Collation of Minor Use Information for the Australian Olive Industry

Publication No. 08/201
Project No. PRJ-003161

The information contained in this publication is intended for general use to assist public knowledge and discussion and to help improve the development of sustainable regions. You must not rely on any information contained in this publication without taking specialist advice relevant to your particular circumstances.

While reasonable care has been taken in preparing this publication to ensure that information is true and correct, the Commonwealth of Australia gives no assurance as to the accuracy of any information in this publication.

The Commonwealth of Australia, the Rural Industries Research and Development Corporation (RIRDC), the authors or contributors expressly disclaim, to the maximum extent permitted by law, all responsibility and liability to any person, arising directly or indirectly from any act or omission, or for any consequences of any such act or omission, made in reliance on the contents of this publication, whether or not caused by any negligence on the part of the Commonwealth of Australia, RIRDC, the authors or contributors.

The Commonwealth of Australia does not necessarily endorse the views in this publication.

This publication is copyright. Apart from any use as permitted under the Copyright Act 1968, all other rights are reserved. However, wide dissemination is encouraged. Requests and inquiries concerning reproduction and rights should be addressed to the RIRDC Publications Manager on phone 02 6271 4165.

Researcher Contact Details

Peter Dal Santo
AgAware Consulting Pty Ltd
21 Rosella Ave Strathfieldsaye VIC 3551

Phone: 03 5439 5916
Fax: 03 5439 3391
Email: pds@agaware.com.au

In submitting this report, the researcher has agreed to RIRDC publishing this material in its edited form.

RIRDC Contact Details

Rural Industries Research and Development Corporation
Level 2, 15 National Circuit
BARTON ACT 2600

PO Box 4776
KINGSTON ACT 2604

Phone: 02 6271 4100
Fax: 02 6271 4199
Email: rirdc@rirdc.gov.au.
Web: http://www.rirdc.gov.au

Published electronically in December 2008
Executive Summary

What is the report about?
The Australian Olive Association Ltd (AOA) has been liaising with its members regarding pest management issues. AOA believes their members are under increasing pressure for adequate and appropriate pest management options in olives. Indications are that diseases, insects and weeds are becoming more prevalent but the control options available to growers are limited.

The report collates information supplied by key stakeholders in the Australian olive industry with regards to: major plant pests, current control techniques, the issues faced by growers, current and future research available.

Who is the report targeted at
The collation of this information will provide a sound background of pest and pesticide issues for the attendees involved in the olive Strategic Agrichemical Review Process planned for October 2008.

Background
As the Australian olive industry grows, it will come under increasing scrutiny from many sectors. One will be the Australian Pesticides and Veterinary Medicines Authority (APVMA) regarding its pesticide use and pest management strategies. The Strategic Agrichemical Review Process will provide:

- Possible solutions for the future pesticide access
- Clear understanding of the pest and pesticide management issues in olives
- Future options for pesticides to comply with the Olive Industry trade focus

Aims/Objectives
The objective of the project was to obtain as much relevant Australian data on the major plant pests, current control techniques, the issues faced by growers, current and future research as is available for incorporation into the olive Strategic Agrichemical Review Process to be used to decide future pesticide requirements in olives.

Methods Used
This report collates the information gathered from twenty four respondents comprising key growers, farm managers, consultants, researchers and retailers involved in the olive industry. Information was requested of them was on:

- Key pests – diseases, insects and weeds
- Pesticides used – registered and off-label
- Australian research data – on-farm and contracted trials
- IPM systems used – local and national strategies
- Overseas information and websites

Results/Key findings
The information gathered showed that:

- There were no major disease issues in Australian olives that could not be controlled, but were recorded as being of significance. These were:
  - Anthracnose (*Colletotrichum sp.*) and Peacock Spot (*Spilocea oleagina*) are common diseases in Australia and overseas. Control is generally by various copper fungicides and cultural techniques such as pruning to allow more air into the canopy. Other fungicides used overseas are strobilurin group (curatives) and dithiocarbamates (protectants). Research into these fungicides is occurring in Australia.
Phytophthora Root Rot (*Phytophthora sp.*) is a significant problem in some parts of Australia (heavier soils) and is controlled by metalaxyl or phosphorous acid (both un-registered uses) and cultural techniques. Overseas management of Phytophthora is predominantly by proper irrigation and drainage. Some also use fosetyl, a fungicide that works in a similar way to phosphorous acid.

Sooty Mold (*Capnodium sp.*) is a significant problem in some areas as a consequence of Black scale. Growers controlling the scale alleviate the problem. The use of copper for Anthracnose and Peacock Spot controls this disease.

There were major insect issues in Australian olives. There were:

- **Black Scale** (*Saissetia Oleae*) and the associated ants (*Formicidae*) are the major pests in olives of Australia and overseas. Control options are very diverse with biological control (predatory insects), oils and insecticides all being used. The adoption of the various control options is often determined by the level of infestation. Unfortunately, with high infestation levels, methidathion is still one of the favoured insecticides worldwide. This is very disruptive of IPM as are some of the other insecticides used. There is extensive research into the biological control options which shows much promise. There are also IPM compatible insecticides available in Australia and overseas. But growers’ comments are that they are not as effective as methidathion in high pressure situations. Other strategies used are pruning to open up closed canopies, controlling ants as they disrupt biological control and soil drenching with insecticides.

- **Olive fruit fly** (*Bactrocera oleae*) is the major pest of olives in most parts of the world and attracts the most research. It is not a pest in Australia. Mediterranean Fruit Fly (*Ceratitis capitata*) and Queensland Fruit Fly (*Bactrocera tryoni*) are pests of olives in Australia but not considered of major importance.

- **Olive Lace Bug** (*Froggattia olivine*) is an increasing problem in Australia and a major pest overseas. This is currently controlled is with insecticides. Unfortunately some insecticides, eg synthetic pyrethroids, are very disruptive of IPM. Potassium salts is reported to be effective on Olive Lace Bug and is IPM compatible. Grower research is investigating the efficacy.

- **Locusts and Grasshoppers** (*Acrididae*) is a significant problem in some areas of Australia and is controlled by insecticides only. Many of the products used are not IPM compatible. There is some government research into the biological control of locusts.

There were no major weed issues in Australian olives.

Implications for relevant stakeholders

The key method of controlling plant pests in Australian olives is with pesticides. Unfortunately, several of the pesticides, in particular some of the insecticides commonly used, are older products with questionable futures – APVMA CRP review, resistance, trade issues and/or poor IPM fit.

This situation needs to be addressed by the olive industry before these pesticides are restricted in their use or removed from the market altogether.

Recommendations

The information in this report will be used in the olive Strategic Agrichemical Review Process to be conducted in October 2008.

Information on pest incidence, pesticide use, residues and IPM techniques gathered from Australia and overseas can be used to plan for future pesticide requirements to fit with the philosophy of AOA. This will be via APVMA permits or registrations in collaboration with agchem manufacturers.

From a pesticide access perspective, the APVMA classifies olives as a member of the ‘Assorted tropical and sub-tropical fruit (edible peel) group’ and a minor crop. Therefore access to minor-use permits by the olive industry should be relatively straightforward.