Banana





INDUSTRY ADVISORY COMMITTEE ANNUAL REPORT 2012/13

Overview

New market research suggests the banana industry is now the largest single horticultural industry in Australia. Retail sales reflect the popularity of bananas, which are the bestselling selling item, both in terms of value and volume, of all fresh and packaged items.

The 2012/13 financial year was an exciting one for the industry. The industry's major growing region in North Queensland (Qld) had its first financial year of uninterrupted production in three years, and a new marketing campaign was launched to further stimulate consumer demand.

Crop staggering techniques assisted with smoother production periods in early 2013. Good prices were achieved in the traditionally lower-producing winter period. There were, however, some disappointing returns for growers, particularly in the pre-Christmas period. On the whole, better prices were achieved by growers in 2012/13 than 2011/12, when the first of the post-cyclone harvests resulted in some production spikes. The major North Qld growing regions experienced drier conditions for most of the year, including during the wet season. The drier conditions assisted with controlling diseases, such as leaf spot in the region. While North Qld continued its post-cyclone recovery, there were damaging weather events elsewhere in early 2013. Severe storm damage was caused to crops in Southern Qld and Northern New South Wales (NSW) and there was heat damage to crops in Western Australia.

Looking ahead, the industry has developed some initiatives aiming to better inform growers and the supply chain of production and market issues, and it is hoped this will assist with improving farm sustainability.

Levy investment

Due to the publication of this report prior to the availability of the 2012/13 financial year results, information from the industry's 2012/13 forecast budget is provided.

The 2012/13 levy forecast is \$5,304,001, which is based on 24 million cartons. The



current levy is 1.7 cents per kilogram. A total of \$3,283,136 is forecast to be invested into research and development (R&D) projects, and \$3,527,385 towards marketing projects. The Australian Government is forecast to provide \$1,855,572 of matched funding to support 19 R&D projects in the R&D levy program.

In addition to levy funds, \$191,783 of voluntary contributions (VC) is forecast to be 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 for all R&D activity.

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

- · Plant protection.
- Resistant varieties and consumer choice.
- Safeguarding production and markets.
- · Sustainable production systems.
- Building science and communication.
- Industry communications.
- Market research.

In 2012/13, ABGC acted as the service provider on seven projects.

The industry also contributes 2.25 per cent of levy and/or voluntary contributions (matched to 4.5 per cent) to an across industry program that addresses issues that affect all of horticulture, such as water availability, climate change, biosecurity and market access.

continued on page 2

The projects in this report have been funded by Horticulture Australia Limited (HAL) using the banana industry levy and/or voluntary contributions from industry with matched funding from the Australian Government for all research and development (R&D) activity.

Strategic objectives

The process for determining the industry's priorities began with the development of the industry's strategic plan. This plan guides future R&D and marketing investment over a five-year period. Activities in the 2012/13 period were therefore guided by the *Banana Industry Strategic Plan 2009–2014*, which can be found at www.horticulture.com.au/ industries/banana. The plan was developed to reflect the industry's priorities, the Australian Government's rural R&D priorities and is reviewed regularly. The industry's objectives, as outlined in the strategic plan, are:

- Increase consumer demand of Australian bananas by 15 per cent by 2014 through marketing and promotion.
- Increase production efficiency by five per cent by 2014 with minimal to no environmental impact.
- 3. Ensure a 4:1 return on investment of industry levies by enhancing the industry's leadership, capacity and influence.

R&D program

Engagement with international banana breeding organisations has continued to gain access to alternative banana varieties that have favourable traits including diseases resistance. Varieties of interest are from Honduras, France, Spain, Brazil and Taiwan. These varieties are being processed through quarantine, and they will be assessed in a range of different locations for resistance and susceptibility to disease, and favourable growth characteristics.

Improved diagnostics are currently under development for a range of banana disease including Fusarium wilt and Sigatoka leaf diseases. These sophisticated technologies have been adopted from medical applications and have the potential to allow for high resolution of different strains of these diseases, in addition to assisting in quick 'turn-around' of results.

Sub-program three of the Banana Plant Protection Program has carried out a strategic agrichemical review process to assess the current chemical usage practices within the industry, and is examining the efficacy of control measures for yellow Sigatoka. The program has also fostered involvement of young, talented



banana researchers to ensure the future of R&D needs for the Australian banana industry are addressed through the participation of six PhD students, and one masters and one honours student.

As a result of good communications with stakeholders and regulatory support from the relevant state government agencies, between April 2010 and January 2013 there was a 60 per cent increase in the number of commercial plantations provisionally free of bunchy top in NSW. In Qld there was increase of around 30 per cent of commercial plantations free of bunchy top.

Crop management strategies were researched and introduced during the year to assist growers with staggering production, before and during storm and cyclone seasons.

Dr Jay Anderson has been successfully appointment as industry R&D Manager. This position plays a key role in facilitating the development and implementation of high-priority R&D projects.

The industry's major biennial event, the Banana Industry Congress, is supported by a levy/VC project and will run from 29 May to 1 June 2013.

Marketing program

The key campaign messages for the new three-year strategic marketing program builds on the 'Nature's Energy Snack' positioning and includes a new message: bananas are a great source of long-lasting energy. The primary target audience of 18–39 year olds, identified as the greatest opportunity for growth, has delivered significantly, with more of this audience buying bananas during 2012 (90.9 per cent versus 77.9 per cent in 2011). Consumer research for the same period shows positive momentum amongst the campaign's more traditional audience of families with children, with consumers responding well to the new three-year campaign advertising messages. As with the younger audience, 59 per cent now rate bananas as their preferred energy snack—well above the pre-cyclone high of 46 per cent in October 2010.

Investment has been in the areas of a new TV commercial, tactical radio advertising, outdoor advertising, such as billboards on buses and trams, in shopping centers and city lifts. Research demonstrates a positive response to interactive digital advertising and social media.

The marketing campaign continues to utilise the support of Billy Slater as the industry's brand ambassador. Key messages are also being successfully communicated via the sponsorship of community events program nationally. In 2013, the retail support program successfully engaged IGA, Woolworths, Aldi and 7-Eleven retail stores through bespoke consumer in-store education and product promotions.

Conclusion

This report provides a snapshot of project activities in the 2012/13 year. The report's sections are divided by the industry's objectives to reflect the activities being undertaken that address these industry issues.

For more information contact:

Jane Wightman, HAL Industry Services Manager T 0404 309 877

E jane.wightman@horticulture.com.au

OBJECTIVE 1

Increase consumer demand of Australian bananas by 15 per cent by 2014 through marketing and promotion

Banana IAC marketing expert

The banana industry sought independent technical marketing advice to assist decision making concerning marketing strategy and implementation.

A Banana Industry Advisory Committee (IAC) marketing expert was appointed in November 2012. The marketing expert provides expert advice and consultation to the Banana IAC and its members, including recommendations and suggested strategies for implementation.

At the 28 February 2013 Banana IAC meeting, the marketing expert reported on the results of a desktop review the past and current marketing program, which was also delivered to the IAC as a formal document.

Throughout 2013, ongoing advice will be provided to the IAC concerning recommendations from the review process, and the IAC marketing expert will also present at the 10th Banana Industry Congress in May 2013.

As a result of activities to date, clarity around marketing goals and key performance indicators has been sought to ensure value for growers' levy funds. New additional measures are being implemented to measure return on investment.

Project BA12013

For more information contact: Mike Evans, Fresh Partners Pty Ltd T 0419 843 253 E mike@freshpartners.com.au

Banana industry yellow pages

An online supply chain directory has been created to provide easily accessible and up-to-date information on suppliers, and to increase local demand in specific regions of local production in the sub-tropics.

