# AM19002 Building Capacity in Irradiation

Strategic workshop: Building capacity in phytosanitary irradiation

Agriculture Victoria Research

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#### **INTRODUCTION**

Australian horticultural industries are increasingly seeking to use irradiation as a phytosanitary treatment for fresh horticulture produce intended for high value Asian markets. Irradiation as a phytosanitary treatment is fast and cost-effective but is not recognised by many of Australia and New Zealand's international trading partners. Importantly, the pathway to international acceptance for phytosanitary irradiation requires that the horticulture sector, regulators, domestic retailers and our trading partners have confidence that phytosanitary irradiation is an effective treatment for key pests and diseases of concern, has no human health risks, and little or no impact on product quality and shelf life.

The project AM19002 - Building Capacity in Irradiation commenced in July 2021 with the aim to build confidence and trust in irradiation as a phytosanitary treatment. More specifically, the objectives of this project are to:

- Build a body of knowledge concerning phytosanitary irradiation for the Australian horticulture sector, government, and our international trading partners
- Fill gaps in our knowledge regarding the effective use of phytosanitary irradiation
- Identify future research and development activities that will increase the use and acceptance of phytosanitary irradiation domestically and internationally.

The project team has now documented reviews covering pest mortality and sterility for Australian insect pests of concern; transmission of plant disease by insect pests; post treatment impacts on product quality and shelf life; methods available to detect irradiation dose in fresh products; regulatory, commercial and cultural barriers to the adoption of phytosanitary irradiation. The information generated from these reviews is now part of an important body of knowledge that is accessible to stakeholders through the Horticulture Industry Network (HIN) website.

To extend the reach of these reviews, both national and international workshops were held in 2022. This purpose of this report is to provide a summary of the Strategic Workshop: Building capacity in phytosanitary irradiation hosted by Agriculture Victoria on Thursday 15 September in Melbourne.

#### Workshop objectives

The half day workshop was promoted as an opportunity for industry stakeholders to discuss how phytosanitary irradiation can be used to protect and grow market access for Australia's horticulture sector. The objectives were to:

- · Communicate industry success stories with phytosanitary irradiation
- Examine regulatory, cultural and commercial barriers to the use of phytosanitary irradiation
- Promote further understanding of food standards and labelling requirements for products treated with irradiation
- Workshop industry challenges to growing market access for irradiated fresh produce.
- Tour the Steritech irradiation facility in Melbourne.

#### Workshop outcomes

The Strategic Workshop was the first of its type held in Australia. The workshop program covered industry success stories; regulatory, cultural and commercial barriers; food standards and labelling requirements; and industry challenges to growing market access (Appendix A). All presentations were recorded and edited. These presentations have been made available through the Horticulture Industry Network (HIN) website <a href="http://www.hin.com.au/current-initiatives/strategic-workshop-building-capacity-in-phytosanitary-irradiation/nocache">http://www.hin.com.au/current-initiatives/strategic-workshop-building-capacity-in-phytosanitary-irradiation/nocache</a>. This link has been circulated to each individual and organisation invited to the event.

Significant effort went into identifying key stakeholders within Australia and New Zealand with over 200 invitations sent. This resulted in 110 registrations for the workshop, with 55 registered online and 55 in person. On the day 35 attended online and 39 in person (Appendix C). There was broad representation from growers/producers, service providers, wholesalers/retailers and government (regulators/researchers) both online and in person from around Australia and New Zealand (Appendix C, D, E). In particular, much effort was made to bring major retail chains Coles and Woolworths to the workshop with both attending online.

A simple evaluation approach was taken for the workshop to ascertain if the workshop met the needs of attendees. The 'Quick evaluation' used the same questions for both online and in-person attendees (Appendix B). Both online and in-person attendees rated the workshop 9/10 and over 90% will use this information to inform their business or organisation (Appendix C, D). This suggested the design and content of workshop mostly met end user needs.

The in-person workshop session focusing on future trade challenges and opportunities was less successful. It was included as a means for participants to identify key challenges and potential actions/solutions to improve market access. This was designed to provide input into the Future Roadmap being developed by the project team, however the questions posed during the session received little feedback.

