

Final Report

Australian Citrus Industry Innovation and Market Development Program

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Delivery partner:

Citrus Australia Ltd

Project code:

CT15012

Project:

Australian Citrus Industry Innovation and Market Development Program CT15012

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Funding statement:

This project has been funded by Hort Innovation, using the Citrus research and development levy and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

Publishing details:

ISBN 978 0 7341 4536 9

Published and distributed by: Hort Innovation

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Sydney NSW 2000

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www.horticulture.com.au

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Content

Content	3
Summary	4
Keywords	5
Introduction	6
Methodology	7
Outputs	13
Outcomes	22
Monitoring and evaluation	29
Recommendations	30
Intellectual property, commercialisation and confidentiality	32

Summary

Project 15012 (Australian Citrus Industry Innovation and Market Development Program) commenced in January 2016 and built upon the success of several previous investments by Hort Innovation. The project had three key elements; market access, market development and market information. The project recognised that the citrus industry is in the advanced stages of development, particularly in the export space, and for that success to continue, strong leadership in these three key areas was required.

Through engagement with the industry through a number of consultative committees, an extensive set of market access priorities was developed which formed the basis of the market access agenda over the three years of the project. Strong progress was demonstrated towards achieving the market access objectives of the industry. Notably, improvements to the access conditions into China were achieved in 2017 and today, the market in mainland China is valued at over A\$160 million. In addition to the formal priorities, the team ensured that channels to trade remained open by hosting audits and pre-clearance activities by the overseas authorities. The project team also assisted growers, packers and exporters by providing advice on phytosanitary, food safety, chemical residues and tariffs. There were no major regulatory breaches or market closures during the three-year project.

An annual tree census was conducted each year which provided the foundation for an export registration system. With the industry in such a buoyant phase, the annual tree census report was regarded as highly useful by citrus businesses looking to redevelop orchards or invest in new plant and equipment. To our knowledge, the citrus industry is the only horticultural industry in Australia with accurate plantings data. The online export registration system revolutionised the way orchards are accredited for export and expedited the process by several months. In 2018-19, there were approximately 742 orchards (11 620 hectares) registered for export and this was only made possible by the online system. Shipping data were collected each week throughout the season to provide exporters with an indication of supply volumes into key markets. Exporter groups were formed under the auspices of Citrus Australia to share intelligence and discuss pricing in export markets. Prices in export markets remained stable and growers have reported better returns than any time in recent history.

The project team dedicated a large amount of effort to assisting growers in the transition to the new retail food safety requirements in Australia. A higher level of scrutiny of fresh produce food safety is imminent both in Australia and overseas. The citrus industry is now in a strong position to face any food safety challenges in the future.

An agrichemical residue monitoring program was established and funded through a separate project (CT15016). Maximum residue limit (MRL) tables were researched and published twice annually. There were no major residue violations in any export market and no regulatory actions during the three-year project. The program has demonstrated that Australian citrus producers adopt good agricultural practices, with responsible use of agrichemicals, and have a strong awareness of importing country MRLs. A large amount of effort was focussed on addressing the agrichemical needs of the industry. Over the duration of the project, the industry gained access to eight new molecules for the control of pests and diseases.

The project team coordinated regional committees and special purpose committees (e.g. export, domestic, agrichemical) which provided an opportunity for the two-way exchange of information between industry, Citrus Australia, Hort Innovation and government. The committees assisted in setting the priorities and engaging on matters such as market access, biosecurity, agrichemicals, marketing, R&D, plantings, and crop forecasts.

The Australian citrus industry is in a strong period of growth and has truly demonstrated itself as a strong competitor on the world stage. Many of the activities conducted within project CT15012 have certainly assisted that success.

Keywords

Citrus industry, market access, market development, market information, market intelligence, agrichemicals

Introduction

Project 15012 builds upon the successes of several previous investments over the last decade by Hort Innovation and its predecessor, Horticulture Australia Ltd. Namely, the project rationalised the activities of:

- CT13022 - driving citrus industry success through a coordinated market development program - Stage 2
- CT12005 - driving citrus exports through improved market access
- CT13037 - delivering robust citrus market information for a more competitive industry
- CT14010 - delivering a National Citrus Plantings Database.

The project also had close linkages with other existing Hort Innovation investments in the market development space including:

- CT15016 - Agrichemical residue monitoring program for Australian citrus exports, (stage 2)
- CT15013 - Citrus quality standards, (stage 3)
- CT14003 - MRL risk analyses and risk management options for major citrus export markets.

The rationale for this project is that export market access and market development remain the highest priority for R&D investment in the citrus industry. Project CT15012 commenced in January 2016. At that time, the industry was operating under the Australian Citrus Strategic R&D Plan (2012-2017). The four key objectives in that plan were to:

- develop and maintain market opportunities
- increase product value
- improve efficiency and sustainability
- provide a supportive operating environment.

The project aimed to deliver upon each of these four objectives. At the commencement of the project, the industry had entered a buoyant phase after some challenging years with drought, unfavourable exchange rates, poor demand, and low returns. The industry's ability to capitalise on the opportunities and remain globally competitive is contingent upon:

- a sound understanding of market requirements (commercial and regulatory)
- an ability to reliably produce and deliver quality products that meet market requirements and customer expectations
- continued access to high-value markets and improvements to market access conditions
- timely access to accurate market intelligence and information on market performance
- access to detailed information on the production base
- an ability to respond quickly to market signals.

The project also aimed to deliver information to encourage new investment, allow forward planning and inform decisions on new plantings and equipment.

The project had three key areas of activity including:

- market access
- market information
- market development.

The market access component of the project included engaging with the supply chain to identify technical and non-technical challenges to trade and to develop cases with the Australian Government to have citrus market access issues placed on the agenda and prosecuted with overseas authorities. This included improvements to phytosanitary conditions, importing country maximum residue limits (MRLs), food safety, tariffs and quotas, and other technical and non-technical issues.

Market information activities were undertaken to enable businesses to make informed decisions on plantings, harvesting, packing, marketing and investment. A national tree census was conducted annually and results were reported with a view to informing future orchard development. Based on information derived from the census, a model was developed to enable long-term production forecasts to be produced. Annual crop forecasts were generated at the commencement of each season via crop forecasting committees and fruit density surveys in orchards across the major production regions. The crop profile was predicated each season based on sizing measurements taken at certain stages throughout the season. Crop forecasts and size predictions were communicated to the entire value-chain to provide an indication of likely supply, and allow seasonal planning. Weekly shipping data were collected from the major exporters, aggregated and disseminated throughout each season to provide 'real-time' data on shipping volumes into the major markets. Monthly reports were generated based on data provided by the Australian Bureau of Statistics. A system for export registration was developed, maintained and administered by the project team to facilitate trade into South Korea, China and Thailand. Exporter groups were coordinated each year to discuss market signals and agreed minimum pricing in the major export markets. Formal Exporter Agreements were furnished with the Australian Competition and Consumer Commission (ACCC).

Market development encompassed all other activities including maintaining access to effective agrichemicals, coordinating residue monitoring, working with the research community to address technical challenges in the supply chain, providing technical support to overseas trade activities, and coordination of exporter groups to exchange information on pricing and volumes in export markets. Hort Innovation's trade strategy was supported through participation at priority trade shows and overseas congresses.

Methodology

Industry engagement

The team developed an extensive network of growers, packers, exporters, retailers, and other members of the supply chain and engaged with these groups through direct contact and formal meetings. Formal groups included:

- Export Market Committee
- Domestic Market Committee
- Variety Committee
- Agrichemical Reference Group
- Food Safety Reference Group
- Network of crop monitors and pest control experts
- Queensland Regional Advisory Committee
- Queensland Citrus Exporter's Group
- Japan, China, USA Exporter's Group
- Riverina Regional Advisory Committee
- Murray Valley Regional Advisory Committee
- Citrus Australia South Australia Region
- Western Australia Citrus.

Regional forums were held in each region annually, and twice annually in Queensland where the team delivered formal presentations on contemporary issues. The forums were generally coupled with practical demonstrations in orchards or in packing-houses. The purpose of the regional forums was to provide an opportunity for the two-way exchange of information on:

- market access

- export trends
- post-harvest
- national plantings
- crop forecasts
- agrichemicals
- food safety
- R&D findings
- export promotions
- labour and welfare.

Special purpose forums were also held each year. The Market Outlook Forum was held in 2016 and 2018. The Citrus Technical Forum was held in 2017. The inaugural Juice Forum was held in the Riverina in May 2018. The forums were well attended by members of the entire supply chain. At each of the forums, the team delivered formal presentations in their topic area.

The team also made a strong effort to visit each citrus packing house prior to the commencement of each season to provide updates on current issues (e.g. market access, export registration and certification, agrichemicals and residues, pest and disease management and biosecurity).

Government engagement

The team had regular engagement with the Australian Government Department of Agriculture and Water Resources (the department). Specifically, the team engaged with the Horticulture Exports Program, Plant Sciences and Risk Assessment, Trade and Market Access Division, the Quota Administration Unit, the National Residue Survey and Australian Chief Plant Protection Office. The purpose of the interactions with government was primarily to progress the citrus industry market access agenda and to streamline the export auditing, inspection and certification process.

Citrus Australia was selected to sit on the department's Horticulture Export Industry Consultative Committee (HEICC) and Hort Innovation's Industry Trade Advisory Panel (iTap) which both provided additional opportunities to progress the citrus market access agenda with government.

During the project, the team formed strong relationships with the Department of Foreign Affairs and Trade, Free Trade Agreement Division. There was a lengthy exchange of dialogue between the project team and DFAT during the negotiation phase of the Indonesia-Australia Cooperative Economic Partnership Agreement as we pressed for the best possible outcome for Australian citrus exporters.

There was also a high level of engagement with Plant Health Australia, particularly after citrus canker was detected in the Northern Territory in March 2018.