All commercial banana growers stretching from Bundaberg in Queensland to New South Wales, and Carnarvon in Western Australia were invited to list their contact and production details in the directory. Wholesalers and/or consolidators were also sought in each growing region to be listed.

The directory is hosted on the Australian Banana Growers' Council website, at www.abgc.org.au.

Project BA12003 For more information contact: Jim Pekin, ABGC T 07 3278 4786 E jim.pekin@abgc.org.au

Subtropical banana industry market development implementation

This project consists of a three-year market development strategic plan for subtropical bananas, in an effort to achieve economic viability for banana growers in the subtropical growing region.

The research aspect for this project is to determine whether growers are prepared to engage in a specific market development program, and to what extent they will commit to the successful outcome of such a plan.

Through providing workshops to growers, the project aims to bring growers together with wholesalers and industry affiliates to build better communications, develop ties between members and to facilitate discussion. The workshops also aim to improve knowledge about the supply chain, improve growers' knowledge and understanding around maintaining quality and standards, and find solutions for the ongoing viability of subtropical banana producers.

Project BA12000

For more information please contact: Geraldine O'Flynn T 0402 308 970 E goflynn@aapt.net.au

Understanding the purchase behaviour of fresh produce consumers

Reliable information on consumer purchase patterns helps the banana 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, their Australian panel is now the second largest panel per capita in the world, providing household level data on a continuous basis.

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

In the latest figures based on a 52 week ending moving annual total, nine out of 10 Australian households purchased bananas, and the average Australian household is now buying bananas 22 times a year. In addition, independent singles are one of the most important lifestage buyer groups from a value sales contribution perspective.

Project MT12010

For more information contact: David Weisz, HAL T 02 8295 2320 E david.weisz@horticulture.com.au

Marketing program

Six months into the new Australian Bananas marketing campaign, research shows consumers are responding well to the new three-year campaign advertising messages and sharing those messages in record numbers via social media.

Across the board, key research measures are getting back to pre-cyclone Yasi levels and in many cases have significantly exceeded them.

Nielsen Homescan research data for the 12 months to December 2012 shows positive momentum amongst the campaign's traditional core audience of families with children, as well as the new growth audience of 18–39 year olds.

More Australian households are buying bananas (94.2 per cent of the population versus 90.3 per cent a year ago), and they are buying them on average much more frequently (22.5 times per year, versus 13.1 times a year ago).

The primary target audience of 18–39 year olds (which equates to 3.6 million households nationally) has shown the greatest growth, with significantly more of this audience buying bananas during 2012 (90.9 per cent versus 77.9% year ago).



The Australian Bananas TV campaign

Moreover, the campaign has achieved success in bringing more of this audience into the banana category versus historical penetration highs of 88.9 per cent in December 2010, pre-cyclone Yasi.

Additional consumer research conducted by Sprout Research shows that 59 per cent of people now agree that bananas are their preferred energy snack, while 74 per cent list bananas in their top five most preferred energy snacks—the highest percentage of any snack listed.

Television advertising

The new campaign, which launched in August 2012 continues the 'Nature's Energy Snack' theme, but also introduces a powerful new message identified in research, that bananas are a great source of long lasting energy.

Spearheading the new campaign is a TV commercial that is a sequel to the highly successful 'No-No Na-Na' campaign that launched three years ago. The commercial will run throughout 2013 using an 'always on' media strategy, thanks to increased investment from the industry marketing levy budget, which was endorsed by the Banana Industry Advisory Committee and will be seen across multiple channels and TV programs.

This TV message has been reinforced with tactical radio advertising throughout the year, aimed at driving sales during periods of peak supply.



Advert panels were placed outside major supermarkets nationally

Outdoor advertising

Outdoor advertising billboards have also been boosted this year, with the bananas message appearing on hundreds of bus and tram backs around the country, as well as digital screens within shopping centres in close proximity to supermarkets and green grocers.

A striking new addition to the outdoor campaign is the introduction of large showcase panels the size of billboards on the sides of buses.

This outdoor activity is being supported by digital screens in city lifts, promoting bananas to office workers at key snacking times.



Showcase panels advertised on buses throughout the country



The Two Bananas, from the Facebook campaign

Interactive digital advertising and social media marketing continue to grow as key elements in the marketing mix.

Social media

The Australian Bananas Facebook fanbase has grown rapidly, to over 100,000—an increase of 52,345 people between July 2012 and April 2013. During this period, Australian Bananas Facebook messages have been seen over 36 million times and reached over 12.7 million people. Banana fans have personally created over 77,250 stories about their much-loved bananas to share with their friends—a level of brand interaction that would be the envy of any snack food marketer.

These numbers have been driven through targeted advertising and highly entertaining and topical social media content. One example of this content is a series of fun videos featuring a couple of off-beat animated banana characters called 'The Two Bananas' who deliver the long lasting energy message while reinforcing the fun and lively personality of the brand.

Banana's brand ambassador

Meanwhile, bananas brand ambassador Billy Slater—professional rugby league footballer for the Melbourne Storm—has been promoting the health and sporting benefits of bananas via a major publicity event on Channel Nine's The Footy Show. The Australian Bananas 'Play of the Day' promotion was won by young Cody Falkenhagen and his team from Beaudesert, Queensland, who were treated to the experience of a lifetime at a private coaching clinic with Billy.

Meanwhile, other marketing activity continues to drive the campaign key messages in the

community. Sponsorships and community events around the country continue to attract large crowds of banana lovers with bananabranded merchandise being expanded to include two new t-shirt designs, rugby league balls, flyers and a children's pencil case. This activity has received additional support through public relations, with health and energy messages from Billy Slater and nutritionist Glenn Cardwell.

The goal of this marketing activity is to push consumers into retail stores to buy more bananas.

Retail support program

A national banana promotion, which ran for eight weeks in IGA and Franklins stores nationally, generated outstanding results. Luke Couch, National Buying & Merchandise Manager-Fresh Produce said, 'Once again we have seen some fantastic growth ... overall volume was up 18 per cent over the previous two months'.

Australian Bananas have secured pointof-sale promotions with Aldi (a first in horticulture) and have worked closely with the marketing and buying teams at Woolworths to develop a major, fully integrated consumer education promotion that was launched April 2013.

A trial program to make bananas more prominent in 30 Victorian 7-Eleven stores delivered a 26 per cent increase in sales during its first two weeks. 7-Eleven are looking to make their stores a destination for banana buyers, to take advantage of consumers' growing acceptance of Australian bananas 'nature's energy snack'.

An award-winning campaign

Given this activity, it's not surprising that more people are noticing the Australian bananas message and buying more bananas. The marketing team and industry alike were particularly pleased to be noticed by one influential group at the end of last year.

The highly respected Parents' Jury, which promotes healthy eating to Australian children, recognised the Australian Bananas marketing campaign as Australia's best marketing campaign targeting children in its 2012 Fame and Shame Awards.

This award was major news in television, newspaper and online media around the country, and generated priceless publicity for the Australian Bananas brand—a fitting way to highlight a successful year.

Project BA12500

For more information contact: David Weisz, HAL T 02 8295 2320 E david.weisz@horticulture.com.au

Fruit and nut tracking study 2011–2013

Sprout Research have been commissioned by Horticulture Australia Limited to track and report key metrics.

The goal of this project is to ensure there is continuity from previous studies, and that value is gained from the current project by tracking key metrics on brand health, advertising awareness and consumer behaviour.

As an outcome to the project, Sprout Research will monitor changes within

the industry, which will be presented and delivered in reports to industry throughout 2012/13. These reports will help influence future strategy, and will be used as a tool to facilitate key decision making.

