



***IPDM PROJECT– The Next Phase:
An integrated pest and disease management
extension program for the olive industry
(OL17001)***

Robert Spooner-Hart

**Hort
Innovation**
Strategic levy investment



**WESTERN SYDNEY
UNIVERSITY**



PROJECT ACTIVITIES



WP1. Collate and analyse existing information on olive IPDM, with particular reference to Black Scale, OLB and Anthracnose (Year 1)

- Major Literature Surveys,
- Survey of Australian olive growers
- Follow-up survey Year 3

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WP2. Workshops/field days (Years 1 and 2)

- IPDM Workshops (9): Covering principles and practices of IPDM; monitoring, biology/ecology/life cycles of Black Scale, Olive Lace Bug, and Anthracnose (with a local focus); conventional and organic management
- Master Classes (2): for consultants, pest monitoring scouts in large groves etc.

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WP3. IPDM extension/communications platform for the industry (Years 2 and 3)

- revised Pest and Disease Field Guide
- best practice IPDM manual.
- web-based tutorials
- flyers on IPDM and the three target species

10 IPDM FIELD DAYS HELD

Marulan (NSW) 10 Aug 2018

Lovedale (NSW) 12 Aug 2018

Perseverance/Toowoomba (QLD) 3 Nov 2018

Pomonal/Grampians (Vic) 16 Nov 2018

Roseworthy (SA) 24 Nov 2018

Launceston (TAS) 1 Dec 2018

New Norcia (WA) 15 Feb 2019

Margaret River (WA) 17 Feb 2019

>270 growers attended, with numbers ranging from 12 to 41. Participant feedback very good.



FIELD DAY TOPICS

Risk Management, Biosecurity, Continuous Improvement & Technical Support, OliveCare[®], Minor Use Permits

Grove Management– Healthy Trees to Support an IPDM Program

Olive Wellness Institute Project

Principles and Practices of IPDM

Key pests and diseases of olives, their biology and management

IPDM Grove Walk

Review of Field Visit; Q & A Session, informal networking



MASTER CLASS 25-26 SEPT, 2019 Hawkesbury campus WSU

| TOPIC | PRESENTER(S) |
|--|--|
| IPDM Project, symptoms | Robert Spooner-Hart (WSU) |
| Olive diseases | Len Tesoriero (NSW DPI) Barbara Hall (SARDI) |
| Lace Bug, Black scale biology | Robert Spooner-Hart |
| Diagnostics in the laboratory | Len Tesoriero, Barbara Hall, Robert Spooner-Hart |
| Soil microbiology | Tom Jeffries (WSU) |
| Soil chemistry | Paul Milham (WSU, ex-NSW DPI) |
| Oil sprays and their role in arthropod (esp. scale) management | Andrew Beattie (WSU, ex NSW DPI) |
| Black scale management: biological control | Andrew Beattie Robert Spooner-Hart |
| Current and possible future agrichemical options (including organic) for olive pests and pathogens | Len Tesoriero Barbara Hall Robert Spooner-Hart |
| Biosecurity: pest and disease threats Diagnostics | Robert Spooner-Hart Barbara Hall Len Tesoriero |
| Group discussions on future actions, Wrap up | All |

Presentation of tutorial on olive pests and diseases



Master Class
participants
inspecting
samples of
anthracnose on
olive fruit with
Plant Pathologists
Len Tesoriero and
Barbara Hall
during laboratory
session



WEB-BASED TUTORIALS

Provide up to date information, self-assessment of knowledge, as well as to prompt changes to/improved practices by growers as a result of completing the tutorial.

Tutorials will be available 24/7 on the AOA's open-access website, Olive Biz.



TUTORIAL TOPICS

- 1. Principles and practices of integrated pest and disease management:** including IPDM principles and practices from an ecological and organic perspective, importance of tree health, cultural practices, biological control, and resistance management.
- 2. Monitoring for pests, diseases and beneficial species:** including symptoms and possible causes, identification/diagnostic services, biosecurity and the pest hotline
- 3. On-farm biosecurity,** including pests and diseases not present in Australia, especially Xylella
- 4. Black scale:** biology, damage and management (including for organic growers).
- 5. Olive lace bug:** biology, damage and management (including for organic growers)



TUTORIAL TOPICS

6. **Weevils:** biology, damage and management (including for organic growers).
7. **Anthracnose:** life cycle, conditions conducive, symptomatology and damage, and management (including for organic growers).
8. **Peacock spot:** life cycle, conditions conducive, symptomatology and damage, and management (including for organic growers).
9. **Grey mould/Cladosporium:** life cycle, conditions conducive, symptomatology and damage, and management (including for organic growers).



