Organisation	Contact
Objective 1: To enhance the efficiency, transparency, responsiveness and integrity of the supply chain						
AH11025	Fresh Food Summit and Supply Chain Forum 2011	Levy	1/10/11	30/6/12	AXS Partners Pty Ltd	Tristan Kitchener 0407 827 738
Objective 2: Maximise the health benefits of horticulture products						
AH11016	Partnership program with Dietitians Association of Australia	Levy	1/10/11	30/6/13	Dietitians Association of Australia	Jodie McHenry 02 4954 4964
Objective 3: Position horticulture to compete in a globalised environment						
AH09025	Office of Market Access Program	Levy	1/10/09	30/6/12	Horticulture Australia Limited	Jodie Pedrana 07 3012 8370
AH09027	Investing in Youth Successful Scholarship applicant	Levy	31/5/10	31/3/15	Rural Industries R&D Corporation	Margo Andrae 02 6271 4132
AH10008	Future Focus – ongoing maintenance	Levy	7/3/11	27/7/12	Centre for International Economics	Derek Quirke 02 6245 7800
AH11014	Leadership training	Levy	1/4/12	31/12/12	Horticulture Australia Limited	Richard Stephens 02 4739 1654
AH11015	Data acquisition and management	Levy	1/4/12	31/5/12	Australian Bureau of Agricultural & Resource Economics	Max Foster 02 6272 2095
AH11020	Opportunities for Australian horticulture in the Carbon Farming Initiative	Levy	29/11/11	25/5/12	Growcom	David Putland 0408 984 039
AH11027	HAL dimethoate and fenthion options seminar	Levy	1/9/11	14/10/11	Horticulture Australia Limited	Kim James 08 6488 2209
AH11028	Updating statistical handbook for horticulture	Levy	1/12/11	31/5/12	Oliver and Doam	Agnes Barnard 02 8011 4743
AH11036	Industry Development Forum 2012	Levy	1/4/12	31/10/12	Horticulture Australia Limited	Richard Stephens 02 4739 1654
Objective 4: Achieve long term viability and sustainability for Australian horticulture						
AH09003	Plant protection: Regulatory support and co-ordination	Levy	1/7/09	30/5/14	AKC Consulting Pty Ltd	Kevin Bodnaruk 0408 567 252
AH09014	Across-industry climate research, development and extension (RD&E) activities	Levy	13/4/10	31/1/12	Horticulture Australia Limited	Peter Melville 02 8295 2317
AH10003	Horticulture component of the National Climate Change Research Strategy for Primary Industries	Levy	30/11/11	3/5/16	Horticulture Australia Limited	Peter Melville 02 8295 2317
AH10006	Pesticide spray drift in horticulture – a response to new guidelines from the APVMA	Levy	1/7/10	31/5/12	Horticulture Australia Limited	Jodie Pedrana 07 3012 8370
AH11005	Horticulture environmental desk audit	Levy	30/11/11	31/8/12	Growcom	Jane Muller 07 3213 2483
AH11006	Carbon amelioration in horticulture	Levy	1/12/11	31/8/12	NSW Department of Primary Industries	Justine Cox 0438 770 187
AH11007	Developing an LCI database for Australian agriculture	Levy	2/1/12	1/10/13	Rural Industries R&D Corporation	Peter Melville 02 8295 2317
AH11008	Horticulture response to APVMA spray drift regulations	Levy	20/12/11	30/5/13	Horticulture Australia Limited	Jodie Pedrana 07 3012 8370