Project MT11028

For more information contact: Heath Adams, Sprout Research T 07 3635 8802 E heath@sproutresearch.com.au

Increase production efficiency by five per cent by 2014, with minimal to no environmental impact

Controlling banana bunchy top virus

Banana bunchy top virus (BBTV) has the potential to damage banana production significantly. BBTV stunts plant growth, and in severe cases, plants will not produce bunches. The best means of disease control is through the use of clean planting material and by the destruction of infected plants. This year marks 100 years of banana bunchy top disease in Australia, and while it has not been eradicated, it has been contained to a small area in South East Queensland (Qld) and Northern New South Wales (NSW).

The banana bunchy top team undertakes inspections of commercial plantations to identify and remove BBTV infected plants to prevent the disease spreading. The team also inspects residential plants and educates home gardeners about the disease and the potential impact it can have on the Australian banana industry.

This project, which is now in its second phase, aims to eradicate BBTV from commercial banana plantations. Surveillance frequency depends on the history of the plantation. Plantations which have never had BBTV are inspected annually, while plantations with no more than one BBTV case in the previous 12 months are inspected 2–3 times per year, and those with more than one BBTV case in the previous 12 months are inspected 9–10 times per year.

Between April 2010 and January 2013, the program saw a 60 per cent increase in the number of commercial plantations provisionally free of bunchy top in NSW. In Qld, there was an increase of approximately 30 per cent of commercial plantations free of bunchy top. Throughout 2012, the team undertook a thorough inspection of bananas in Bundaberg Qld, resulting in the confirmation that Bundaberg is bunchy top free.

Non-commercial plantings of bananas can be an important source of BBTV infection, as aphids carrying the virus get blown into commercial plantations and cause infection of healthy plants. In September 2012, the team undertook an intensive inspection of residential banana plants in the area north east of Lismore to target this known hotspot of infection.



Plant inspection in a residential backyard

Over 1,000 BBTV infected plants were destroyed and the campaign was deemed a success due to the high levels of community and local media engagement.

Community engagement and education is extremely important to the success of the bunchy top project. The team have created a flyer with up-to-date information on BBTV and pictures of the symptoms, for distribution to commercial and non-commercial growers. In addition, the team have made two short videos on BBTV. These videos, which are available on YouTube, explain the disease, show symptoms of BBTV for growers, home gardeners and local government authorities. The videos can be accessed on the Australian Banana Growers' Council website, at www.abgc.org.au.

The project also invests in new technology to help fight BBTV. Researchers from the University of Queensland (UQ) have been engaged to investigate the use of the latest aerial/satellite digital images, incorporating new infrared photography and spectral reflectance technology to remotely detect individual banana plants. The success of this technology will greatly increase the efficiency of the team, as it would allow them to identify and target those residents and properties with banana plants for BBTV inspections.

UQ and the Queensland Department of Agriculture, Fisheries and Forestry are currently conducting trials to better understand how long a plant may be infected before showing symptoms of BBTV, and find better methods of destruction of infected plants.

Project BA12006

For more information contact: Jim Pekin, ABGC T 07 3278 4786 E jim.pekin@abgc.org.au

Building competitive banana production systems for a sustainable future

This project investigates the potential for alternative banana production systems, based on the maintenance of crop uniformity over successive crop cycles to achieve improved labour efficiency.

This project aims to generate efficacy and fruit residue data for ethephon pseudostem injection for nurse suckering to support an application to the Australian Pesticides and Veterinary Medicines Authority (APVMA) for a minor use permit (category 21).

The nurse suckering technique

This technique has been widely used in North Queensland production systems to schedule cropping, and has come to particular importance in the aftermath of tropical cyclones Larry and Yasi. Banana producers used the technique to overcome the industry wide synchronisation of cropping induced by the cyclone damage.

Traditionally, nurse suckering has involved physical destruction of the banana plant's primary meristem, located in the centre of the pseudostem at its base. The potential replacement of this difficult and physically demanding task by ethephon pseudostem injection offers significant labour savings for the industry, potentially making crop scheduling and uniformity management easier to achieve in practice.

It is also considered that a more uniform cropping system would offer improved efficiencies for nutrient and pesticide inputs. To achieve continuous fruit supply, any alternative production system needed to consist of a series of scheduled, overlapping crops that would each be managed to maintain their uniformity.

The crop uniformity management trial work ceased in 2011. The Banana Industry Advisory Committee approved a post-Yasi plan to undertake efficacy and fruit residue trials for ethephon pseudostem injection for nurse suckering. This trial work commenced in late 2011, with the second experiment being implemented in late 2012—early 2013. Fruit residue analyses will commence with the subsequent crop in the 2013/14 year. Ethephon efficacy and residue trial work is currently being undertaken. The failure of the first trial to establish the lowest efficacious rate resulted in the development of a revised timeline and a project variation request with Horticulture Australia Limited.

Project BA09038

For more information contact: Stewart Lindsay, DAFF Qld T 07 4064 1130 E stewart.lindsay@daff.qld.gov.au



Managing yellow Sigatoka in Far North Queensland

Yellow Sigatoka, also known as leaf spot, is a fungal leaf disease present in all banana growing regions in Australia, with the exception of Carnavon in Western Australia.

Severe cases of yellow Sigatoka affect bunch weight and fruit quality through uneven ripening of bananas. The disease is easily spread from plantation to plantation through the air, meaning poorly managed plantations are a source of disease for neighbouring plantations. The best means of control of yellow Sigatoka and other leaf diseases is through effective de-leafing, in conjunction with appropriately timed fungicide applications.

The warm, humid climate of North Queensland (Qld) is particularly

favourable for yellow Sigatoka and other leaf diseases. In Far North Qld, yellow Sigatoka is a prescribed disease, meaning growers are required to keep leaf levels below five per cent by state government regulations.

The yellow Sigatoka liaison officer is employed to undertake leaf spot inspections and help educate growers on disease symptoms, this assists growers comply with state regulations on a voluntary basis. The yellow Sigatoka liaison officer also plays an important communications role, sharing information between growers, rural suppliers, government and university research staff.

As a result of this project, and increased surveillance of all commercial growers in Far North Qld, an improvement in disease management and biosecurity practices has been seen, with only two and half per cent of cases needing to be passed onto Biosecurity Queensland for their involvement.

These results demonstrate voluntary compliance by the banana industry, and the success of the yellow Sigatoka liaison officer in assisting growers to gain a greater understanding of leaf spot disease.

Project BA12007

For more information contact: Jim Pekin, ABGC T 07 3278 4786 E jim.pekin@abgc.org.au

Banana plant protection program

Australia is free of many of the major pests and diseases which cause economic production and quality losses in overseas producing countries. From a production and consumer perspective, it is important to keep exotic pests and diseases out of Australia.

The most recent biosecurity plan lists 13 fungal pathogens, three viruses, four bacteria, six nematodes and 182 insects that occur in banana production areas elsewhere in the world.

In addition to individual growers controlling endemic diseases in a cost effective and sustainable manner, the industry needs to exclude these exotic threats. The benefits are significant and fall into four broad categories:

Exclusion is by far the cheapest option of control and helps keep the cost base of production low.

Lower environmental footprint due to not having to control these problems.

Market access for plant material and fruit.

Consumer confidence in the fruit which is of high quality and has less risk of pesticide residues.

Due to the large number of exotic pests, and a significant number of endemic pests and pathogens which can impact on grower profitability in different regions at different points in time, the banana industry commissioned the development of an integrated banana plant protection program. This program consists of four subprograms, each representing a core strategic area.

Resistant varieties and consumer choice

The activities in this subprogram focus on:

- Identifying varieties with resistance to key diseases, such as Panama wilt, yellow and black Sigatoka, which have high consumer appeal.
- Access to new and existing varieties through licensing agreements with overseas breeding and evaluation programs has been established or is under negotiation.

