

# 2018-19 INTEGRATED PEST AND DISEASE MANAGEMENT

## FIELD DAY SERIES



**Red Rock Olives, Pomonal | 16 November 2018**



## POMONAL FIELD DAY PROGRAM

### **08:30 Registration**

Registration fee – \$35 inc GST pre-paid via Eventbrite website. Includes refreshments, lunch, BBQ afterwards, hand lens, field day presentation notebook.

### **08.45 Welcome, Housekeeping, and Overview of Field Day Program,**

Greg Seymour, CEO, AOA

### **09:00 Risk Management, Biosecurity, Continuous Improvement and Technical Support,**

Peter McFarlane, OliveCare® Administrator, and AOA Biosecurity Representative; Greg Seymour, Convenor, Olive Industry Risk and Crisis Management Committee:

- Risk Management, Industry Risk and Crisis Management Plan;
- Fostering Industry Biosecurity Threat Awareness and Preparedness;
- *OliveCare*® Code of Best Practice;
- Maintaining Producer Access to Registered Pesticides and 'Minor Use Permits' for use in Olive Groves.

### **09:30 Q & A Session**

### **09:40 Grove Management Checklist - Healthy Trees to Support an IPDM Program,**

Michael Thomsett, Horticultural Consultant and AOA Director, NSW

- Irrigation;
- Nutrition & Soil Health;
- Pruning/ Tree Management;
- Drones in Groves

### **10:10 Q & A Session and Morning Tea**

### **10:30 Product Quality and Market Development,**

Michael Thomsett, Peter McFarlane, Abby Dolphin, Olive Wellness Institute, Greg Seymour

- Australian International Olive Awards and Regional Olive Competitions;
- The *Tastebook*™ Sensory Training Program.
- Industry Generic Promotions Programs;
- Olive Wellness Institute Project

### **11:30 Q&A Session**



## POMONAL FIELD DAY PROGRAM

### **11:40 IPDM Session 1**

Dr Robert-Spooner-Hart

- Principles and Practices of IPDM

### **12:30 LUNCH**

### **1:15 IPDM Session 2**

Dr Robert Spooner-Hart and Dr Len Tesoriero

- Monitoring for pests, diseases and beneficial species
- Biology and life cycles of key pests and diseases
- Factors influencing pest and disease spread and incidence in groves
- Strategies for conventional and organic management
- Advantages and disadvantages of management strategies
- Importance of timing, application and targeting of interventions.

### **14.45 Drive to IPDM Field Activities**

Rash Valley Olives, 23 Shum Rd, Palmtree QLD 4352

Our Hosts are Roger and Shirley Harrison

### **15:00 IPDM Grove Walk**

Roger Harrison, Dr Robert-Spooner-Hart and Dr Len Tesoriero

Introduction to Rash Valley Olives

Grove walk and discussion

Insect identification

Disease identification

Grove management and drone exhibition



### **16:30 Drive Back to Perseverance Hall**

### **16:45 Review of Field Visit; Q & A Session**

Dr Robert Spooner-Hart and Dr Len Tesoriero

- Field day participants are invited to send images of insect or disease issues on their grove to Dr Spooner-Hart one week prior to the event. Feedback will be provided in a group Q&A session without identifying the senders of the images.
- Questions will also be taken without notice on any aspect of pest and disease management from participants during this session.
- Questions/ comments about any of the topics covered during the day

### **17:15 Evaluation and Concluding Remarks, Greg Seymour**

### **17:30pm Post Field Day Networking BBQ**

Field day participants are invited to join the field day speakers at an informal get-together at the Perseverance Hall after the field day concludes. This function will provide an opportunity for participants to get one-on-one with the experts to discuss issues of relevance to their own groves and businesses. Meals and drinks are included in Field Day Fee.

### **8:00pm Field Day Close**

# Session 1: Risk Management, Biosecurity, Continuous Improvement and Technical Support

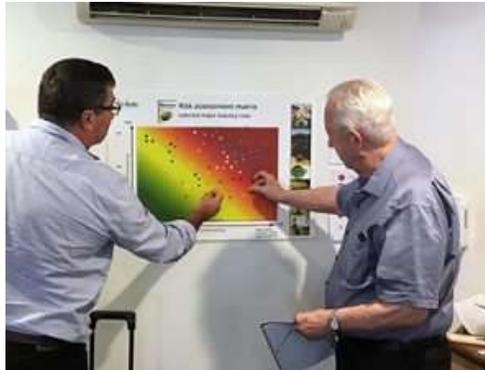
*With Peter McFarlane, OliveCare® Administrator, AOA Biosecurity Representative and AOA Agri-chemical Permits Co-ordinator; &  
Greg Seymour, Convenor, Olive Industry Risk and Crisis Management Committee.*

- Risk Management: Industry Risk and Crisis Management Plan;
- Biosecurity Risk Management: Fostering industry biosecurity threat awareness and preparedness;
- Food Safety & Product Quality Risk Management: *OliveCare*® Code of Best Practice;
- Regulatory Risk Management: Maintaining producer access to APVMA registered agri-chemicals, and 'Minor Use Permits' for use in olive groves.



# Risk Management, Industry Risk and Crisis Management Plan

*Greg Seymour, Convenor, Olive Industry Risk and Crisis Management Committee*



AOA Directors Michael Thomsett (L) and Peter O'Meara (R) prioritise industry risks on a “impact vs likelihood” risk matrix at an AOA ‘risk and crisis management planning workshop’.



# Identifying and Managing Olive Industry Risks

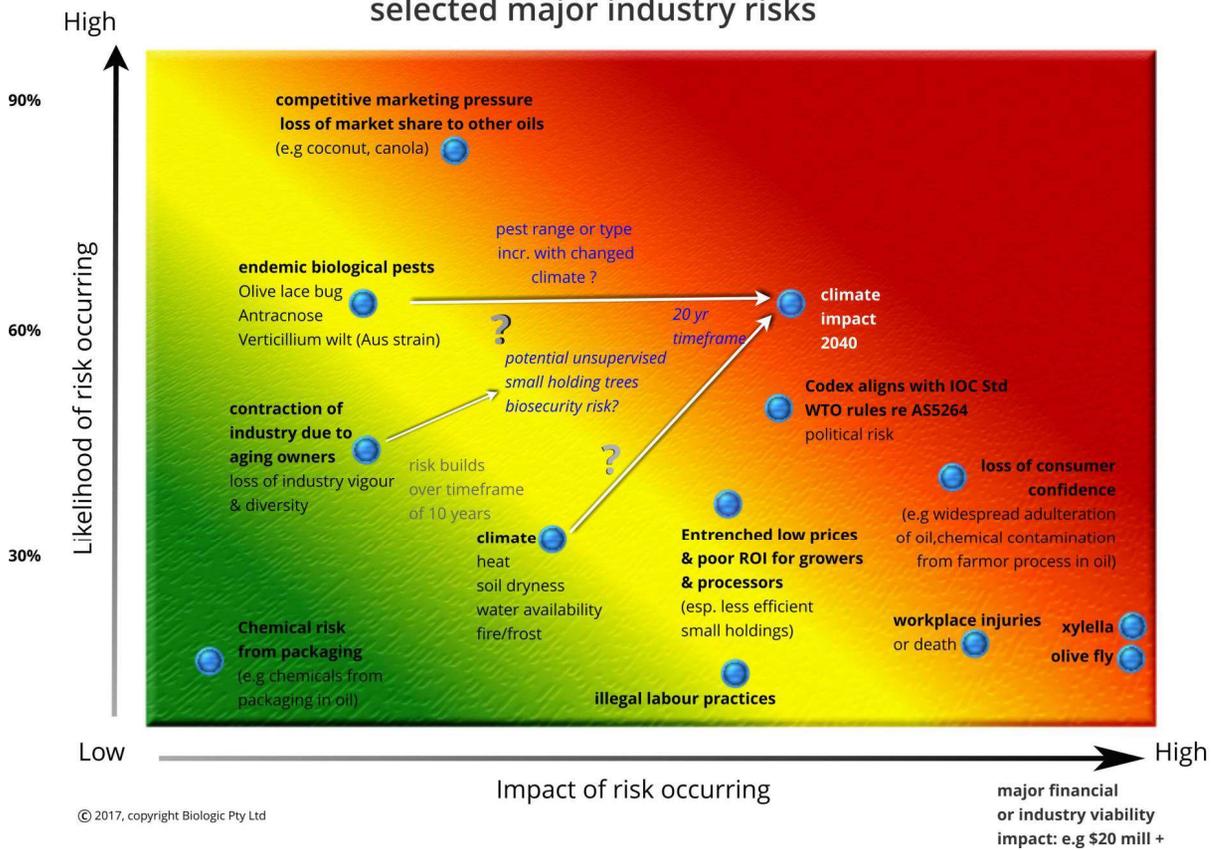
The AOA is working with Hort Innovation on '*risk and crisis management planning for the olive industry*', (project OL16011).

- The Australian Olive Industry Risk Register provides a template for AOA as well as individual enterprises to develop risk management plans including details of:
- Identified industry / enterprise risks;
- How each risk could impact on the industry / enterprise;
- An assessment in terms of likelihood of impact occurring and potential seriousness if it does occur;
- Grading of each risk according to a risk assessment table (risk matrix);
- Assigned organisational / individual responsibilities for managing the risk;
- Proposed mitigation actions (prevention and contingency); and
- Ideally, (if quantifiable) the costings for each mitigation strategy.



# Risk assessment matrix

## selected major industry risks



# Industry Level Risks

The Australian Olive Industry faces known risks such as those as identified as threats in the **Olive Strategic Investment Plan (SIP)**; these risks require management and investment at an industry level, including:

- **Biosecurity:** Pests and diseases spreading from abandoned groves and/or failure of biosecurity measures leading to entry of serious pests and diseases into Australia.
- **Climate Change:** Creating risks to production from both variable weather conditions and changes in pest and disease incidence.
- **Market Competition:** Loss of domestic market share to alternative food oils as a result of failure to convince consumers of the value proposition of olive oil.
- **Food Fraud:** Australia's food service industry is plagued with mislabelled oils and general lack of information, appreciation and/or understanding about EVOO and its effect on food.
- **Economic:** Lack of effective and affordable harvesting solutions for small/medium growers.
- **Food Terrorism:** Deliberate contamination of food products aimed at undermining consumer confidence, leading to product recall and inflicting economic loss on industry.



# Olive Enterprise Level Risks

Olive producers face many kinds of risk that need to be managed at an enterprise level, including:

**Product Quality:** defective products – resulting in loss of consumer confidence, and reputational damage.

**Food Safety:** exceeding pesticide MRL's; physical, chemical and biological contamination; product adulteration – requiring product recall.

**Biosecurity:** incursion of endemic and exotic pests diseases and weeds – resulting in higher production costs, reduced yields and profitability, or worse!

**Environmental:** managing waste including processing discharge, adapting to increasing climate variability – resulting in higher production costs, reduced yields and profitability.

**Regulatory:** employment of illegal workers, unsafe workplaces - resulting in prosecution and reputational damage.

Yes there are others – suggestions?



# Risk Level Matrix

The level of an identified risk is based on a combination of the determined **consequence** and **likelihood** of the risk event occurring.

An example of a simple **risk level matrix**:

RISK OUTCOME					
Low					
Moderate					
Significant					
High					
Likelihood	Consequence				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Almost Certain 5	5	10	15	20	25
Likely 4	4	8	12	16	20
Possible 3	3	6	9	12	15
Unlikely 2	2	4	6	8	10
Rare 1	1	2	3	4	5



# Biosecurity Risk Management

*Peter McFarlane, AOA Biosecurity Representative*



On-farm biosecurity best practices play a pivotal role in maintaining Australia's reputation of producing high quality products.



