

Final Report

Regional VegNET Services – Southern Queensland

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Delivery partner:

Lockyer Valley Growers Inc.

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VG18003

Project:

Regional VegNET Services – Southern Queensland VG18003

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Summary

The objective of the VegNET Southern Queensland project was to communicate Hort Innovation vegetable levy funded RD&E to growers and other stakeholders in the industry. The nine month project was intended to bridge the gap between past and future VegNET projects.

The project was conducted by the Lockyer Valley Growers inc. with Zara Hall appointed in the role of Industry Development officer. The project met all deliverables outlined in the project milestones , for example delivery of RD&E events across the region showcasing HIA vegetable levied RD&E and published Case Studies on regionally relevant topics including a case study outlining how the Lockyer Valley vegetable industry responded to a major production challenge - management of Diamondback moth.

Feedback from industry about the success of the project was positive with M&E data from RD&E seminars indicating events were considered 'very useful' or 'extremely useful' for the purpose of networking and a large proportion of attendees intended to make changes to their business as a result of one of the seminar presentations.

Keywords

Communication, Extension, VegNet, Lockyer Valley, Fassifern, Granite Belt, Southern Queensland, Vegetable

Introduction

Veg Net Southern Queensland was a short term (9 month) project designed to be a bridging project between past and future VegNet programs. The project ran from June 2019 through to March 2020 with the objective of communicating Hort Innovation Vegetable Fund RD&E to growers and industry; including coordination of RD&E seminars and publication of newsletters to showcase relevant Hort Innovation funded RD&E as well as RD&E from other sources.

The Lockyer Valley Growers Inc (LVG) was formally established in December 2013 as a means for the fruit and vegetable growers in the area to unite and work together. They aim to support initiatives and projects which benefit the growers of the Lockyer and provide a united voice for horticulture in the region. Further, the group aims to create opportunities for social interactions, networking and promote education and training programs. The group is open to all fruit and vegetable producers growing produce in the Lockyer Valley and is managed on a day-to-day basis by a 100% voluntary committee.

Early in the project, the Locker Valley Growers Inc. employed Zara Hall in the role of Industry Development Officer for Southern Queensland to deliver the project milestones. This report outlines the project achievements.

Methodology

RD&E Seminars

Three RD&E seminars were held across the Lockyer Valley and Granite Belt. Events were advertised through word-of-mouth, email and facebook. The format for seminars were four invited speakers with a 15 minute speaking time slot plus question time followed by a BBQ and drinks. Events were intended to be social to create and maintain strong connectivity amongst growers and industry.

Monitoring and evaluation of these events was conducted using a survey form which was answered anonymously by each audience participant. Survey respondents were asked to rate each of the presentations on a scale of 1 – 5 where 1 is 'not at all useful to their business' and 5 is 'very useful'. Two other questions were asked; 'How useful was the event for the purpose of networking' and 'Do you intend to make changes to your business following these presentations'. Results were collated in Microsoft excel and summarised as part of a synopsis for each event.

Case Studies

Case studies were chosen based on a regional focus or priority as well as topics that 'showcase' the vegetable industry in Southern Queensland. Interviews and photographs were gathered to form the case studies which were published in the quarterly newsletters (Autumn 2020 edition) and made available on the Lockyer Valley Growers Inc. website.

Newsletters

Newsletters were distributed quarterly with articles from various relevant sources including Hort Innovation Projects. Newsletters had a hard copy reach of 300 plus electronic copies and were made available on the Lockyer Valley Growers Inc. website.

Newsfeed

Newsfeeds were distributed fortnightly with short articles and event flyers from various sources including Hort Innovation Vegetable levied Projects. Contributors were briefed to supply articles with minimal text, good graphics and a link for further information. The premise for including short articles was based on observations that growers are overwhelmed by the amount of electronic news they receive and long articles or articles without catchy graphics are less likely to be read. Newsfeeds were distributed to a contact list of 400+ subscribers.

Social Media

Facebook events had a reach of approximately 90 - 1300 people depending on the topic e.g a Korean Australia Free Trade Agreement (KAFTA) post had a reach of 1300 people.

Website

The Lockyer Valley Growers Inc. website was regularly updated to include events and resources for growers.

Special Topic – Diamondback moth management

In response to the ongoing challenge of managing Diamondback moth, a series of extension based activities were lead by the Lockyer Valley Growers Inc. including regular committee meetings for the Diamondback moth management committee members, a special RD&E seminar (this special seminar was in addition to the 3 contracted RD&E seminars), communication of the Lockyer Valley Insecticide Resistance Management Strategy, text reminders to changes to the IRMS window and a survey of grower and industry adoption of the IRMS.

CropLife Australia commissioned a survey to benchmark industries current management of Diamondback moth which was conducted by Zara Hall, LVG in collaboration with Clinton McGrath, DAF. Survey respondents from the grower community, resellers, nurseries, and chemical representatives were asked a series of questions to benchmark their awareness of the Lockyer Valley

Diamondback moth Insecticide Resistance Strategy (IRMS) as well as a general discussion about their experiences managing Diamondback moth. This information was collated and reported back to CropLife Australia and a summary of the discussions is provided in Appendix 6 (not for distribution).

Outputs

Outputs include:

- RD&E seminar, Stanthorpe, 17 September 2019
- Special seminar, Gatton, Diamondback moth management, 25 September 2019 (this was in addition to the 3 contracted seminars)
- RD&E seminar, Stanthorpe, 6 February 2020
- RD&E seminar, Gatton, (scheduled for March 2020 – synopsis to be supplied as an addendum to this report)
- Diamondback moth Insecticide resistance management strategy committee meetings
- Newsletter – Spring 2019 ([Available on the Lockyer Valley Growers Website](#))
- Newsletter – Summer 2019/20
- Newsletter – Autumn 2020 (scheduled for print 1 March 2020)
- E-News (Fortnightly electronic newsfeed x10)
- Consultation workshop, Gatton, facilitated by Jeff Coutts
- VegNet phase II planning meeting, Sydney
- Steering committee meeting for Southern Queensland regional representatives
- Participation and contribution at VegNet meetings
- Conference attendance & pre-conference workshop, APEN, Darwin
- Participation and contribution to SVEN meeting
- Case study – Growing leaders (scheduled for print, Autumn 2020 Newsletter)
- Case study – Diamondback moth Management – how an industry responded to a major production challenge (see appendix - in print for Autumn newsletter)

Detailed synopsis for outputs including R&D seminars and meetings is provided as an Appendix.