- Trial sites have been established in Duranbah, in the sub-tropics, and South Johnstone in the wet tropics. Evaluation of varieties is in progress.
- Importation and selection of further new varieties from overseas breeding programs is underway.
- A new germplasm mother block has also been established in the dry tropics (Ayr) away from the main production areas.

Safeguarding production and markets

This subprogram addresses two key areas:

- The first ensures safe access to banana germplasm, which involves the supply of and movement of new varieties into Australia, as well as movement of plant material within Australia through rigorous screening for pests and diseases at import and post entry.
- The joint activities of the tissue culture laboratory and the virology group ensure continuous supply of plants with high health status.
- Imported germplasm is undergoing a series of rigorous diagnostic tests to ensure that banana plants imported as tissue culture plantlets are free of disease.

The second part of this subprogram focuses on:

- Improving the capacity for prevention, detection, identification and effective, coordinated early response to exotic pests and diseases.
- Activities include monitoring and identifying populations of exotic pathogens such as black Sigatoka, bacterial wilt and Fusarium wilt, 'tropical race four'.
- Recent research on freckle disease reveals that more than one fungal species was involved in causing this disease on banana. The distribution of these different species was determined and a rapid diagnostic assay to distinguish between the different species was successfully developed and published.

Sustainable production systems

This subprogram focuses on:

 Improving productivity through provision of cost effective and sustainable management options for priority endemic pests and diseases. Management of yellow Sigatoka can be troublesome during certain times of the year and pathogen populations can develop resistance to certain fungicides.



Discolouration and destruction of vascular bundles in Lady Finger bananas caused by Fusarium wilt race 1, used as controls in the variety evaluation block in Duranbah, NSW



Dr Mike Smith inspecting plants Duranbah's variety evaluation block, shortly after ex-tropical cyclone Oswald

- A molecular diagnostic assay is being tested alongside traditional bioassays, with the goal of delivering faster and more sensitive identification of strains exhibiting fungicide resistance.
- Trials of new and existing chemicals are underway, as well as optimising and refining current management practices involving a combination of de-leafing and application of fungicides.

 Field trials are also underway to determine the effectiveness of defence promoters against Fusarium wilt.

A review of all pesticides and growth regulators used in the banana industry has been conducted in collaboration with AgAware Consulting Pty Ltd, and an analysis of soil health in banana farms has been conducted in the sub-tropics.

Building science and communication

This subprogram is aimed at:

- Building a networked industry science capacity. Six PhD students, one masters and one honours student are partly supported through this program, in an effort to attract young scientists to a career in horticulture.
- A series of scientific publications have been published and a number are at various stages in the review process.
- Articles have been published in the Australian Bananas magazine, newsletters Tropical Banana News and Subtropics Banana News, and talks have been given at local grower meetings.
- The first banana plant protection workshop was held in June 2012 at South Johnstone, Queensland (Qld).
 The second workshop will be held in conjunction with the 2013 Australian Banana Industry Congress in Coolum, Qld.

This project started in September 2011 and will conclude in May 2016. A wide range of activities are underway, such as:

- Germplasm screening sites are starting to produce bunches and the evaluation of the first batch of varieties has started.
- Importation of further new varieties and their inclusion in field evaluation trials is ongoing.
- Characterisation of exotic pathogens is ongoing to enable the industry to develop diagnostic tools. Trials with regards to yellow Sigatoka management are underway. Attention will be given to a new disease problem in bananas in Papua New Guinea. This needs to be characterised to ensure the disease is not spread to Australia through Cape York.

These research activities are integrated and connected to address complex industry problems, aimed to develop and deliver cost-effective outcomes for growers to meet industry needs in a strategic manner.

Project BA10020

For more information contact A/Prof Andre Drenth, UQ T 07 3255 4391 E a.drenth@uq.edu.au



Inspection of a trial block

Developing best management practice guidelines

The Queensland Department of Agriculture, Fisheries and Forestry (DAFF), in partnership with the Australian Banana Growers' Council (ABGC) is developing an environmental Best Management Practices (BMP) guideline for the Australian banana industry. The BMP is a national project that will build on initiatives and resources in regional banana production areas.

The banana BMP will provide a mechanism for growers to assess their practices and identify their business's strengths and areas for improvement. The resource component will then provide information to assist with practice change. The BMP is a voluntary system that encourages continual improvement by providing information relating to current best practice. It will be reviewed on a regular basis to include emerging information, technologies and practices.

The grower reference group have completed all nine modules that make up the resource material and the draft has been reviewed by industry stakeholders. The banana BMP will be housed on the ABGC website, where growers can either access it online or use a print function to maintain hard copy records. The banana BMP is due to be launched at the Australian Banana Industry Congress in May 2013. The BMP demonstrates the Australian banana industry's commitment to continual improvement of production practices to maintain the environmental integrity of the industry. The guidelines have been developed after recognising the importance of such an industry-specific resource and provided an opportunity for DAFF Queensland and ABGC to work collaboratively.

Project BA11006

For more information contact: Naomi King, DAFF Qld T 07 4064 1152 E naomi.king@daff.qld.gov.au



Banana BMP grower reference group member Marc Darveniza, discing in his canola fallow crop. Canola is a non-host crop for plant-parasitic burrowing nematodes (Radopholus similis), and an example of best practice for nematode management.

Growing sub-tropical bananas for quality and yield

This project aims to address the environmental constraints of banana production in Carnarvon, Western Australia. Carnarvon experiences sustained high winds throughout the summer months, which reduces the water use efficiency of bananas by increasing transpiration and causing leaf shearing that reduces the photosynthetic rate.

The project has been comparing cultivation of banana under protective net structures and the open field. Yield gains of 25 per cent were observed by growing bananas under netting, through consecutive crop cycles and crop cycle time has improved slightly. This year, a benefit-costs analysis (BCA) was conducted to compare the economic benefits of erecting netting structures over banana plantations. Preliminary results indicated that despite the yield improvement, over a period of 10 years there was no significant financial gain by erecting these structures.

The project hosted a visit from South African sub-tropical banana expert, Dr John Robinson in September 2012. Dr Robinson noted the improvement in the growth and quality of bananas grown under netting, but commented that due to disruption from effects of flooding in 2010/11, there was probably little value in collecting more field data. The data collected to date has been sufficient to conduct the BCA and has been utilised in the development of a production guide for sub-tropical bananas, which will be released in May 2013.

Climatic measurements will also be collected throughout 2013, prior to the cessation of field activities.

Project BA08003

For more information contact: Dr Chris Schelfhout, DAFWA Carnarvon T 08 9956 3336 E chris.schelfhout@agric.wa.gov.au Ensure a 4:1 return on investment of industry levies by enhancing the industry's leadership, capacity and influence

Banana enterprise performance comparison – phase III

This project is has advanced into its third round of data collection. Due to the impact of cyclone Yasi on much of the industry, data from the 2010/11 financial year was not collected as part of this project.

The data recently collected is from the 2011/12 financial year. The database now contains information covering more than 60 banana growing businesses across three financial years. The project database contains detailed information about many aspects of the operation of banana growing businesses that collectively represent more than 30 per cent of annual Australian production. The participating growers are spread across Queensland, New South Wales and Western Australia.

Participants each received a personalised comparative analysis report at the end of each round of data collection. Tailored individual reports contain information about the grower's own business compared to the participating group in the following key areas:

- Productivity.
- Financial management and performance.
- Labour use and labour use efficiency.

- · Packing operations.
- Marketing and returns.
- · On-farm practice.
- · Costs incurred through business.

The great majority of participating growers contributed data for more than one year, so they also received information about how their business varies from year to year. Participants are using information from their personalised reports to identify areas where changes can improve future business outcomes.