# Key Biosecurity Risks

An industry observation is that the top 3 biosecurity / plant health threats to Australian horticulture are:

- Movement of machinery and workers on and off groves eg Olive Lace Bug – if we can't get this right with known pests and risks what hope do we have if Xylella enters Australia?
- Propagation and distribution of nursery stock without adopting adequate plant health protocols (especially for fungal and bacterial diseases) - this includes other host species that may be sourced by your neighbours.
- Illegal importation of plant material to gain an economic advantage – shameful behaviour!

## **A timely biosecurity reminder about movement of nursery trees and other plant propagation material:**

Western Australia's Department of Primary Industries (DPIRD) has confirmed the detection of citrus canker on two properties in Kununurra and Wyndham, **linking it to plants moved from a retail nursery in the Northern Territory.**

**Note to olive growers: Do you always source certified disease free olive trees?**



# On-farm Biosecurity Awareness & Preparedness

## Six easy ways to protect your property:

Don't put your livelihood at risk by neglecting orchard biosecurity.

### 1. Be aware of biosecurity threats

Make sure you and your orchard workers are familiar with the most important exotic olive pest threats. Conduct a biosecurity induction session to explain required hygiene practices for people, equipment and vehicles in your orchard.

### 2. Use pest-free propagation material

Ensure all propagation material is from trusted sources and orchard inputs are fully tested, pest-free and preferably certified. Keep good records of your orchard inputs.

### 3. Keep it clean

Practicing good sanitation and hygiene will help prevent the entry and movement of pests onto your property. Workers, visitors, vehicles and equipment can spread pests, so make sure they are clean before entering and leaving your property. Have a designated visitor's area and provide vehicle and personnel wash-down facilities.



# On-farm Biosecurity Awareness & Preparedness

## Six easy ways to protect your property (continued):

### 4. Check your orchard

Monitor your trees frequently. Knowing the usual appearance of your orchard and trees will help you recognise new or unusual events and pests. Keep written and photographic records of all unusual observations. Constant vigilance is vital for early detection of any exotic plant pest threat.

### 5. Abide by the law

Respect and be aware of laws and regulations established to protect the olive industry, Australian agriculture, and your region.

### 6. Report anything unusual

If you suspect a new pest – report it immediately to the Exotic Plant Pest Hotline:  
**1800 084 881**

**Don't put your livelihood at risk by neglecting orchard biosecurity.**



# Enforce Visitor Requirements

The following are suggested general requirements for managing visitors on farm to limit the biosecurity risk that they pose.

- Place a sign at all property entry points requesting all visitors to report to the office before progressing into other areas of the site.



# Enforce Visitor Requirements

- Details of each visitor **must** be recorded in the 'Visitor Record'.
- Designated staff, visitor parking and delivery / pick-up points **must** be separated from production area(s).
- Visitors entering the production area such as customers, contractors, crop consultants or sales representatives **must** be free of contaminants that could carry plant pests such as soil and vegetative material, where appropriate provide foot-baths, boot covers or request clean boots, etc.
- Restrict unnecessary movement of visiting machinery, vehicles, equipment and people into the production area.
- Any vehicles or equipment going into the production area **must** be checked (in a low risk area) for organic matter including soil, crop residue, weed seeds, live pests and possible diseased host material.
- Provide access to vehicle wash-down facilities will be available for high risk machinery including mechanical pruners and harvesters.



# The Biosecurity Back Office

The Australian Olive Association Ltd (AOA) is working closely with **Plant Health Australia (PHA)** on industry biosecurity planning processes, fostering olive industry biosecurity threat awareness and preparedness, and industry response to incursions of exotic pests and diseases.

AOA is a signatory to the **Emergency Plant Pest Response Deed (EPPRD)**, a government / industry cost sharing agreement that lies at the heart of the industry-government partnership arrangement for plant biosecurity and incursion management. The AOA Board has received training on its responsibilities under the EPPRD.

The **National Management Group (NMG)** is responsible for making key decisions on national biosecurity policy and resourcing in a response to an Incident under the EPPRD. The NMG comprises representatives from all Affected Parties for a particular Biosecurity Incident, who are authorised to bind that Party under the EPPRD, and PHA. The Olive Industry representative on the NMG is AOA CEO Greg Seymour.

The **Consultative Committee on Emergency Plant Pests (CCEPP)** is Australia's key technical body for coordinating national responses to **emergency plant pest (EPP)** incursions (around 5 per month), and assessing the technical feasibility for their eradication. AOA's representative on the CCEPP is Peter McFarlane.



# The Biosecurity Plan for the Olive Industry

The Biosecurity Plan for the Olive Industry (OBP) Version 2.0 October 2016, provides a framework for the olive industry, government and other relevant stakeholders to determine pests of highest priority, analyse the risks they pose, and put in place procedures to reduce the chance of pests becoming established, and minimise the impact if a pest incursion occurs.



# High Priority Olive Pests and Diseases

The Biosecurity Plan for the Olive Industry identifies the following 5 high priority exotic pests and diseases of olives:

- Olive fly (*Bactrocera oleae*)
- Olive moth (*Prays oleae*)
- Leaf scorch (*Xylella fastidiosa subsp. multiplex* with vectors)
- Olive quick decline (*Xylella fastidiosa subsp. pauca* with vectors)
- Verticillium wilt (*Verticillium dahliae* - exotic defoliating strains) – already in Australia present on cotton!

**Would you be able to recognise these if they appeared in your grove?**



# The Exotic Plant Pest Hotline

Calls to the Exotic Plant Pest Hotline will connect to an automated system that allows the caller to choose the state or territory that the call relates to. The caller will then be connected to the relevant authority for that jurisdiction where calls will be answered by an experienced person, who will ask some questions to help understand the situation, such as:

- what was seen (describe the pest or send a photo) and when was it first noticed
- where it was found and what it was on
- how many pests are present/how infected is the crop
- how widely distributed it is.

Every report will be taken seriously, checked out and treated confidentially.

**If you suspect a new pest, call the Exotic Plant Pest Hotline**



# Food Safety & Product Quality Risk Management

*Peter McFarlane, OliveCare® Administrator*



The Australian Olive Industry's Code of Best Practice was launched in 2008, expanded, re-branded and re-launched in 2017 as *OliveCare®*.



# What is OliveCare®?

In a high cost producer country such as Australia it is essential that producers are able to compete on product quality rather than on price.

The *OliveCare*® program coverage is now extended from EVOO to include certification of table olives, flavoured olive oils, and other olive products.

*OliveCare*® also encompasses the entire olive supply chain from growers to the market place, including: grove management, olive processing, product storage, retail, food service and export marketing.

*OliveCare*® incorporates the provisions of the Australian Standard for Olive Oils and Olive Pomace Oils (AS5264-2011®), introduced in July 2011; and the Voluntary Industry Standard for Table Olives in Australia (RIRDC 12-111), introduced in 2012.



# What is *OliveCare*®?

The *OliveCare*® Code of Best Practice program provides a quality systems approach to manage risk and underpin product quality, that provides tools to:

- Establish authenticity and quality of Australian olive products;
- Provide surety and build confidence of consumers in Australian olive products;
- Establish a framework that encompasses good business practice with HACCP-style production controls;
- Build olive industry skills and capacity;
- Deal effectively with complaints; and
- Establish a compliance culture within the industry in relation to industry voluntary standards, Australian Consumer Law (ACL), and the ANZFA Food Standards Code.



# OliveCare® Training Program

In addition to offering workshops and seminars, AOA working with River Murray Training (RMT) have developed 'e-learning' modules (comprising a total of 10 on line interactive presentations) with the aim of building industry skills and facilitate implementation of the *OliveCare®* Code of Best Practice.

Modules include Food Safety & Quality, Export Readiness and Sensory Training.

These 6 e-learning modules are linked to Units of Competency from the National Training Framework (NTF), and can lead to a recognised VET qualification or Statements of Attainment eg from the *Certificate III in Food Processing*, or *Certificate IV in Production Horticulture*.

To access the *OliveCare®* e-learning modules, participants need to firstly register with Gillian Ireland at River Murray Training [gillian.ireland@r-m-t.com.au](mailto:gillian.ireland@r-m-t.com.au) or [admin@r-m-t.com.au](mailto:admin@r-m-t.com.au)

For sustainability of the on-line training program a nominal enrolment fee of \$68 will be charged for participants accessing modules.

Participants will be issued with a username and password to log onto website that hosts the AOA on-line training program: <http://www.r-m-t-online.com>



# OliveCare<sup>®</sup> Compliance

All Code Signatories are required to provide annually to the *OliveCare*<sup>®</sup> Administrator evidence of:

- Having a **Product Risk Assurance** or HACCP style food safety / food quality plan - either 'in-house' or as part of a proprietary third party certification arrangement, (template provided), this should include:
  - Use of a **Corrective Action Request (CAR)** procedure to deal with quality complaints, negative feedback, audit failures, on-farm inefficiencies, accidents or lapses in processes, procedures or performance (*template provided*);
  - Using a documented **product trace back system** including unique batch codes, supply chain records and a product recall system in place (*template provided*);
- Using product **Best Before Dates** supported by technical evidence (oxidative stability), and not exceeding 2 years;
- Compliance with Australia New Zealand Food Authority (ANZFA) Food Standards Code, Schedule 20 – **Maximum residue limits**, including keeping spray diary records, and observing Good Agricultural Practice (GMP);



# OliveCare® Compliance

- Undertaking **annual product testing** (at NSW DPI or Modern Olives), meeting AS5264-2011 requirements for classification for each product certified as required under the *OliveCare®* Code of Best Practice, including:
  - **Minimum Oil Chemistry:** Free Fatty Acids (FFA), Peroxide Value (PV), Ultra-Violet Absorption (UV) - ( $\Delta K$ , K232 & K270). These parameters may be tested using NIR for Australian oils where the laboratory has achieved robust calibration;
  - **Highly recommended:** Oil Freshness Testing: Pyropheophytin A (PPP's), 1,2 Diacylglycerols (DAG's), tests which enable an objective calculation of BBD; plus
  - **Sensory assessment** undertaken by NSW DPI or Modern Olives (or through participation in a recognised olive competition);
- Providing a **declaration of EVOO storage conditions**, including control of Heat, Light and Oxygen;
- Having **product labels compliant** with AS5264-2011, Australian Consumer Law (ACL) and *OliveCare®* (providing copies of all product labels to be certified);
- All Signatories are encouraged to implement an **on-farm biosecurity plan** using the Farm Biosecurity Action Planner: <http://www.farmbiosecurity.com.au/planner/>



# OliveCare® Certification

AOA members who are *OliveCare*® Signatories are authorised to apply the following AOA trade marks to their certified products, POS materials and websites in accordance to the rules of use of these logos:



Further information on *OliveCare*® and EVOO is available on the AOA website at: <https://australianolives.com.au>



# OliveCare® Certification

*OliveCare*® certified brands are listed by state of origin on the 'Everyday Australian Extra Virgin' website: [australianextravirgin.com.au/brands/](http://australianextravirgin.com.au/brands/).

*OliveCare*® Signatories: 147 (33%) of an estimated 450 commercial Australian olive producers.

