

Facilitating the Development of the Western Australian Citrus Industry

Nathan Hancock
Fruit West

Project Number: CT05011

CT05011

This report is published by Horticulture Australia Ltd to pass on information concerning horticultural research and development undertaken for the citrus industry.

The research contained in this report was funded by Horticulture Australia Ltd with the financial support of Fruit West and the citrus industry

All expressions of opinion are not to be regarded as expressing the opinion of Horticulture Australia Ltd or any authority of the Australian Government.

The Company and the Australian Government accept no responsibility for any of the opinions or the accuracy of the information contained in this report and readers should rely upon their own enquiries in making decisions concerning their own interests.

ISBN 0 7341 2292 6

Published and distributed by:
Horticulture Australia Ltd
Level 7
179 Elizabeth Street
Sydney NSW 2000
Telephone: (02) 8295 2300
Fax: (02) 8295 2399

© Copyright 2010



Know-how for Horticulture™

Final Report

Project Number:

CT05011

Project Title:

Facilitating the development of the
Western Australian Citrus Industry

Completion date

28 February 2010

Authors:

Nathan Hancock
Helen Ramsey

Research Providers:

Agricultural Produce Commission
Horticulture Australia Limited
Department of Agriculture and Food Western Australia

Final Report
HAL project: CT05011
Completion date 28 February 2010

Project Leader:

Nathan Hancock
Department of Agriculture and Food Western Australia
3 Baron Hay Court, South Perth WA, 6151
Phone: 08 9368 3780
Email: nathan.hancock@agric.wa.gov.au

Key Personnel:

Helen Ramsey – DAFWA
Kevin Lacey - DAFWA
Greg Beales – former chair of the WA Citrus Council
Geoff Fawcett – Fruitwest Grower Committee

This report was written as part of the reporting requirements of Horticulture Australia Limited. Industry funding from the Agricultural Produce Commission and Horticulture Australia Limited and the financial contribution from the Department of Agriculture and Food Western Australia is acknowledged. Thanks must go to the contributions from a range of individuals associated with those bodies, as well as Citrus Australia Limited, the Western Australian Citrus Council, the Western Australian Citrus Improvement Group and to all the growers and marketers who have contributed time, effort and discussion to this project.

March 2010

Disclaimer.

“Any recommendations contained in this publication do not necessarily represent current HAL policy. No person should act on the basis of the contents of this publication, whether as to matters of fact or opinion or other content, without first obtaining specific, independent professional advice in respect of the matters set out in this publication.”

Table of Contents

- Executive Summary 4
- Introduction..... 5
- Method 5
- Management 6
- Activities 6
- Activity Snapshot - The Marketing and Export Forum..... 7
 - Develop and support communication networks 7
 - Establish sites demonstrating Best Management Practice 8
 - Provide Technical support to the WAFGA Citrus Council 9
 - Develop a Retail Development Program 9
- Evaluation..... 12
- Implications 14
- Recommendations 14
- Appendix A..... 15

Executive Summary

Project CT05011 'Facilitating the development of the Western Australian Citrus Industry' is the third project undertaken between the Department of Agriculture and Food Western Australia, the Western Australian Fruit Growers Citrus Council and Horticulture Australia Limited.

The primary objective of the project was to facilitate communication between local industry members and the national and international citrus industry. This was achieved through attendance at state, national and international conferences and study tours as well as providing a platform for presenters from overseas and interstate to engage with local growers.

Development Officers in the project also provided technical support and feedback to the Western Australian Citrus Growers Citrus Council and lead the development of the Western Australian Citrus Industry Strategic Plan 2010 – 2020.

The project established best management practice demonstration sites in the main growing areas of the state to demonstrate good fertiliser, irrigation, pest and cultural management practices. Learning's from the process and the findings of demonstration trials were extended to growers through field days, written materials, email newsletters, radio interviews and the department website.

A retail development project was established that monitored the quality of citrus available to consumers at the retail level. Feedback on internal and external fruit quality, shelf life and fruit availability was provided to retailers, individual growers and packers throughout the country and overseas and to the wider industry. From this work the Western Australian *Citrus Fruits Packing Code 2008* was developed. This code specifies minimum standards for the internal maturity of citrus fruits and makes it illegal to offer for sale produce which does not meet the standard. The code benefits consumers and growers, providing better eating experiences for WA consumers and reducing customer backlash to immature fruit at the start of season.