Project No.	Project title	Levy or VC	Project start	Project finish	Organisation	Contact
AH11010	Biotechnology awareness in horticulture	Levy	10/10/11	25/4/12	Horticulture Australia Limited	Alok Kumar 0418 322 070
AH11019	The impacts of the proposed carbon price mechanism on Australian horticulture	Levy	29/11/11	31/5/12	Growcom	David Putland 0408 984 039
MT09043	Enhancing confidence in product integrity in domestic and export markets	Levy	1/7/11	28/12/13	Horticulture Australia Limited	Richard Bennett 0429 329 731
MT10029	Managing pesticide access in horticulture (cont. from AH04009 and MT07029)	Levy	1/7/10	2/7/15	AgAware Consulting Pty Ltd	Peter Dal Santo 03 5439 5916
MT10049	A multi target approach to fruitspotting bug management	Levy	1/3/11	1/4/16	NSW Department of Primary Industries	Dr Ruth Huwer 02 6626 1196
Objective 5: Other						
AH10016	Horticulture support for the CRCNPB rebid – round 14	Levy	24/5/11	14/1/12	CRC For National Plant Biosecurity	Kim James 08 6488 2209
AH11003	Support function for Across Industry Committee	Levy	15/9/11	30/8/13	Horticulture Australia Limited	Warwick Scherf 02 8295 2323
AH11017	Sponsorship of Appetite for Excellence Awards	Levy	1/7/11	22/6/14	Horticulture Australia Limited	Erin Riley 02 8295 2340
AH11023	Graham Gregory Award and function	Levy	1/7/11	30/6/16	Horticulture Australia Limited	Erin Riley 02 8295 2340
AH11026	Across industry program administration	Levy	1/7/11	30/6/12	Horticulture Australia Limited	Warwick Scherf 02 8295 2323
AH11038	Horticulture information unit	Levy	15/5/12	15/8/13	Horticulture Australia Limited	Richard Bennett 0429 329 731
AH11800	Industry annual report 2011/12	Levy	1/7/11	30/6/12	Horticulture Australia Limited	Barbara Knezevic-Marinos 02 8295 2334










































To find out more information on the cherry industry's contribution to projects in the Across Industry Program, please contact the HAL Industry Services Manager for the cherry industry, Stuart Burgess, on 0417 536 300 or stuart.burgess@horticulture.com.au

CLIMATE CHANGE RD&E

Australian horticultural industries remain committed to exploring the impacts and opportunities arising from climate change. Horticulture climate R&D investment encompasses a diverse range of objectives and in 2011/12 these include: cross-collaborative programs such as the Climate Change Research Strategy for Primary Industries (CCRSPI); carbon footprinting and lifecycle assessment; nitrous oxide research; evaluation of the carbon price mechanism and the Carbon Farming Initiative; adaptation management to reduce the on-farm risk of climate change; and water use efficiency.

These programs aim to empower horticulture to evolve under a changing climate through sound science and communication channels. HAL's RD&E investment in climate is obtained through industry levies, voluntary contributions and matched by the Australian Government.

CHERRY PROGRAM

Project No.	Industry Obj	Rural R&D priorities	Project title	Levy or VC	Project start	Project finish	Organisation	Contact
CY08003	1	 	Cherrynet – Improving stem retention in sweet cherries to meet quality specifications	VC/Levy	30/6/09	30/4/12	Victorian Cherry Association	Ken Gaudion 03 5825 3700
CY09000	3	  	Improved communication within the Victorian cherry industry	VC	1/10/09	14/10/11	Victorian Cherry Association	Kath Boast 03 5825 3700
CY09002	1	  	Improving marketable yield of premium quality cherries	Levy	24/12/09	30/11/12	Tasmanian Institute of Agriculture	Penny Measham 0437454622
CY09006	1	    	Improving cold treatment for disinfesting cherries for Q-fly	Levy	1/7/09	31/5/12	NSW Department of Primary Industries	Dr John Golding 02 4348 1926
CY09012	1		Investigating and overcoming negative effects of global warming on cherry dormancy	VC	21/8/09	1/8/11	Scientific Horticulture Pty Ltd	Dr Gordon Brown 03 6239 6411
CY09019	2	  	Retail handling training package	Levy	25/11/10	30/10/11	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY10002	1	 	Optimising cherry fruit set, crop load and fruit nutrition and size	VC/Levy	1/7/10	31/7/12	Tasmanian Institute of Agriculture	Dr Dugald Close 03 6226 2776
CY10012	1	 	Improving the quality and consistency of Australian cherries to ensure market access	Levy	24/1/11	30/6/12	NSW Department of Primary Industries	Dr John Golding 02 4348 1926
CY10017	1		Cherry Export Manual – 2010 and 2011 editions	Levy	30/9/10	31/10/11	Fruit Growers Tasmania Inc	Nick Featherstone 0408 285 965
CY10019	3		Facilitating cherry industry communications via the <i>Tree Fruit</i> publication 2010/11	Levy	15/10/10	30/9/11	Fruit Tree Media	Nick Morenos 03 9740 7136
CY10021	1		Developing market access and maintenance capacity within the Australian cherry industry	Levy	1/11/10	31/10/11	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY10022	2		Developing communications capacity within the Australian cherry industry	Levy	25/11/10	31/7/11	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY10023	3		Building biosecurity preparedness capacity within the Australian cherry industry	Levy	1/11/10	31/10/11	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY10026	3	   	Cherry consumer research	Levy	1/4/11	30/7/11	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY10702	2		Fruit Growers Tasmania annual May conference and Cherry Growers of Australia regional extension, May 2011	VC/Levy	2/5/11	30/8/11	Fruit Growers Tasmania Inc	Nick Featherstone 0408 285 965
CY10703	2		Cherry Growers of Australia annual conference 2011	VC	16/5/11	31/10/11	Fruit Growers Tasmania Inc	Nick Featherstone 0408 285 965
CY11004	3	   	Extension of improved communication with the Victorian cherry industry	VC	26/10/11	31/7/13	Victorian Cherry Association	Kath Boast 03 5825 3700
CY11005	2	 	Expanding cherry exports for NSW cherry growers through the attendance and participation at 2011 Asia Fruit Logistica	VC	23/11/11	31/1/12	NSW Cherry Growers Association	Joanne Wells 02 6384 3285
CY11010	1	  	Cherry cultivar selection: chill hours and climate change	Levy	1/7/11	1/3/12	YV Fresh	Charlotte Brunt 0420 284 439