Certified Australian EVOO brands: 144

Certified Imported EVOO brands: 2

Certified Australian Flavoured Olive Oil brands: 21

Certified Australian Table Olive brands: 19

Certified Australian Skin Care Product brands (Pending)

Our aim is to increase producer and supply participation in *OliveCare*® from 150 to 240 over the next 3 years, including recruiting more retailers, food service and exporters.



# Product Quality & Reputational Risk Management

The major risks to olive oil quality to be managed are:

**Fruit damage in the grove** – poor quality olives – diseased, damaged by insect pests or frost.

**Failure to synchronise harvest and processing** – fruit held too long and too hot between harvesting and processing starts to ferment – the shorter and cooler this period the better.

**Poor processing technique** – incorrect malaxing time and temperature, failure to clean machinery between batches.

**Poor oil storage** – failure to rack off sediments, exposure to oxygen by not filling tanks or using other air exclusion methods – more on this in the August OliveCare® News.

**Failure to determine an objective BBD.**

**Unscrupulous traders** – in short crop years buying and selling of lesser quality olive oil to fill orders – always independently test bulk oil quality.

**Poor supply chain handling** – including displaying product near heat and light sources, and failure to efficiently manage stock rotation.



# Factors That Accelerate the Breakdown of EVOO

Factors that accelerate the breakdown of EVOO are well established:

- **Exposure to air (oxidation)** – using permeable plastic bulk storage containers, or partially filled storage containers, without using a floating lid or inert gas blanket.
- **Heat** – using uninsulated tanks and storage sheds.
- **Light** – using transparent containers – don't use 1000 Lit IBC's to store olive oil.
- **Contact with sediments and water (hydrolysis)** – need to rack-off tanks regularly during settling.
- **Delayed processing of harvested fruit** – fermentation will occur over time (best if fruit harvested at night and processed within 4-12 hours).
- **Processing damaged (high FFA) fruit** (diseased, mummified, split, over-ripe, frosted) will result in defective oils.
- **Variety and style** – oxidative stability - mild (low polyphenol), low oleic acid olive oils are less stable, even under ideal storage conditions may not last a year!
- **Olio Nuovo (new oil) style** is freshly pressed olive oil with incomplete settling; the higher moisture content of these oils causes hydrolysis and a typical shelf life of only 3 to 6 months.
- **Time** – waiting for a better price? Unlike wine EVOO doesn't get better with age – best to move it as quickly as possible.



# Olive Oil Defects

## The big 5:

- **Fusty:** A flavour defect attributable to poor storage conditions of the olives, usually promoting the bacterial growth of the Clostridium and Pseudomonas genera.
- **Musty - humid:** A flavour defect occurring when low temperatures and high humidity promote mould growth, mainly of the Aspergillus and Penicilium genera.
- **Winey - vinegary:** A flavour defect caused by storage condition of the olives that causes aerobic fermentation by the growth of yeasts that produce ethanol, acetic acid, and ethyl acetate.
- **Muddy sediment:** A flavour defect caused by storage in contact with oil sediment for long periods of time.
- **Rancid:** A flavour defect caused by the oxidation of the oil and subsequent formation of aldehydes during the production process giving the oil an oxidized flavour and odour.

## Other common defects:

- **Frosted (wet wood):** Characteristic flavour of oils extracted from olives which have been injured by frost while on the tree.
- **Heated (Burnt):** Characteristic flavour of oils caused by excessive and/or prolonged heating during processing, particularly when the paste is mixed under unsuitable thermal conditions.
- **Metallic:** Characteristic of oil which has been in prolonged contact with (new) metallic surfaces during crushing, mixing, pressing or storage.



# Fresh and Well Processed Olive Oils

## Research evidence suggests:

- Fresh and well processed oils have FFA's of  $\leq 0.4$  (Australian Standard  $\leq 0.8$ )
- Fresh and well processed oils have PV's of  $\leq 12$  (Australian Standard  $\leq 20$ )
- It is expected that fresh and well processed oils should show K232 values under 2.00 and K270 values under 0.18 (Australian Standard K232 values  $\leq 2.50$  and K270 values  $\leq 0.22$  )
- Fresh good quality oils will have around 90% of 1,2 DAGs and will decrease 20 - 25 % per year, under proper storage conditions. (Australian Standard  $\geq 35$ )
- Fresh good quality oils will have  $< 1$  % of PPPs and will increase 6 – 8 % per year, under proper storage conditions. (Australian Standard  $\leq 17$ )
- EVOO quality oils must have no defects and must exhibit the fruity attribute.



# OliveCare<sup>®</sup> declaration of EVOO storage conditions

## Taking into account current concerns regarding olive oil storage conditions:

Before issuing EVOO Compliance Certificates based on current season oil laboratory test reports, Signatories are required to complete the following declaration covering each EVOO product to be certified:

### For storage of bulk olive oil:

Do you store your oil in stainless steel tanks? (YES / NO) – If not what storage vessels do you use? – Provide details

Do you use an inert gas blanket or a floating lid? (YES / NO) – If not how do you control exposure to air? – Provide details

Do you store your oil <18 degrees C ? (YES / NO) – What is the storage temperature range for your EVOO – Provide details

Does your EVOO contain >70% Oleic Acid? (YES / NO) - Have you tested the fatty acid profile (FAP) of your EVOO products? (YES / NO), list varieties grown:

Do you 'rack-off' sediments and water when settling your new season olive oil? (YES / NO) – What is your 'rack-off' schedule? – Provide details

### For storage of pre-packaged olive oil:

Warehouse storage conditions - do you store your oil <18 degrees C ? (YES / NO) – What is the storage temperature range for your EVOO – Provide details

What steps do you take to manage product exposure to heat during road / air/ sea freight? Eg do you use temperature controlled transport, thermal blanket protection and temperature logging?

### Olive oil sourced from:

### Certified Product Labels:

Signatory Name:

Date:

Please complete and return to the OliveCare<sup>®</sup> Administrator at: [peter@mc.com.au](mailto:peter@mc.com.au)



# OliveCare® Why Certified 'Freshness Tested'



Ten *OliveCare*® Signatories are now AEV® Certified Freshness Tested with potential Best Before Dates objectively established between 18 and 30 months from 'freshness testing' (providing the product continues to be kept under recommended storage conditions).



# OliveCare® Certification of EVOO



**AUSTRALIAN**  
**EXTRA VIRGIN**  
*Certified*  
**FRESHNESS TESTED™**

This certificate confirms that:  
**Saluté Oliva Pty Ltd**  
Is a signatory to the Australian Olive Association's Code of Best Practice (*OliveCare*®).  
The Extra Virgin Olive Oil that accompanies this certificate, identified as:  
"Saluté Oliva EVOO Harvest 2018"  
This olive oil meets the specifications of Australian Extra Virgin Olive Oil under the Australian Standard (AS5264-2011®) and *OliveCare*®.

**Certificate issued by:**  
Australian Olive Association Ltd (AOA).  
A.B.N. 57 072 977 489  
PO Box 6661  
Baulkham Hills, NSW 2153

**AOA Office:**  
Phone: 0478 606 145  
E: [secretariat@australianolives.com.au](mailto:secretariat@australianolives.com.au)  
Code Administrator:  
Phone: 0418 839 836  
E: [peter@au-thentic.net](mailto:peter@au-thentic.net)

**Certificate No. 1039**  
Expires: **30 November 2020**  
COP ID #: **148**  
Harvest Year: **2018**  
AOA Membership #: **A2758**  
Laboratory Test Results: **AU 18/0669/1**  
Signed:   
**CHIEF EXECUTIVE OFFICER**



**Australian Extra Virgin olive oil**  
*Everyday*



# OliveCare<sup>®</sup> Certification of EVOO

## FRESHNESS TESTING:

Shelf-life is the length of time, under normal storage conditions, within which no off-flavours or defects are developed and quality parameters such as peroxide value and specific absorbance are retained within accepted limits of the relevant standards.

Potential BBD is best determined from the lowest value derived from the following 3 estimations: Rancimat<sup>®</sup> (Induction time), PPP and DAG testing:

- Hours of induction time (IND) at 110°C x 1 = expected shelf life (in months)
- (17.0% - PPPs) / 0.6% = expected shelf life (in months)
- (DAGs – 35.0%) / \*FFA factor = expected shelf life (in months)

\*FFA factor = 1.7% (if FFA < 0.4%); 2.1% (if 0.4% < FFA < 0.6%); or 2.5% (if FFA > 0.6%)

**Note 1:** A new cheaper NIR ‘freshness testing’ method is in development.

**Note 2:** Under the Australian Standard, the stated BBD may not exceed 2 years.



# OliveCare<sup>®</sup> Certification of EVOO

## FRESHNESS TESTING:

*Example:* Oil “A” was analysed prior to being bottled and showed the following analytical results:

IND (@ 110°C):	21 hours
PPPs:	5.1%
DAGs:	63.0%
FFA:	0.24%

Applying the above formula we would have the following analysis:

IND:	$(21 \times 1) = 21;$	predicted 21 months
PPPs:	$(17.0\% - 5.1\%) / 0.6\% = 19.8;$	predicted 20 months
DAGs:	$(63.0\% - 35.0\%) / 1.7\% = 16.4;$	predicted 16 months.

The DAGs prediction is the lowest figure, therefore this oil should have an expected shelf life of **16 months** from the date of testing (providing the oil is stored under optimal conditions).



# Australian Market Survey Results

Cumulative results of over 5 years of Australian 'off the shelf' market survey testing, undertaken from July 2012 to July 2017, reveal a disappointingly high product failure rate:

- 26 (22%) of the 129 OliveCare® certified brand samples tested failed to meet the requirements for EVOO classification under AS5264-2011.
- 42 (41%) of the 102 Australian non- certified brand samples tested failed to meet the requirements for EVOO classification under AS5264-2011.
- 135 (89%) of the 151 Imported brand samples tested failed to meet the requirements for EVOO classification under AS5264-2011.



# Australian Market Survey Results

## Failed Parameters:

**Sensory Defects (all standards):** A total of 139 (36%) of the 382 products (42 (22%) Australian and 97 (51%) imported) exhibited negative sensory attributes (defects).

**Chemical Analysis (all standards):** A total of 56 (15%) of products (29 (15%) Australian and 27 (14%) imported) failed one or more of the chemical test parameters.

**Freshness Analysis (Australian standard only):** A total of 121 (32%) products (46 (24%) Australian and 75 (39% imported) failed freshness testing: Pyropheophytin A (PPP's), and / or 1,2 Diacylglycerols (DAG's).



# Take Home Messages

- *Olivecare*<sup>®</sup> Certified EVOO products have a superior record of compliance with olive oil standards over other Australian or imported products, however there is plenty of room for improvement.
- The industry practice of routinely applying a 2 year 'Best Before Date' on EVOO products without supporting test data is potentially misleading and is strongly discouraged.
- The use of harvest year on product labels is strongly encouraged to guide consumers in their choice of the freshest EVOO product.
- Australian market of the shelf survey testing of EVOO products has found that many products have less than 12 months of potential shelf life, sometimes as low as only 1 month.
- 'Freshness testing' of new season Australian EVOO products found that some products have less than the stated 24 months of potential shelf life, sometimes as low as 12 months.