One of the biggest findings of the project was that the focus of industry resourcing had to change from expansion and production to marketing. The WA industry has expanded rapidly and is forecast to produce 40,000 tonnes in 2015 almost three time's the states current production of 13,000 tonnes. A marketing and export forum was held in 2009, revealing to growers, marketers, retailers and government the extent of this expansion and the effect it could have on supply and demand dynamics in the near future.

Following the forum a focus group consisting of growers, packers and agents was formed to discuss and plan the industries future. A strategic plan was developed that focuses on relevant timely data, communication across the supply chain and development of domestic and export markets.

Introduction

In 2006 the Western Australian citrus industry through the Western Australian Fruit Growers Association ((WAFGA) now Fruitwest) entered its third agreement to deliver an industry development project with Horticulture Australia Limited (HAL) and the Department of Agriculture and Food Western Australia (DAFWA). 'Facilitating the development of the Western Australian Citrus Industry – CT05011' followed in the footsteps of the previous projects, using strategic planning and industry input as guides to the direction the project should take.

The industry strategic plan identified four areas in which the project could have an impact:

- Develop and support communication networks
- Establish sites demonstrating Best Management Practice (BMP)
- Provide Technical support to the WAFGA Citrus Council
- Develop a Retail Development Program

During the life of the project there has been many structural changes at national (Citrus Australia Limited) and local (Fruitwest) levels. The Western Australian citrus industry has also undergone a period of rapid expansion over the past five years. The area of production has increased by 80 percent and volumes of production are expected to increase to 40,000 tonnes per annum by 2015, up from current production estimates of 13,000 tonnes per annum. Whilst the rate of expansion has slowed, it has influenced project outcomes and the strategic outlook of the industry.

Method

The project recognised its audience as adult learners and applied principles of adult learning to the activities it developed and presented. Summarising Liebe (1991)¹, the principles of adult learning are that adults:

- Expect to find learning rewarding
- Use all of their senses to learn
- Learn more effectively when they can relate new information to their existing knowledge
- Need opportunities to practice their new skills and apply their new knowledge
- Remember best the first and last things in a learning session
- Need feedback on their progress
- Need to be actively involved in the learning process
- Need more time to make sense of and value new information

Working in collaboration with the Western Australian CITTgroups coordinator and the Western Australian Fruit growers Citrus Council (WA Citrus Council) the Industry Development Officer (IDO) set yearly programs of activity driven by industry. Various methods were used to extract topics to be covered. One method developed from a

¹ Liebe, S 1991 'Principles of Adult learning',

<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm>.

accessed on 12/03/2010

project planning workshop was to ask growers gathered for the end of year meeting to write down a number of topics they would like more information on. Those topics were read out to generate group discussion and written cards that were paced on a wall. Participants were then given a small number of stickers that they used to indicate which topics appealed to them. The topics were ranked by how many stickers they attracted. These topics were then considered in terms of best fit for the calendar year and the agenda for the year was set accordingly.

The IDO developed a strong network of national and international contacts through attendance at local, interstate and international conferences and seminars. Issues such as uniformity of packing in volume fill cartons and adoption of internal maturity parameters by industry were ideas initiated by the WA Citrus Council and delivered through the IDO project.

Management

The IDO was largely autonomous. The IDO reported quarterly to the WA Citrus Council until 2009 when a change in constitution meant that the council met biannually. Towards the end of 2009 Western Australian Fruit Growers began a transition to a new body called Fruitwest and no reporting mechanism has yet been put in place. The IDO has reported verbally to the chair of the Citrus Commodity Committee. The IDO completed HAL's milestone reporting requirements of the project.

Activities

Objectives delivered through the IDO project fit into four broad areas as identified in the industry strategic plan. These are:

- Developing and supporting communication networks
- Establishing sites demonstrating Best Management Practice (BMP)
- Providing Technical support to the WAFGA Citrus Council
- Developing a Retail Development Program

The project conducted many activities in the delivery of these objectives including those listed below.