Market access

A Market Access Manager was appointed at the commencement of the project. Input into the citrus industry market access priorities was provided by the Export Market Committee, Citrus Australia's Regional Advisory Committee and direct engagement with other members of the supply chain. We estimate that the Export Market Committee represents over 85 per cent of the citrus export volume. A market access priorities document was developed and ratified by the Export Market Committee at the commencement of each year. The Export Market Committee held two face-to-face meetings each year to provide advice on technical and non-technical challenges and to discuss crop and market expectations and outcomes from the previous season. The committee also provided advice to Hort Innovation on investment in overseas marketing and promotions. The Export Market Committee was a valuable vehicle for informing project activities. Minutes were recorded at each meeting. Hort Innovation was invited to attend and provide input. The citrus industry market access priorities identified at the commencement of the project included:

- China to approve the Riverland Fruit Fly Pest Free Area
- China to remove of orchard freedom requirement for Fuller's rose weevil
- China to remove of orchard freedom requirement for light brown apple moth
- China to approve cold disinfestation at 3°C
- Korea to remove the requirement for pre-clearance inspection

- Indonesia to allow imports of Australian citrus between months of April and November
- New Zealand to approve cold disinfestation at 3°C
- Japan to approve imports of additional mandarin varieties under in-transit cold disinfestation
- United States to expand access conditions for additional production areas in Australia (chiefly Queensland).
- The Philippines to approve the use of ‘stand-alone’ data loggers for in-transit cold disinfestation
- The Philippines to approve the Riverland Fruit Fly Pest Free Area
- Vietnam to resolve issues related to imports from Western Australia
- Vietnam to approve the Riverland Fruit Fly Pest Free Area.

The project team met regularly with the Department of Agriculture and Water Resources and the Department of Foreign Affairs and Trade (DFAT) to progress the industry’s market access agenda.

Export registration, inspection and certification

The approval of non-government (industry-based) inspectors to perform phytosanitary inspections was identified as a major opportunity for the citrus export industry in 2011. Systems to enable the use of industry-based inspectors were developed between 2012 and 2015. Under previous iterations of this project we assisted the Australian government in developing and trialling those systems and ensured that the initiative remained high on the government agenda. In 2016, the Australian government achieved approval from all importing country authorities to allow the use of industry-based Authorised Officers and we worked closely with the government in rolling out the training and assessment across all citrus growing regions.

In 2014, the market development team developed an online system for export registration which builds upon information provided in the Citrus Tree Census. Prior to the roll-out of the system, industry participants were being disadvantaged by an inadequate ‘paper-based’ system operated by the Department of Agriculture and Water Resources and export opportunities were not being realised, particularly in China. When the system was first developed, there were less than 1 000 hectares registered for export. As interest in exports has grown, there are now close to 11 000 registered hectares. During this project, we have continued to develop the system to accommodate the increasing volume of registrations and have dedicated a single resource to assisting growers with the registration process. Similarly, we have provided the department’s administrators and auditors with a large amount of assistance in understanding and using the system. This has required ongoing effort as government personnel are continually changing roles. As exports have continued to grow, so too have the demands on the system and the personnel who use the system. The online export registration system has not been ‘set and forget’ and continual upgrades have been required to accommodate the increasing demands of users as well as the increasing interest in exports.

It is a requirement of the conditions for Korea, China and Thailand, that orchards be monitored for pests and diseases by persons that are trained, assed and accredited. The department has delegated the training and assessment responsibilities to Citrus Australia. In 2014 (under the previous iteration of this project), Citrus Australia launched an online training in partnership with Tocal College, New South Wales Department of Primary Industries (NSW DPI). The project team continued to update and administer the system to provide training to approximately 70 crop monitors each season.

Audits, pre-clearance and verification visits

For the citrus export trade to continue each season, a number of countries are required to conduct audits and verification visits to observe growing, packing and export procedures. Japan’s Ministry of Agriculture, Forestry and Fisheries is required to verify cold disinfestation procedures as well as trapping records in the Riverland Fruit Fly Pest Free Area on an annual basis. The Korean plant protection agency requires a pre-clearance officer to be posted to Australia for the duration of the export season to supervise loading of containers and inspect goods for pests and diseases. The Indonesian authorities visit Australia biennially as part of the Indonesia-Australia Country Recognition Agreement on Food Safety. In addition to these scheduled visits, a range of unannounced audits can take place in response to emerging issues. For example, the Indonesian authorities visited Australia twice within the life of the project in response to fruit fly detections in the Riverland Fruit Fly Pest Free Area. The project team coordinated these visits in cooperation with state and Commonwealth governments with a view to showcasing the performance and professionalism of Australian citrus businesses.

Annual citrus tree census

The project team conducted a national tree census each year of the project. The rationale behind the census was

to provide the industry with objective data on current plantings to inform future investment. The census was opened each season from 1 November to 31 December. Growers were provided the opportunity to contribute to the census either online or via a traditional ‘paper-based’ system. A large number of growers from regions with poor internet access also provided details over the phone. Growers provided information on variety, rootstock, year of planting, row spacing, tree spacing, canopy hectares and number of trees. Data were collated each year and provided to industry in the form of a full report and infographic snapshot.

The team also developed a model in which data from the tree census could be entered to reasonably predict the production volume and trends over the next decade. The model accounted for variation between variety, rootstocks, region, spacing’s and age of trees. Presentations on the tree census and the forward forecasts were provided at our regional forums, issue forums as well as in overseas trade seminars.

Crop forecasts

Crop estimates committees, were formed in each region. The committees comprised growers, packers, extension officers and agronomists. The committees met either face-to-face or via teleconference prior to the commencement of each season. Objective data were collected by contractors in the major regions by conducting frame counts and sizing surveys at two stages within the growth cycle. Crop forecasts were provided to industry participants through our regional advisory committees. Presentations on the crop forecast were provided to industry at regional forums and special interest forums. The overseas trade also requested information on the season forecast and presentations were provided at overseas trade seminars. The crop forecast was reconciled at the end of each season by collecting ‘bin-tip’ data from packing houses in each of the major growing regions.

Exporter Groups and Shipping data

The project team coordinated the Japan, China, USA Exporter group. The purpose of the group was to meet at the commencement of the season to ‘calibrate’ prices in these three markets and to discuss market signals in export markets only. The group was strictly directed not to discuss or exchange information which could influence pricing or volumes on the Australian domestic market. An exporter agreement was lodged with the Australian Competition and Consumer Commission which defined the terms of the agreement. Under that agreement, exporters provided Citrus Australia with data on weekly loadings. Data was aggregated and disseminated to group members on a weekly basis so that exporters had access to ‘real-time’ data on product that was on the water.

The project team also assembled the Queensland Citrus Exporter’s Group with a similar objective. However, responsibility for that group was transferred to the Queensland Department of Agriculture and Fisheries midway through the project and Citrus Australia became participants in the group.

Overseas trade seminars, trade shows and other activities

Throughout this project, the team attended and contributed to a number of priority trade shows. Specifically, the team attended and exhibited at China Fruit and Vegetable Fair in 2016, 2017 and 2018. While not considered a show that is well attended by the commercial sector, the show is coordinated by the China Entry-Exit Inspection and Quarantine Association (CIQA) and sponsored by the China’s General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ). Maintaining strong relationships between the Australian horticulture sector and these two organisations is considered pivotal to the ongoing trade relationship. The trade shows provided the opportunity for the team to deliver presentations and attend ‘friendship’ events with AQSIQ and CIQA.

While this project was strictly funded through the citrus R&D levy, the team did support promotions and marketing activities in export markets. The support provided was however limited to technical and commercial advice to overseas traders and delivery of technical presentations at the commencement of the campaigns. Pre-season seminars took place in Japan and Thailand where the team provided attendees with information relating to crop forecasts, quality, tariffs, trade data, long-term projections, research and development and agrichemical management.

Agrichemicals

A separate project (CT15016, Agrichemical residue monitoring program for Australian citrus exports stage 2) was funded by Hort Innovation in 2015. The funding arrangement for CT15016 covered only the government charges and freight costs. Coordination and administration of residue monitoring program was provided by the project team under CT15012. Under that program, citrus exporters and packing houses registered their interest at the commencement of the season. Samples were taken from packing lines and freighted to the contract laboratory (Symbio Alliance) where they were screened for approximately 200 agrichemicals. Results of analyses were provided to the Australian Government National Residue Survey (NRS) and the participating business. Businesses and the NRS team would compare results to importing country MRLs to determine if any Maximum Residue Limit risks existed. Where risks were present, consignments could be redirected. Aggregated data were provided to

Citrus Australia at the end of each season and reviewed by the project team.

The project team remained abreast of Australian and overseas MRLs via importing country websites and SPS notifications. MRL listings were updated each year in September (to coincide with control of the spring complex of pests) and again in March, prior to the commencement of the export season. For the earlier part of the project, assistance was provided by AKC consulting. A *'Guide to achieving Export MRLs'* was also published which aimed to provide guidance on achieving importing country MRLs through extended export harvest intervals. Both documents were distributed to exporters via email and made available via the Citrus Australia website.

Access to modern and effective agrichemicals remains a key priority for the citrus industry, especially as older chemistry is removed and MRLs are continually being reviewed. At the commencement of the project, the team assembled an Agrichemical Reference Group with a view to informing the agrichemical priorities for the citrus industry. The group was made up of growers, packers, researchers, pest management consultants, agronomists, regulators, researchers, agrichemical companies and Hort Innovation. The group identified emerging pest threats, emerging threats to chemical use and identified new and replacement chemistry. Priorities were taken either directly to the agrichemical companies or to Hort Innovation to be progressed through the AgVet Collaborative forum. The project team provided technical and commercial information to the agrichemical companies and the Australian Pesticides and Veterinary Medicines Authority to support and maintain access to a number of agrichemicals.

R&D extension

The team has cultivated strong working relationships with the R&D community. Specifically, we have formed close relationships with researchers from NSW DPI and Queensland Department of Agriculture and Fisheries in the areas of postharvest quality, pest and disease management, variety and rootstock evaluation, plant health and plant nutrition. We have included the researchers in our regional visits and presentations by these researchers have always been a key feature of our regional and special issues forums. For example, the project team has provided a large amount of input into project CT15010 (Australian Citrus Postharvest Science Program) and has assisted the project leaders to establish networks of packers, growers and marketers in order to develop and execute project priorities.