# Take Home Messages

- The application of ‘freshness testing’ of EVOO is strongly encouraged to assist producers in providing a ‘cast iron’ guarantee to consumers that their product meets the requirements for EVOO classification under AS5264-2011, up to the stated BBD.  
**Note:** A new cheaper NIR ‘freshness testing’ method is in development.
- To assist in implementing Good Agricultural Practice (GAP), and Good Manufacturing Practice (GMP), AOA has developed this Hazard Analysis Critical Control Point (HACCP) style Food Quality Plan template for EVOO for use by *OliveCare*® Signatories.
- The *OliveCare*® Administrator works closely with all Signatories including those with test failures to help identify causal factors and set rectification requirements, as well as providing constructive feedback to other brand owners.
- *OliveCare*® Signatories receive a monthly newsletter packed with useful information and tips on product certification, grove management best practice, olive oil and table olive processing best practice, product storage best practice, and product distribution and handling best practice.



# Regulatory Risk Management

*Peter McFarlane, Peter McFarlane, AOA Agri-chemical Permits Co-ordinator*



Maintaining producer access to APVMA registered agri-chemicals, and 'Minor Use Permits' for use in olive groves.



# Risks When Using Agri-chemicals

The risks associated with the use of agri-chemicals – pesticides, fungicides, herbicides and crop regulation agents include:

**Legal:** Agri-chemicals applied to a crop may only be used in accordance with label or permit conditions approved by the APVMA, or as otherwise allowed under state control of use legislation. The recommended chemical use is designed to ensure any chemical residues in food products are within legislated MRLs.

**Operator Safety:** Agri-chemicals may be toxic to humans and there are legal OH&S and operator training considerations for staff involved in spray application.

**Food Safety:** Agri-chemical may not be applied to a crop unless FSANZ has established a MRL for that chemical.

**Environment:** Agri-chemicals may be toxic to other organisms in the environment, requiring strict conditions to be set for application of chemicals, to prevent spray drift into reserves and non-target crops, and contamination of water courses.



# Risks When Using Agri-chemicals

The risks associated with the use of agri-chemicals (continued)

**Efficacy:** It is important that the chemical selected is efficacious to control the target pest. Frequent use of a chemical may lead to resistance to this chemical by the target pest. Growers should follow recommended resistance management strategies.

**IPDM:** Not all agri-chemicals are compatible with IPDM practices, as they may be toxic to beneficial insects.

**Organic Certification:** Limits application to a list of approved chemicals, the use of the term 'organic' on product labels places responsibility on the producer to ensure there are no detectible chemical residues.

**Always check the permit and label conditions for withholding periods before using any chemicals.**



# Approved Agri-chemicals for use on Olives

A list of **chemical permits** (off-label use) issued by APVMA for the control of major olive pests and diseases, and registered chemicals for use on olives is available on the AOA website at:

<https://australianolives.com.au/chemical-permits/>

All current minor use permits for the industry, and the conditions of their use, are searchable at

<https://portal.apvma.gov.au/permits>



# Approved Agri-chemicals for use on Olives

AOA works closely with Hort Innovation on olive data generation projects to maintain permits to enable continuing use of useful agri-chemicals on olives, including:

- PER14908 Pyraclostrobin + Metiram (Aero) / olives / **anthracnose**. Residue trials undertaken. Permit extended to 31 March 2020
- PER14897 Clothianidin (Samurai) / olives / **olive lace bug**. Residue trials undertaken. Permit extended to 31 March 2023
- PER81949 Esfenvalerate (Sumi-Alpha Flex Insecticide) olives / **olive lace bug**. Residue trials undertaken. Permit extended to 30 November 2021
- PER81870 Pyrethrins (Pyganic Organic Insecticide) / Olives / **olive lace bug**. Residue trials undertaken. Permit extended to 31 October 2019
- Alpha-cypermethrin / Olives / **Curculio Beetle/Apple weevil & Cutworms**. Residue trials undertaken. Permit extended to 30 November 2021



# Pending Chemical Permits for use on Olives

Hort Innovation is currently working with research providers on a new permit application for use on olives:

- Mancozeb / Olives / **Anthracnose**. Trial work contracted Dec-2017, due for completion Jun-2019



# New Chemical Registrations for use on Olives

AOA also works closely with Hort Innovation to select high priority data generation projects to register new chemicals for use on olives, including:

ST16006 – A multi-industry data generation project contracted by Hort Innovation in February 2017, will undertake studies required for **new label registrations** with Bayer and ADAMA for the following:

- Bayer Luna Privilege (Fluopyram) for the control of **anthracnose** in olives
- Adama – Trivor (acetamiprid 186 g/L + pyriproxyfen 124 g/L) for the control of **olive lace bug and scale** in olives.

Both data generation projects are due for completion in February 2020 and the data generated will be provided to ADAMA and Bayer to make the regulatory submissions to the APVMA for label registrations for olives.



# New Chemical Registrations for use on Olives

ST17000 – A multi-industry data generation project contracted by Hort Innovation in April 2018, will undertake generation of residue, efficacy and crop safety data in olives required for the following **new label registrations** with Bayer:

- Bayer coded product DC-163 for the control of **apple weevil (curculio beetle)** on olives
- Bayer Flupyradifurone (Sivanto) for the control of **olive lace bug**

Both data generation projects are due for completion in November 2020 and the data generated will be provided to Bayer to make the regulatory submissions to the APVMA for label registration for olives.

Hort Innovation data generation projects are funded by the Australian Government through Assistance Grants (Access to industry Priority Uses of Agvet Chemicals).



# ***Grove Management Checklist in Support Of Healthy Trees And Implementation of an IPDM Program,***

Michael Thomsett, Horticultural Consultant and AOA Director, NSW

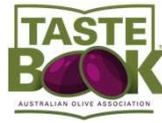


# Michael Thomsett

Horticultural Consultant

Email: [thomsett.mail@gmail.com](mailto:thomsett.mail@gmail.com)

Ph: 0427373111



Telstra 9:07 am



© TreeYo Permaculture  
[www.treeyopermaculture.com](http://www.treeyopermaculture.com)

# Irrigation

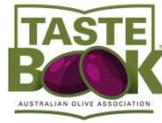
- Strategies for efficiencies
- System design for specific suitability
  - How much? When?
- Benefits of soil moisture monitoring





# Soil Health and Fertility

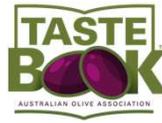
- ❑ Managing Organic matter in the living soil
- ❑ Methods and Options for improved fertility





# Tree Management & Pruning

- ❑ Lessons for Successful Establishment
- ❑ Managing the Canopy - Pruning Strategies for your Trees
- ❑ Tree Care – post Harvest & post Pruning
- ❑ Pollination – How can I help?



# Cleft graft – 18 months



Other Pollination strategies trialled in the Pyrethrum daisy industry may be worth a go



# DRONES in GROVES

**ORTHBOUND HORTICULTURE**

**Michael Thomsett**

# Getting started

- CASA RULES
- PRIVACY
- CAN I FLY THERE



2:33

Can I Fly There?

**You can fly here**

You are permitted to fly here provided you follow the standard conditions outlined by CASA. Do not exceed 120 metres (400FT) above ground level.

The 'Can I fly there?' app covers aviation rules about where you can and can't fly your drone to ensure the safety of manned aircraft and people on the ground.

Check before you fly! There may be other rules you must comply with, such as local government/council rules, national parks and privacy.

[LEARN MORE](#) [GOT IT](#)

Drone Complier

16.2°C

Prices Rd, Coolamb, Estella, Booroo, Avocet Dr, Pine Gully Rd, McKee, rical, lg, McKee



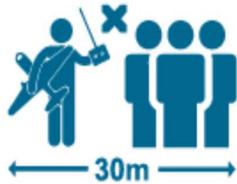
# Rules

As well as flying in a safe location, you must also follow these rules:



You must only fly during the day and keep your drone within visual line-of-sight. This means being able to see the aircraft with your own eyes (rather than through a device) at all times.

You must not fly your drone higher than 120 metres (400ft) above the ground.



You must keep your drone at least 30 metres away from other people.

You must not fly your RPA over or near an area affecting public safety or where emergency operations are underway (without prior approval). This could include situations such as a car crash, police operations, a fire and associated firefighting efforts, and search and rescue.



You must only fly one RPA at a time.

You must not fly over or above people. This could include beaches, parks, events, or sport ovals where there is a game in progress.



If your drone weighs more than 100g, you must keep at least 5.5km away from **controlled aerodromes**.



Flying within 5.5km of a **non-controlled aerodrome** or **helicopter landing site (HLS)** is possible, but only if no manned aircraft are operating to or from the aerodrome. If you become aware of manned aircraft operating to or from the aerodrome/HLS, you must manoeuvre away from the aircraft

and land as soon as safely possible.

It is illegal to fly for money or economic reward unless you have a drone operators certificate, or you are flying an excluded RPA in the sub-2kg or private landholder category.



Respect personal privacy: Don't record or photograph people without their consent - this may breach state laws.

Remember, you must not operate your drone in a way that creates a hazard to another aircraft, person or property.



# What can a drone do for me in my grove?

- SURVEY AND MONITORING
- DESIGN AND LAYOUT
- DETECT PLANT STRESS –PESTS AND DISEASE OUTBREAKS AND MUCH MORE
- MARKETING
- COLLECT VALUABLE DATA
- TRACK CHANGES OVER TIME











AUSTRALIAN & NEW ZEALAND  
**Olivegrower  
& processor**  
NATIONAL JOURNAL OF THE OLIVE INDUSTRY