- Articles written for local and national publications
- Radio interviews
- Technical papers (farmnotes)
- Supporting CITT groups
- Meetings, bus trips, field trips
- National plantings data base
- Technical support of WAFGA
- Attended local, national and international conferences and seminars
- Perth central market visits
- Fruit testing

Activity Snapshot - *The Marketing and Export Forum*

A more detailed description of one of the activities is provided to better show the method, quality and outcomes of the activity and therefore the project itself.

At the beginning of the 2008 season the Western Australian citrus industry suffered a slump in prices due to oversupply of early navels. A major factor that contributed to this situation was the strong Australian dollar which influenced marketers to import more Californian navel oranges than in the past. This was of particular concern when put in the context of Western Australia's growing supply of navels and mandarins. Many marketers commented on the unexpected volume of local fruit that was available in the early part of the season.

After discussions with various industry members and with the support of Peter Ansell a citrus grower from West Gingin (1.5hrs north of Perth) the concept of a "Marketing and Export Forum" was conceived.

The aim of the forum held in March 2009, was to increase awareness of the volumes of fruit to be expected in the next 5-7 years and to make industry aware of the challenges and opportunities of marketing the fruit, including exporting. The meeting was open to the whole of the supply chain including growers, marketers, retailers, exporters and support industries.

Speakers at the forum included local growers, market agents, Department of Agriculture and Food statisticians, Horticulture Australia, Australian Quarantine Inspection Service, Austrade, local exporters, one of the directors of Riversun Export and the principal 'Fresh Produce' buyer from Singapore's NTUC Fairprice.

Industry was invited by mail and email and the event was covered in the rural press and local fruit magazine prior to and after the forum. On the day of the forum the local ABC Country Hour was broadcast live from the forum and included a live on air interview with several of the speakers, including Peter Ansell and the IDO. The Australian Citrus News national magazine ran an article following the forum and variations of that article and others were picked up by fresh produce websites.

Outcomes of the forum ranged from an increased understanding of the size of the industry by participants, to negotiations by some parties to supply the NTUC Fairprice supermarket chain. An evaluation form was filled in by some of the participants and is attached as Appendix A. This activity significantly developed the IDO's network.

By far the most significant outcome of the forum has been the decisive shift in strategic focus of the industry as it recognises the emphasis of effort should be in communication, forecasting and market development.

Develop and support communication networks

Communication is integral to the success of any industry and any industry development project. The IDO worked to support links between the Department of Agriculture and Food and citrus industry groups on a regional, state and national level. The IDO attended and built networks at:

- National citrus conferences (3)

- International citrus congress (China)
- International study tours (China, United States)
- National marketing meeting
- National IDO development day
- CITTgroup meetings
- Regional zone meetings

The IDO held meetings or events that gave participants opportunities to grow their networks such as:

- 'Blue Birthmark' bus trips – in general participants were shown examples of fresh produce stores or fresh produce sections of supermarkets. The quality of produce was discussed as was the effectiveness of the blue birthmark sticker. The trips then went on to such destinations as the Woolworths distribution centre in Kewdale or to Curtin University Post Harvest Laboratory to tour the premises and then hear from guest speakers.
- The Marketing and Export Forum (as discussed above)
- Grower meetings in Carnarvon and Kununurra
- End of year meetings

Establish sites demonstrating Best Management Practice

Six Better Management Practice (BMP) demonstration sites were established throughout the south west of WA. These were located in West Gingin, Gingin, Bindoon, Harvey and Wokalup. Properties were selected to reflect a variety of soil types, irrigation and nutrition systems and scales of production.

Temperature loggers were installed at each site to monitor soil temperature five and ten centimetres below the soil surface and air temperature within the tree canopy. Loggers operated all year round and recorded temperature once every hour. Crop phenological stages were also recorded at each site throughout the year creating an accurate picture of the timing of the different crop phenological stages for a number of citrus varieties in WA. Irrigation, nutrition, pest and cultural management practices were also monitored at each site.