Export advice, crises management and distressed cargo

With the export trade in citrus growing at an impressive rate, so too have the number of issues and crises associated with the trade. The project team served as a 'help line' to exporters to assist in understanding and fulfilling regulatory requirements and helped resolve issues with audits, inspection and certification. We provided a conduit between industry and government in instances where cargo had become distressed. The team was the first point of call for government in times of crisis (e.g. product tampering and foodborne illness in 2018).

Technical and commercial advice to government

Before any market access case is progressed by government, industries must first demonstrate that there is sufficient commercial interest, that there is sufficient technical R&D to support the case, that substantial trade will result, and that the industry is commercially and technically prepared. Throughout the life of the project, the team provided a large amount of commercial and technical advice to government to support new and improved market access and assisted with the development of technical packages to support bilateral negotiations.

Food safety

Fresh Produce Food Safety became an emerging and serious issue over the last three years in light of several high-profile cases of foodborne illness and product tampering. Accordingly, the project team assembled an informal food safety reference group to act as a discussion forum and provide technical advice to overcome any emerging trade barriers (domestic and export) related to food safety.

As a result of an initiative by Hort Innovation to harmonise food safety requirements across the major retailers (HARPS), new food safety requirements were implemented in 2017-18. The project team assisted the citrus industry in the transition to the new retailer requirements and promoted awareness of the new requirements by providing formal presentations at regional forums and regular communications via print and electronic media. The team also became accredited to deliver Freshcare training (one of the schemes recognised by the retailers). Senior management from Freshcare and the Fresh Produce Safety Centre were also invited to speak at a number of Citrus Australia's forums. The team also held a dedicated food safety forum in Barmera in October 2018.

Australia has food safety recognition agreements with a number of importing countries. These agreements require periodic renewal with a large amount of technical and commercial information. The agreements negate the need for costly inspections and product assessments on arrival in the export destination. In turn, this allows Australian exporters access through specific ports. The team has continued to provide advice and host visits by the overseas

authorities to establish and renew the country recognition agreements.

Communications

Updates on key issues affecting the citrus industry (e.g. market access, biosecurity, agrichemicals, food safety, plantings, crop forecasts) were provided to industry via print and electronic media. Specifically, the team provided a large amount of content for the citrus industry quarterly tabloid (Australian Citrus News) and the fortnightly online newsletter (Citrus eNews). The team has developed an extensive database of stakeholders from all levels of the supply chain including growers, packers, exporters, marketer, retailers, agronomists, researchers and regulators.

Outputs

Here we report the physical outputs that resulted from the project activities. This list is not exhaustive.

January – July 2016	
Activity	Output
Attendance and participation in the Horticulture Export Industry Consultative Committee (HEICC), 17 February and 8 June 2016	<ul style="list-style-type: none"> Record of HEICC meeting (17 February 2016) Record of HEICC meeting (8 June 2016)
Coordinate and attendance at Queensland Regional Forum	<ul style="list-style-type: none"> CA Regional Forum Agenda, 1 March 2016 Event report - Qld Regional Forum 1 March 2016 Presentation Market Access Priorities and progress (D. Daniels) Presentation – citrus tree census (N. Hancock)
Meetings of Crop Estimates Networks	<ul style="list-style-type: none"> Australian Citrus National Forecast for 2016 Season
Meeting of Export Leadership Group	<ul style="list-style-type: none"> Export market committee meeting minutes 150316 Export Market Access Priorities 2016
Meeting of Domestic Leadership Group	<ul style="list-style-type: none"> Domestic Market Leadership Group Meeting minutes 23 03 14
Correspondence with Agrichemical Leadership Group	<ul style="list-style-type: none"> Technical package to APVMA to support minor use permit application for the control of citrus gall wasp Brief on Mancozeb issues in Queensland (June 2016) Review of citrus agrichemical usage (July 2016) Minor use permit for clothianidin to control citrus gal wasp in oranges and mandarins Minor use permit for clothianidin to control citrus gal wasp in lemons.
Online tree census	<ul style="list-style-type: none"> Australian Citrus Tree Census report Tree Census Brochure (condensed version) infographic
Online export registration system	<ul style="list-style-type: none"> List of registered orchards and packing-houses for export to Korea, China and Thailand 2016. 68 packing houses registered for export 3 321 blocks registered for export, totalling hectares. registered orchards for export 8 121 registered hectares for export
Market Outlook Forum	<ul style="list-style-type: none"> Report on market outlook forum (March 2016) Presentation – Market access, priorities and progress (D. Daniels) Presentation – Australian Citrus Quality Standards, (N. Hancock) Presentation - Citrus Trees Census and crop forecast (N. Hancock)
Citrus Agrichemical Residue Monitoring Program	<ul style="list-style-type: none"> Service contract between Citrus Australia and Commonwealth of Australia List of participating exporters (24) 2016 NRS Citrus brochure (English) 2016 NRS Citrus brochure (Japanese) 2016 NRS Citrus brochure (Korean) 2016 NRS Citrus brochure (Malaysian) 2016 NRS Citrus brochure (Thai)

	<ul style="list-style-type: none"> • 2016 NRS Citrus brochure (Indonesian) • 2016 NRS Citrus brochure (Chinese) • Citrus export MRLs – March 2016 update
Regional forums and variety days	<ul style="list-style-type: none"> • SA Regional Forum Agenda 24 May 2016 • Event report: Riverland Regional Forum 2016 • Murray Valley Regional Forum – program • Event report: Murray Valley Regional Forum 2016 • Riverina Regional Forum – program • Event report: Riverina Regional Forum 2016 • Qld Regional Forum Agenda 1 March 2016 • Event report: Qld Regional Forum 1 March 2016
Coordinate Citrus to Korea pre-clearance program	<ul style="list-style-type: none"> • 2016 Korean pre-clearance schedule • Letter to Mr Yun 300517 • 3 exporters registered • 42 containers inspected
Engagement with Australian Competition and Consumer Commission (ACCC)	<ul style="list-style-type: none"> • Letter to ACCC (28 April 2016) furnishing Export Agreement • Letter from ACCC (20 May 2016) • Japan, China, USA exporter group certificate (17 May 2016)
Meeting of Japan, China, USA exporter group	<ul style="list-style-type: none"> • Japan China USA exporter group minutes (29 April 2016) • Japan China USA exporter group minutes (20 May 2016) • Japan China USA exporter group minutes (1 July 2016)
CT15012 Project Reference Group	<ul style="list-style-type: none"> • CT15012 Project Reference Group meeting notes 5 July 2016
Program Logic Model and Monitoring and Evaluation Plan	<ul style="list-style-type: none"> • McKinna <i>et al.</i> Draft Program Logic and M&E plan (18 July 2016)
Variety Leadership Group meeting	<ul style="list-style-type: none"> • Variety Committee Meeting minutes (25 June 2016)
Participation at AgVet Collaborative Forum	<ul style="list-style-type: none"> • Report on AgVet Forum (7 June 2016)
Weekly shipping data for key export markets	<ul style="list-style-type: none"> • 16 05 31 Shipping report • 16 06 06 Shipping report • 16 06 14 Shipping report • 16 06 20 Shipping report • 16 07 01 Shipping report • 16 07 08 Shipping report • 16 07 18 Shipping report
July – December 2016	
Activity	Output
Meeting with Export Leadership Group	<ul style="list-style-type: none"> • Export market committee meeting agenda 191016 • Export market committee minutes 191016
Meetings of Japan, China, USA exporter's group	<ul style="list-style-type: none"> • 16 04 29 Japan China USA exporter group minutes • 16 05 20 Japan China USA exporter group minutes • 16 07 01 Japan China USA exporter group minutes • 16 07 22 Japan China USA exporter group minutes • 16 08 12 Japan China USA exporter group minutes
InfoCitrus reports	<ul style="list-style-type: none"> • 2016 04 16 Queensland InfoCitrus Report • 2016 04 23 Queensland InfoCitrus Report

	<ul style="list-style-type: none"> • 2016 04 30 Queensland InfoCitrus Report • 2016 05 07 Queensland InfoCitrus Report • 2016 05 21 Queensland InfoCitrus Report • 2016 05 28 Queensland InfoCitrus Report • 2016 06 25 Queensland InfoCitrus Report • 2016 07 09 Queensland InfoCitrus Report • 2016 07 16 WA InfoCitrus Report • 2016 07 23 Queensland InfoCitrus Report • 2016 08 06 Queensland InfoCitrus Report • 2016 08 13 Queensland InfoCitrus Report
Collects and disseminate weekly shipping data for Japan, China and USA	<ul style="list-style-type: none"> • 16 06 06 Shipping report • 16 06 14 Shipping report • 16 06 20 Shipping report • 16 07 01 Shipping report • 16 07 11 Shipping report • 16 07 18 Shipping report • 16 08 03 Shipping report • 16 08 08 Shipping report(2) • 16 08 15 Shipping report • 16 08 29 Shipping report • 16 09 05 Shipping report • 16 09 19 Shipping report • 16 09 27 Shipping report • 16 10 13 Shipping report • 16 10 20 Shipping report • 25 07 18 Shipping report
Report on Citrus International Congress	<ul style="list-style-type: none"> • Final report - Citrus International Congress
Meeting with Variety Leadership Group	<ul style="list-style-type: none"> • Variety leadership Group Minutes 061216
Meeting with Domestic Leadership Group	<ul style="list-style-type: none"> • 16 10 19 Domestic Market Committee notes
Queensland regional Advisory Committee	<ul style="list-style-type: none"> • 16 11 18 Queensland visit
Updates to online training for Registered Crop Monitors	<ul style="list-style-type: none"> • Online training updates November 2016 • Online RCM training 2017
Review of KCT export manual	<ul style="list-style-type: none"> • KCT export manual
Attendance at HEICC meeting	<ul style="list-style-type: none"> • Minutes - HEICC Mtg 12
Attend China Fruit and Vegetable Fair Beijing	<ul style="list-style-type: none"> • Presentation: China FVF 2016 D. Daniels
Participation in HIA Trade Advisory Committee	<ul style="list-style-type: none"> • Hort Innovation Status of Technical Market Access Requests - Dec 2016 FINAL • iTAP telecon 29 August - Minutes – 290816 • 20161024 Industry Debrief Thailand Bilateral 2016