Additional examples of articles can be provided on request e.g. Newsletters (these are also available as an e-copy on the Lockyer Valley Growers website), various e-newsfeeds or Jeff Coutts's consultation workshop.

Outcomes

Outcomes include:

- Development of rapport with industry through 30+ farm visits
- Contributed to social connectedness of community through social events e.g. Christmas parties in Gatton & Stanthorpe
- Facilitated collaboration opportunities for growers and HIA project staff (e.g introductions between agronomist, Surachat Vuthapanich, Rugby farms and Mike Furlong: VG16062 for field trials; Ben Linnan and Jessica Page VG16067 for using Diadegma in an IPM compatible system)
- Informed industry about RD&E through communication of 15+ HIA research projects:
(e.g. VG13076 Soil wealth / VG16009 Precision ag / VN18003 Onion project/ VG17014 Redback in broccoli / VG16067 Impact of pesticides on beneficial arthropods / VG16060 Agrichemical priorities / VG16020 Minor use permits / VG16061 Exports / VG17012 Internal Rot in Capsicum / VG16086 AWM / VG15073 Bean Carlavirus / MT17017 Food trends / VG16062 Nectar sources for beneficials / VG15070 Weed management / MT16004 Leafminer / VG16068 Biofumigants)
- Utilisation of 2 new Apps, Sli.do & Canva, following APEN pre-conference workshop as part of communication and monitoring & evaluation
- Contribution to application for 3 minor use permits in vegetables (Pendimethalin in capsicum, Scala in capsicum and Serrenade opti in cucurbit)

Detailed synopsis for outcomes is provided as an Appendix

Monitoring and evaluation

RD&E Events

79 Growers and industry personnel attended the RD&E seminars held across the region. One of these events was a special event for Diamondback moth management which was in addition to the three contracted RD&E events. The final RD&E event is scheduled for March 2020 in the Lockyer Valley.

1) Monitoring and evaluation for the Stanthorpe RD&E seminar held in late 2019 showed 64% of attendees intended to make changes to their business from something they heard or learnt at the seminar. On average the event was seen as 'very useful' to 'extremely useful' for the purpose of networking. This event was attended by 26 growers and industry personnel. (see Appendix 3 for a full synopsis for this RD&E event)

2) Similar M&E data was gathered for the 2020 seminar held in Stanthorpe with 80% of attendees indicated they intended to make changes to their business as a result of the presentations they heard that night and on average, attendees found the evening to be 'very useful' to 'extremely useful' for the purposes of networking. This event was attended by 21 growers and industry personnel. (see Appendix 4 for a full synopsis of this RD&E event).

3) An RD&E event is scheduled for early March in the Lockyer Valley prior to the completion of the VegNET project (project end date: 30 March 2020). Monitoring and evaluation data will be supplied as an addendum to this report.

4 Special) A special RD&E event was held in September 2019 on Diamondback moth management. This was in addition to the 3 contracted seminars. This event was attended by 32 growers and industry personnel. This RD&E event formed part of a larger program run in the Lockyer Valley to communicate RD&E for DBM management (see appendix 5 for a full synopsis of this event). Monitoring and evaluation data gathered for this program is discussed further below.

Diamondback moth Management Program

Ninety four percent of industry respondents were aware of the Insecticide Resistance Management Strategy, 62% of growers were implementing the strategy and 79% of growers were achieving acceptable control of Diamondback moth in the 2019 season. Additional discussion from the M&E were collated and is available as a report (see Appendix 6 – this appendix is not for distribution). This data and the additional discussion around management of DBM provides a benchmark to evaluate the performance of the Insecticide Resistance Management Strategy going forward.

Newsletter

Autumn 2019: The Autumn 2019 newsletter had a print distribution of 300 hard copies plus electronic versions accessed via the website. Articles in the newsletters included Hort Innovation funded projects export readiness, Precision Ag (VG16009), Cover Cropping (VG16068) and Impact of pesticides on beneficial arthropods (VG16067). The newsletter is available on the Lockyer Valley Growers Inc. website at <http://lockyervalleygrowers.com.au/resources/newsletters/>

Summer 2019-20: The Summer 2019-20 newsletter had a print distribution of 300 hard copies plus electronic versions accessed via the website. Articles in the newsletters included Hort Innovation funded projects Precision Ag (VG16009), Redback spiders in broccoli (VG17014) and Cover Cropping (VG16068). The newsletter is available on the Lockyer Valley Growers Inc. website at <http://lockyervalleygrowers.com.au/resources/newsletters/>

Autumn 2020: The Autumn 2020 newsletter is scheduled for print on 1 March and will have a print distribution of 300 plus electronic copies.

Case Studies

1) Case Study: Diamondback moth management in the Lockyer Valley – a whole of industry response to a major production challenge

This case study will be published to the Lockyer Valley Growers website and will be printed in the Autumn 2020 newsletter with a print of 300 copies plus electronic copies (see Appendix 8).

2) Case Study: Growing Leaders: Roslyn Pennings

This case study will be published to the Lockyer Valley Growers website and will be printed in the Autumn 2020 newsletter with a print of 300 copies plus electronic copies (see Appendix 9).

Newsfeed

Newsfeeds were distributed fortnightly to an audience of 400+ subscribers. Utilisation of mass email technology (MailChimp) for distribution of newsfeeds made it easier for readers to change their subscription preferences and to collect reader analytics. On average, the number of subscribers opening newsfeeds was approximately 44% and the number of subscribers clicking on links in the newsfeeds ranged from 0% - 12% depending on the articles. Highest click rates for newsfeeds were for topics about water.