Information collected from each site was used in monthly Seasonal Update reporting to ACG/CAL and in the creation of the WA Citrus production calendar released during September 2006. A FarmNote on Gibberellic Acid was also produced as a result of the demonstrations site activity. The BMP demonstration site activity was also effective in identifying gaps in the knowledge of growers in general that were subsequently addressed through workshops and field days such as CITTgroup meetings.

Information on phenological stages and soil temperatures collected at the demonstration sites was also collated and used in a number of CITTgroup meetings/workshops. This information assisted in providing recommendations on the timing of nutrient applications, cultural sprays and pest management. Information from the temperature probes in particular assisted greatly in identifying the optimum time to commence fertiliser programs in the spring. Traditionally growers were holding off on fertiliser applications until the end of spring assuming the soil was too cold for nutrients to be taken up by tree roots. Data from the temperature probes showed that the soil

was warming up much sooner than was anticipated and thus fertiliser applications could commence much sooner than expected. This had significant impacts of grower's fertiliser programs and the health of spring flushes.

The idea of BMP sites was stretched to look at specific industry problems. In response to grower claims that albedo breakdown treatments were ineffective in Western Australia three farmer demonstration BMP's were established. These BMP's were used to show the effectiveness of currently recommended practices for the management of albedo breakdown. The trial focused on the use of recommended foliar treatments Calcium Nitrate (CaNO₃) and Gibberellic Acid (GA). Treatments were applied following the recommendations from research trials carried out by Michael Treeby, CSIRO Victoria, in 2002². Data collected from the BMP's has been disseminated in several formats and was presented at several CITTgroup meetings. Whilst some of the sprays reduced symptoms albedo breakdown remains an issue for Western Australian growers and requires further investigation.

Two demonstration sites, one in the north and one in the south also trailed the use of Nufarm Corasil Plant Growth Regulator on imperial mandarins. Corasil is used for increasing the fruit size of citrus.

Upon reflection it is acknowledged that an opportunity was missed to gain benchmark information from the initial farms involved in the BMP sites. Benchmarking has been identified by industry as a key strategic objective in future projects.

Provide Technical support to the WAFGA Citrus Council

The IDO provided support to the WAFGA Citrus Council and the chair of the council in numerous ways including:

- Attendance at citrus council meetings
- Representation at various industry meetings
- Provision of data as requested
- Review of the strategic plan – '2005-2009 WA Citrus Industry Direction'
- Conducting the strategic planning meeting process
- Developing the Western Australian Citrus Industry Strategic Plan 2010-20

Develop a Retail Development Program

Supermarkets including Coles, Woolworths, IGA and various independents were visited weekly during the main WA citrus season (July to September), fortnightly either side of the main season and monthly in the off season (December to February). The external appearance of all citrus fruits in store was assessed and samples were collected and tested for percentage juice, degrees Brix, sugar:acid ratio and taste.

Reports summarising internal and external fruit quality characteristics and in-store findings, including prices, product availability and retailer comments, were produced monthly. These reports were posted on the Australian Citrus Growers (now Citrus Australia Limited) website and e-mailed to citrus industry stakeholders throughout the

² M.T. Treeby and R. Storey (2002). Calcium spray treatments for ameliorating albedo breakdown in navel oranges. Australian Journal of Experimental Agriculture, volume 42 pages 495-502.

country. When a quality issue was identified, the individual grower/packer was contacted and made aware of the problem and where and when it occurred.

Most quality issues found in store were caused by harvest timing and method and post harvest handling and storage problems. Quality issues included immature/high acid fruit not meeting internal maturity standards (particularly at the start of season); stem end damage caused by snip picking of imperial mandarins and sour rot, wax breakdown and development of off flavours and smells in navels and mandarins caused by incorrect post harvest handling and storage. The only major production related issue seen at the retail level was the problem with internal dryness and granulation in imperial mandarins, particularly those from Queensland.

During the 2005 navel season an alarming quantity of fruit from the eastern states and WA showed signs of incorrect post harvest storage with wax breakdown problems and development of off smells and flavours. As storage temperatures play a vital role in the freshness and quality of fruit post harvest it was decided that temperature data loggers be placed in fruit boxes to monitor storage temperatures between the packing shed and retail outlet during the 2006 season.