Attendance at Queensland Citrus Exporters Group	<ul style="list-style-type: none"> • QRAC Meeting Notes 171116
Open online tree census	<ul style="list-style-type: none"> • Australian Citrus Tree Census report • Tree Census Brochure (condensed version) infographic
Open online export registration system	<ul style="list-style-type: none"> • Online registration system maintained and redeveloped • 8194 registered hectares for export • 72 packing houses registered for export
Coordinate online training for Registered Crop Monitors	<ul style="list-style-type: none"> • Communique to Registered Crop Monitors • Updated online training package
Annual report for NRS program	<ul style="list-style-type: none"> • NRS End of Year milestone report 2016 – Citrus • CT15016 Milestone 102
Examine data from agrochemical residue monitoring program	<ul style="list-style-type: none"> • Review of citrus agrichemical usage August 2016
Market visit to Tokyo	<ul style="list-style-type: none"> • Japan Travel Report FINAL Industry 150916
Market visit to Manila	<ul style="list-style-type: none"> • Trade seminar Philippines 2016 • Presentation to retailers (D. Daniels) • Presentation to retailers Glenn Feist
December 2016 - July 2017	
Coordinate and hold Queensland Regional Forum	<ul style="list-style-type: none"> • Queensland regional forum Program Agenda <p style="text-align: center;">Formal presentations:</p> <ol style="list-style-type: none"> 1. Harmonised Australian Retailer Produce Scheme (D. Daniels) 2. Agrichemicals – D. Daniels 3. Market Information – N. Hancock <ul style="list-style-type: none"> - Tree Census – draft report - Crop Quality and Forecast <ol style="list-style-type: none"> 4. Australian Citrus Quality Standards – N. Hancock 5. Export market update – D. Daniels
Work with Hort Innovation and chemical registrants to progress and maintain access to agrichemicals.	<ul style="list-style-type: none"> • Renewal on minor use permit for Iprodione • Application for import tolerance for iprodione and Captan in Taiwan • Samurai draft label • Extension of minor use permit for Iprodione • Application for Importing country tolerance for Iprodione and Captan. • Review of Agrichemical usage
Participation in meeting with Citrus Industry Strategic Investment Advisory Panel	<ul style="list-style-type: none"> • Presentation to Strategic Investment Advisory Panel (D. Daniels)
Preparation and attendance at HEICC meeting Canberra (meeting 13)	<ul style="list-style-type: none"> • Minutes from meeting 12 • Minutes from meeting 13

Hold national Technical Forum Mildura	<ul style="list-style-type: none"> • Report on Technical forum • Formal presentations: <ol style="list-style-type: none"> 1. National 2017 Tree Census (N. Hancock) 2. Agrichemical management (D. Daniels)
Conduct third meeting with Export Leadership Group	<ul style="list-style-type: none"> • Minutes from meeting
Conduct third meeting with Variety Leadership Group	<ul style="list-style-type: none"> • Minutes from meeting
Conduct third meeting with Quality/Domestic Leadership Group	<ul style="list-style-type: none"> • Minutes from meeting
Compile report on online tree census	<ul style="list-style-type: none"> • Presentation on tree census results (N. Hancock) • Citrus Tree census report 2017 (N. Hancock) • Citrus Tree census infographic 2017 (N. Hancock)
Crop density and sizing surveys	<ul style="list-style-type: none"> • 2017 National Forecast
Meetings with Crop Estimates Committees	
Coordination of NRS program	<ul style="list-style-type: none"> • 24 Participants signed up for 2017 season • Contract with Commonwealth executed • 2017 NRS trade brochure (6 languages)
Sunraysia Regional forum South Australia Regional Forum	Formal presentations: <ul style="list-style-type: none"> • Citrus Tree Census (N. Hancock) • Trade and market access (D. Daniels)
Coordinate Japan preclearance program	<ul style="list-style-type: none"> • Audit and verification itinerary/schedule • Letter to Mr Yamamoto • Agenda for entry meeting • Agenda for exit meeting
Coordinate Korea preclearance program	<ul style="list-style-type: none"> • 2017 pre-clearance schedule • Letter to Ms Su-Ji Lee, Korea's Quarantine and Inspection Agency
Meeting with Agrichemical Leadership Group	<ul style="list-style-type: none"> • Record of meeting • 2017 Strategic Agrichemical Review Process
Preparation and attendance at HEICC meeting Canberra	<ul style="list-style-type: none"> • Meeting minutes and action items
Meeting with Department of Agriculture and Water Resources, Canberra	<ul style="list-style-type: none"> • Record of meeting
Aggregate shipping data and compile report	<ul style="list-style-type: none"> • Shippers reports
Regular teleconferences with Japan, China, US exporter's group	<ul style="list-style-type: none"> • Meeting minutes and minimum pricing recommendations. •
Trade seminars in Japan	Formal presentations <ul style="list-style-type: none"> • Australian Citrus Crop: Now & The Future (J. Damiani) • Export Update & Tariffs (D. Daniels) • Australian oranges in Japan (J. Damiani)
Participation in Queensland Citrus Exporter's Group	<ul style="list-style-type: none"> • Meeting minutes and pricing recommendations

Media articles	<ul style="list-style-type: none"> • Citrus Tree Census reveals rise in mandarin plantings, Australian Citrus News Winter 2017 • Citrus Production to exceed 750 000 tonnes, Australian Citrus News Winter 2017 • 2016 testing shows very good fruit quality, , Australian Citrus News Winter 2017 • Agrichemicals and evolving challenge, Australian Citrus News Autumn 2017
Coordinate online export registrations for Korea, China and Thailand	<ul style="list-style-type: none"> • Growers and packers registered for the 2017 season
Coordinate online training for registered crop monitors	<ul style="list-style-type: none"> • List of Registered Crop Monitors
Provide input into draft standards on export accreditation	<ul style="list-style-type: none"> • Input into guideline on audit of Horticulture export accreditations. • Input into guideline on management of Horticulture export accreditations.
Participation in trade event for Australian citrus at the Australian Embassy in Thailand	<ul style="list-style-type: none"> • Formal presentation to seminar participants (importers, retailers, trade officials).
July – December 2017	
Conduct fourth meeting with Export Leadership Group	<ul style="list-style-type: none"> • Meeting minutes
Conduct fourth meeting with Quality/Domestic Leadership Group	<ul style="list-style-type: none"> • Meeting minutes
Conduct mid-term evaluation review with consultant	<ul style="list-style-type: none"> • Mid-term review – final report
Open online export registration system	<ul style="list-style-type: none"> • Industry Advice Notices • KCT snapshot
Update online training for Registered Crop Monitors	<ul style="list-style-type: none"> • Online training system • Record of changes
Participation in HIA Trade Advisory Committee	<ul style="list-style-type: none"> • Meeting minutes
Develop program for 2018 Market Outlook Forum	<ul style="list-style-type: none"> • Draft program
Open online tree census	<ul style="list-style-type: none"> • 2017 National tree census • National tree census infographic
Coordinate online training for Registered Crop Monitors	<ul style="list-style-type: none"> • Email to industry participants
Conduct regular teleconferences with Japan, China, USA exporter group	<ul style="list-style-type: none"> • Meeting minutes and pricing recommendations
Participate in regular teleconferences with Queensland Citrus Exporter's Group	<ul style="list-style-type: none"> • Meeting minutes and pricing recommendations
Collaboration with Freshcare, the Produce Marketing Association and Fresh Produce Safety Centre to provide information to government to renew Australia-Indonesia Country Recognition Agreement on Food Safety	<ul style="list-style-type: none"> • Document - Fresh Produce Food Safety in Australia

Meeting with Regional Advisory Committees	<ul style="list-style-type: none"> Meeting minutes
Preparation and participation in HEICC meetings	<ul style="list-style-type: none"> Meeting minutes
Coordination of NRS residue monitoring program	<ul style="list-style-type: none"> End of year management report NRS brochure, translated into six Asian languages. 430 samples submitted for analysis
Collaborate with Hort Innovation and AgVet product registrants to gain access to agrichemicals	<ul style="list-style-type: none"> Emergency use permits Clothianidin (2) Abamectin Exirel label claim
Participation in season launch in Philippines	<ul style="list-style-type: none"> Presentation to retailers in Philippines – D. Daniels
Collect, aggregate and disseminate shipping data	<ul style="list-style-type: none"> Weekly shipping reports
Collaborate with Currie Communications to develop relevant media articles in ACN	<ul style="list-style-type: none"> Media articles in Australian Citrus News
Participation in biennial Freshcare/GlobalGAP conference	<ul style="list-style-type: none"> Presentation
Participation in melon industry export conference	<ul style="list-style-type: none"> Presentation – Australian Citrus exports D. Daniels
Presentation to CASAR committee on revised retailer standards on fresh produce safety (HARPS)	<ul style="list-style-type: none"> Presentation on HARPS – D. Daniels
Work with department to improve market access conditions	<ul style="list-style-type: none"> Revised protocol for citrus to China
January – July 2018	
Coordinate Murray Valley Regional Advisory Committee meeting	<ul style="list-style-type: none"> Minutes of meetings
Review Annual Operating Plan	<ul style="list-style-type: none"> 2018 Annual operating plan
Preparation and attendance at HEICC meeting Canberra	<ul style="list-style-type: none"> Minutes of meetings
Coordinate and hold Queensland Regional Forum	<ul style="list-style-type: none"> Regional forum program Presentation by M. Milner Presentation by D. Daniels Presentation by N. Hancock
Coordinate meeting of Qld Regional Advisory Committee	<ul style="list-style-type: none"> Minutes from meeting
Coordinate and hold Market Outlook Forum	<ul style="list-style-type: none"> Forum program Presentation by M. Milner Presentations (2) by D. Daniels Presentations (2) by N. Hancock
Report and evaluation on Market Outlook Forum	<ul style="list-style-type: none"> Report on Market Outlook forum Participant evaluation/survey
Update MRL tables and publish to website	<ul style="list-style-type: none"> Citrus Export MRLs – August 2018 Guide to Achieving Citrus Export MRLs – August 2018
Conduct fifth meeting with Export Leadership Group	<ul style="list-style-type: none"> Minutes from meeting
Provide technical and commercial advice	<ul style="list-style-type: none"> Correspondence to DFAT