Facebook

Facebook posts and events for HIA vegetable levy projects reached between 96 and 470 accounts depending on the post. The most recent post, a share of a SPAA event, 'Getting started with Precision Ag' had a reach of 470 accounts.

Website

Website statistics from the commencement of data collection in November 2019 showed visits to the website ranged from 340, 380 and 440 visits for November, December and January respectively.

Recommendations

The VegNET southern Queensland project and Industry Development Officer role fulfills an important communication role for industry as a conduit of information between stakeholders in the vegetable industry.

The format of the RD&E seminars was considered to be valuable and likely to lead to change in practice as exemplified by monitoring and evaluation data. It is strongly recommended that the RD&E seminars be continued in a new iteration of the VegNET project.

Refereed scientific publications

None.

References

Newsletters

<http://lockyervalleygrowers.com.au/resources/newsletters/>

Intellectual property, commercialisation and confidentiality

Appendix 6 survey responses to Diamondback moth management are not to be distributed.

Acknowledgements

We would like to thank the vegetable growers in Southern Queensland for their support of the Lockyer Valley Growers Inc. and Zara Hall throughout the VegNET project.

We would like to thank industry personnel including the HIA vegetable funded project staff who contributed to the RD&E communicated throughout the project.

This project has been an enjoyable and rewarding project and we would like to thank Hort Innovation for funding it.

Appendices



Appendix 1. Southern Queensland Industry Development Officer Position Description

About Lockyer Valley Growers Inc

The Lockyer Valley Growers Inc (LVG) was formally established in December 2013 as a means for the fruit and vegetable growers in the area to unite and work together. They aim to support initiatives and projects which benefit the growers of the Lockyer and provide a united voice for horticulture in the region. Further, the group aims to create opportunities for social interactions, networking and promote education and training programs. The group is open to all fruit and vegetable producers growing produce in the Lockyer Valley and is managed on a day-to-day basis by a 100% voluntary committee.

Description and Purpose of Position

The LVG Southern Queensland Industry Development Officer (IDO) is funded by Horticulture Innovation Australia as part of the National Vegetable Extension Network, under project VG18003, using the Vegetable Levy and funds from the Australian Government. The fixed-term, full-time position will provide extension and industry development services to the vegetable growers throughout Southern Queensland, with a focus on the Lockyer Valley, Darling Downs, Granite Belt, Fassifern Valley, Gold Coast and Greenbank/Logan areas. Specific project objectives and KPI's are identified in the project and annually include:

- Implementation of three workshops or seminars throughout the region
- Coordination and Implementation of one consultation workshop
- Publication of two newsletters and distribution to vegetable growers throughout the region

And other event and field day coordination, digital and media communication as required by the LVG committee.

Responsibilities and Duties

- Development of an eight month work plan for delivering regional capacity building services to the vegetable industry in Southern Queensland
- Facilitate communication between key stakeholders including Lockyer Valley Growers Inc, vegetable growers in Southern Queensland, Growcom, AusVeg, DAF (Queensland Government) , Department of Agriculture (Federal Government) and Horticulture Innovation Australia.
- Undertake coordination and day to day management of events, information sessions, small information sharing field days, consultation workshop and newsletters.

- Coordinate public relations activities including website management, facebook, twitter and coordinate other forms of publicity through traditional media channels including radio, newspaper and television. All media activities are to be approved by the LVG committee or Project Coordinator.
- Development and implementation of project monitoring evaluation and reporting plan.
- Adhere to all policies and procedures developed by the Lockyer Valley Growers Inc.
- Working constructively with the LVG Project Manager, LVG committee and other team members to ensure that the committee directives are followed, and responsibilities are fulfilled.

Core competencies and experience (selection criteria)

1. Highly developed written and oral communication skills
2. Demonstrated ability in stakeholder engagement and management including internal and external people and organisations
3. Demonstrated experience working with agricultural producers to achieve industry development outcomes
4. Demonstrated ability in managing multiple tasks including time, resources, budget management and report writing and submission
5. Ability to work autonomously on a day to day basis, whilst also working cooperatively with others to achieve industry development goals

Qualifications

Tertiary qualifications in agriculture, communications or marketing and relevant experience in an industry development or extension role would be highly regarded.

Other features of the Position

- Salary will be dependent on experience. Other benefits will include appropriate superannuation, appropriate annual leave and sick leave and carers leave annually. A vehicle for work related travel will be provided with the vehicle being housed at the Lockyer Valley Growers office.
- The location of the role will be based at the Lockyer Valley Growers Office (within the DAF Research Station, Gatton)
- Attendance at meetings outside of normal work hours will be required.
- Some travel and over-night stays will be required.
- A two month probationary period will apply to the successful candidate
- Candidates will be subject to a criminal history check during the selection process. A “working will children” Blue Card will also be required within 12 weeks of accepting the position. Permanent residency for Australia or Australian Citizenship must be provided upon application.

For further information

Enquiries about the position should be directed to the Lockyer Valley Growers Inc committee on email admin@lockyervalleygrowers.com.au

Application Process

To apply for the position it is recommended that you submit:

- A cover letter
- A statement describing how you meet each of the selection criteria (response must be no longer than two pages)

- A resumé, and
- Contact details of at least two referees.

This application should be emailed to admin@lockyervalleygrowers.com.au

Appendix 2. APEN Conference Synopsis – 12 and 13 September

Themes from the Australasia-Pacific Extension Network Conference in Darwin in September covered the 'big issues': water, labour, energy, markets, sustainability and safety and highlighted that these challenges are not specific to vegetables but broadly affect all agricultural commodities.

From our region, presenters included Clinton McGrath, DAF who shared insights into multi-modal export techniques in both South Korea and China. Other presentations included Georgie Oaks "ladies in livestock", creating insect meal from a waste byproduct (ACIAR) and Rabi Maskey's "energy decision support tool for irrigation systems".

A focus of the conference was the use of online technology in communication, from demonstration of the program Sli.Do for online audience participation, to Apps for social media such as Canva, Boomerang and InShot. Despite the major leaps forward in online communication, a repeat message from the conference was the benefits of 'grass roots' communication in creating meaningful practice change with agricultural producers.