Twelve loggers were placed in fruit consignments destined for the WA market, six from local packing sheds in Harvey, Bindoon and Gingin and six from QLD, SA and VIC. Loggers recorded temperature every 60 minutes from the time fruit was placed in the box until the box was opened at the retail outlet.

All loggers placed by WA participants were received by retail outlets within the Perth metropolitan area. Transit times between the packing shed and retail outlet ranged from 1 day to 16 days. Loggers in two consignments from South Australia also reached retail outlets, one in Broome, the other in Kalgoorlie. Transit time to Kalgoorlie was 9 days and to Broome 23 days. Loggers from two SA consignments were discovered at Market City in Canning Vale.

Temperatures recorded by loggers varied considerably between the packing shed and retail shelf (Figure 1) showing that there is considerable room for improvement in the cool chain. The time taken for fruit to cool to its optimum storage temperature (shown in Table 1) ranged from two to seven days. Once reaching this temperature it was often not maintained, sometimes dipping to temperatures that may cause rind blemish. In one consignment of navels the temperature was reduced to 7° C after 8 days but then rose again to a maximum of 15° C by day 11 where it stayed for 3 days before again being reduced to 7° C. Such fluctuation in storage temperature can lead to the deterioration of internal and external fruit quality, development of off flavours and smells and wax breakdown.

Storage temperatures in the markets remained constant hovering around 7.5° C (see Figure 2).

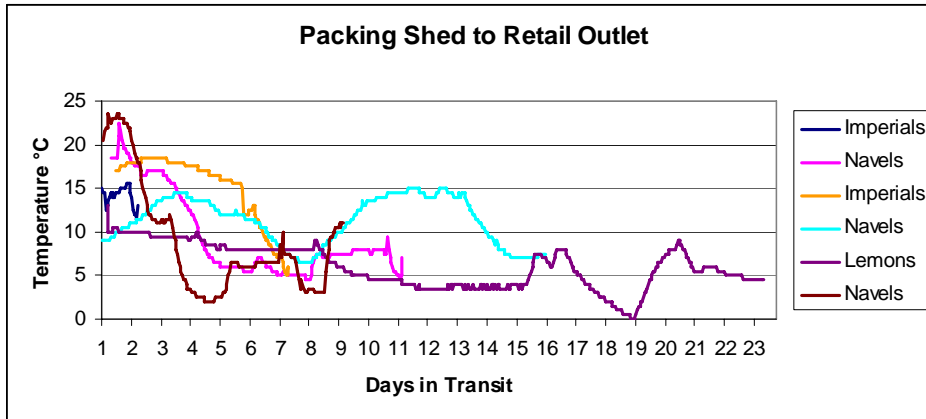


Figure 1: Storage temperatures between the packing shed and retail outlet.

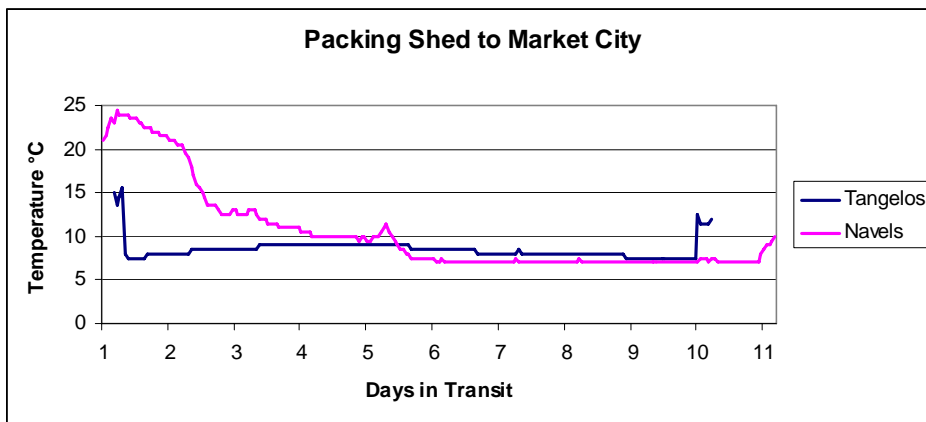


Figure 2: Storage temperatures between the packing shed and Market City.