A tour the Steritech irradiation facility in Melbourne was also offered to give in-person participants firsthand experience of the technology and operations. The tour was very successful with 38 registering for the tour run by Ben Reilly of Steritech.

Media also attended the workshop with the following Fresh Plaza article being produced <a href="https://www.freshplaza.com/north-america/article/9459874/australia-s-first-forum-held-to-assist-the-fresh-produce-industry-grow-with-phytosanitary-irradiation/">https://www.freshplaza.com/north-america/article/9459874/australia-s-first-forum-held-to-assist-the-fresh-produce-industry-grow-with-phytosanitary-irradiation/</a>.

The project team are confident that the workshop objectives were met and that key stakeholder's knowledge concerning the use of phytosanitary irradiation has substantially improved. A number of in-person comments from attendees suggested that further workshops should be run in the future to keep momentum moving forward.

#### **APPENDICES**

**Appendix A: Strategic Workshop Program** 

### Strategic workshop: Building capacity in phytosanitary irradiation 15 September 2022



Location: Agriculture Victoria, 475 Mickleham Rd, Attwood, Victoria Room: A03-01 & A03-02

Date: September 15, 2022 Time AEST: 09:00 AM Time NZ: 11.00 AM

Instructions to join videoconference:

- Join via video conference at: <a href="https://kastio.com/ag-150922">https://kastio.com/ag-150922</a>
- Insert your name and email
   Insert Password: horticulture

| Program   |  |   |  |  |  |  |  |  |
|-----------|--|---|--|--|--|--|--|--|
| Agenda    | Timing                                   | Topic   | Presenter  |  |  |  |  |  |
| Day 1 W   | Day 1 Welcome and introductions          |   |  |  |  |  |  |  |
| 1.        | 9.00-9.05 am                             | Welcome   | Traci Griffin (Head, Agriculture<br>Victoria Research) |  |  |  |  |  |
| Session 1 | Phytosanitary irra                       | adiation: Industry experience   |  |  |  |  |  |  |
| 2.        | 9.05-9.20 am                             | Irradiation of table grapes – the story so far  | Jeff Scott (CEO ATGA)                                  |  |  |  |  |  |
| 3.        | 9.20-9.35 am                             | Export of mangos to New Zealand and beyond  | Ben Martin (Chair AMIA)                                |  |  |  |  |  |
| 4.        | 9.35-9.50 am                             | Benefits of irradiation for plant protection<br>organisations                                 | Mirianne Jovanoski (DAFF)                              |  |  |  |  |  |
| 5.        | 9.50-10.00 am                            | Question and answer session 1   |  |  |  |  |  |  |
|           | tea 10.00-10.30 an<br>Phytosanitary irra | n<br>adiation: Overcoming barriers to trade   |  |  |  |  |  |  |
| 6.        | 10.30-10.45 am                           | Barriers to the acceptance of phytosanitary<br>irradiation: regulatory and technical barriers | Lloyd Kingham (NSW DPI)                                |  |  |  |  |  |
| 7.        | 10.45-11.00 am                           | Barriers to the acceptance of phytosanitary<br>irradiation: commercial and cultural barriers  | Ben Reilly (Steritech)                                 |  |  |  |  |  |
| Session 3 | Linderstanding A                         | ustralian food standards  |  |  |  |  |  |  |
| 8.        | 11.00-11.15 am                           | Interpreting and applying labelling requirements to<br>fit your business                      | Glenn Stanley  |  |  |  |  |  |
| 9.        | 11.15-11.30 am                           | Question and answer session 2   |  |  |  |  |  |  |
| Session 4 | Workshop session                         | : Phytosanitary irradiation: Confronting challenges a   | nd seeking opportunities                               |  |  |  |  |  |
| 10.       | 11.40-12.40 pm                           | Future trade opportunities and challenges   | Panel discussion                                       |  |  |  |  |  |
| Lunch     | 12.40 - 13.30pm                          |   |  |  |  |  |  |  |
| 11.       | 13.30-17.00pm                            | Tour of Steritech's Melbourne Irradiation Facility  | Steritech  |  |  |  |  |  |

