Challenges of sustainability and the impact of agriculture on the environment was another key message from the conference. Landholders are seen as the frontline in dealing with climate change and as stewards of the largest area of arable land in the Australia. There was a push for the agriculture sector to move from major energy users to major energy producers, and from major sources of carbon emission to major carbon sinks.

A breakfast event for HIA industry personnel provided a chance for VegNet staff to discuss industry challenges and extension strategies. An oft heard phrase "I don't know where my levy goes" was discussed as being a major driver for the importance of the VegNet program to provide a voice for HIA levied RD&E.

Tours of some of Darwin's major tourism and agricultural facilities included visits to *Windows to the Wetlands* and *Beatrice Hill Farm* buffalo breeding program. Tours provided an opportunity to hear and see progress and challenges facing extension for industries in the

Top End. Rangers at Windows to the Wetlands shared some 'only in the Top End' extension strategies to manage Magpie Geese populations during NT hunting season.

Rangers explained how maintaining bird numbers from season to season requires a dynamic approach to hunting caps. Rangers utilise competitions and invite key hunters on heli flights to count bird numbers at breeding sights to appreciate changes in bird populations and get 'buy-in' for reducing hunting caps. The 'win a gun' competition had to be withdrawn for legal reasons but not before it was provided high profile support by the NT police and publicised in major NT newspapers.

Appendix 3. Stanthorpe Growers BBQ Synopsis- 17 September 2019

The September 2019 grower BBQ was attended by 26 growers, researchers and industry support personnel. The event provided a chance for industry to network and learn about current RD&E.

At the time of the meeting, Stanthorpe growers were facing serious production challenges related to water and weather. Irrigators were significantly under allocated and dry conditions, fires and strong winds were contributing to extremely difficult growing conditions. These challenges were the driver for the event and topics and speakers were chosen for the event based around the theme of 'a strong and resilient vegetable industry'.



Image: Fires on 6 – 8 September in the Stanthorpe region burned houses, agricultural production and natural bush

Clinton McGrath, DAF, provided an update on the potential use of freeze-dried vegetables as a value-add opportunity for growers. Attendees got to taste locally made pizzas which showcased various freeze-dried vegetables.

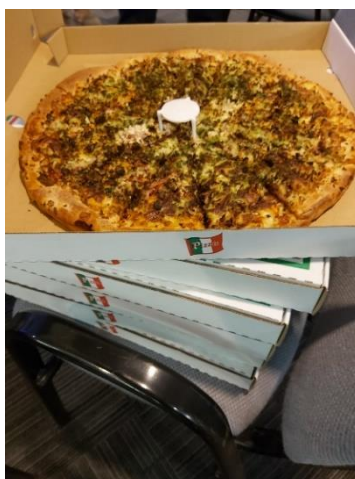


Image: Locally made pizzas showcasing locally grown freeze-dried vegetables

Pieter Van Nieuwenhuyse, AHR, discussed farming in dry periods and shared tips for making best use of available water including measuring evapotranspiration and using water moisture sensors (VG16078).

Irrigation tips

Below average rainfall during 2019 may have reduced your water reliability. Check [the seasonal rainfall outlook for vegetable growing regions \(September - November 2019\)](#) to get some indication of potential in-season rainfall

- Check [your irrigation system is ready](#) for the coming season
- Check [your subsoil moisture](#)
- Check [your crop monitoring and soil moisture tools](#) are working before it really warms up
- Don't get caught out by [rapid increases in crop water use in spring-early summer](#)
- Be aware of [declining water quality](#) as water becomes scarce, which often goes hand-in-hand
- Understand irrigation decisions: [from enterprise planning to the paddock](#).

Bron Ford, Hort Help, Discussed currently available and relevant grants for growers. These are available as a document on the Lockyer Valley Growers Inc. website <https://lockyervalleygrowers.com.au/resources/>



Bron Ford discusses funding opportunities with growers

Zara Hall provided an introduction as the newly appointed Industry Development Officer for Southern Queensland under the VegNet program. As part of the discussion, Zara used Sli.Do, an online grower engagement tool to trial live participant feedback and to identify priority areas for the HIA funded Minor use permit program. Serenade opti was identified as a priority need for Cucurbits and this information was relayed to Patrick Arratia for permitting.

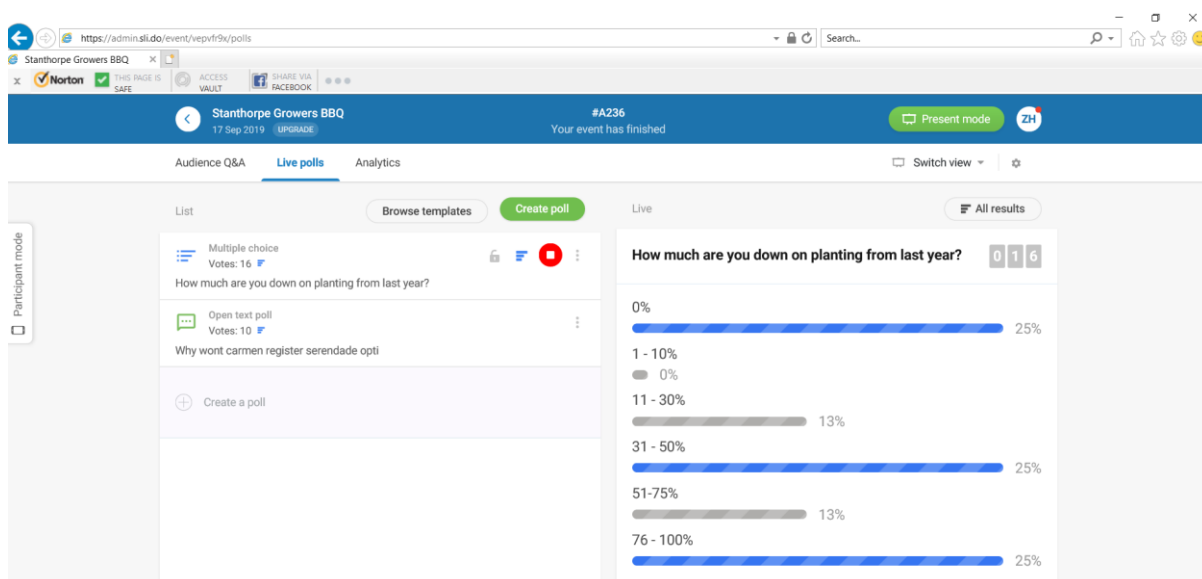


Image: Participant feedback indicated 63% of growers were significantly down on production compared to 2018