Recommended storage temperatures for citrus are a compromise between minimising rind blemish and minimising loss of quality.

Table 1: Recommended storage temperatures

Commodity	Optimum Temperature	Maximum storage life
Navel	7 – 10°C	8 weeks
Valencia	7 – 10°C	12 weeks
Oranges (fully coloured)	3 – 5°C	6 weeks
Mandarins	5°C	4 - 8 weeks
Grapefruit	12°C	12 weeks
Lemons	12°C	12 weeks
Tangelo	3 – 5°C	6 weeks

Source: Trigwell, B. (1999) Citrus Handling Guide, South Australian Research and Development Institute, South Australia

Information collected from the data loggers was fed back to all retailers that participated in the activity. Information was also presented to participating growers and the WA industry as a whole through presentations at industry meetings and articles in the WA Fruit Grower Magazine.

The citrus fruits grading code 2008

An outcome of the CT05011 project and the Retail development program was the creation and adoption of the *Citrus fruits grading code 2008* (the code) that came into effect in January 2009. Growers wanted to have an effect on the quality of fruit presented to consumers in Western Australia. To begin with growers indicated a prescriptive method that covered the external and internal aspects of the fruit was the type of tool they wanted. The IDO reviewed what was used in other areas of Australia and in other industries in Australia and reported that determining a minimum internal maturity standard for citrus was the preferable method.

The code sets minimum standards for sugar content, sugar to acid ratio and percentage of juice. The onus is on the grower to test the fruit before harvest commences. Growers can use the services of the Department of Agriculture and Food or local independent companies to conduct maturity tests. Fruit that is tested at the central markets or at retailers and is found not to meet the code is destroyed and fines apply across the supply chain.

By adopting this code growers accepted that consumers choose to buy fruit on appearance and that market forces will drive the demand for fruit of certain external qualities. Where growers could have an impact was to increase the likelihood that the fruit the consumer purchased would meet a minimum standard of maturity. In doing so growers felt they may reduce the time between purchases of citrus fruits by providing a pleasant experience.

The code was extended to industry through meetings, literature, radio interviews and the Western Australian Minister for Agriculture Terry Redman appeared on local news bulletins explaining the benefits to consumers. Response to the code from growers around Australia was positive and discussions regarding adoption of the code nationally have begun at Citrus Australia.

Evaluation

Evaluation was conducted throughout the life of the project through the use of evaluation/feedback forms at field days and grower meetings and conversational feedback from growers and industry stakeholders in day to day activities. Feedback was considered and incorporated into the planning of activities.

In order to present grower comments about the project five semi structured interviews were conducted. The interviewer used the ORID³ conversation technique to extract from growers their thought and reactions to the project. Table 2 below is a collection of grower statements on the stated topics.

³ ORID conversation: Objective, Responsive, Interpretive and Decisional

Table 2 Semi structured interview with citrus growers – ORID conversation method

<p>What did the Industry Development Project do?</p> <ul style="list-style-type: none"> • gave growers access to people in the industry • linked us to the east and the projects they run over there • listened to what people wanted, growers wanted, what was important to their future and then gave it to us • point of call, a link between growers and growers, growers and the department and growers and the wider world • I think bringing international and national speakers to Western Australia is one of the most important thing the project did for growers here • The marketing forum and then the strategic planning meeting that came out of it, they have been the key achievements, we now have a new direction • Grower meetings, doesn't matter what the topic is, if I don't get something from the speaker I get something from meeting other growers, networking has helped me and my business, its invaluable
<p>What have been the highs and lows of the project?</p> <ul style="list-style-type: none"> • I personally don't think there've been any lows from the project, I saw some things on the marketing bus trip that I didn't like, but that's a reflection of the retailers not the project • Getting the maturity thing sorted, having a code, that is definitely important to our industry • Since the marketing meeting things with my agent have been fantastic, I am moving my fruit though the market so much more smoothly now they understand some of the issues raised there • The info I got on liming from one of the end of year meetings, and meeting the lime guy, that has put money in our pocket. We were scratching our heads up to that point, nothing we were doing was coming off and then after hearing him things made sense • The work on GA that was done, I've adopted the spray for albedo breakdown after I saw that it worked in our conditions
<p>What does having an Industry Development Project mean for industry?</p> <ul style="list-style-type: none"> • we are so busy as growers, we often have periods where we are so busy we wouldn't have a clue what was happening in our industry or where to look, having an IDO is a focal point, one call or an email and I have an answer • it means we still have a link to the department, or a link to the east. It means we're kept up to date with what is important in the citrus world • it is a resource, an opportunity, if I go to these things I will more than likely come away with something I can add to my business • it kept us together, there was a chance with the big developments in the north that we would work against each other but the IDO brought us all together and we're all learning, big and small
<p>Where to from here?</p> <ul style="list-style-type: none"> • well that's been made clear, the strategic planning meeting took our thoughts and put them in a form that makes sense, gives us some direction • anything we do going forward has to include communication with agents, we know there's a lot of fruit out here, its coming and they have to be ready • there has to continue to be meetings like we've had, there's always new • people, new growers, new researchers all with ideas, we need to have that • interaction or we'll stagnate • marketing, we have to get that right, there's going to be so much fruit here soon and if its not done smoothly we will all loose • tweak the code, there are some levels that should be higher, fruit won't leave my farm if it doesn't taste good and the code should better reflect that