to DFAT to support FTA negotiations	
Conduct fifth meeting with Variety Leadership Group	<ul style="list-style-type: none"> • Minutes from meeting
Conduct fifth meeting with Quality/Domestic Leadership Group	<ul style="list-style-type: none"> • Minutes from meeting •
Meetings with Crop Estimates Committees	<ul style="list-style-type: none"> • 2018 Crop forecast
Compile presentation for online tree census to be presented at forum	<ul style="list-style-type: none"> • Presentation on tree census outcomes
Compile full report for online tree census	<ul style="list-style-type: none"> • Tree census • Tree census brochure (condensed version)
Commence coordination of NRS program	<ul style="list-style-type: none"> • NRS contract with Commonwealth • NRS program brochure
Coordinate meeting of Qld Regional Advisory Committee	<ul style="list-style-type: none"> • Minutes from meeting
South Australia Regional Forum	<ul style="list-style-type: none"> • Presentation by N. Hancock • Presentation by D. Daniels
Attend Western Australia Regional Advisory Committee meeting	<ul style="list-style-type: none"> • Minutes from meeting
Hold meeting of the Riverina Regional Advisory Committee	<ul style="list-style-type: none"> • Minutes from meeting
Coordinate and hold meetings of the Citrus Canker stakeholder group	<ul style="list-style-type: none"> • Meeting minutes • Technical and commercial advice to government
Murray Valley Regional forum	<ul style="list-style-type: none"> • Forum agenda • Presentation by M. Milner • Presentation by N. Zerveas • Presentation by B. Cant
Japan pre-season trade seminars <ul style="list-style-type: none"> - Osaka - Tokyo 	<ul style="list-style-type: none"> • Presentation and talking points • D. Daniels, B. Cant
Murray Valley Regional Advisory Committee meeting	<ul style="list-style-type: none"> • Minutes from meeting • Frost mitigation presentation (NSW DPI, Citrus Australia) • Brochure- managing Qfly • Quick guide to managing Qfly • Afourer management factsheet
Fruit fly in-field management workshop	<ul style="list-style-type: none"> • As above
Riverina Juice forum	<ul style="list-style-type: none"> • Forum program • Presentation by D. Daniels • Presentation by N. Hancock
Coordinate Korea preclearance program	<ul style="list-style-type: none"> • Citrus to Korea pre-clearance program schedule • Welcome letter to Korean inspector.
Agrichemical Leadership	<ul style="list-style-type: none"> • Response to APVMA on spray drift management tool • Chairman product label.
Collect and aggregate shipping data to major export markets Shipping reports and distribute to industry participants.	<ul style="list-style-type: none"> • Weekly shipping reports
Contribute to development of policy for domestic movement conditions for citrus canker host material.	<ul style="list-style-type: none"> • Emergency Use Permits for citrus canker host material • • Domestic movement controls for canker host material
Preparation and attendance at HEICC meeting Canberra	<ul style="list-style-type: none"> • Minutes of meetings
Hold meeting of the Riverina Regional Advisory Committee	<ul style="list-style-type: none"> • Record of meeting
High-level dialogue with Department of Agriculture and Water Resources	<ul style="list-style-type: none"> • Record of meeting

Assist Queensland Citrus Exporter's Group with development of collateral for trade event in Thailand	<ul style="list-style-type: none"> • Retail handling guide • Mandarin calendar • Mandarin flyer • Mandarin poster • Mandarin wobblers
Provide presentations at Thailand pre-season trade seminar.	<ul style="list-style-type: none"> • Presentation to Thai importers and retailers
Provide advice to the department to support technical market access negotiations with Thailand.	<ul style="list-style-type: none"> • Briefing for government negotiators. • Technical package on proposed management measures for FRW.
Deliver Freshcare training across southern growing regions	<ul style="list-style-type: none"> • 134 participants trained and accredited to Freshcare Version 4
July – December 2018	
Department of Agriculture (legal team) field visits to orchards and packing houses	
Coordinate and hold meetings of the Citrus Canker stakeholder group	<ul style="list-style-type: none"> • Meeting minutes • Technical and commercial advice to government
Freshcare training	<ul style="list-style-type: none"> • 72 growers trained to Freshcare version 4
Meeting with Export Leadership Group	<ul style="list-style-type: none"> • Meeting minutes • Review of market access priorities
Meeting with Variety Leadership Group	<ul style="list-style-type: none"> • Meeting minutes
Meeting with Quality/Domestic Leadership Group	<ul style="list-style-type: none"> • Meeting minutes
Open online export registration system for packing houses and growers	<ul style="list-style-type: none"> • 74 registered packing houses • 742 registered orchards • 10 620 registered hectares.
Open tree census	<ul style="list-style-type: none"> • 2018 tree census
Update online training for Registered Crop Monitors	<ul style="list-style-type: none"> • 2018 Citrus Online training course for Registered Crop Monitors
Participate in Queensland citrus exporter's group meetings	<ul style="list-style-type: none"> • Minutes of meetings • Minimum pricing recommendations
Engagement with Agrichemical companies for new product development	<ul style="list-style-type: none"> • Label claim for Chairman • Label claim for Trivor • Label claim for Samuarai
Participation in National Fruit Fly Symposium	<ul style="list-style-type: none"> • Presentation D. Daniels
Deliver Freshcare training across southern growing regions	<ul style="list-style-type: none"> • Training sessions across New South Wales, Victoria and South Australia. • 72 participants trained and accredited to Freshcare version 4.
Murray Valley Afourer pruning workshop	<ul style="list-style-type: none"> • Workshop
Food safety forum (Barmera)	<ul style="list-style-type: none"> • Presentation: Allergen management, Georgina Christensen • Presentation: Drivers for Food Safety & Quality Compliance, Clare Hamilton Bate • Presentation: Intro to Food Safety, N. Hancock • Presentation: Microbiological Pathogens on Citrus Fruit- Understanding The Risks, SP Singh • Presentations on HARPS, Tristen Kitchener

Outcomes

Overall, the Australian citrus industry has entered a buoyant phase with returns that could not be imagined just a few years ago. Approximately 260 000 tonnes of Australian citrus are exported annually and the value is approaching half a billion Australian dollars. The Chinese market is now receiving over 100 000 tonnes of Australian citrus annually and this has put pressure on supply volumes into other export markets as well as the Australian domestic market. Unexpectedly, there is even strong pressure on the supply of juice grade fruit as packers have found fresh consumption demand in export markets for Valencia oranges and other varieties that have historically been sent to processing. There is unmet demand in almost all export markets and the industry is responding through capital investment in new plantings, packing houses and other infrastructure.

At the commencement of CT15012, the project team set some ambitious but realistic objectives. The team had a clear direction and has executed its strategy well. Here we report on the outcomes for the Australian citrus industry that come about as a result of CT15012.

Industry engagement

At the commencement of the project, the project team had already established extensive networks of growers, packers, exporters, researchers, regulators, agronomists, retailers, wholesalers and other members of the value chain. However, as the citrus industry has continued to evolve, the players within the industry have changed and constant effort has been required to maintain existing relationships and cultivate new ones. Through our regional and special interest forums (e.g. Market Outlook Forum) we have seen participants in the supply chain collaborate and form strategic alliances. Our forums have also given the research community a platform to extend their R&D results and we have witnessed first-hand businesses capitalising on the latest findings (e.g. post-harvest quality). Ultimately, this collaboration has led to greater efficiency and quality through better business practices.

Through our Japan, China, USA exporter group we have seen businesses exchange intelligence on pricing and signals in export markets with agreement on minimum export prices. Growers, packers and exporters are achieving better returns than any time in recent memory. Today, China, Japan and the USA are the three largest markets for Australian citrus with a combined value of A\$305 million.

Similarly, our Queensland Citrus Exporter's Group has shared information on pricing and volumes in export markets and members of the group are enjoying stronger prices in export markets than ever before. Through the formation of this group by Citrus Australia, like-minded businesses have formed an alliance and have conducted marketing and promotional activities in Thailand through a voluntary marketing levy. To our knowledge, the voluntary marketing levy is a first for any agricultural industry in Australia. Thailand is now the second largest market for Queensland mandarins valued at close to A\$20 million.

Our various regional and special purpose committees (e.g. Export Market committee, Domestic Market Committee and Variety Committee) have provided a strong vehicle to inform project activities and citrus industry priorities. Advice from these committees has been used to further progress the citrus industry agenda in the areas of quality, market access, export promotions, R&D, disease resistance and agrichemicals.

Government engagement

Engagement with government at federal, state and local levels has been strong and there is a deep level of mutual respect between Citrus Australia and the government agencies that the project team has engaged with. With a high rate of employee attrition within government agencies, it remains a constant challenge to maintain working relationships with continual 're-education' of government officers. Irrespective of the high turnover, we have managed to maintain currency and ensure that citrus industry priorities remain high on the agenda. This has been despite a large number of horticultural industries competing for government attention and resources.

While not always easy to accept, government regulators provide an essential service within the citrus supply chain. As the citrus export trade has continued to grow, so too have the demands on government inspection and certification services. It has been critical that the government be kept well informed of the direction of the citrus industry as investment and the level of sophistication have grown. We have worked closely with the Department of Agriculture and Water Resources to continue to find efficiencies in the export registration and certification process. It is difficult to envisage the citrus export trade being where it is in 2018 without the constant attention the team has given to working with the department to modernise the export registration process.