Matt Moyle, Nufarm, gave an update on future changes to registrations for chemicals in the Dithiocarbamate group and what this will mean for growers from a disease management perspective. The Dithiocarbamate group (Mancozeb, Metiram, Propineb, Thiram, Zineb and Ziram) are currently nominated and prioritised for reconsideration of their registrations by APVMA due to safety risks in a breakdown phase of the chemicals. More information can be found on the APVMA website <https://apvma.gov.au/node/19281>

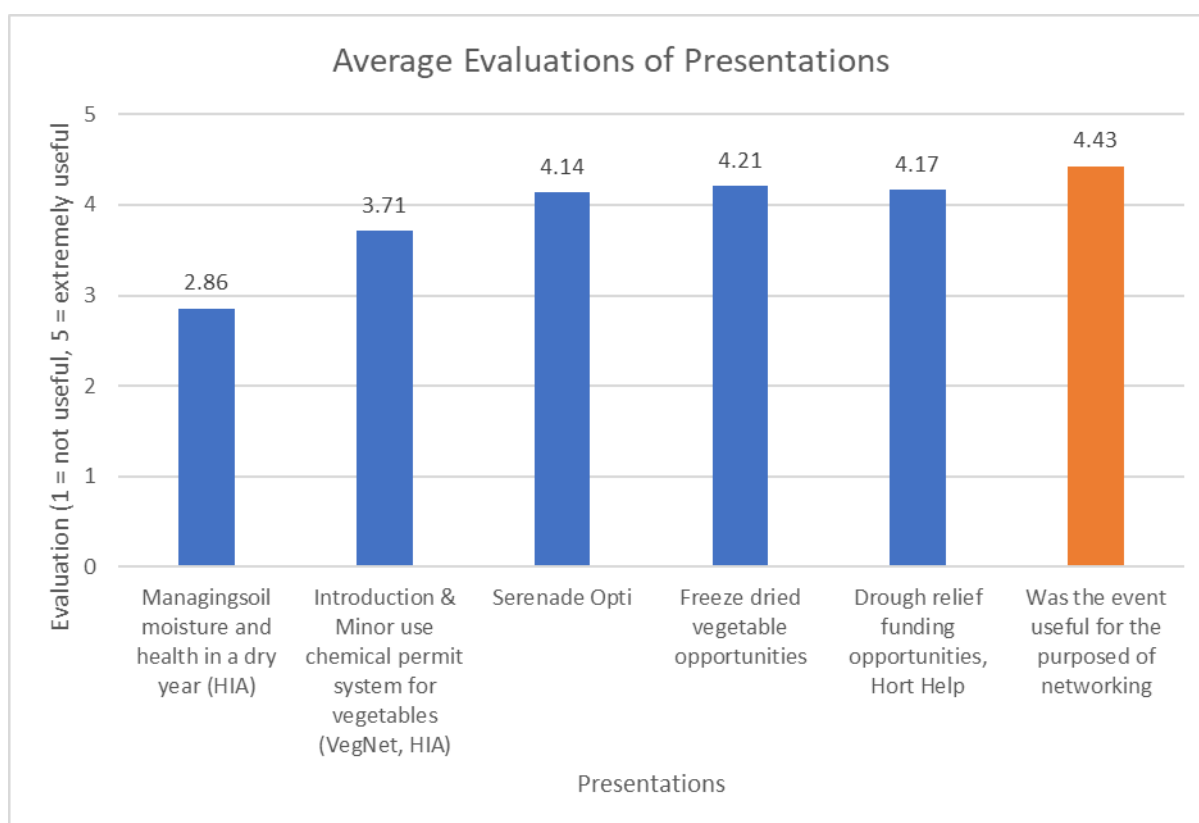
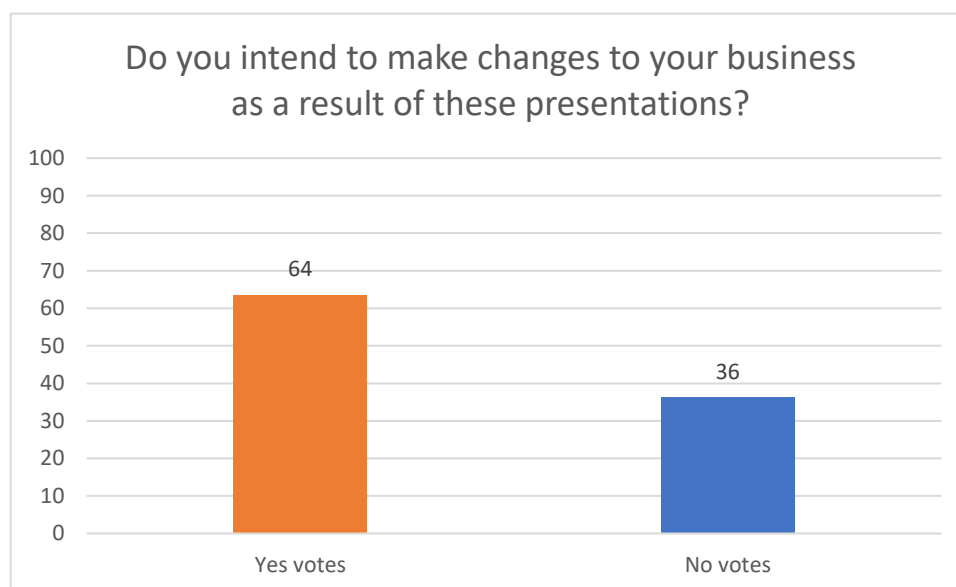
Carmen Brown, Bayer, discussed the availability and efficacy of two biological products – Serenade Prime and Serenade Opti for bacterial disease management and shared related



videos:

Cherie Gambley, DAF, discussing Serenade Opti: <https://youtu.be/FRA-iUiBtWU>

More than 60 percent of participants thought that they would make changes to their business as a result of the presentations (fig 1) and on average, participants found the event 'very useful' or 'extremely useful' (fig 2).