**Field days provide  
missing link**

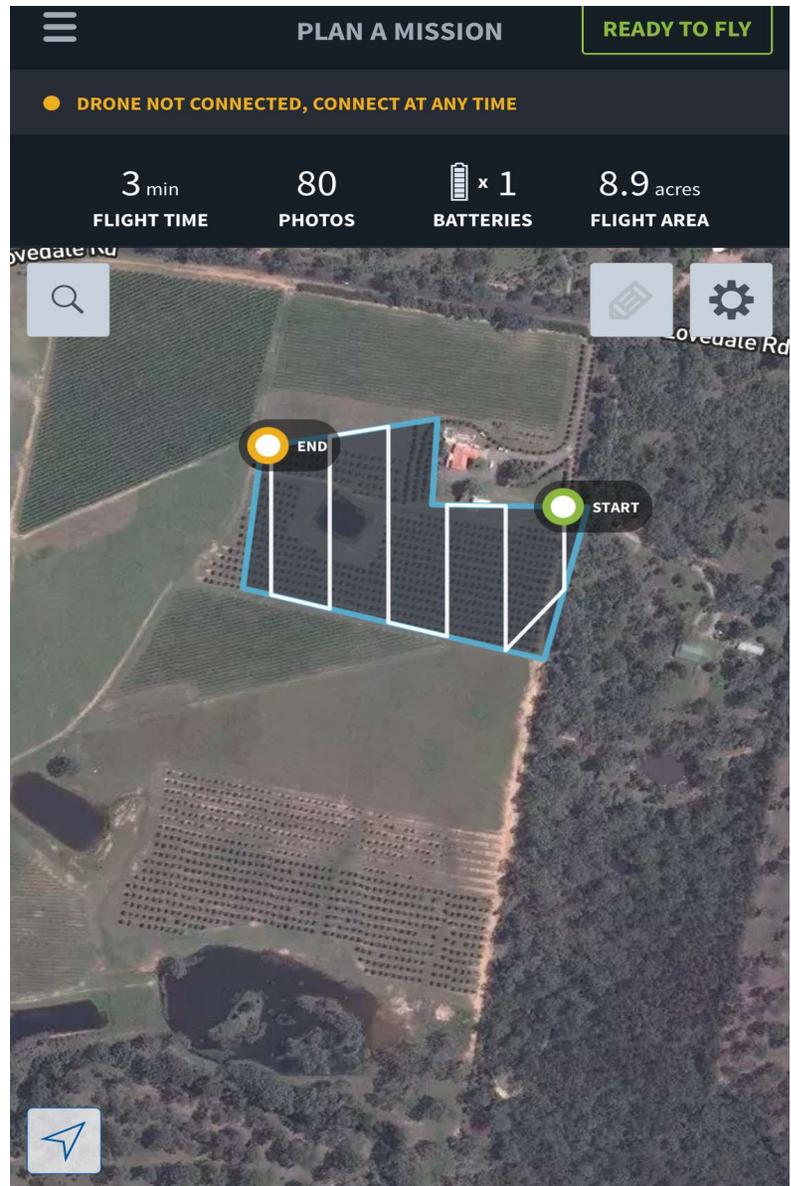
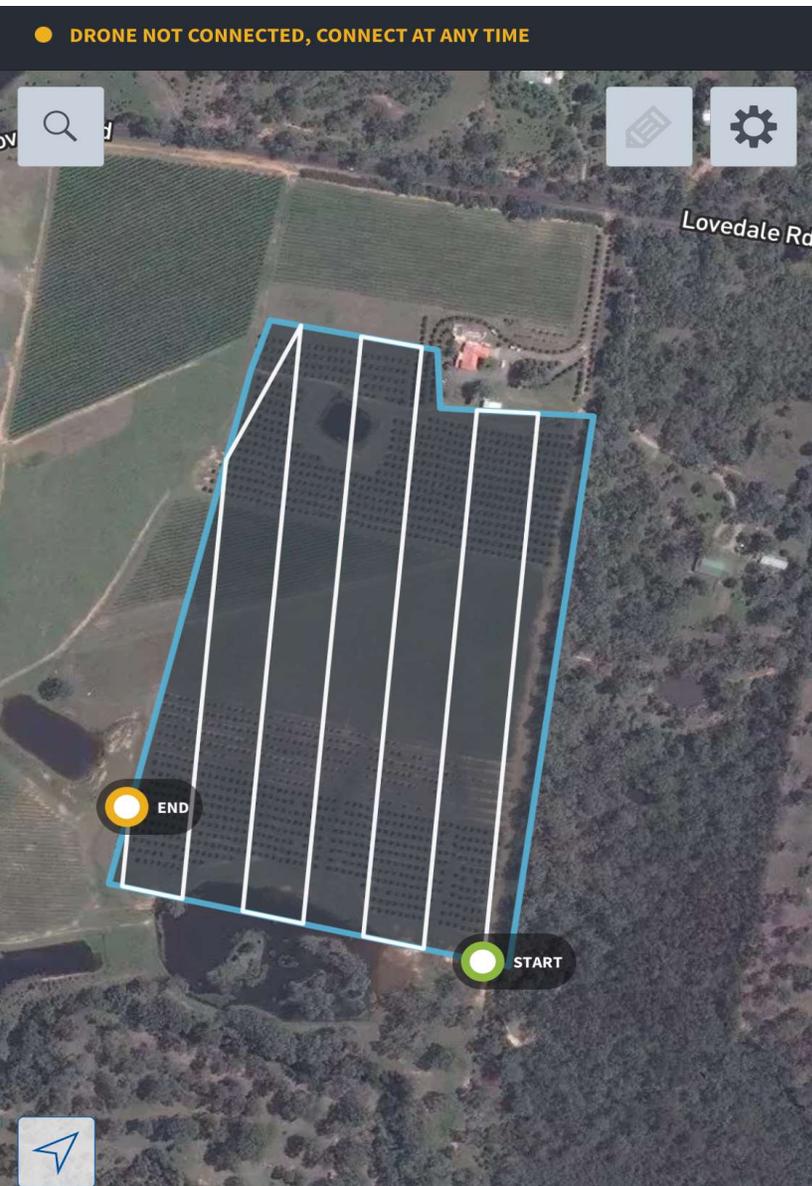
**September** 2018

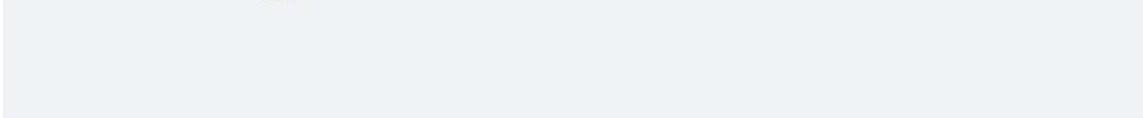
Conference preview  
Harvest report: Tas & NZ  
Pruning  
Olive lace bug management



# Apps and software

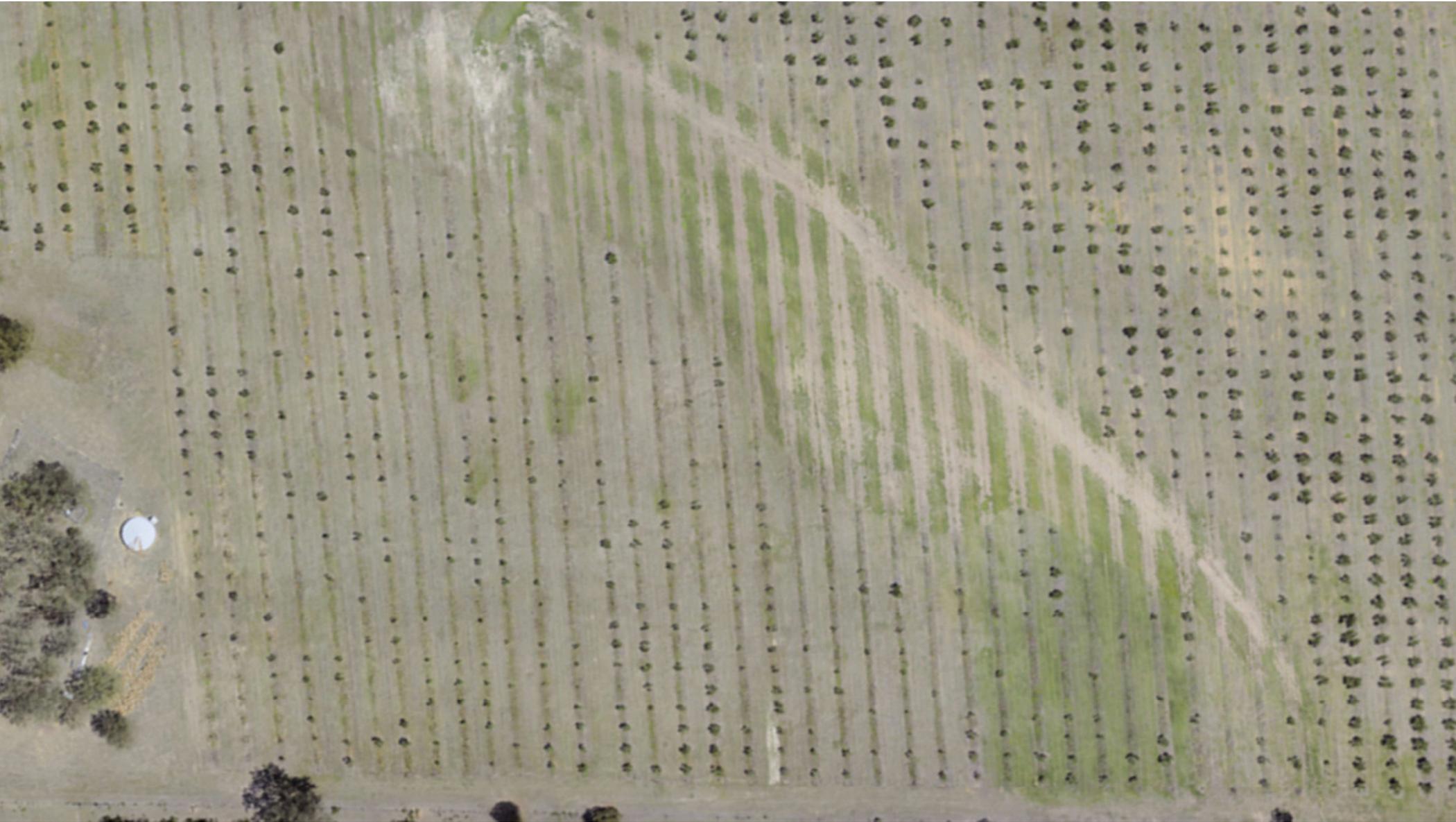
- SKY CATCH , DRONE DEPLOY, AND LITCHI - MAPPING MISSION APPS
- Sensors and Analytics. **Slantrange**