For the reasons stated above, industry participants find it difficult to engage with government agencies. Similarly, government agencies prefer to engage and consult with a single representative body. The project team has ensured that the industry is represented at all levels of government in the areas of market access, biosecurity,

export certification, free trade agreements and agrichemicals. We have emphasised at every opportunity the production volume and export value of citrus relative to other industries to ensure that the industry has a hearing by government that is proportional to the industry's size and scale.

Market access

The citrus industry is a mature industry and currently exports to over 50 markets. Market access conditions into most markets were established several decades ago. Consequently, there are no new market access requests pending. The citrus market access agenda is therefore centred on expansion of existing policies, protecting the existing trade channels, and improving upon current protocols. The project team has also been focussed on working to ensure that the industry understands and fulfils all regulatory requirements including phytosanitary, agrichemical residues, and food safety. Many of the existing trade protocols are less than optimal, unnecessarily onerous, and costly to achieve. Moreover, conditions of trade are in a constant state of change and are seldom liberalised. During the life of the project there were no regulatory breaches of any kind and no market closures. Through the work of the project team, the industry has developed a strong export culture with an excellent record of regulatory compliance. The industry today has a strong awareness of the impact that any regulatory breach could have on the industry and its ability to access export markets.

At the commencement of the project, Citrus Australia's Export Market Committee determined the market access priorities for the citrus industry. Through our engagement with government, the project team has ensured that the government has continued to progress the industry requests at every opportunity. Despite the challenges associated with high rate of staff turnover within government, the team has managed to ensure that no momentum has been lost as a result of staff changes. In the life of the project there has been strong progress on almost all market access priorities.

In October 2017, China reviewed its policy for the import of Australian citrus. The new conditions of trade include:

- approval of the Riverland Fruit Fly Pest Free Area. This improvement was the result of over a decade's work by Citrus Australia and is seen as a major gain for the South Australian citrus industry. Reports from South Australian exporters are that the approval has saved the industry between two and four dollars per 18kg carton in treatment costs
- approval of cold disinfestation procedures to allow treatment to be carried out at 3°C for Queensland Fruit Fly. This is considered a major gain for the rest of Australia and has led to reduced energy costs and superior outturn quality in fruit exported to China
- removal of orchard freedom conditions for Fuller's rose weevil. This has reduced compliance costs, chemical usage and allowed a larger number of hectares to be registered for export.
- removal of orchard freedom condition for light brown apple moth. This has reduced compliance costs, chemical usage and allowed a larger number of hectares to be registered for export.
- approval of citrus exports in bins (as opposed to cartons). This has enabled lower grade or juice grade fruit to be exported to China for processing.

In 2017, South Korea agreed to remove the requirement for a pre-clearance inspector contingent upon strong quarantine performance. At the time of writing, the Korean authorities are reviewing the industry's record over the last two seasons. While we have concerns over Korea's view on the industry performance, we do consider that progress has been made.

In September 2018, the Indonesia-Australia Cooperative Economic Partnership negotiations concluded. During the negotiations, Citrus Australia provided a large amount of advice to the Department of Foreign Affairs on the citrus industry priorities. As a result, the agreement has a number of favourable outcomes for Australian citrus. The outcomes include:

- guaranteed annual Tariff Free Quota for Australian oranges of 10 000 tonnes, increasing by 2.5 per cent per annum
- guaranteed annual Tariff Free Quota for Australian mandarins of 7 500 tonnes, increasing to 10 000 over 15 years and unlimited after 20 years
- guaranteed annual Tariff Free Quota for Australian lemons of 5 000 tonnes, increasing by 2.5 per cent per annum.

Since 2012, there has been a large amount of business uncertainty in Indonesia where the import authorities have

issued seasonal import quotas on an erratic basis. For several seasons, there were no imports allowed between April and September - the major months of the Australian export season. The quotas detailed in the cooperative economic partnership will provide an opportunity for export programs to be re-established in Indonesia. As a high value market in close proximity to Australia, the gains in Indonesia are welcome news to the sector, particularly for Queensland mandarin exporters.

In 2017, the International Plant Protection Convention (IPPC) adopted a number of cold disinfestation standards for Mediterranean fruit fly and Queensland fruit fly. The project team provided input and commentary on the standards as part of the adoption process. Japan is a signatory to the IPPC and the new standards have opened up the dialogue between Australian and Japan on expanding the access for Australian mandarins to include a number of additional varieties. The Japanese authorities have agreed that there is no technical argument against the expansion of existing policy for Australian citrus and the request is now in the administrative phase. Australian mandarin plantings have been on a steep upward trajectory (particularly Afourer type mandarins) and the Australian domestic market is under pressure. The opening up of the Japan market for additional varieties would provide an additional outlet for Afourer mandarins that are currently not well-received in other parts of Asia. Additionally, the expansion of Japan's policy would provide risk mitigation for the Riverland Pest Free Area from where substantial volumes of mandarins are currently exported to Japan. In the event that the Riverland Pest Free Area is suspended, cold treatment would provide a viable option for Riverland mandarins. While this has not yet been finalised, we consider Japan's new position as major progress on an issue that has spanned more than two decades. The issue is now the subject of bilateral discussions between Australia and Japan and we remain hopeful for a prompt resolution.

At the commencement of the project, Vietnam was one of the last remaining countries to approve the Riverland Fruit Fly Pest Free Area. There were also technical issues within the protocol which meant fruit could not be exported from Western Australia. These issues were resolved in June 2018 and Riverland producers may now export to Vietnam under Pest Free Area certification. The issues related to exports from Western Australia have also been resolved.

Expanded access for citrus to the United States to allow additional production areas (primarily Queensland) has been a longstanding issue for the industry. In 2014, the project team provide information on production practices to support Australia's technical submission. In September 2015, the United States Department of Agriculture (USDA) released its risk assessment for expanded access for citrus from Australia. In 2017, the USDA updated its treatment manual to include cold disinfestation schedules for additional fruit flies that could be associated with Australian citrus. This essentially means that the technical assessment has now been finalised and finalisation of this request is purely an administrative process. While not yet finalised, we consider this to be major progress towards a 20-year market access request. When finalised, the US market will provide an additional outlet for the Queensland mandarin sector against a backdrop of rapidly increasing mandarin production in Australia.

The Philippines is the last remaining market to approve the Riverland Fruit Fly Pest Free Area. While we did make some progress in having this placed on the government's market access agenda, the request has now been put on hold due to a series of fruit fly detections and recent outbreaks. We have however made some progress towards reducing the costs of in transit cold disinfestation. In 2016 we assisted the New South Wales Department of Primary Industries in designing and applying for funding to conduct trials to demonstrate the reliability of more cost-effective temperature logging equipment. The Philippines is an important but low returning market and the costs associated with cold disinfestation are difficult to recover. At the time of writing, the trials are complete and the Department of Agriculture is preparing a technical case to present to the authorities in the Philippines. The approval of more affordable logging equipment would equate to savings of half a million dollars annually for the citrus industry alone and would have flow-on effects for other industries.

Export registration, inspection and certification

For exports to South Korea, China and Thailand, growers and packers must fulfil certain requirements and register annually. In 2014, the project team developed and implemented an online system for grower and packer registration. The initiative was in response to an underperforming paper-based system being operated by the Department of Agriculture and Water Resources. We have continued to administer the online registration system and as interest in the China market has grown, so too have the demands on the system from users, including the department. We have continued to develop the system to accommodate the new demands.

At the commencement of CT15012 in January 2016, there were 340 growers (totalling 5 100 hectares) and 51 packing houses registered for the export program. In the three years of the project, the export program has more than doubled. Today there are 742 growers (totalling 10 620 hectares) and 74 packing houses registered. In that same three-year period, the annual trade volume into mainland China has increased by 569 per cent from 13 000

tonnes to 74 000 tonnes. Trade volumes into Korea have more than doubled (albeit from a low base) and trade volumes into Thailand have also experienced a modest increase. Without the efforts of the project team to develop and administer the online export registration system, the opportunities in China would never have been realised.

The project team has also worked closely with the department to develop an industry-based system of in-field and packing house controls that achieve importing country requirements. We have also assisted growers and packers to understand and fulfil all regulatory requirements and achieve successful registration each season. During the period of the project, there have been no major breaches of quarantine, agrichemical or food safety violations and there have been no market closures.

In late 2015, the Australian Government received approval from overseas trading partners to move towards industry-based personnel (Authorised Officers) to perform phytosanitary inspections. While the transition towards Authorised Officers was smooth, it was not without challenges. For the transition to take place, a large number of Authorised Officers needed to be trained and assessed in the job functions relevant to citrus exports (e.g. cold disinfestation and loading of containers). While large parts of the horticulture sector were critical of the move, Citrus Australia embraced the change and recognised the opportunities it would bring. The project leaders assisted the department in communications and coordinating the training and assessment of Authorised Officers. The move has been a quantum leap forward for the industry. In the three years after the transition, citrus exports increased by 66 per cent, from 158 000 tonnes in 2014 to 263 000 tonnes in 2017. The rise in citrus exports would certainly not have been possible under the previous government-based inspection program.

Online training for crop monitors

For exports to Korea, China and Thailand to take place, all orchards must be surveyed for quarantine pests by a suitably trained person. In 2014, the project team developed and implemented online training for crop monitors, in cooperation with Tocal College. A robust, professionally managed, auditable system became critical in 2018 as new regulations were introduced concerning how properties are accredited for export. The new regulations include the use of industry-based personnel to conduct orchard surveillance. As stated previously, there are now close to 11 000 hectares of orchards registered for export. Each one of these properties must be surveyed in the month of February. The online crop monitoring course has enabled a sufficient number of industry-based personnel to be trained and assessed to undertake orchard surveillance. Without the online course, it would simply not be possible.