Appendix 4 - Stanthorpe Growers BBQ Synopsis - 6 February 2020

Twenty one growers, researchers and industry support staff attended the Stanthorpe Growers BBQ on Thursday 6 February. The region has had some rainfall in the last couple of weeks with light showers on the night of the BBQ. Most growers have reduced their plantings considerably for the 2019-20 summer production season due to low water volume and quality and some growers have sought off-farm income.

Guest presenters on the night included:

Jenny Ekman, AHR presenting information on food safety.

Len Tesoriero, DPI, presenting information on capsicum internal rot and

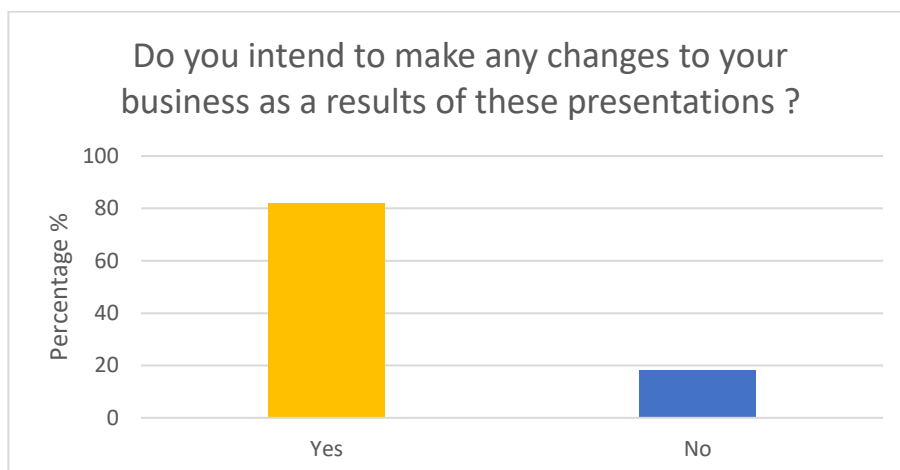
Moudassir Habib presenting information about his PhD research project investigating the impediments to best practice cold chain management.

Clinton McGrath, DAF and Zara Hall, LVG lead a 'how-to' session with growers on 'how to calibrate a boom spray'.

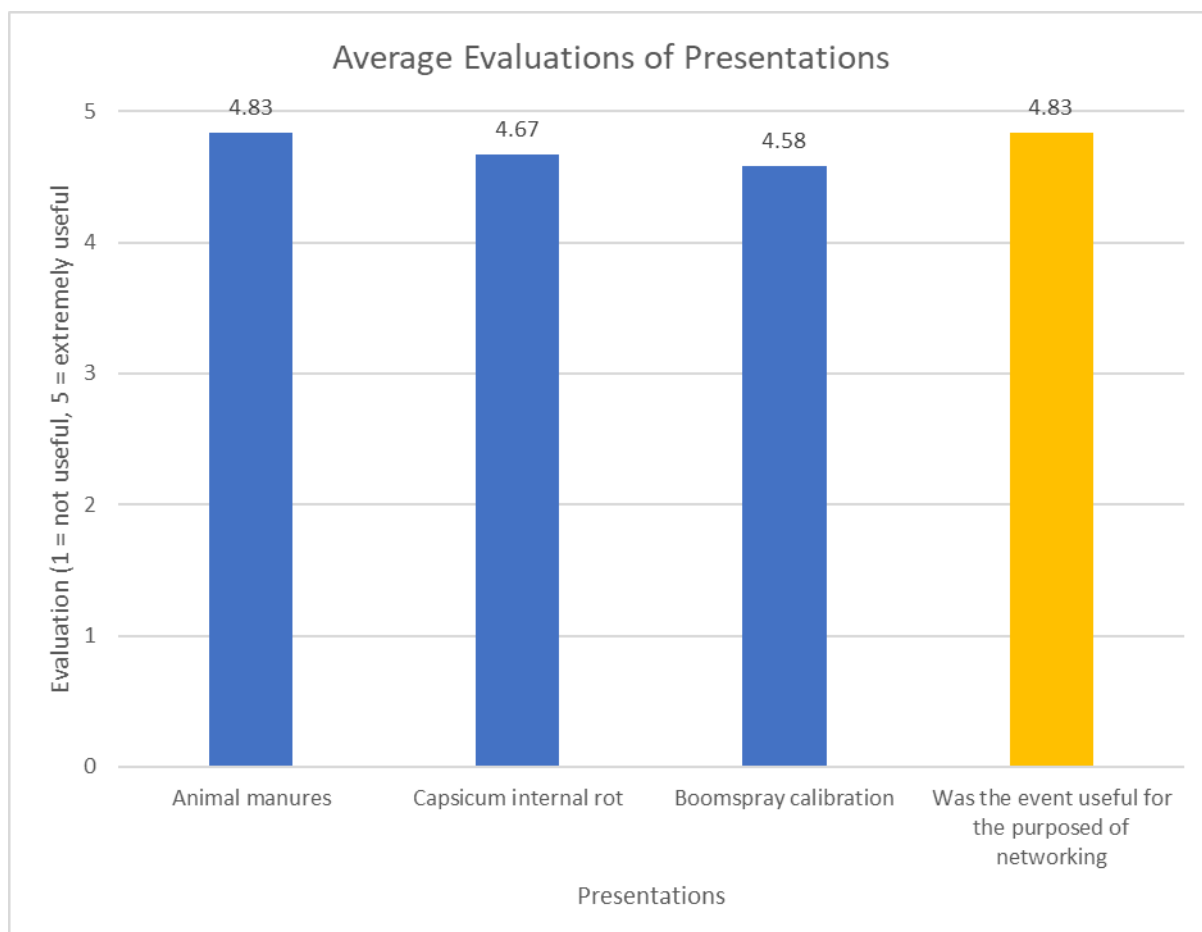
80% of attendees indicated they intended to make changes to their business as a result of the presentations they heard that night and on average, attendees found the evening to be 'very useful' to 'extremely useful' for the purposes of networking.