FLYERS

Eight electronic copy “flyers” identified for production

One-two page summary of the tutorial information

Available to olive growers and advisors/consultants/ pesticide suppliers via the Olive Biz website.
Access to e-copies as well as downloading and printing of hard copies for distribution

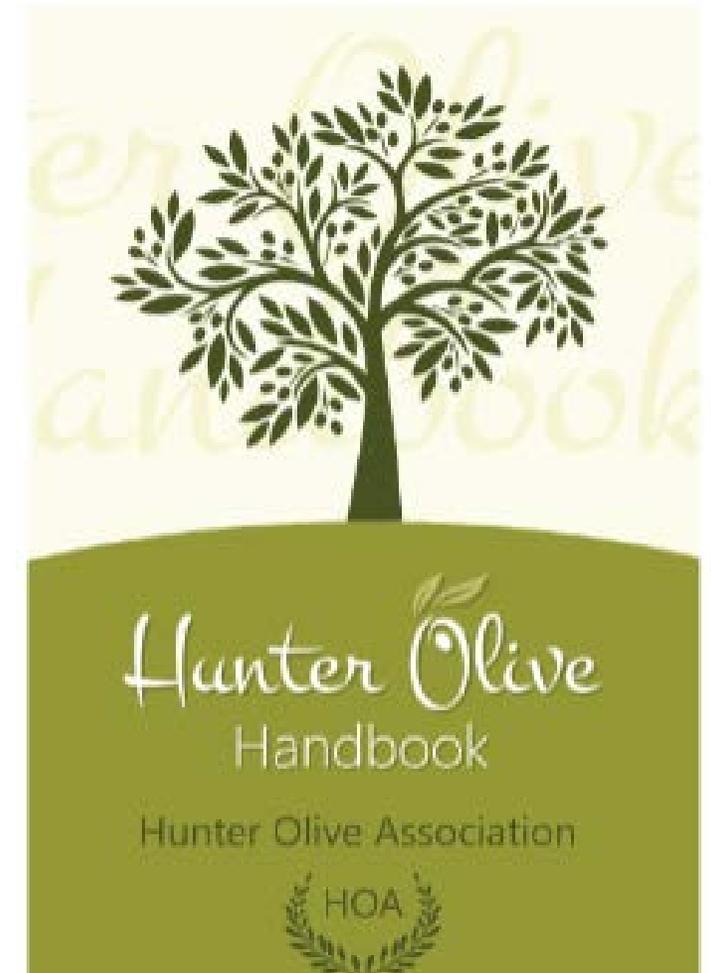
Flyer topics are:

- 1. Integrated pest and disease management in Australian olive production**
- 2. On-farm biosecurity and Xylella**
- 3. Black Scale**
- 4. Olive Lace Bug**
- 5. Weevils**
- 6. Anthracnose**
- 7. Peacock spot**
- 8. Grey mould/Cladosporium**



BEST PRACTICE IPDM MANUAL

- Similar to the section developed in collaboration with the Hunter Olive Association's (HOA) Best Practice Handbook.
- Alternative extension tool to the web-based tutorials and flyers
- Available to all olive growers on Olive Biz website.
- Planned to be completed by end August 2020



REVISED FIELD GUIDE TO OLIVE PESTS, DISEASES AND DISORDERS

- Information updated and extended, including revision of Australian information and inclusion of new exotic pests and diseases. Increased number of images.
- Electronic format
- Table of contents allows selection of specific pest or disease

Field Guide to Olive Pests, Diseases and Disorders in Australia



Robert Spooner-Hart,
Len Tesoriero, Barbara Hall

FINAL PROJECT SURVEY

WE ARE ALL SICK OF SURVEYS



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However, to assess the outcome of the project, we are required under the contract to undertake a second survey towards the end of the project. So in August, 2020, we encourage you to participate in this second survey: this will also update information on olive P & D.

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We anticipate the tutorials, Field Guide and flyers will be completed by end May 2020



WE LOOK FORWARD TO YOUR FURTHER PARTICIPATION IN THE PROJECT

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**OLIVE
FUND**

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



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**PLEASE SEND ANY INFORMATION OR IMAGES TO
r.spooner-hart@westernsydney.edu.au**

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