In late 2018 in preparation for the 2019 season an exotic pest module was included in the training and a section added to the crop monitor form which will capture surveillance data for exotic pests in close to 50 per cent of the Australian citrus orchards. This work was done in collaboration with project CT17001.

Audits, pre-clearance and verification visits

On average, the team has been required to coordinate four visits by overseas authorities annually. Ultimately, the team is in the best position to select appropriate citrus businesses to provide an accurate cross-section of Australian production standards. As a result of the team's efforts, all verification visits have been successful and there have been no disruptions to trade.

The Indonesian authorities are required to visit Australia on a biennial basis to confirm procedures as part of the Australia-Indonesia Country Recognition Agreement on Food Safety. The agreement was last renewed in October 2017 as the result of a successful verification visit by the Indonesian food safety authorities. The visit was also supported by a large amount of technical and commercial information provided to the Indonesian side by the project team. The Country Recognition Agreement allows trade in Australian citrus to continue without the need for on-arrival product testing and inspection. Additional benefit is derived through the ability to access Indonesia through a larger number of ports than other southern hemisphere suppliers. The Indonesian market is valued at approximately A\$20 million.

Similarly, Australia and the United States have a mutual agreement on food safety, allowing entry of Australian citrus into the USA. The agreement entered into force in April 2017 as the result of a successful visit hosted by the project team in 2015. The agreement negates the need for ongoing food safety audits by the USA authorities and reduces the level of surveillance required on arrival in the USA. The USA market is the fourth largest market for Australian citrus and was valued at A\$26 million in 2018.

As part of the requirements for citrus exports to South Korea, a Korean officer is required to inspect goods and supervise the loading of containers prior to export (pre-clearance). The project team has hosted the Korean inspector and coordinated the 3-month pre-clearance program from Melbourne since 2014. While only modest volumes of citrus are exported to Korea, it is a small but important market for those businesses who participate in

the program. In the three years of project CT15012, exports to Korea have more than doubled (to 2 700 tonnes) and are now valued at A\$6 million.

Citrus exports to Japan are subject to a pre-season audit by the Japanese authorities. Each year, Japan's Ministry of Agriculture, Forestry and Fisheries visits Australian production sites to audit the Riverland Pest Free Area and confirm in-transit cold disinfestation procedures. The project team, has coordinated the annual visit in cooperation with the department and the Australian Table Grape Association. Approximately 40 000 tonnes of citrus are exported to Japan each year to a value of \$A69 million, making it the second largest market for Australian citrus.

Annual citrus tree census

At the commencement of CT15012, the project team stated that the overarching goal was:

“to develop a globally competitive and well informed industry that can reliably supply products that satisfy market requirements”.

In our view, there is no more powerful tool than tree census in informing decisions by citrus businesses.

The national citrus tree census has been an annual activity throughout the life of the project. Results are published as a full report and a condensed 'infographic' version and made available to participants via email and on the Citrus Australia website. Results are also presented at Citrus Australia's regional forums and special purpose forums. To our knowledge, this is the first detailed citrus tree census ever conducted in Australia. Gathering information on national citrus plantings had been poorly coordinated in the past. The citrus tree census has been well received by members from the entire value chain. For the first time, growers may make informed decisions on plantings based on hard evidence rather than anecdotes and hearsay. We are witnessing a large amount of new investment in the industry in orchards and in packing house technology. Those investments are also being informed by the tree census. The tree census also provides retailers and wholesalers with a large amount of confidence in supply volumes and enables forward planning by citrus category managers.

The project team has also developed a model which can reasonably predict supply volumes for each major variety over a ten-year period. The model takes into account region, age of trees, rootstock and tree density within orchards. Projections from the modelling are also utilised to inform business decisions. The project team has found the modelling useful in presenting business cases to government for market access requests and with agrichemical companies to justify investment in new pest and disease control products. Data from the tree census have also formed the basis of a large number of presentations delivered at overseas export seminars to demonstrate the reliability of the Australian citrus supply over the next 10 years.

Crop forecasts

The annual crop forecasts were developed by the project team by conducting fruit density and sizing surveys in the major growing regions. The surveys were complimented with input from crop estimates committees in each region and reconciled at the end of each season by gathering information from each packing house on 'bin-tips'. The crop forecasts were provided to supply chain participants prior to the commencement of the season to assist in robust decision making. In the past, marketing decisions were informed by industry trends, suspicions and anecdotal evidence.

Exporter Groups and Shipping data

The formation of the two exporter groups has allowed industry members to exchange data on pricing and volumes in export markets. The collection and aggregation of weekly shipping data has served as verification and has provided 'real-time' data on product in-transit to export markets. Through the minimum pricing recommendations, we have witnessed stable prices in the markets over the last three seasons. Growers, packer and exporters are reporting the highest returns in memory. The exporter groups have also provided a useful feedback mechanism from industry back to the project team to inform decisions on where to direct its efforts.

Overseas trade seminars, trade shows and other activities

While marketing and promotions were outside the scope of this project, the project team has participated in a large number of overseas activities that promote the citrus industry's reputation as a safe and reliable supplier. Specifically, the team attended China Fruit and Vegetable Fair to support Hort Innovation's efforts in China. We have spoken at numerous overseas conferences and provided presentations to retailers in overseas markets and participated in season launches in Thailand and Japan. In 2017 and 2018, the team contributed to trade seminars in Japan. The net result of these activities is that the Australian industry was adequately represented at these events and that the industry's reputation as a serious contender in Asia was reinforced.

Agrichemicals

Access to modern and effective agrichemicals remains a key issue for the citrus industry and the project team has put in a large amount of effort in ensuring that the industry could continue to protect its production base. Through its Agrichemical Reference Group, the team has cultivated strong working relationships with agrichemical companies, regulators (chiefly the APVMA), researchers and pest management consultants. We have utilised these relationships to achieve outcomes for the citrus industry. Part of the challenge has been to convince the agrichemical companies to invest in new products and regulatory approvals for the citrus industry.

Throughout the life of the project, a number of serious pest and disease issues have arisen that have been addressed by the team. In 2016, after working with Sumitomo, Citrus Australia was granted two Emergency Use Permits for Samurai® (clothianidin). In 2018, Samurai was granted a full label claim for citrus. Access to this important molecule has enabled growers to protect their crops against citrus gall wasp, an extremely damaging pest. This has become increasingly important as other molecules are under regulatory scrutiny. Additional benefit has been derived through the chemistry having known activity against a range of quarantine pests. In essence, more citrus is available for export.

In March 2018, the label for Confidor Guard was extended to include citrus gall wasp as a target pest.

In 2016, we provided the APVMA with technical and commercial information to support an amendment to the Agricultural and Veterinary Chemicals Code to include an increased maximum residue limit for dithiocarbamates. As a consequence, Queensland growers have protection against a range of fungal diseases without incurring regulatory violations.

Over the life of the project and in previous years, the project team worked closely with researchers from Dupont (now FMC) to test new products on Australian citrus pests and archived a label claim for Exeril® (cyantraniliprole). This is an important molecule against Fuller's rose weevil, Kellie's citrus thrips and provides another option to manage production and quarantine pests.

In November 2017, Adama achieved a label claim Trivor® to control various pests of citrus. This adds another tool to the citrus grower's toolbox. We have worked with Adama to achieve the claim and advise growers of the benefits of the new product.

In September 2017, the APVMA renewed Citrus Australia's emergency use permit for Iprodione to control emperor brown spot disease in susceptible mandarin varieties and tangelos. The renewal was the result of an extensive body of work conducted after Citrus Australia and Hort Innovation were successful in a grant application to the AgVet Collaborative forum.

The APVMA granted Citrus Australia an Emergency Use Permit for Captan to control emperor brown spot on mandarins on 5 October 2016. This is another welcome addition to the arsenal for Queensland producers and provides another alternative in the case that dithiocarbamates are removed from use.

The team has worked with Syngenta to achieve a label claim for Chairman (propiconazole/fludioxinil). Prior to the registration of this product, there was no product available for control of sour rot for export fruit. While overseas MRLs are still being established, this has been an exciting development for the industry in achieving better control of fungal rots on export fruit.

In summary, there has been a large amount of activity in the agrichemical space. While there are a number of looming threats on the horizon (e.g. suspension of chlorpyrifos), there are currently no major gaps in the agrichemical toolbox for citrus growers.

R&D extension

Essentially, all the activities the project team have undertaken have involved the promotion of past and present R&D outcomes. The recent success in export markets has been the direct result of market access R&D over the last two decades. Cold disinfestation was first researched as a viable treatment for fruit flies in the 1990s. With a view to improve outturn quality, there have been incremental improvements in temperature/time regimes over the next 20 years. In 2018, over 200 000 tonnes of citrus were exported into fruit fly sensitive markets with 120 000 tonnes being exported under cold disinfestation procedures.

Fuller's rose weevil was the subject of extensive research between 2008 and 2010 to determine control methods with a view to overcoming the quarantine barriers for market access to China, South Korea and Thailand. There has been a strong cultural shift within the industry to move towards management systems for Fuller's rose weevil, driven chiefly by strong demand and high returns in China. In 2017, China moved to amend its import policy to include the systems approach as a viable method of controlling Fuller's rose weevil. It has been a six-year effort by the project team to develop an industry-based system (including online record keeping and registration), promote its value to industry, and to assist the industry in understanding and fulfilling the requirements. Exports to Greater China in 2018 were valued at A\$210 million. The entire China export program has been built upon the Fuller's rose weevil research of 2008-10.

The project team has cultivated strong working relationships with the research community, particularly the lead agency for citrus research, New South Wales Department of Primary Industries (NSW DPI). We have actively encouraged representatives from NSW DPI to attend all of Citrus Australia's forums. Our forums have had a strong focus on R&D extension. We have held numerous special interest forums and workshops on contemporary issues. For example, we have held workshops in the Murray Valley on fruit fly management and Afourer pruning techniques. We held a food safety forum in Barmera in October 2018. We held a juice forum in the Riverina in May 2018. Through our forums and workshops, industry participants gain a greater awareness of R&D findings and are provided the opportunity to capitalise on that R&D, adopt new practices, and improve their business practices. That the industry is experiencing such a buoyant phase is strong evidence that R&D is having an impact on the industry's competitiveness and profitability, particularly in the export arena.