Jenny Ekman, AHR, presented information on food safety to Stanthorpe growers.



80% of attendees indicated they intended to make changes to their business as a result of the presentations they heard at the grower BBQ.



On average, attendees found the evening to be 'very useful' to 'extremely useful' for the purposes of networking.



Appendix 5: Diamondback Moth Management in the Lockyer Valley, Grower BBQ Synopsis

32 growers and industry support personnel attended the Lockyer Valley Growers Inc. Diamondback moth Management Event on 25 September 2019 at the foundation building, University of Queensland, Gatton campus.

Patrick Press, Sumitomo, provided an in-depth presentation on *Bacillus thuringiensis* (*Bt*) and its' use for management of Diamondback moth. Information included data on adjuvants, attractants, ultra-violet light stabilisers, available *Bt* strains and chemical rotation.



Image: Patrick Press, Sumitomo shares results from testing Bt efficacy using various adjuvants

Geoff Cornwell, CropLife Australia gave an overview of the 2019 Insecticide resistance management strategy and current pesticide resistance testing results (Performed by Greg

Baker's team, SARDI and funded by CropLife Australia). Results from pesticide resistance testing for Diamondback moth in the region indicate significantly elevated resistance levels to most IPM compatible pesticides registered for Diamondback moth. CropLife Australia, in collaboration with Lockyer Valley Growers Inc. is currently conducting a survey of Lockyer Valley brassica growers to evaluate the 2019 Diamondback moth Insecticide Resistance Management Strategy.

The 2019 Diamondback moth Insecticide Resistance Management Strategy is available on the Lockyer Valley Growers Inc. website

Following presentations, **Chris Rutland, Landmark** facilitated a discussion on the area wide management approach to Diamondback moth in the Lockyer Valley.

Thank you to Geoff Cornwell, CropLife Australia and Patrick Press, Sumitomo for presenting; Chris Rutland, Landmark for facilitating discussions; and Landmark and Vanderfield for supporting this Lockyer Valley Growers Inc. event.

Appendix 7: Lockyer Valley Growers Steering Committee Meeting

Friday 22 November 2019

Attendees:

Bron Ford, consultant

Kerry Hauser, Lockyer Valley grower representative

Michael Sippel, President, Lockyer Valley Growers Inc.

Mitch Brimbelcombe, Fassifern representative

Tim Carnell, Granite belt grower representative

Zara Hall, Southern Queensland Industry Development Officer

Apologies:

Anthony Staatz, Southern Downs grower representative

Topics:

WATER

Lack of irrigation water (low volume and low quality) is of major concern. Most notably in the Granite belt but all regions experiences challenges in volume and quality. Central lockyer scheme on track in water allocation plan. Granite belt emu swamp dam progressing. Suggestion for a research provider to demonstrate different water purifiers to assist growers in making informed choice (Possible HIA concept note).

Ongoing drought is putting strain on communities. Mental health is of major concern. Communities likely to be forever changed as farmers move off farm and potentially out of district. Lockyer Valley Growers Inc events to continue to maintain social connectedness amongst grower community. Suggestion for lunch time sessions in the next phase of VegNet with a single speaker on topics ranging from diversifying income / value added hort / mental health / women in hort.

PESTICIDES

Insecticide resistance in Diamondback moth reaching crisis point in the lockyer valley. Committee to meet 12 Dec to plan workshops and extension plants for early 2020. Plan to include resistance management strategy, IPM technologies workshop, spray technology workshop / predatory releases (subject to funds) (possible HIA concept note).

Huge disparity between states in pesticide legislation and availability of pesticides e.g Vic legislation vs QLD. This is to be discussed with Growcom.

Long delays in processing minor use permits through HIA (e.g. Scala permit in Capsicum).

Discuss possibility of QLD regions co-funding registration of pesticides of high priority if not considered a priority through HIA (subject to funds).

Suggestion for workshop for growers re: spray technology / spray drift / dye night. Particularly amongst younger / newer growers.

Vietnamese community chem use of concern. Suggestion for Vietnamese grower R&D events in next phase of VegNet. Suggestion that topics be covered from an economic saving slant rather than a safety

or environmental slant.

Tim Carnell has stepped down in his role as Granite belt grower rep due to competing priorities. A new rep to be nominated via the Granite belt grower association.

Appendix 8: Case Study: Diamondback moth management in the Lockyer Valley, a whole of industry response to a major production challenge

DIAMONDBACK MOTH MANAGEMENT LOCKYER VALLEY


A Whole of Industry Response to a Major Production Challenge

In 2017, growers began reporting poor spray efficacy in brassicas targeting Diamondback moth.

Insecticide resistance testing validated growers concerns with Diamondback moth showing increased tolerance to all IPM compatible pesticides registered in brassicas with the exception of Bts.


Industry lead a series of complementary initiatives to address the problem including development of an Insecticide Resistance Management Strategy, workshops and monitoring and evaluation of the adoption of the program.

Survey results showed 95% of industry were aware of the Insecticide Resistance Management Strategy. This program is ongoing.




RD&E Updates

In 2018, the Lockyer Valley Growers Inc. launched the IRMS with more than 50 industry personnel in attendance representing most brassica producers. An update was again provided in the 2019 season with 35 industry personnel in attendance. One of the presenters, Patrick Press, Sumitomo, shared tips on how to get the most out of Bt sprays.




Impact of Pesticides on Beneficial Arthropods

Through the HIA project VG18067 lead by Jessica Page, IPM Technologies; scientists tested the impact of pesticides on beneficial arthropods of importance in brassicas. Jessica Page, Paul Horne (IPM Technologies) and Lara Senior (DAF) visited growers to discuss the findings of the research and seek feedback on the usability of the Pesticide Impact Guides (available from April 2020).