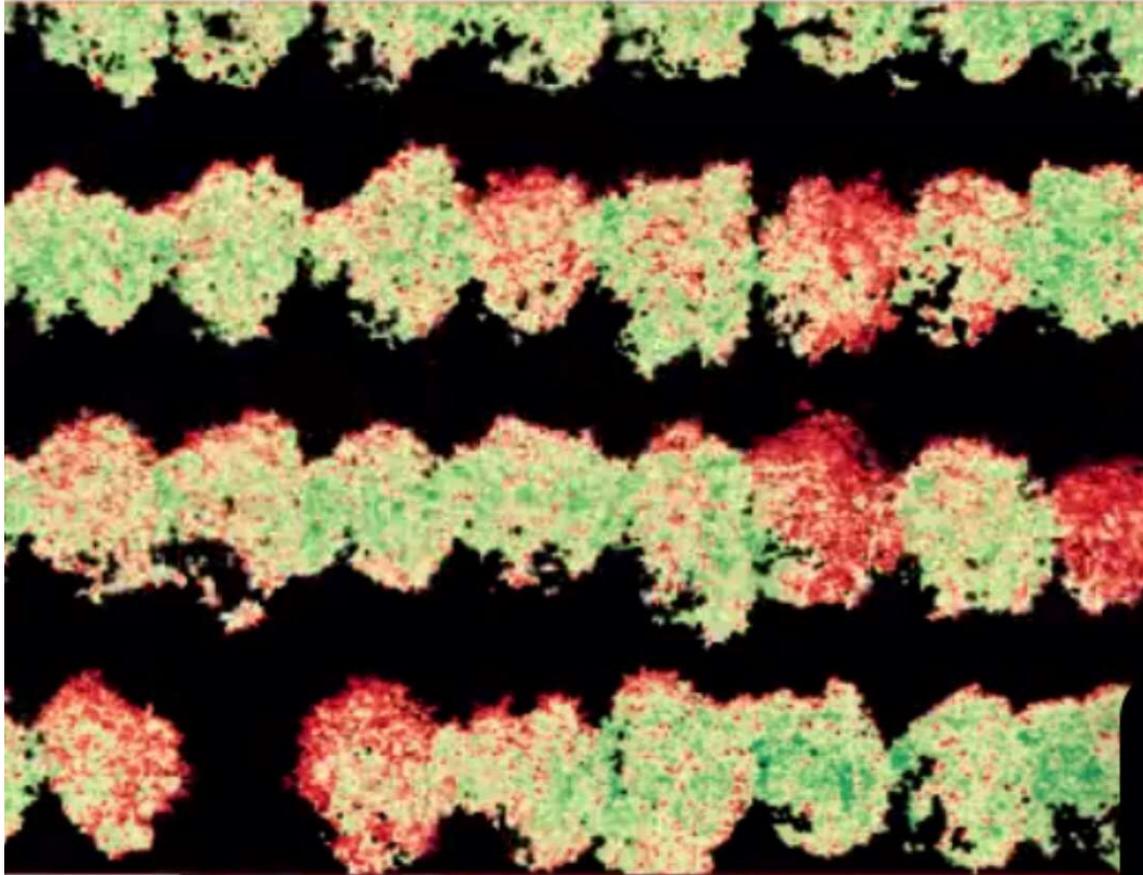
# SlantRange Solution

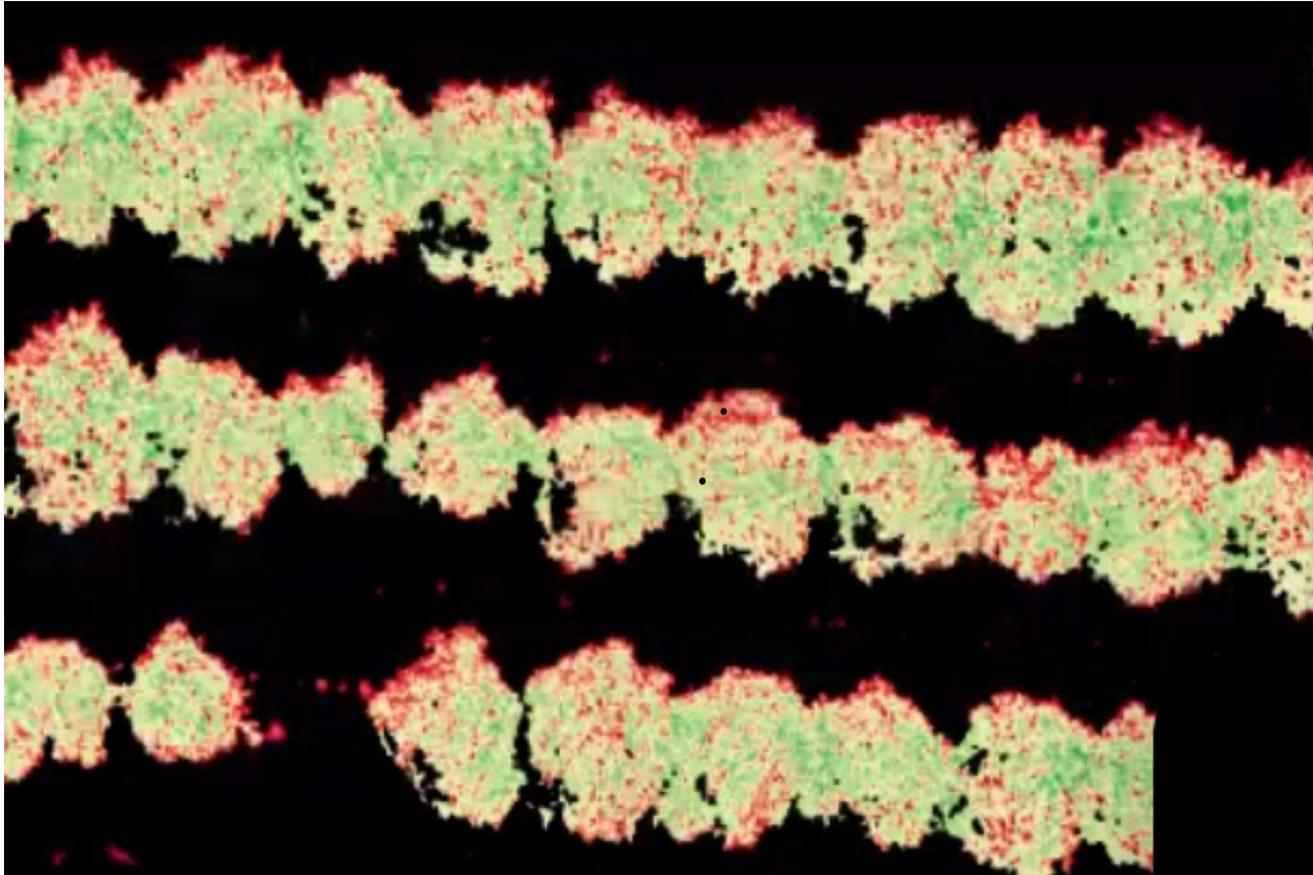
Multispectral Sensor

Analytics Software

Data Services











# EARTHBOUND HORTICULTURE

- Contact : MICHAEL THOMSETT
- PH : 0427 373 111
- Email : [earthboundhorticulture@gmail.com](mailto:earthboundhorticulture@gmail.com)
- [thomsett.mail@gmail.com](mailto:thomsett.mail@gmail.com)

## ***Product Quality improvement***

- Australian International Olive Awards and Regional Olive Competitions;
  - The *Tastebook*<sup>™</sup> Sensory Training Program

Michael Thomsett and Peter McFarlane





[The Awards](#) ▾

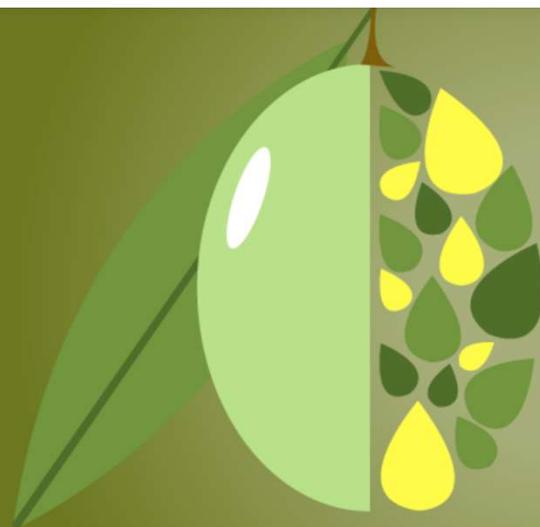
[Entering the Awards](#) ▾

[Meet Our Judges](#) ▾

[Results](#) ▾

[About the AOA](#)

[Login](#)



# The AUSTRALIAN INTERNATIONAL Olive Awards

[Enter your Extra  
Virgin Olive Oil](#)

[Enter your  
Flavoured Olive Oil](#)

[Enter your Table  
Olives here](#)



[The Awards](#) ▾

[Entering the Awards](#) ▾

[Meet Our Judges](#) ▾

[Results](#) ▾

[About the AOA](#)

[Login](#)



# EVOO Competition Information

**To complete your online entry for the AIOA Extra Virgin Olive Oil Competition click here :**

**[for AOA Members](#) | [for non-AOA Members](#)**

[Extra Virgin Olive Oil Classes](#)

**CLASS 1 - Delicate**

**CLASS 2 - Medium**

**CLASS 3 - Robust**

# Tastebook™ Sensory Training

*Peter McFarlane, AOA Tastebook™ Co-ordinator*



Tastebook™ is a sensory training initiative involving appreciating, describing and understanding how to improve the quality of EVOO and table olives.



# What is Tastebook™ ?

- The Tastebook™ sensory training program includes tasting of olive oils and table olives (later on we plan to include flavoured olive oil and other olive products).
- The aim is expose competition judges, olive producers and other olive enthusiasts to regular sensory experiences and palate calibration for olive products, and to assist in gaining an understanding of how to achieve product excellence, providing feedback on the style, quality and uses of the sample products.
- Tastebook™ aims to encourage a conversation on judging methodology and enables benchmarking of participant performance against senior judges. Participants are also encouraged to benchmark their own products against the samples provided.



# What is Tastebook™ ?

- Tastebook™ participants provide feedback via SurveyMonkey, and for each round a report is prepared by sensory scientist Soumi Paul Mukhopadhyay of DPI Wagga Wagga, for publication in AOA's Australian & New Zealand Olivegrower & Processor© magazine, with highlights in Friday Olive Extracts (FOE)©.
- Tastebook™ is a component of a broader professional development platform for competition judges that includes Masterclasses for EVOO and table olive judging as well as annual refresher courses.
- Tastebook™ integrates with OliveCare® e-learning modules linked to Units of Competency from the National Training Framework (NTF), and can lead to a recognised VET qualification or Statements of Attainment.
- E-learning participants will need to register with River Murray Training [admin@r-m-t.com.au](mailto:admin@r-m-t.com.au) and will be issued with a username and password to log onto the website that hosts the on-line training program: <http://www.r-m-t-online.com>



# What is Tastebook™ ?

After three successful rounds of Tastebook™ the AOA Board has made a decision to implement a cost recovery charge for participation in Tastebook™.

Registration now occurs on-line at OliveBiz®, using the Eventbrite payment facility, with the following fee structure (there is no longer a 'free' list):

- Domestic participants:
  - AOA Members: \$25
  - Non Members: \$30
- International participants: All countries: \$50

**Register for Tastebook™ Round 5 on the OliveBiz® Website: Opening TBA**

<https://olivebiz.com.au/tastebook/>

Previous Tastebook™ reports and training materials from rounds 1, 2, 3 and 4 are available for review on the AOA website under 'Members Lounge' at: <https://australianolives.com.au/tastebook/>

**Happy Tastebooking!**



Thank You !



# ***Market Development***

- Olive Wellness Institute
- Industry Generic Promotions Programs
- The Everyday Campaign

Abby Dolphin, OWI Coordinator, BHSc Naturopathy

Greg Seymour, AOA CEO, Chair of CAE Committee





**Olive Wellness**  
INSTITUTE™

# The olive tree – nature's ancient source of health and wellness

Presentation from the Olive Wellness Institute

**Hort  
Innovation**  
Strategic levy investment

**OLIVE  
FUND**

## OUR MISSION

To increase awareness of Extra Virgin Olive Oil and other olive products by gathering, sharing and promoting expert, credible and evidence-based information on their nutrition, health and wellness benefits.



# About the Olive Wellness Institute

## OUR STORY

The Olive Wellness Institute is a science repository on the nutrition, health and wellness benefits of olives and olive products, which is all subject to extensive peer review. The institute is guided by scientific experts that specialise in the nutrition, health and wellness benefits related to olive products



### CREDIBILITY

All information developed and distributed by the Olive Wellness Institute is subject to extensive review by the Advisory Panel as a result of our evidence based, science-first approach.



### EVIDENCE BASED

The Olive Wellness Institute is strictly committed to delivering evidence-based information informed by high-level research standards.



### EXPERTISE

The Olive Wellness Institute is guided by leading scientists, researchers and health professionals who have research expertise in olives, olive oil and its uses in traditional diets.



# ADVISORY PANEL

The OWI has an expert Advisory Panel, to provide insight and guidance, and to ensure a high level of scientific direction.

The functions of the Advisory Panel members are to provide evidence-based guidance to the OWI, to ensure:

- The OWI is viewed as a highly credible, evidence based source of olive health and wellness information.
- All information that is prepared and released by OWI is credible, non-biased and scientifically sound.



**Professor Catherine  
Itsiopoulos (Chair)**



**Associate Professor  
Mary Flynn**



**Dr. Simon Poole**



**Professor  
Russell Keast**



**Dr Michael Kingsley**



**Dr Selina Wang**



**Dr Flavia Fayet-Moore**



## ABOUT US – how did it start

- The Olive Wellness Institute™ is a social responsibility venture, sponsored by Boundary Bend Limited.
- Leading producer of premium Extra Virgin Olive Oil with olive groves and olive mills in Australia and California USA,
- Boundary Bend Limited has a focus on improving the health and wellbeing of consumers around the world through the consumption of high quality and nutritious plant-based products sourced from the olive tree.