Project No.	Industry Obj	Rural R&D priorities	Project title	Levy or VC	Project start	Project finish	Organisation	Contact
CY11011	3		Cherry industry five year Strategic Investment Plan	Levy	1/8/11	15/6/12	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY11012	1		Brown Rot, Boytrytis research project	Levy	11/11/11	1/12/12	Tasmanian Institute of Agriculture	Dr Karen Barry 0400 929 258
CY11013	3		CGA research framework	Levy	1/8/11	30/4/12	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY11014	3		Biosecurity preparedness for the Australian cherry industry	Levy	1/9/11	31/5/12	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY11015	1		Printing of Australian Cherry Production Manual	Levy	1/07/11	7/10/11	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY11016	1		Evaluation of high quality Australian bred sweet cherries for export and domestic markets	Levy	26/9/11	30/6/14	South Australia Research & Development Institute	Darren Graetz 08 8389 8809
CY11017	2		Developing and maintaining market access for the Australian cherries	Levy	1/9/11	30/6/12	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY11018	3		Developing communications, engagement and capacity across the Australian cherry industry	Levy	11/8/11	1/7/12	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
CY11020	1		Integrated soil management	Levy	1/9/11	16/4/12	Cherry Growers of Australia Inc	Kym Green 08 8389 8621
CY11021	3		Cherry category management program	Levy	1/7/11	17/8/11	Horticulture Australia Limited	Elisa Tseng 02 8295 2341
CY11022	1		Market access of cherries based on non host status to Queensland fruit fly	Levy	1/11/11	31/7/12	NSW Department of Primary Industries	Andrew Jessup 02 4348 1965
CY11023	3		Cherry Industry Research Plan 2011–2014	Levy	1/1/12	30/6/14	Horticulture Australia Limited	Elisa Tseng 02 8295 2341
CY11024	2		Australian Cherry Industry Category Management Program 2011/12 season	Levy	1/11/11	30/6/12	Horticulture Australia Limited	Elisa Tseng 02 8295 2341
CY11500	2	N/A	Cherry Marketing Program 2011/12	Levy	1/7/11	30/6/12	Horticulture Australia Limited	Elisa Tseng 02 8295 2341
CY11800	3	N/A	Cherry Industry Annual Report 2011/12	Levy	1/7/11	30/6/12	Horticulture Australia Limited	Barbara Knezevic-Marinov 02 8295 2334
CY11900 /10	3	N/A	2011 Cherry partnership agreement	Levy	1/7/11	10/8/12	Cherry Growers of Australia Inc	Simon Boughey 03 6231 1229
MT07058	3		Combined Fruit Growers Tasmania and Cherry Growers Australia Industry Development Officer	VC/Levy	1/7/07	30/6/12	Fruit Growers Tasmania Inc	Nick Featherstone 0408 285 965
MT08035	1		Providing data packages for new fruit fly control technology	VC/Levy	1/7/08	25/5/12	Department of Agriculture, Fisheries and Forestry, Queensland	Dr Hainan Gu 0401 676 360
MT08036	1		Ecology and preharvest control of fruit flies for system approaches to market access for fruit fly host commodities	Levy	1/7/08	30/4/12	CRC For National Plant Biosecurity	Anthony Clarke 07 3864 5023
MT09006	1		Improving European earwig management in pome and cherry orchards through the use of pheromones	Levy	2/11/09	30/9/12	Tasmanian Institute of Agriculture	Dr Geoff Allen 03 6226 2732