On-farm Trials

Matt Crust of Crust farms assisted Mike Furlong's team from UQ in running research trials on-farm for a HIA research project VG18062, investigating flowering plants as food sources for parasitoids. Parasitoids including *Diadegma* wasps require a nectar source for optimum productivity. Furlong's team investigated the impact of flowering plants on beneficials.




Diamondback Moth Management Committee

The DBM management committee was formed with the guidance of Michael Sippel, Lockyer Valley Growers Inc. with representation from growers, agronomists, resellers, researchers, chemical companies and CropLife Australia and chaired by Chris Rutland, Landmark to develop the IRMS. The committee continues to meet throughout the season to coordinate ongoing RD&E efforts.



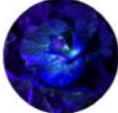
Insecticide Resistance Management Strategy

The strategy is a 2-Window Strategy with a focus on Bt sprays & a production break through the Summer months. Development of the strategy was grower lead. In 2019, the strategy was updated with CropLife Australia, taking into account new data from resistance testing conducted by Greg Baker, SARDI.




Insecticide Resistance Testing

Greg Baker's team at SARDI performed resistance testing for DBM collections from the Lockyer Valley funded through CropLife Australia. Results showed elevated resistance levels to most pesticides registered in brassicas.



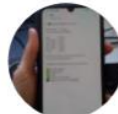
Workshops

In 2017, Lockyer Valley Growers Inc.; Steve Kluck, Limit farms & Matt Moyle, Nufarm, hosted a Spray Demonstration Event at Limit farms using fluorescing dyes to demonstrate the importance of spray technology in optimising the performance of pesticides and adjuvants.




Area Wide Parasitoid Releases

Information about Area Wide release of *Diadegma*, a parasitoid of DBM was shared in a 2020 workshop hosted by Bayer with advice provided by Jessica Page and Paul Horne, IPM Technologies. *Diadegma* is naturally occurring in cropping systems where only selective chemistry is used and is available for release through Biological Services. Image: DAF




Communication


Lockyer Valley Growers Inc. provided text message reminders and alerts to industry about changes to the IRMS Windows and development times of DBM. The Lockyer Valley Growers Website included a Resource page with information about Diamondback moth including the Development Calculator developed by Schellhorn and Hamilton.






Monitoring & Evaluation

CropLife Australia conducted a M&E of the IRMS with assistance from Lockyer Valley Growers Inc. & DAF. 95% of surveyed industry were aware of the IRMS. Most growers were reporting good control of DBM using Bt sprays. Some growers reported that a production break was not feasible for their business.







This project has been funded by Hort Innovation using the vegetable research and development levy and funds from the Australian Government. For more information on the levy and strategic levy investment visit horticulture.com.au

Appendix 9: Case Study: Growing Leaders



Growing Leaders

Building a Connected Vegetable Industry with a Sustainable Future

Growing Leaders (VG15030) is a Hort Innovation funded program provided by Rural Training Initiatives. The theme for the graduate of the 2017 growing leaders program was 'building a connected vegetable industry with a sustainable future'. Roslyn Pennings is the Senior Supply Manager at Barden Produce Gatton. Here she speaks to Zara Hall about her experience going through the Growing Leaders Program in 2017.

What made you want to apply for Growing Leaders?

I wanted to go through the program because I had seen others at Barden's who had completed Growing Leaders in previous years and you could see the impact it had on them both personally and professionally. It was so clear, the changes you would see in people like [the late] Shaun [Reina] from prior to starting the program to afterwards. Shaun was this really humble guy. He had come through the ranks and he didn't see himself as a leader- but he was.




What was the experience like to go through the growing leaders program?

I loved it. I'd do it again if I could – actually, I volunteered the following year to do it again, but Clem [Hodgman] said I had to leave the space open for another person to have an opportunity [Roslyn laughs]. It's not an easy program, but I was very impressed that the program was designed to accommodate participants with varying experiences and job roles.

For me, the public speaking was the hardest. I have no problems having a chat. And people that know me, know that I have an opinion on everything. But standing up and speaking publicly – that is different. It was really challenging but I am so glad I did it.

What has been the impact of Growing Leaders on you?



As part of the program, we were asked to choose a theme –our team chose the theme of building strong connections. Part of the process of going through Growing Leaders was to set clear goals for ourselves. Around the theme of building strong connections, I made it a goal to become more involved in my local industry. I started going to the Lockyer Valley Grower events like the BBQ information nights. I have also attended various agronomy training meetings. I sign up for all the industry newsletters. And I have become a collector of business cards.

"Attend the grower information BBQs, sign up for industry newsletters, be a collector of business cards - you never know when these connections might be useful"

I don't pretend to understand all the technical aspects of what is being said at industry meetings. And there might be a lot of information that I don't use. But often, weeks or months later, I might be chatting to someone and they will mention a production challenge or some other thing, and I will be like "wait a minute, I have a phone number for someone who can help you with that". Or, "I have heard something about that", and I can dig out the newsletter article or a business card for someone who works in that area.

I know so many more people since going through Growing Leaders. When I go to events like Hort Connections, I will run into the graduates from my program and it is so good to catch up with them. Although it is a 6 month course, we only spent three weeks in total together but we formed such a strong connection going through the program together. And I know more people from my local area too. Some of these people are our suppliers or we have contact with them through work, and now when I get a phone call or I talk to someone, I know who they are because I have met them at a grower BBQ.

Do you have any learnings or advice for people from the Growing Leaders program?

Attend events such as the Lockyer Valley Growers Information nights & BBQs, sign up for industry newsletters, be a collector of business cards - you never know when these connections might be useful.

Hort Innovation don't currently offer the Growing Leaders program which is really unfortunate. I really hope they make it available again in the future because it was such a fantastic program.

Hort Innovation now offers two new professional development programs: MT18016 National Leadership Development Program & LP15001 Masterclass in horticultural business.

More information about these professional development opportunities can be found by clicking on the following link: <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/lp15001/>