#### Quick Evaluation

#### Strategic workshop: Building capacity in phytosanitary irradiation

| ~ 4 | Dianas asses | this event out | -E 4 70 h   | : F         | and the second | E         |       |
|-----|--------------|----------------|-------------|-------------|----------------|-----------|-------|
|     | Please score | This event our | OF TO - DOW | Intormative | was this e     | event tor | woule |
|     |              |                |             |             |                |           |       |

Please circle: (uninformative) 1 2 3 4 5 6 7 8 9 10 (very informative)

- Q2. Will you use this information for your business or in your organisation? (Circle)
  - a. Yes
  - b. Unsure
  - c. No
- Q3. Which of the following best describes you? (Circle all that are relevant)
  - a. Grower / producer
  - b. Retailer / wholesaler
  - c. Service provider
  - d. Government agency

| N4. Please provide any comments, opgotygities or take-home messages that you heard at today's vorkshop. |   |
|---|---|
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Appendix C: Strategic workshop evaluation results

Registrations: 55 in room, 55 online

Actual attendance in room: 39

Attendance online: 35

| In ro | In room surveys: 19 received   |  |  |   |  |  |  |
|-------|--|--|--|---|--|--|--|
|       | Q1 Please score<br>this event out of 10<br>– how informative<br>was this event for<br>you? | Q2. Will you use this information for your business or in your organisation? | Q3. Which of the following best describes you? | Q4. Please provide any comments, opportunities or take-home messages that you heard at today's workshop.  |  |  |  |
|       |  | (Yes / Unsure / No)  |  |   |  |  |  |
| 1     | 9  | Yes  | Service provider                               | Story around domestic use of a radiation, demonstration of efficacy of treatment  |  |  |  |
| 2     | 9  | Yes  | Grower / producer                              | All about the messaging. government doing great work but can engage / empower industry more to drive market access objectives   |  |  |  |
| 3     | 8  | Yes  | Government Agency                              | Use labelling positively  |  |  |  |
| 4     | 10   | Yes  | Grower / producer                              | Thought the industry presentations were great - especially for table grapes. we need increased irradiation protocols  |  |  |  |
| 5     | 8  | Yes  | Government Agency                              | Maybe a bit more looking at 'holes'   |  |  |  |
| 6     | 10   | Yes  | Government Agency                              | No comments   |  |  |  |
| 7     | 9  | Yes  | Service provider                               | Opportunity for standardised language / visual presence of irradiated product, using consumer research to drive language and logo device - current opportunity. Plan for removal of point of sale call out longer term. |  |  |  |
| 8     | 10   | Yes  | Government Agency                              | A fantastic day of discussion, information to confirmation at need to get more education and acceptance of a radiation on the domestic levels.  |  |  |  |
| 9     | 9  | Yes  | Retailer / wholesaler                          | Very informative, would like regular updates to review. Additional workshops to review results.   |  |  |  |

| 10  | 9   | Yes                   | Service provider      | Would like to be provided presentations if available and to be kept in the loop as this progresses.   |
|-----|-----|-----------------------|-----------------------|---|
| 11  | 10  | Yes                   | Government Agency     | Positive future but needs continuous attention / work. Need to continue development - not stop. Lots to do!   |
| 12  | 9   | Yes                   | Government Agency     | This is a start of what should and could be regular industry / government roundtable to drive the use of a radiation  |
| 13  | 9   | Yes                   | Government Agency     | Would be good to have a participant list so we know who was here in audience  |
| 14  | 9   | Yes                   | Government Agency     | Enjoyed all talks and presentations. Good job organisers  |
| 15  | 9.5 | Yes                   | Retailer / wholesaler | Good information and a way forward  |
| 16  | 10  | Yes                   | Service provider      | No comments   |
| 17  | 9   | Yes                   | Government Agency     | knowing what the old or current standards are. Seeing the new tech is a greater method than methyl bromide. Understanding irradiation's place in the Australian domestic and international trade markets. |
| 18  | 10  | Yes                   | Government Agency     | great to see developments with use of irradiation both internationally and domestically.  |
| 19  | 9   | Yes                   | Service provider      | Irradiation is a growing option for sustainable treatment   |
| Ave | 9.2 | Yes = 19              |                       |   |
|     |     | Grower / producer     | 2                     |   |
|     |     | Retailer / wholesaler | 2                     |   |
|     |     | Service provider      | 5                     |   |
|     |     | Government Agency     | 10                    |   |