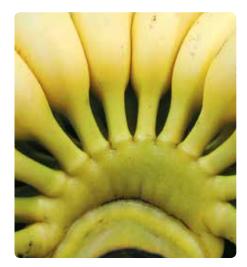
Data from this project has also been used to prepare a comprehensive economic analysis of the contribution the banana industry is making to the local economy in growing regions, and to the national economy. Without information from this project, this level of analysis would not have been possible.

How information is collected from growers and the format of individual grower reports have been carefully reviewed at the end of phase two of the project. Improvements in these areas have been applied to phase three of the project and will continue into phase four, which will collect information for the 2012/13 financial year.

For more information, or to enquire about participation in the next round of data collection and reporting, contact CDI Pinnacle Management Pty Ltd.

Project BA11026

For more information contact: Howard Hall, CDI Pinnacle Management T 07 3217 6466 E hhall@pinnaclemanagement.com.au



Contribution of the Australian banana industry to the economy

This project analysed the contribution of the Australian banana industry to regional, state and national economies.

The analysis found that 236,000 tonnes of bananas were produced by the industry between 2010 and 2011, with a gross value of \$368 million. However, data from 2010/11 includes the significant impact on production caused by cyclone Yasi. Data from previous years was therefore analysed in order to determine production in a more typical year, when production was between 300,000 and 400,000 tonnes. Banana producers in Far North Queensland (Qld) (51 per cent of producers) are responsible for about 90 per cent of production, and are likely to continue to be the dominant producers in the future. The total direct expenditure by banana farms during 2009/10 (when production was estimated at 310,000 tonnes) is estimated at \$573 million. Direct employment by banana farms totalled 3,826 full-time employees during this period.

The flow-on effects are that the industry contributes \$1.1 billion per annum to the three main banana growing regions of Far North Qld, Northern New South Wales and Carnarvon in Western Australia, and 9,598 full-time equivalent jobs. It also represents 9.5 per cent of total private business turnover across the three regions and 8.24 per cent of full-time equivalent jobs. The industry also contributes between 30 and 50 per cent of Qld's gross value of fruit production, and between three and eight percent of total gross value of agricultural production in Qld, pending major climatic events.

The analysis was conducted using data from economic research (regional state and national levels), interviews with over 50 businesses dependent upon the banana producing industry and aggregated data from the 'Banana enterprise comparison project, rounds phase I and II' (Projects BA09037 and BA10026).

Project BA11013

For more information contact: Howard Hall, CDI Pinnacle Management T 07 3217 6466 E hhall@pinnaclemanagement.com.au

Attracting and retaining young professionals in horticulture

The Primary Industry Centre for Science Education (PICSE), and the Australian banana industry through its support of the program, is committed to supporting a new generation of young people to enter science-based careers in primary industries, associated research and agribusiness organisations.

In the 2012/13 year, the PICSE program nationally engaged with 2,535 students from year five to 12 through the PICSE Science Investigation Awards. A portion of the banana industry support went towards the first place prize money, awarded to winning entrants across three states.

More than 100 year 11 and 12 science teachers participated nationwide in the PICSE teachers' professional development two-day forums, with the focus for 2012 being 'Co-developing solutions to create new ways of supplying quality food by 2050'. Teachers attending the forums in Queensland, held at the University of the Sunshine Coast (USC), were provided with a banana industry research tour at Maroochy Research Station, located near Nambour.

In November and December 2012, student industry scholarship camps and placements were held nationally for 148 year 11 and 12 students looking to continue their study at a tertiary level. In January 2013, individualised five-day placements with science-based professionals working in primary industries were held as part of the program. Twenty students attending the camp at USC were given an insight into the banana industry via a tour of the Maroochy Research Station with Dr Mike Smith, as well as a tour of the new Queensland Ecosciences Precinct in Brisbane to examine their banana virus collection.

The banana industry also provided one student, Chanara Gettons from Xavier Catholic College, Hervey Bay, with the opportunity to gain first-hand experience of the industry by being placed with Dr Mike Smith.

During her work experience, Chanara learned about the important work of the Banana Plant Protection Program's research and development activities, including tissue culture work at the Maroochy Research Station. Chanara also visited the race 1 Fusarium wilt screening site at Duranbah, and a commercial banana farm to gain first-hand farming experience.

Project MT11006

For more information contact: Deborah Worley, PICSE T 03 6430 4935 E picse.admin@utas.edu.au

10th Banana Industry Congress

The Banana Industry Congress is the premier biennial event for banana growers and industry stakeholders.

This project assists the planning and delivery of this major event, being held from 29 May to 1 June 2013 at the Palmer Coolum Resort on the Sunshine Coast in South East Queensland.

The Congress theme is 'Sustaining the Complete Package', reflecting the need to ensure the future viability of this major horticulture sector which produces Australia's number one selling fruit. More than 40 speakers will attend the congress to inform and lead discussion on marketing, retailing and supply chain, farm practices and research and development, as well as innovation.

The congress also provides an ideal platform to facilitate industry networking through a number of social events.

Project BA12701

For more information contact: Jim Pekin, ABGC T 07 3278 4786 E jim.pekin@abgc.org.au

Banana industry RD&E management

The Australian Banana Growers' Council employed an R&D manager, with the primary function of developing and implementing priority R&D projects, in line with the *Banana Strategic Investment Plan 2012–2014*, as recommended by the Banana Industry Advisory Committee (IAC).

Since the commencement of the role in July 2012, the R&D Manager, Dr Jay Anderson, has attended grower meetings and field days in North Queensland and Northern New South Wales, which provided opportunities to meet with local growers and gain a greater understanding of the issues facing the banana industry. Such events have enabled Dr Anderson to provide information to state and federal governments, and research organisations on issues such as chemical access (permits and registration), biosecurity legislation (state and federal), workforce development and environmental issues.

In addition, Dr Anderson has streamlined the approach to delivering high-priority projects, through the development of briefs for Horticulture Australia Limited-funded projects on extension, and an integrated production and market information system. Assistance has been provided to researchers applying for projects with other funding bodies, such as an environmental management project funded under the Federal Government Carbon Farming Futures program.

Dr Anderson has also provided feedback from government departments and research organisations to members of the Banana IAC and banana growers—liaising with growers at industry meetings and providing articles for banana industry publications.

Project BA11027

For more information contact: Jim Pekin, ABGC T 07 3278 4786 E jim.pekin@abgc.org.au

Nuffield Australia Farming Scholarships

Nuffield Australia awards scholarships annually to those in the agricultural and horticultural industries in Australia. The 16-week program provides an opportunity for scholars to travel overseas on a research scholarship relating to primary production, with the objective to increase production knowledge, and personal and management skills. The scholarships are a unique opportunity to stand back from day-to-day business management and study a relevant primary industry subject of interest.

Paul Inderbitzin, who researches banana fruit quality and waste management, received the 2013 Nuffield Scholarship supported by Horticulture Australia Limited using the banana levy and matched funds from the Australian Government. Paul is employed in the family farming enterprise as manager of 220 hectares of irrigated cropping/seed production and 40 hectares of bananas. He has invested heavily in the banana industry in the past 12 months —an area of expansion Paul sees great potential in. Yet, ongoing consumer demand for consistent production of high-quality fruit



is an area which Paul sees as a significant challenge. He will also study disease and quarantine challenges for the banana industry.

To date, Paul has attended a briefing day for new scholars in Queensland, and the Nuffield National Spring Tour, held in October 2012. In 2013, Paul will attend the Contemporary Scholars Conference (CSC) in Canada and is also participating in the March 2013 Global Focus Program. The group will travel to New Zealand, Canada, Mexico, Brazil, the United Kingdom, and California and Washington in the United States. Paul will also participate in individual study, visiting Ecuador, Columbia, Costa Rica and the Philippines. He will submit his written report by June 2014 and report verbally in September 2014.