Project No.	Industry Obj	Rural R&D priorities	Project title	Levy or VC	Project start	Project finish	Organisation	Contact
MT09026	3		Protecting pollination for the Australian horticultural industry Stage 2	Levy	30/3/09	31/7/12	Horticulture Australia Limited	Kim James 08 6488 2209
MT09086	3		'Bee Force' – Improving surveillance and sentinel hive traps	Levy	14/6/10	30/5/12	Rural Industries R&D Corporation	David Alden 02 6271 4128
MT09087	3		'Bee Force' – Developing the model for other regions	Levy	14/6/10	30/5/12	Rural Industries R&D Corporation	David Alden 02 6271 4128
MT09090	3		Developing a honeybee and pollination CRC bid	Levy	14/6/10	30/3/12	Rural Industries R&D Corporation	David Alden 02 6271 4128
MT09099	1		National Fruit Fly Strategy – BCA for the Australian horticulture industry	Levy	15/7/11	31/12/11	Plant Health Australia	Nicholas Woods 02 6215 7704
MT10017	3		Understanding the purchase behaviour of fresh produce consumers	Levy	1/9/10	30/8/12	Horticulture Australia Limited	David Chenu 02 8295 2381
MT10022	3		Export-import market intelligence	Levy	1/9/10	31/5/12	Fresh Intelligence Consulting	Wayne Prowse 0408 164 966
MT10058	3		Biosecurity implementation to strengthen Australia's honeybee and pollination responsive industries	Levy	15/7/11	31/12/12	Plant Health Australia	Rodney Turner 02 6260 4322
MT10060	1		Pollination – Pesticide and Bees booklet	Levy	1/8/11	30/4/12	TQA Australia	Daryl Connelly 0488 333 893
MT10063	1		Remote sensing of beehives to improve surveillance	Levy	1/8/11	30/4/13	National Centre for Engineering in Agriculture	Cheryl McCarthy 07 4631 2297

Australian Government Rural R&D Priorities: Productivity and adding value Supply chain and markets Natural resource management
 Climate change and climate variability Biosecurity Innovation skills Technology

To find out levy and/or voluntary contribution expenditure per project, please contact the HAL Industry Services Manager for the cherry industry, Stuart Burgess on 0417 536 300 or stuart.burgess@horticulture.com.au



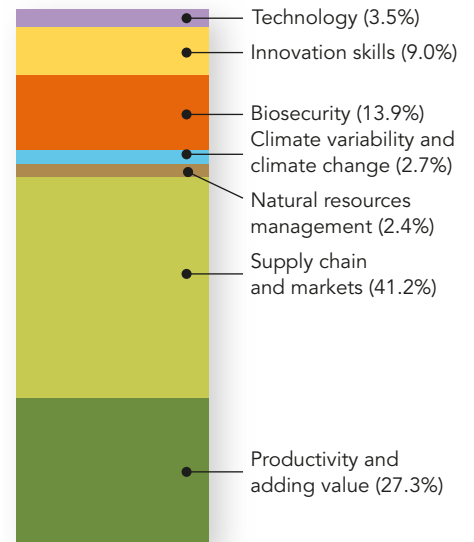
INVESTING IN AUSTRALIAN HORTICULTURE

Australian Government priorities

As part of the Australian Government's commitment to rural research and development, horticulture industries can access matching Commonwealth funding through HAL for all R&D activities.