- 
- Funded by Hort Innovation, using the Olive Fund research and development levy and contributions from the Australian Government.
  - Hort Innovation is the grower owned, not-for-profit research and development corporation for Australian horticulture.
  - The strategic levy investment project Educating Health Professionals about Australian Olive Products OL17002 is part of the Hort Innovation Olive Fund



**BOUNDARY BEND  
LIMITED**

Australia's premier olive company

**Hort  
Innovation**  
Strategic levy investment

**OLIVE  
FUND**



[Watch the Olive Wellness Institute Preview Video](#)



[Watch the Olive Wellness Institute Awareness Event Video](#)



# What's available on the Olive Wellness Institute website?

## Extra Virgin Olive oil & Olive Leaf

- ✓ Health Benefits
- ✓ Grades
- ✓ Bioactive compounds
- ✓ Production
- ✓ Myths & Facts
- ✓ Fat profile



Introduction to Olive Oil

## GRADES OF OLIVE OIL

Natural Olive Oils

<b>EXTRA VIRGIN OLIVE OIL</b> Highest grade of olive oil High in natural antioxidants and polyphenols Trans fat free	<b>VIRGIN OLIVE OIL</b> Lower grade than EVOO Moderately high in natural antioxidants Considered less healthy than EVOO	<b>LAMPANTE OLIVE OIL</b> Not fit for consumption without further processing Only intended for refining or technical use
-------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------

Refined Olive Oils and blends

<b>REFINED OLIVE OIL</b> Obtained from natural olive oils and then refined No natural antioxidants High in trans fats	<b>OLIVE OIL</b> Composed of refined olive oil and EVOO or VOO Typically contains 5–15% of EVOO and/or VOO	<b>EXTRA LIGHT &amp; PURE OLIVE OIL</b> Paler colour Similar to olive oil Low in flavour and antioxidants (not in calories)
--------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------

Pomace (waste) Olive Oil

<b>CRUDE OLIVE-POMACE OIL</b> Obtained from treating olive pomace with solvents/physical treatments For refining or technical use only	<b>REFINED OLIVE-POMACE OIL</b> Oil produced from refining crude olive-pomace oil High in trans fats No natural antioxidants	<b>OLIVE-POMACE OIL</b> Blend of refined olive-pomace oil and EVOO or VOO
----------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------

Olive Wellness INSTITUTE™

EVOO = Extra Virgin olive oil    VOO = Virgin olive oil



## Articles

### HOW THE MEDITERRANEAN DIET AND EXTRA VIRGIN OLIVE OIL AID IN THE PREVENTION AND

The prevalence of diabetes has more than tripled over the last 3 decades, with around 1.2 million people...

WRITTEN BY: JACQUE PLOZZA



OLIVE WELLNESS ARTICLE

### 11 HEALTH BENEFITS OF EXTRA VIRGIN OLIVE OIL THAT YOU CAN'T IGNORE

In this article we're looking at the major health benefits of adding Extra Virgin Olive Oil to your diet...

WRITTEN BY: JOE LEECH



OLIVE WELLNESS ARTICLE

CATEGORIES: ANTIOXIDANT, CARDIOVASCULAR HEALTH, DIABETES, INFLAMMATION, MEDITERRANEAN DIET, OLIVE BY-PRODUCTS, OLIVE OIL, WEIGHT MANAGEMENT

### SHOWDOWN: WHAT IS THE BEST OIL FOR COOKING?

This article examines the factors that influence how an oil reacts at high temperatures, and reveals what...

WRITTEN BY: JOE LEECH



OLIVE WELLNESS ARTICLE

### NEUROPROTECTIVE EFFECTS OF EXTRA-VIRGIN OLIVE OIL AND ITS COMPONENT OLEOCANTHOL

Extra-virgin olive oil (EVOO) has many health promoting effects. Among these health benefits, supported by...

WRITTEN BY: AMAL KADDOURI



OLIVE WELLNESS ARTICLE

## A GUIDE TO COMMON COOKING OILS

Cooking oil is a basic and essential ingredient in every kitchen, and whether you're baking, sautéing,...

WRITTEN BY: KATHLEEN ALLEAUME

## Myths vs Facts

**Myth: You cannot cook with (heat) Extra Virgin Olive Oil**

This is incorrect. It is safe and suitable to cook with a high quality Extra Virgin Olive Oil. It can help to protect the naturally stable oil when heated, making Extra Virgin Olive Oil...



OLIVE WELLNESS ARTICLE  
VIEW OLIVE WELLNESS ARTICLE

## Cooking with Extra Virgin Olive Oil

A recently published research paper assessed the most common supermarket cooking oils, and determined which is the most suitable for use when cooking.



OILS TESTED:	TESTS PERFORMED:	MEASUREMENTS:
<ul style="list-style-type: none"> <li>Extra Virgin Olive Oil (EVOO)</li> <li>Virgin Olive Oil (refined blend)</li> <li>Canola Oil</li> <li>Rice Bran Oil</li> <li>Grapeseed Oil</li> <li>Cocconut Oil</li> <li>Peanut Oil</li> <li>Sunflower Oil</li> <li>Avocado Oil</li> </ul>	<ul style="list-style-type: none"> <li>240°C: Oils heated gradually (over 20 minutes) from 25 to 240°C</li> <li>180°C for 6 hours: Oils heated at 180°C for 6 hours</li> </ul>	<ul style="list-style-type: none"> <li>Polar compounds - Group of substances commonly measured in cooking oil as an indicator of the oil degradation. Levels above 25% are considered unsafe.</li> <li>Smoke point - the temperature at which the oil produces a thin, continuous stream of bluish smoke.</li> <li>Trans fats - unhealthy fats that have a negative impact on health.</li> </ul>

**OUTCOMES**

- Cooking oil smoke point is NOT the best way to decide if an oil is suitable for cooking at high temperatures, and for repeated use in a commercial kitchen.
  - The initial smoke point of the cooking oil did NOT correlate with the stability of the oil, and the final levels of polar compounds after the heating trials.
- Oxidative stability is the most important factor in determining the safety and suitability of an oil when used for cooking.
  - More stable oils will produce less polar compounds when heated.

**KEY RESULTS:**

EVOO was the most stable oil of those tested. EVOO yielded lower levels of polar compounds and trans fats when compared with other oils - Canola Oil, Grapeseed Oil and Rice Bran Oil performed the worst and produced very high levels of polar compounds and trans fats. EVOO is naturally high in antioxidants which contributes to the stability of the oil when heated.

**This shows that EVOO is the safest and most stable oil to cook with**

Dr. Alison F. Goullamian C. Ravett L. Evaluation of Chemical and Physical Changes in Different Commercial Oils during Heating. *Acid Scientific*, 2018, 2(6): 2-11.

# Resources – access from home page



The screenshot shows the Olive Wellness Institute website home page. The navigation menu includes: Olive Science, Extra Virgin Olive Oil, Olive Leaf, Resources (circled in green), and About Us. A 'Subscribe' button is located in the top right corner with the text 'WE HAVE A NEWSLETTER' above it. The main content area is titled 'Resources' and features four categories, each with a representative image and a label: 'General' (top-down view of a meal), 'Growers & Processors' (hands holding an olive branch, circled in green), 'Healthcare Professionals' (two women in lab coats), and 'Academics' (top-down view of people working on laptops).

**Olive Wellness INSTITUTE™**

Olive Science    Extra Virgin Olive Oil    Olive Leaf    **Resources**    About Us

WE HAVE A NEWSLETTER  
[Subscribe](#)

## Resources

-   
[General](#)
-   
[Growers & Processors](#)
-   
[Healthcare Professionals](#)
-   
[Academics](#)



# What's available for Growers and Processors?

## ✓ Event Kit

- ✓ Posters for display at farmers markets or other community/health events
- ✓ Leaflets – e.g. cooking with EVOO
- ✓ FAQs – common EVOO questions / training manual

## ✓ Infographics

- ✓ Cooking with EVOO
- ✓ Grades of Olive Oil
- ✓ Oil comparisons

## ✓ Information leaflets

## ✓ Articles



**Cooking with EXTRA VIRGIN OLIVE OIL**

When you cook in high quality Extra Virgin Olive Oil, the healthy nutrients (e.g. vitamins and antioxidants) from the oil can enrich the food, boosting the antioxidant content of the meal. What's more, cooking in Extra Virgin Olive Oil makes vegetables taste better and helps with the absorption of fat-soluble nutrients.

**DID YOU KNOW?**

Cooking with Extra Virgin Olive Oil has been the cornerstone of the Mediterranean Diet for thousands of years

**It is a healthy oil to use for all types of cooking**

**WHY CAN YOU COOK WITH EXTRA VIRGIN OLIVE OIL?**

Extra Virgin Olive Oil is naturally high in antioxidants and healthy fats

**HOW CAN YOU COOK WITH EXTRA VIRGIN OLIVE OIL?**

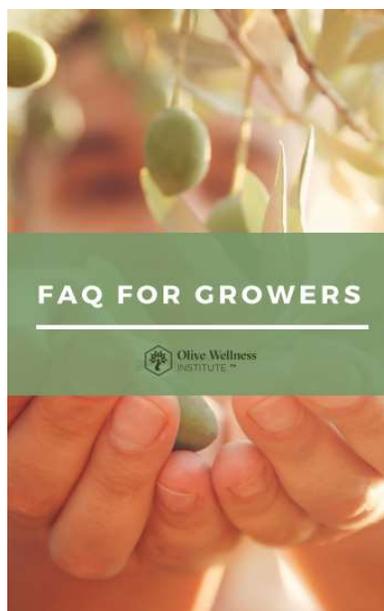
Extra Virgin Olive Oil is suitable for sautéing, pan frying, deep frying and oven baking. Every style of cooking at home.

**This healthy combination is unique to Extra Virgin Olive Oil**

When Extra Virgin Olive Oil is heated, the natural antioxidants keep the healthy fats stable.





**FAQ FOR GROWERS**







**LOOKING FOR MORE INFORMATION ABOUT EXTRA VIRGIN OLIVE OIL?**

Visit the Olive Wellness Institute and subscribe to receive a FREE Olive Health & Wellness e-book

[www.olivewellnessinstitute.org](http://www.olivewellnessinstitute.org)

**Find out: How do cooking oils compare? Health benefits of Extra Virgin Olive Oil**

Ask our Olive Experts a Question! Join our community





**HEALTH BENEFITS OF EXTRA VIRGIN OLIVE OIL**

There are a wide range of well-evidenced health benefits related to Extra Virgin Olive Oil:

- Prevention of Overall Mortality
- Prevention of Cardiovascular Disease (CVD), Coronary Heart Disease, and Myocardial Infarction
- Reduction in Overall Cancer Incidence
- Prevention of Neurodegenerative Diseases
- Prevention of Mood Disorders
- Reversal of Fatty Liver Disease
- Prevention of Overweight and Obesity

Extra Virgin Olive Oil is central to the Mediterranean Diet. There is increasing evidence describing the unique and powerful role of Extra Virgin Olive Oil at the heart of the numerous regional variations of the Mediterranean Diet. Extra Virgin Olive Oil is a crucial element of a diet rich in vegetables, making a plant predominant diet enjoyable and sustainable.

The Mediterranean style diet is now recommended by governments, scientists and health professionals as an example of a nutritional gold standard with a considerable body of evidence to support very significant beneficial effects on health and wellness.

The Mediterranean Diet is a nutritional recommendation based on the traditional dietary patterns of Southern Europe. This diet is characterised by the high consumption of Extra Virgin Olive Oil, legumes, unrefined cereals, fruits and vegetables, moderate to high consumption of fish and dairy products, and low consumption of non-fish meat. In 2013, UNESCO listed the Mediterranean diet as part of the intangible cultural heritage of humanity.

Evidence shows that people who consume a Mediterranean style diet enjoy various health benefits.