Implications

Involvement of the supply chain in recent industry meetings and planning meetings illustrates a willingness of growers and agents to work together. The strategic planning⁴ process revealed the need for better industry information from both agents and growers. This will require the implementation of several systems to produce and track industry information.

In order to frame the industry in its current position a SWOT analysis was conducted and is attached as 'Appendix A: SWOT analysis of the Western Australian Citrus industry'. To summarise, the industries strengths are its willingness to work together and adopt to change. Its weaknesses and opportunities are intertwined in the area of supply chain communication its biggest threat is over supply.

Recommendations

It is recommended that a further Industry Development Officer project be negotiated. The project should endeavour to deliver on the strategic plan developed by industry, with the following key objectives:

1. Improve the flow of communication through all levels of the supply chain
2. Facilitate the development of the Western Australian domestic market
3. Facilitate the improvement in production techniques and access to new varieties and technologies
4. Develop a long term export strategy
5. Develop local, national and international industry networks

In particular it is recommended that a forecasting system be implemented in Western Australia and that the industry adopts the Infocitrus program in packing sheds. These two strategic moves will provide valuable statistics and data about the volume of fruit produced in Western Australia and the rate at which it is being moved through the packhouses and into the market.

A further recommendation to the national industry is to engage all members of the supply chain in planning meetings in particular but at all times that information transfer is possible.

⁴ Copies of the Western Australian Citrus Industry Strategic plan 2010-2020 can be provided on request

Appendix A

SWOT Analysis: Western Australian (WA) Citrus industry.

Objective: To further develop the WA citrus industry and support growers to increase profitability and sustainability.

<p>Strengths</p> <ul style="list-style-type: none">• Industry participation and adoption of change• Industry leadership and personnel• Fee for service income stream for industry development, marketing• Blue sticker birthmark• Strong parochial market for WA produce• Emphasis on producing high quality product• Recent development has increased importance of the industry	<p>Weaknesses</p> <ul style="list-style-type: none">• Industry spread from Capel to Kununurra – representation?• Communication through the supply chain is fragmented• Lacks a dedicated, one stop online service (website)• Market is subject to flooding due to imports• Small population in WA, dispersed across wide state• One major juicing processor• Too many QA variations creating unnecessary work• Industry estimates of size• Marketing message lost in sea of information
<p>Opportunities</p> <ul style="list-style-type: none">• Opportunity through new developments to reduce imports from Eastern States through alliances with major chains• Opportunity to increase WA's citrus exports• Opportunity to invest in new varieties of easy peel and seedless fruit• To build stronger ties with Citrus Australia• To increase communications with market floor	<p>Threats</p> <ul style="list-style-type: none">• Oversupply of citrus in local market• Loss of democratic voice in APC structure• Biosecurity issues such as Huanglongbing and Citrus Canker• Major retailers continuing to source citrus out of the state when in season• Competitiveness of other interstate and overseas growers• Urban encroachment• Labour issues – cost, retention, availability• Attracting and keeping younger growers