The Australian Government's Rural Research and Development Priorities aim to foster innovation and guide R&D effort in the face of continuing economic, environmental and social change. HAL's operations are closely aligned with these priorities.

This chart shows the percentage of expenditure in HAL's cherry R&D program against each of the Australian Government priorities for rural research and development. Full details of expenditure across all industries is available in HAL's annual report at www.horticulture.com.au



Productivity and adding value

Improve the productivity and profitability of existing industries and support the development of viable new industries.

Supply chain and markets

Better understand and respond to domestic and international markets and consumer requirements and improve the flow of such information through the whole supply chain, including to consumers.

Natural resource management

Support effective management of Australia's natural resources to ensure primary industries are both economically and environmentally sustainable.

Climate variability and climate change

Build resilience to climate variability and adapt to and investigate the effects of climate change.

Biosecurity

Protect Australia's community, primary industries and environment from biosecurity threats.

Innovation skills

Improve the skills to undertake research and apply its findings.

Technology

Promote the development of new and existing technologies.

HAL's roles and relationships

Horticulture Australia Limited (HAL) is a not-for-profit industry owned company. Its role is to manage the expenditure of funds collected by the Australian Government on behalf of horticulture industries.

In 2011/12 HAL invested more than \$100 million in projects to benefit horticulture industries.

An Industry Advisory Committee (IAC) is established for each industry with a statutory levy and annual income exceeding \$150,000.

The Industry Representative Body (IRB) for an industry is responsible for recommending to HAL the establishment of, and any changes to, statutory levies. The IRB for an industry with a statutory levy recommends membership of the IAC to HAL and must demonstrate how the skills required on an IAC are met by the persons they recommend for appointment to the committee.

For more information please visit www.horticulture.com.au

HAL partnership agreement and consultation funding

The partnership agreement between Cherry Growers Australia Inc (CGA) and HAL sets out the tasks each organisation will perform to enable the other to discharge its responsibilities related to levy payers and industry services. Partnership agreement activities are funded by HAL using the cherry R&D levy and matched funds from the Australian Government as well as cherry marketing funds.

These funds enable CGA to undertake the Annual Levy Payers' Meeting, conduct IAC meetings, attend HAL Industry Forums, attend HAL/CGA Australia Executive Board to Board consultation meetings, and other formal and informal consultation between personnel of CGA and HAL.

The full year consultation funding expenditure for CGA in 2011/12 was \$133,981. This represents 8.6% of the total annual levy expenditure. Consultation funding in respect of R&D represents 7.6% of the investment in R&D expenditure and consultation funding in respect of marketing represents 13.8% of the investment in marketing expenditure.

Project CY11910

For more information contact:

Simon Boughey, CGA

T 03 6231 1229

E ceo@cherrygrowers.org

CHERRY INVESTMENT SUMMARY

Year ended 30 June 2012

	Marketing 2011/12 \$	R&D 2011/12 \$	Combined 2011/12 \$
Funds available 1 July 2011	31,646	352,660	384,306
INCOME			
Levies received	304,601	406,135	710,736
Commonwealth contributions		639,146	639,146
Other income	467	5,548	6,015
Total income	305,068	1,050,829	1,355,897
<i>Budget</i>	271,779	905,516	1,177,295
<i>Variance to budget</i>	33,289	145,313	178,602
PROGRAM INVESTMENT			
Levy programs	221,205	1,131,539	1,352,744
Service delivery programs by HAL	27,134	146,752	173,886
Across industry contribution		21,648	21,648
Levy collection costs	3,265	4,352	7,617
Total investment	251,604	1,304,291	1,555,895
<i>Budget</i>	244,143	1,101,315	1,345,458
<i>Variance to budget</i>	(7,461)	(202,976)	(210,437)
Annual surplus/deficit	53,464	(253,462)	(199,998)
Closing balance 30 June 2012	85,110	99,198	184,308

Cherry Industry Advisory Committee (IAC)

Bob Granger (Chair)
 Scott Coupland
 Gary Fergusson
 Kym Green
 Lucy Gregg
 Tim Reid
 Andrew Smith
 Ian Sparnon
 Simon Boughey (Ex-Officio)
 Stuart Burgess (Ex-Officio)



FOR MORE INFORMATION CONTACT:



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 Hobart TAS 7000

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