Appendix D: Strategic workshop Online Evaluation results

| Q1 | Please score this event out of 10 – how informative was this event for you? |     |
|----|---|-----|
|    | 8   | 33% |
|    | 9   | 33% |
|    | 10  | 33% |
|    | Average Score   | 9   |
| Q2 | Will you use this information for your business or in your organisation?    |     |
|    | Yes   | 91% |
|    | Unsure  | 9%  |
|    | No  | 0%  |
| Q3 | Which of the following best describes you? (Select all that are relevant)   |     |
|    | Grower / producer   | 18% |
|    | Retailer / wholesaler   | 18% |
|    | Service provider  | 27% |
|    | Government agency   | 36% |

Appendix E: Overview of online attendees

| Total Registered | Total Attendees<br>(Live) | Peak Viewers | Attendance rate | Country | City       |
|------------------|---------------------------|--------------|-----------------|---------|------------|
| 46               | 36                        | 34           | 78.26%          |         |            |
| Unique ID        | Status                    |              |                 | Country | City       |
| 378798           | Registered                |              |                 | AU      | Sydney     |
| 378799           | Registered                |              |                 | AU      | Sydney     |
| 378801           | Attended                  |              |                 | AU      | Sydney     |
| 378804           | Registered                |              |                 | AU      | Ballarat   |
| 380291           | Registered                |              |                 | NZ      | Auckland   |
| 380319           | Attended                  |              |                 | NZ      | Auckland   |
| 380908           | Attended                  |              |                 | AU      | Sydney     |
| 380936           | Registered                |              |                 | AU      | Mareeba    |
| 381349           | Attended                  |              |                 | AU      | Sydney     |
| 381431           | Attended                  |              |                 | AU      | Melbourne  |
| 381496           | Registered                |              |                 | AU      | Sydney     |
| 381497           | Registered                |              |                 | AU      | Sydney     |
| 382413           | Attended                  |              |                 | AU      | Gold Coast |
| 382860           | Attended                  |              |                 | AU      | Melbourne  |
| 383355           | Attended                  |              |                 | AU      | Brisbane   |
| 383461           | Registered                |              |                 | AU      | Melbourne  |
| 383474           | Registered                |              |                 | AU      | Brisbane   |
| 383720           | Attended                  |              |                 | AU      | Sydney     |
| 385280           | Attended                  |              |                 | AU      | Melbourne  |
| 385283           | Attended                  |              |                 | AU      | Melbourne  |
| 386479           | Attended                  |              |                 | AU      | Sydney     |
| 386482           | Attended                  |              |                 | AU      | Brisbane   |
| 386527           | Attended                  |              |                 | AU      | Sydney     |
| 386532           | Attended                  |              |                 | NZ      | Wellington |
| 386597           | Attended                  |              |                 | NZ      | Wellington |
| 386607           | Registered                |              | I               | AU      | Sydney     |
| 386685           | Attended                  |              |                 | AU      | Sydney     |
| 386717           | Attended                  |              |                 | NZ      | Wigram     |
| 386718           | Attended                  |              |                 | AU      | Sydney     |
| 386719           | Attended                  |              |                 | AU      | Sydney     |
| 386720           | Attended                  |              |                 | AU      | Perth      |

| 386721 | Attended |  | AU | Melbourne           |
|--------|----------|--|----|---------------------|
| 386722 | Attended |  | AU | Sydney              |
| 386723 | Attended |  | AU | Sydney              |
| 386724 | Attended |  | AU | Sydney              |
| 386725 | Attended |  | AU | Sydney              |
| 386726 | Attended |  | AU | Sydney              |
| 386727 | Attended |  | AU | Adelaide            |
| 386728 | Attended |  | AU | Sydney              |
| 386729 | Attended |  | AU | Melbourne           |
| 386730 | Attended |  | AU | Brisbane            |
| 386732 | Attended |  | NZ | Auckland            |
| 386734 | Attended |  | AU | Adelaide            |
| 386735 | Attended |  | AU | Svensson<br>Heights |
| 386736 | Attended |  | AU | Melbourne           |
| 386738 | Attended |  | AU | Melbourne           |