Project BA11003

For more information contact: Jim Geltch, Nuffield Australia T 03 5480 0755 E enquiries@nuffield.com.au

Banana industry communications program

This program ensures growers are informed about issues and events affecting their own regions, other regions and the industry as a whole.

Key achievements in 2012/13 include the improvement and expansion of communications channels, including:

- The launch of a new website, www.abgc.org.au, containing more information and functionality, with an improved content management system enabling frequent updates.
- A multi-channel communications
 approach, both electronic and printed.
- The increased frequency of electronic communications.
- New format grower newsletters, informing growers of events in their own and other regions as well as national issues.

 Providing communications assistance to extension events, including shed meetings and field walks.

Online presence

The new website is an important communications tool for ensuring the timely and cost-effective distribution of new and topical information, such as alerts, industry notices, research reports and media releases. The website is a complete resource of Australian banana industry information catalogues of industry publications, project reports and links to other online information.

External communications

The communications database has been upgraded and there is a process of continuing maintenance of stakeholder information. This has assisted the industry to ensure communications materials are efficiently targeted and distributed so the appropriate internal and external stakeholders receive communication on industry issues.

In the 2012/13 year, the program also assisted with distributing information about the 2013 Banana Industry Congress, the industry's major biennial event.

This program began in October 2010 and will conclude on 31 December 2013. It has successfully established systems, materials and processes which continue to be utilised in ongoing communications initiatives.

Project BA09066

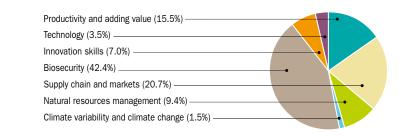
For more information contact Rhyll Cronin, ABGC T 07 3278 4786 E rhyll.cronin@abgc.org.au

Australian Government priorities

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

The Australian Government's Rural R&D 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 banana R&D program against each of the Australian Government priorities for rural R&D. 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.

Satural resource management

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

ở 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 consultation funding

The consultation agreement between ABGC 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.

Consultation agreement activities are funded by HAL using the banana industry R&D levy and matched funds from the Australian Government.

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

The consultation funding expenditure for ABGC for nine months from 30 July 2012 was \$132,400. This represents 2.9 per cent of the total annual levy expenditure. Consultation funding in respect of R&D represents 4.4 per cent of the investment in R&D expenditure and consultation funding in respect of marketing represents 2.0 per cent of the investment in marketing expenditure.

Project BA12910

For more information contact: Jim Pekin, ABGC T 07 3278 4786 E jim.pekin@abgc.org.au

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 2012/13 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 Prescribed Industry Body (PIB) for an industry is responsible for recommending to HAL the establishment of, and any changes to, statutory levies. The PIB 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.

ACROSS INDUSTRY PROGRAM

The banana 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 www.horticulture.com.au/industries/across_industry_program.asp.

Project No.	Rural R&D priorities	Project title	VC or Levy	Project start	Project finish	Life of project value	2012/13 YTD* expenditure	Organisation	Contact
Objective 1	L: To enhance t	he efficiency, transparency, responsivenes	s and ii	ntegrity of the	e supply cha	in			
AH12009	Z Ø	Partnering fresh produce with retail: quality assurance harmonisation – phase I	Levy	1/08/12	31/05/13	\$143,500	\$143,500	Kitchener Partners	Tristan Kitchener 0407 827 738
AH12010	M (P	Partnering fresh produce with retail: joint working groups	Levy	1/08/12	30/10/13	\$274,475	\$155,688	Kitchener Partners	Tristan Kitchener 0407 827 738
AH12016	2	Partnering fresh produce with retail: quality assurance harmonisation – phase II	Levy	15/05/13	30/06/15	\$307,271	\$0	Kitchener Partners	Tristan Kitchener 0407 827 738
VG11019	M 🖗 🛌	Hortstats database: maintenance	Levy	1/01/12	31/05/13	\$30,000	\$4,000	Australian Bureau of Agricultural & Resource Economics	Matthew Miller 02 6272 3527
Objective 2	2: Maximise the	e health benefits of horticultural products							
AH11016	Ø	Partnership Program with Dieticians Association of Australia	Levy	1/10/11	30/06/13	\$180,000	\$90,000	Dieticians Association of Australia	Jodie McHenery 02 4954 4964
Objective 3	3: Position hort	iculture to compete in a globalised enviro	nment						
AH09027	~ 9	Investing in Youth Scholarship	Levy	31/05/10	31/03/15	\$80,000	\$0	Rural Industries R&D Corporation	Margo Andrae 02 6271 4132
AH10008	№ 0 ≋ 谷 🔒 🎙 🖳	Future Focus: ongoing activities	Levy	7/03/11	24/10/12	\$109,000	\$29,000	Centre for International Economics	Derek Quirke 02 6245 7800
AH11009	R 🖗 💟	Autonomous perception systems for horticulture tree crops	Levy	1/05/12	27/11/15	\$599,500	\$100,000	University of Sydney	Dr Salah Sukkarieh 02 9351 8154
AH11014	~ 9	Leadership training: industry development for professionals	Levy	1/04/12	31/12/12	\$6,586	\$3,989	Horticulture Australia Limited	Peter Melville 02 8295 2317
AH11036	~ 9	Industry Development Forum 2012	Levy	1/04/12	31/10/12	\$35,591	\$34,773	Horticulture Australia Limited	Dr Alison Anderson 02 8295 2316
AH11039		Horticulture Leaders – Across Horticulture Leadership Training	VC/ Levy	15/05/12	29/01/13	\$136,250	\$81,750	Strategic Business Development Pty Ltd	Russell Cummings 0414 929 585
AH12012	D Ø 😹	Technical, secretarial and operational services for the NWPPA desktop study	Levy	22/08/12	31/05/13	\$11,000	\$0	Plant Health Australia	Nicholas Woods 02 6215 7704
AH12015	Ģ	Food Innovation Hub	Levy	8/05/13	31/08/13	\$28,166	\$0	Food Innovation Partners	Russel Rankin 07 3289 4591
MT12029		Horticultural Market Access Manager 2012–2015	VC/ Levy	1/10/12	30/09/15	\$613,500	\$86,670	Langley Consulting	Chris Langley 0498 723 103
Objective 4	1: Achieve long	term viability and sustainability for Austra	alian ho	rticulture				_	
AH09003	N 69	Plant protection: regulatory support and coordination	Levy	1/07/09	30/05/14	\$995,061	\$187,800	AKC Consulting Pty Ltd	Kevin Bodnaruk 02 9499 3833
AH09014	<u>Ř</u>	Across industry climate RD&E activities	Levy	13/04/10	29/11/13	\$75,126	\$395	Horticulture Australia Limited	Peter Melville 02 8295 2317
AH10003	丞 ≋ 상	Horticulture component of the National Climate Change Research Strategy for Primary Industries	Levy	30/11/11	3/05/16	\$225,000	\$22,500	Horticulture Australia Limited	Peter Melville 02 8295 2317
AH10006	**	Pesticide spray drift in horticulture: a response to new guidelines from the APVMA	Levy	1/07/10	31/05/13	\$20,000	\$1,966	Horticulture Australia Limited	Jodie Pedrana 0404 314 751
AH11005	*	Horticulture Environmental Desk Audit	Levy	30/11/11	10/12/12	\$50,000	\$10,000	Growcom	Jane Muller 07 3213 2483
AH11006	~	Carbon amelioration in horticulture	Levy	1/12/11	31/08/12	\$78,010	\$36,510	Department of Primary Industries	Justine Cox 0438 770 187
AH11007	☑ @ 葶苡	Developing a LCI database for Australian agriculture	Levy	2/01/12	1/10/13	\$20,000	\$0	Rural Industries R&D Corporation	Peter Melville 02 8295 2317