[www.olivewellnessinstitute.org](http://www.olivewellnessinstitute.org)



All resources are downloadable

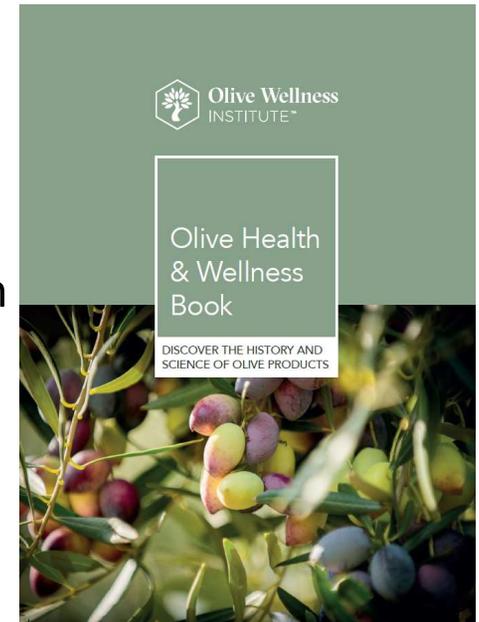
# Sign up to the Olive Wellness Institute



- ✓ Receive a FREE Olive Health and Wellness eBook
- ✓ Access to downloadable Grower event kits
- ✓ Receive a monthly newsletter on the newest olive topics
- ✓ Access to credible and unique olive information
- ✓ Interact with the Olive community



[info@olivewellnessinstitute.org](mailto:info@olivewellnessinstitute.org)



## GROWERS SURVEY

Would you like to see the Olive wellness Institute continue?  
5 question survey – link in FOE



<https://www.surveymonkey.com/r/8HGFZDB>

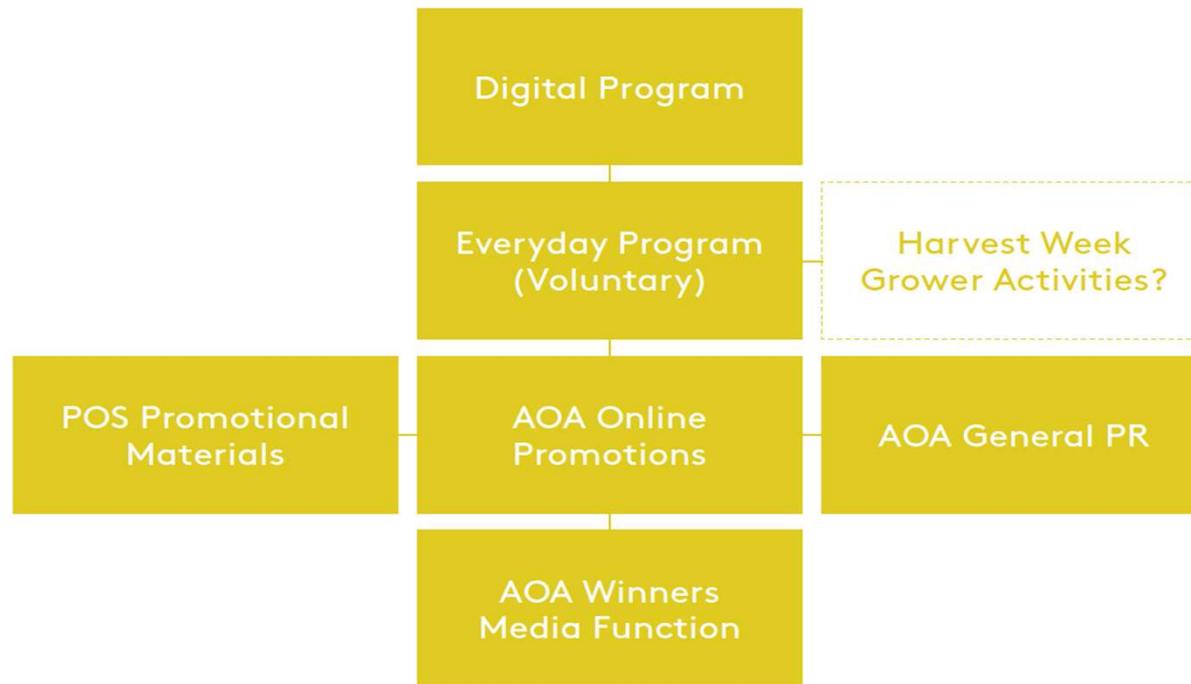


Thank You !



## THE FULL AOA PROMOTIONAL CALENDAR

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# Australian Extra Virgin Olive Oil



## - RECIPES -



**BRANDING**

Australian  
**Extra  
Virgin**  
olive oil  
*Everyday*



Australian  
**Extra  
Virgin**  
olive oil

*Everyday*

*Everyday* Australian Extra Virgin olive oil



WEBSITE

1 NEW  
BEAUTIFUL  
WEBSITE



OliveBiz

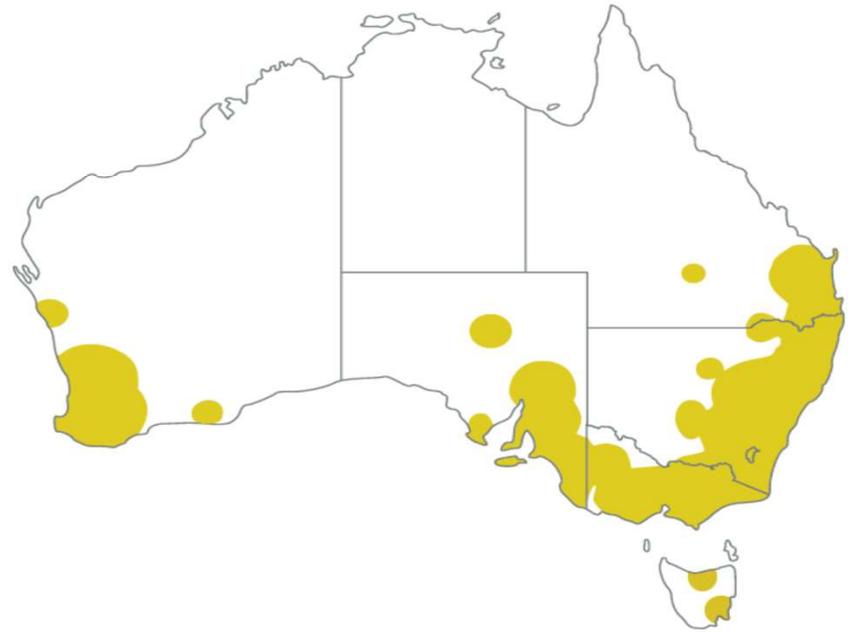
Hort  
Innovation  
Strategic levy investment

OLIVE  
FUND

# Buy Local

With over 900 Extra Virgin Olive Oil producers in Australia, there's an abundance of locally grown, certified brands to choose from.

Looking for the freshest AEVOO? Make sure you buy local...



Open "[australianextravirgin.com.au/brands/](http://australianextravirgin.com.au/brands/)" in a new tab



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## Australian Extra Virgin Olive Oil



### GIBSON'S GROVE

Gibson's Grove

Contact: [Greg & Claire Gibson](#)

Phone: (02) 6853 7247

Certified Australian EVOO and Table Olives

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Greta's Grace - "Greta's Grace Organic"

Contact: [Peter & Julia Anderson](#)

Phone: (02) 9460 0617



GWYDIR GROVE  
AUSTRALIAN OLIVE OIL

*Fresh, Fruity, Fabulous!*

Gwydir Grove Olives

Contact: [Margie Kirkby](#)

Phone: (02) 6752 7411



## Australian Extra Virgin Olive Oil



### - SWITCH IT IN, AND TASTE THE DIFFERENCE -

Try these daily switch-ins for the ultimate diet boosters!

MORNING



Butter to  
**AUSTRALIAN  
EXTRA VIRGIN  
OLIVE OIL**

NOON



Salad Dressing to  
**AUSTRALIAN  
EXTRA VIRGIN  
OLIVE OIL**

NIGHT



Frying Oil to  
**AUSTRALIAN  
EXTRA VIRGIN  
OLIVE OIL**

## PRODUCTION OF ENGAGING CONTENT

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36

AEVOO  
stories told

8

videos filmed  
and published



FACEBOOK



1 BIG  
FACEBOOK  
COMMUNITY  
123 POSTS,  
5324 PAGE  
LIKES

2000  
FACEBOOK  
COMPETITION  
ENTRIES

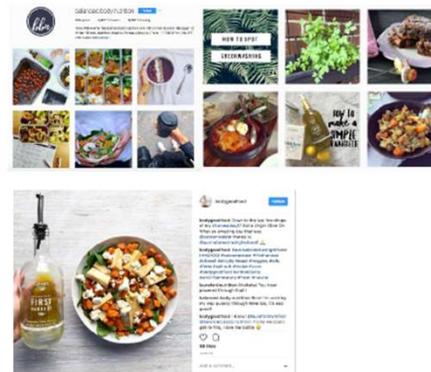
1800 EMAIL  
ADDRESSES  
ON OUR  
DATABASE



## BLOGGER FAMIL – HARVEST CELEBRATION

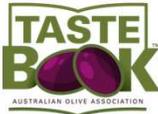
Ten food, health and nutrition bloggers and social influencers invited to Cobram Estate during harvest

- Full day itinerary of harvest tour, AEVOO tasting and lunch
- Photo, interview and video content gathered for future use
- All guests have since published articles

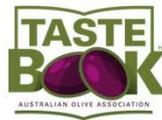


# THE NUMBERS THAT MATTER

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2,597,713 targeted Facebook impressions



77,256 visitors to Everyday website



8,205 organic visitors from Google searches



Thank You !



## POMONAL FIELD DAY PROGRAM

### **11:40 IPDM Session 1**

Dr Robert-Spooner-Hart

- Principles and Practices of IPDM

### **12:30 LUNCH**

### **1:15 IPDM Session 2**

Dr Robert Spooner-Hart and Dr Len Tesoriero

- Monitoring for pests, diseases and beneficial species
- Biology and life cycles of key pests and diseases
- Factors influencing pest and disease spread and incidence in groves
- Strategies for conventional and organic management
- Advantages and disadvantages of management strategies
- Importance of timing, application and targeting of interventions.

### **14.45 Drive to IPDM Field Activities**

Rash Valley Olives, 23 Shum Rd, Palmtree QLD 4352

Our Hosts are Roger and Shirley Harrison

### **15:00 IPDM Grove Walk**

Roger Harrison, Dr Robert-Spooner-Hart and Dr Len Tesoriero

Introduction to Rash Valley Olives

Grove walk and discussion

Insect identification

Disease identification

Grove management and drone exhibition



### **16:30 Drive Back to Perseverance Hall**

### **16:45 Review of Field Visit; Q & A Session**

Dr Robert Spooner-Hart and Dr Len Tesoriero

- Field day participants are invited to send images of insect or disease issues on their grove to Dr Spooner-Hart one week prior to the event. Feedback will be provided in a group Q&A session without identifying the senders of the images.
- Questions will also be taken without notice on any aspect of pest and disease management from participants during this session.
- Questions/ comments about any of the topics covered during the day

### **17:15 Evaluation and Concluding Remarks, Greg Seymour**

### **17:30pm Post Field Day Networking BBQ**

Field day participants are invited to join the field day speakers at an informal get-together at the Perseverance Hall after the field day concludes. This function will provide an opportunity for participants to get one-on-one with the experts to discuss issues of relevance to their own groves and businesses. Meals and drinks are included in Field Day Fee.

### **8:00pm Field Day Close**

# THE END