Citrus Australia's biennial Citrus Technical Forum is the premier citrus event in Australia. The event was last held in 2017 and plans for the 2019 forum is in the final stages. The forum provided researchers in Australia and overseas the opportunity to present R&D results in formal auditorium sessions, poster sessions and smaller workshops. The event is well attended by over 450 delegates.

Export advice, crises management and distressed cargo

As opportunities in Asia are presented, export quality fruit is in short supply. Several years ago, the team believed that the Australian supply had reached its limit. However, a substantial number of new participants have entered the export trade. Growers who have historically grown for the domestic and juice markets have been encouraged by the success of others. It is important that new participants entering the export arena do so sensibly, with a thorough understanding of the risks. In sensitive markets like China, inexperienced traders have the potential to damage the reputation of the entire industry. The team has provided technical and commercial advice to new growers and assisted them in understanding and fulfilling commercial and regulatory requirements. There have been no major regulatory violations and no loss of market access during the duration of the project.

Despite export volumes increasing by 60 per cent over the last five years, the number of crises and distressed cargo has decreased. This is even more surprising given that there is a strong focus on exporting to markets with more complex regulatory systems (e.g. China and Japan). In previous years, there was a high level of intervention required of the project team on issues related to export registration, auditing, certification and cold disinfestation. However, very little intervention has been required in recent times. This indicates that the industry has developed a strong export culture and awareness of regulatory requirements. We feel that the project team has developed robust systems which have laid the foundations for the success of the citrus industry, with minimum disruption to trade.

Food safety

While not an immediate threat, fresh produce food safety is certainly a looming issue for the Australian citrus industry. Food safety reforms are taking place in a number of export destinations. As noted previously, Indonesia and the USA have imposed food safety requirements on Australian exports. Thailand has recently introduced new regulations concerning the sourcing of fresh produce. Australian retailers have recently introduced new requirements for suppliers of fresh produce. Governments across Australia, including the Commonwealth, are reviewing fresh produce safety in response to a series of high profile cases of foodborne illness. New regulations are almost certain.

In the first instance, the team ran an awareness campaign to advise growers of the new retailer requirements and the timeframes for implementation. Over the last 12 months, the project team has been assisting growers in the transition to the new retailer requirements. The team has trained 227 growers to Freshcare version 4. Another 245 growers were trained by other trainers across Australia. As a result, the Australian citrus industry is in a strong position to respond to reforms anywhere in the world.

Communications

The project team has continued to provide content, contacts and editorial advice for the quarterly tabloid, Australian Citrus News and the fortnightly newsletter, Citrus eNews. The team has further expanded Citrus Australia's databases of industry stakeholders including members of the growing, packing and exporting sector. The team has an extensive network and has regularly visited packing houses in all the major regions which provides an effective conduit of information low back to the grower base. As stated previously, we have held annual regional forums in each of the major regions and more frequently in Queensland.

Through these channels, we have provided regular communication to all of our stakeholders on issues related to market access, market trends, plantings, biosecurity, and R&D. We have a high level of confidence that our messaging is reaching the intended audience and that citrus industry participants are being kept well informed of developments within the citrus industry.

Monitoring and evaluation

At the commencement of the project in January 2016, an annual operating plan was submitted to Hort Innovation at MS102. The annual operating plan detailed the minimum activities that would be undertaken throughout the life of the project. It was expected that there would be a large number of other activities that would arise in response to emerging issues within the industry. Except for the formation of a number of committees, all activities detailed in the annual operating plan have been fulfilled. The project team has always enjoyed strong support from its members and willingness to participate in the various committees we have formed. We have however experienced some level of volunteer 'fatigue'. On that basis, the Production Leadership Group was never formed due to the challenges associated with finding enough people with expertise and time. At the commencement of the project there was a strong network of state Industry Development Officers (IDOs) across the country. However, the IDO network experienced sharp decline with only two states employing IDOs. For that reason, formal meetings of our IDO network never took place. However, the IDOs did provide strong contributions in many of our other committees including our regional advisory committees, Agrichemical Leadership Group and Crop Estimates Committees.

In July 2016, we developed a project assessment framework with David McKinna *et al.*. As an addendum to that framework, a set of key evaluation questions were developed. In November 2017, an evaluation was conducted by RMCG. The evaluation by RMCG also included project CT15013 (Australian Citrus Quality Standards, stage 3).

The review determined that there was strong alignment between the Citrus Strategic Investment Plan (2017-2021) and existing project objectives and outcomes, primarily outcomes 1 (market development) and 3 (quality and productivity). RMCG reported that there is a good level of evidence on the outputs that underpin these project outcomes but only a moderate level of evidence that these activities are leading to the desired outcomes based on the desktop review and interviews undertaken as part of the mid-term evaluation. This is understandable as the full impacts of the activities are not always immediately obvious. Moreover, the reviewers interviewed only a relatively small number of industry participants.

In its review, RMCG provided 16 recommendations and where possible we have actioned these recommendations. Many of the recommendations were simply to continue the work that was already being carried out.

Since the review, we have re-examined our resourcing and accepted the recommendation to incorporate the separate CT14003 MRL risk analyses and risk management options for major citrus export markets with the Australian Citrus Industry Pesticides Monitoring Program component of CT15012. We have recruited two new junior, but very competent and experienced staff members who are developing well. Both of those staff were previously employed for close to a decade in Australia's largest packing house.

We have continued to refine our communication strategy and Citrus Australia has recently been successful in its bid to manage the citrus communications project (CT18000). Having a dedicated resource within Citrus Australia will most certainly lead to more effective communications with the sector.

We have reinvigorated the Riverina Regional Advisory Committee with new membership. The success of inaugural Juice Forum in the Riverina in 2018 is evidence that this committee is once again functioning. While the IDO network has diminished, there has been strong contributions from the IDOs in Perth, the Murray Valley and the Riverina on our respective committees.

Recommendations

As the citrus industry has entered a buoyant phase, it is attracting a large amount of interest and investment. Growers are re-developing orchards, packing houses are investing in state-of-the-art technology and the rest of the supply chain is modernising its infrastructure. The industry is more bullish than ever before. However, the project team are of the firm view that there needs to be a sensible approach to future investment. Investment decisions should be closely aligned with requirements in domestic and export markets, existing plantings and knowledge of competitor offerings. Arbitrarily “planting more trees” is an old-fashioned way of thinking. Moreover, the Australia citrus industry has gained a reputation as a safe and reliable supplier – and this reputation must be protected. With new and inexperienced traders entering the industry, it is important that the new players are well-informed of regulatory and commercial issues. Food safety, agrichemical residues, and protection of plant health will require continued attention and strong leadership.

While the industry enjoys access into almost all markets, maintenance and improvements to existing protocols will also require attention. There are certain markets where achieving phytosanitary conditions is overly onerous and costly. Optimising the trade and continuing to work with government to minimise the impost on producers will be critical to the industry’s further success.

Changes in climate, increased movement of people, regulatory scrutiny of agrichemicals and the move to softer chemistry will mean that new pests and diseases will emerge as threats. Protection of the production base by access to modern and effective chemistry as well as advances in Integrated Pest Management will undoubtedly require resourcing.

As the export trade continues to grow, so too will the demands on government auditing, inspection and certification services. Strong leadership from industry to cooperate with government to ensure that services are delivered efficiently and effectively will be key. Co-regulatory approaches to compliance, which build upon the legacy of activities within CT15012 should be further explored.

Timely access to information on plantings is more critical now than ever before. Through the tree census conducted under CT15012 we have already seen evidence of poorly informed planting decisions which will inevitably lead to a situation of over-supply with some varieties at some parts of the season. This is particularly evident with mandarins and lemons. Conversely, there are certain varieties that are in short supply for some parts of the season. This demonstrates the value of ongoing collection of data on current plantings and further work on accurate modelling to reasonably predict production over the next decade. This will not only assist producers but also marketers and category managers in developing long-term strategies. Data such as this will no doubt assist in strategic investment of citrus levies into the future.

In the mid-term review of CT15012, RMCG reported that many of the project activities were having an impact on the profitability of the sector and recommendations were made to continue that work. Many of the activities being undertaken are pure ‘operational’ activities which are simply essential services for the continuation of trade. Examples include hosting overseas auditors and inspectors, maintaining a training and accreditation system for crop monitors, maintaining an online system for export registration, and representation on various government committees.

Fresh Produce Food Safety is likely to attract more global scrutiny in the coming years. There are currently sweeping reforms in the USA, China, Canada, and Europe. Thailand and Indonesia have already introduced entry requirements that relate to food safety. Australian retailers have recently moved to a harmonised system and have imposed more onerous requirements on growers. The Australian regulator (Food Standards Australia and New Zealand) has initiated a review of fresh produce safety in response to a number of recent high-profile cases. Continued effort by the project team in promoting awareness, training and accreditation should be a strong focus going forward.

In this project and previous projects, the juice processing sector has not received a great deal of attention. This was largely due to the fact that the sector was in rapid decline with new plantings of Valencia oranges and other juicing varieties at historical lows. There has however been a minor recovery in recent years, with processors reporting undersupply and returns on juice grade fruit at impressive levels. Despite the resurgence, growers and processors appear to have reached an impasse with neither wanting to commit to new investment due to the challenges of the past. The project team feels that the juice sector warrants greater attention in future iterations of this project.

With so much attention placed on the export trade, in particular the opportunities in China, attention to the Australian domestic market has also been somewhat overlooked. The Australian domestic market consumes

approximately one-third of the crop and is therefore still the most important market for Australian producers. A greater level of engagement with retailers should be explored in the future to examine ways in which the project team and retailers could share a greater level of cooperation.

Intellectual property, commercialisation and confidentiality

No project IP, project outputs, commercialisation or confidentiality issues to report.