ACROSS INDUSTRY PROGRAM

Project No.	Rural R&D priorities	Project title	VC or Levy	Project start	Project finish	Life of project value	2012/13 YTD* expenditure	Organisation	Contact
AH11008	Z 😹	Horticulture response to APVMA spray drift regulations	Levy	20/12/11	30/05/13	\$70,000	\$0	Joint RDC collaboration	Jodie Pedrana 0404 314 751
AH11010		Biotechnology awareness in horticulture	Levy	10/10/11	31/05/13	\$130,000	\$38,842	Horticulture Australia Limited	Dr Alok Kumar 0418 322 070
AH11011		Horticulture funding of the CRC for plant biosecurity	Levy	30/06/12	30/05/18	\$3,000,000	\$500,000	CRC For National Plant Biosecurity	Dr Simon McKirdy 02 6201 2882
AH11029	Z 😹	Provision of independent technical and secretarial services to the NWPPA	Levy	20/12/11	31/05/13	\$50,000	\$0	Plant Health Australia	Nicholas Woods 02 6215 7704
AH12008		Australian Horticulture Export Symposia 2012	Levy	1/07/12	30/05/13	\$40,000	\$31,570	Horticulture Australia Limited	David Chenu 02 8295 2381
AH12017		Feasibility Study: all-of-horticulture peak representative body	Levy	1/05/13	30/06/14	\$30,000	\$0	Horticulture Australia Limited	Dr Alison Anderson 02 8295 2316
MT10029	M Ø	Managing pesticide access in horticulture	Levy	1/07/10	2/07/15	\$1,674,450	\$153,750	AgAware Consulting Pty Ltd	Peter Dal Santo 03 5439 5916
MT10049	M 💥 🔽	A multi-target approach to fruitspotting bug management	Levy	1/03/11	1/04/16	\$1,310,000	\$38,333	Department of Primary Industries	Dr Ruth Huwer 02 6626 1196
MT10066	Z 💥 <u></u>	Project coordination for MT10049	Levy	14/03/11	31/05/13	\$40,000	\$1,448	RCR Agri Pty Ltd	Chaseley Ross 0409 707 806
Objective	5: Other								
AU 4 4 0 0 0									
AH11003	∞∞∞ ∞∂	AIC: support function	Levy	15/09/11	30/08/13	\$84,187	\$0	Horticulture Australia Limited	Warwick Scherf 02 8295 2323
AH11003 AH11017		AIC: support function Sponsorship of Appetite for Excellence Awards	Levy Levy	15/09/11	30/08/13 22/06/14		\$0 \$19,000		
	상 🖬 🎙 🖳	Sponsorship of Appetite for Excellence				\$75,000		Limited Horticulture Australia	02 8295 2323 Erin Riley
AH11017	상 🖬 약 🛄 우	Sponsorship of Appetite for Excellence Awards Graham Gregory Award and Function	Levy	1/07/11	22/06/14	\$75,000 \$150,000	\$19,000	Limited Horticulture Australia Limited Horticulture Australia	02 8295 2323 Erin Riley 02 8295 2340 Erin Riley
AH11017 AH11023	상 의 양 <u>의</u> 양 양	Sponsorship of Appetite for Excellence Awards Graham Gregory Award and Function Across industry program communications	Levy Levy	1/07/11	22/06/14 30/06/16	\$75,000 \$150,000 \$20,000	\$19,000 \$12,648	Limited Horticulture Australia Limited Horticulture Australia Horticulture Australia	02 8295 2323 Erin Riley 02 8295 2340 Erin Riley 02 8295 2340 Erin Riley
AH11017 AH11023 AH11024	రా లి ౪ె ⊑ ౪ ౪ ౫ ౪ ౫ ౪ ≫	Sponsorship of Appetite for Excellence Awards Graham Gregory Award and Function Across industry program communications plan	Levy Levy Levy	1/07/11 1/07/11 31/07/11	22/06/14 30/06/16 31/07/13	\$75,000 \$150,000 \$20,000 \$25,000	\$19,000 \$12,648 \$0	Limited Horticulture Australia Limited Horticulture Australia Limited Horticulture Australia Limited	02 8295 2323 Erin Riley 02 8295 2340 Erin Riley 02 8295 2340 Erin Riley 02 8295 2340 Warwick Scherf
AH11017 AH11023 AH11024 AH11026	☆ ŵ ŷ ⊑ ŷ ŷ Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø	Sponsorship of Appetite for Excellence Awards Graham Gregory Award and Function Across industry program communications plan Across industry program administration Statistical Handbook for Horticulture:	Levy Levy Levy Levy	1/07/11 1/07/11 31/07/11 1/07/11	22/06/14 30/06/16 31/07/13 30/06/13	\$75,000 \$150,000 \$20,000 \$25,000 \$49,500	\$19,000 \$12,648 \$0 \$8,937	Limited Horticulture Australia Limited Horticulture Australia Limited Horticulture Australia Limited Horticulture Australia Limited	02 8295 2323 Erin Riley 02 8295 2340 Erin Riley 02 8295 2340 Erin Riley 02 8295 2340 Warwick Scherf 02 8295 2323 Agnes Barnard

Australian Government Rural R&D Priorities:

Productivity and adding value

Ø Supply chain and markets ☆ Climate change and climate variability Biosecurity

₩ Natural resource management ♀ Innovation skills Technology

CLIMATE CHANGE RD&E

Throughout 2012/13 the Australian horticulture industry invested in a diverse array of climate change and climate variability projects to mitigate risk and explore potential opportunities. Targeted projects delivered against a range of objectives pertinent to either a particular industry, or the horticulture industry as a whole.

Horticulture Australia Limited (HAL) invested in cross-collaborative programs, such as the Climate Change Research Strategy for Primary Industries (CCRSPI) and Agricultural Lifecycle Inventory (AusAgLCI), and specific projects and programs on crop phenology, nitrogen management, regulated deficit irrigation, carbon and soil, and urban forest projects.

HAL'S RD&E investment is obtained through industry levies, voluntary contributions and matched by the Australian Government.

BANANA PROGRAM

Project	Industry	Rural R&D	Project title	VC/	Project	Project	Life of project	2012/13 YTD*	Organisation	Contact
rigeor	obj.	priorities		Levy	start	finish	value	expenditure	organisation	Contact
Levy progra	evy program									
BA09038	2	Z Ø 🂱 <u>L</u>	Building competitive banana production systems for a sustainable future	Levy	1/12/10	30/09/14	\$439,450	\$0	The Department of Agriculture, Fisheries and Forestry, Qld	Stewart Lindsay 07 4064 1130
BA09066	3	∞∞∞ ∞ € € ⊊	Banana industry communications program	Levy	19/10/10	31/12/13	\$1,435,200	\$224,000	Australian Banana Growers' Council Inc.	Rhyll Cronin 07 3278 4786
BA10020	2	M 📾 🔒	Banana Plant Protection Program	Levy	19/09/11	31/05/16	\$6,089,514	\$0	The University of Queensland	A/Prof Andre Drenth 07 3255 4391
BA11003	3	Ģ	Nuffield Australia Farming Scholarship 2013	Levy	1/08/11	31/05/15	\$49,000	\$39,200	Nuffield Australia Farming Scholars	Jim Geltch 03 5480 0755
BA11006	2	~	Developing best management practices guidelines	Levy	1/09/11	30/08/13	\$61,026	\$23,451	The Department of Agriculture, Fisheries and Forestry, Qld	Naomi King 07 4064 1152
BA11013	3	Ø	Contribution of the Australian banana industry to the economy	Levy	1/10/11	18/11/12	\$140,000	\$70,000	CDI Pinnacle Management Pty Ltd	Howard Hall 07 3217 6466
BA11026	3	Z Ø 9	Banana enterprise performance comparison – phase III	Levy	28/06/12	4/07/14	\$250,000	\$50,000	CDI Pinnacle Management Pty Ltd	Howard Hall 07 3217 6466
BA11027	3	M 🖉 🖓 🔽	Banana industry RD&E management	Levy	28/06/12	20/07/15	\$428,897	\$137,235	Australian Banana Growers' Council Inc.	Jim Pekin 07 3278 4786
BA12006	2	Î	Controlling banana bunchy top virus – phase II	Levy	17/09/12	1/08/15	\$2,015,616	\$537,496	Australian Banana Growers' Council Inc.	Jim Pekin 07 3278 4786
BA12007	2	Ê	Managing yellow Sigatoka in Far North Queensland	Levy	17/09/12	30/07/15	\$432,702	\$110,540	Australian Banana Growers' Council Inc.	Jim Pekin 07 3278 4786
BA12010	3	🜌 Ø 🎙 <u>-</u>	Banana production and marketing information system	Levy	1/02/13	23/09/13	\$293,500	\$0	Australian Banana Growers' Council Inc.	Jay Anderson 07 3278 4786
BA12013	1	Ø	Banana IAC marketing expert	Levy	14/11/12	13/11/13	\$9,000	\$0	Fresh Partners Pty Ltd	Mike Evans 0419 843 253
BA12500	1	Ø	Banana industry marketing program 2012/13	Levy	1/07/12	30/06/13	\$3,385,000	\$2,374,700	Horticulture Australia Limited	David Weisz 02 8295 2320
BA12800	3	☑ ∅ ≋ ở д ў ⊑	Banana Industry Annual Report 2011/12	Levy	1/07/12	30/06/13	\$9,600	\$6,044	Horticulture Australia Limited	Amanda Lucas 02 8295 2318
BA12910	3	☑ ∅ ≋ ở д ў ⊑	Banana Consultation Funding Agreement 2012/13	Levy	1/11/12	10/08/13	\$264,800	\$78,650	Australian Banana Growers Council Inc	Jane Wightman 0404 309 877
MT11028	1	M 69	Fruit and nut tracking study 2011-2013	Levy	15/03/12	30/06/13	\$75,040	\$2,571	Sprout Research	Heath Adams 0438 614 291
MT12001	2	D Ø	SPLAT culture based management of Queensland fruit fly	Levy	1/12/12	30/11/15	\$443,140	\$0	South Australia Research & Development Institute	Dr Peter Crisp 08 8303 9371
BA08003	2	N Ø	Growing subtropical bananas for quality and yield	VC/ Levy	1/09/08	30/11/13	\$166,000	\$29,000	Department of Agriculture & Food Western Australia	Dr Chris Schelfhout 08 9956 3336
BA12701	3	🜌 💡 🛄	10th Banana Industry Congress 2013	VC/ Levy	18/09/12	31/08/13	\$160,000	\$112,000	Australian Banana Growers' Council Inc.	Jim Pekin 07 3278 4786
MT11006	3	Ģ	Attracting and retaining young professionals in horticulture	VC/ Levy	1/12/11	30/11/14	\$409,656	\$6,667	Primary Industry Centre for Science Education, UTAS	Gordon Stone 07 4615 2255
MT12010	1	Ø	Understanding the purchase behaviour of fresh produce consumers	VC/ Levy	1/07/12	30/06/14	\$1,023,359	\$79,873	The Nielsen Company	David Weisz 02 8295 2320

Project	Industry obj.	Rural R&D priorities	Project title	VC/ Levy	Project start	Project finish	project	2012/13 YTD* expenditure	Organisation	Contact
The banana	VC progran	ı operates in addi	tion to the levy investment program							
BA12000	1	de 6 🖉 🔽	Subtropical banana industry market development implementation	VC	18/01/13	30/06/13	\$46,507	\$26,042	Geraldine Bernadette O'Flynn	Geraldine O'Flynn 0402 308 970
BA12003	1	M 🕫 💱 🔽	Subtropical banana industry supply chain directory	VC	1/08/12	30/12/12	\$28,379	\$28,379	Australian Banana Growers' Council Inc.	Jim Pekin 07 3278 4786

*YTD as of 31 March 2013. This list does not include expenditure on carried-forward projects due to late-running milestones, which is accounted for in the banana YTD levy investment summary

Australian Government Rural R&D Priorities:

✓ Productivity and adding value
 ✓ Supply chain and markets
 Katural resource management
 Katural resource management
 Katural resource management
 Katural resource management



BANANA LEVY INVESTMENT SUMMARY

Due to the publication of this report prior to the end of the 2012/13 financial year, the 2011/12 levy investment summary is included in this report.

Year ended 30 June 2012	Marketing 2011/12 \$	R&D 2011/12 \$	Combined 2011/12 \$
Funds available 1 July 2011	2,292,879	2,488,279	4,781,158
Income			
Levies received	2,348,111	1,093,086	3,441,197
Commonwealth contributions		2,195,737	2,195,737
Other income	92,390	102,924	195,314
Total income	2,440,501	3,391,747	5,832,248
Budget	2,003,625	3,260,983	5,264,608
Variance to budget	436,876	130,764	567,640
Program investment			
Levy programs	3,083,532	3,864,623	6,948,155
Service delivery programs by HAL	377,840	526,852	904,692
Across industry contribution		62,862	62,862
Levy collection costs	90,397	42,081	132,478
Total investment	3,551,769	4,496,418	8,048,187
Budget	2,902,633	4,737,041	7,639,674
Variance to budget	(649,136)	240,623	(408,513)
Annual surplus/deficit	(1,111,268)	(1,104,671)	(2,215,939)
Closing balance 30 June 2012	1,181,611	1,383,608	2,565,219

Nine months ended 31 March 2013	Marketing 2012/13 \$	R&D 2012/13 \$	Combined 2012/13 \$
Funds available 1 July 2012	1,181,611	1,383,608	2,565,219
Income			
Levies received	2,962,440	1,379,067	4,341,507
Commonwealth contributions		866,841	866,841
Other income	46,482	50,186	96,668
Total income	3,008,922	2,296,094	5,305,016
Budget	2,741,945	2,733,640	5,475,585
Variance to budget	266,977	(437,546)	(170,569)
Program investment			
Levy programs	2,431,020	1,537,885	3,968,905
Service delivery programs by HAL	297,396	195,797	493,194
Across industry contribution		33,851	33,851
Levy collection costs	19,404	19,643	39,047
Total investment	2,747,821	1,787,176	4,534,997
Budget	2,845,925	2,975,927	5,821,852
Variance to budget	98,104	1,188,751	1,286,855
Annual surplus/deficit	261,101	508,918	770,020
Closing balance 31 March 2013	1,442,712	1,892,526	3,335,238



Banana Industry Advisory Committee (IAC)

Sue White – Chair Craig Buchanan Gary Fattore Paul Inderbitzin Cameron R MacKay Michael Nixon Doug Philips Stephen Spear Jim Pekin (Ex-Officio) Jane Wightman (Ex-Officio)



For more information contact:



Jane Wightman Industry Services Manager Horticulture Australia Limited

Suite 2, Level 5 87 Wickham Terrace QLD 4000

T 0404 309 877 E jane.wightman@horticulture.com.au

Horticulture Australia Limited (HAL) Level 7, 179 Elizabeth Street Sydney NSW 2000 T 02 8295 2300 F 02 8295 2399 www.horticulture.com.au