



## OLIVE LACE BUG



### Management of Olive Lace Bug

By Dr Vera Sergeeva

*“We have had a lot of trouble trying to control lace bugs this year. When we reach into the trees, our arms are covered with lace bugs.”*

*“Our grove is surrounded by ironbark trees, and I guess the weather has encouraged the lace bugs to multiply. Two nearby olive groves are decimated.”*

Every year I receive several emails like the one above concerning Olive Lace Bug (OLB). It is a serious olive tree pest which can cause heavy defoliation and total crop failure if not managed effectively. Effective control depends just as much on ensuring your olive trees are in optimal healthy as it does on controlling the numbers of OLB by a well-timed spraying regime.

The three most important areas to focus on are:

- 1. Tree Health**
- 2. Spotting OLB early in the Spring**
- 3. Early, Effective use of insecticide sprays**





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### Tree Health

Healthy trees – even alongside heavily infested unhealthy trees, will repel attacks by OLB, stay healthy, and produce good fruit. But stressed trees, short of water or important nutrients, will succumb to OLB attack. OLB, in spite of its name, is actually an endemic native insect in Australia which attacks eucalypts and other native Australian trees as well as olive trees.

Olive trees are able to resist an attack by OLB, however grove owners will need to work on:

- **Adequate water supply in a dry year;** this may involve irrigation, but also think about careful positioning of the trees, mulching, and building up the organic content of the soil. You can control the size of your trees by pruning– “right-sizing” the tree for the water supply it has access to. Trees high on a slope will probably get less water in a dry year.
- **Good Soil Nutrition:** Look carefully at your soil and leaf analyses and deal with any significant deficits. Get the plant biology working so the trees look healthy with a dense leaf colour.
- **Magnesium and Leaf Chlorophyll:** Chlorophyll is the stuff in the leaves which makes photosynthesis possible. It is vital for tree health and a component which is damaged by OLB attack which causes the leaves to turn yellow. Magnesium builds chlorophyll and helps the tree resist OLB attack. So look hard at the soil analysis and work on the Ca:Mg balance. You may have to spread some dolomite to raise the Mg content.

### Monitor the Spread of OLB:

OLB does not “just happen”; OLB hibernates in and around your grove, as adults and eggs in protected places. In spring the eggs hatch, and go through several wingless stages (*instars*) before turning into the winged adults which spread across the grove and lay more eggs. The full life cycle is short, only 12 to 23 days, so you have to move quickly to stop them. You may find that, in your grove, the OLB start to appear in the same places each spring – quite often spreading from south to north.

If you can see where they are hatching, and spray them in their early stages without wings you can both stop their spread, and prevent the laying of eggs.



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### Early, Effective, Use of Insecticide Sprays:

I am in favour of avoiding the use of complex chemical insecticides because they tend to kill beneficial insects as well as the OLB. Horticultural spray oils\* are simple, easy to use safely, and are kinder to beneficial insects, but they do depend on the spray fully "wetting" the instars and insects. Since the instars and insects live on the underside of olive leaves, the spray equipment must be set up carefully to saturate the undersides of the leaves right across the tree.



\*Horticultural spray oils are oil-based products used to control pests. Most horticultural oils available are plant-based (vegetable/cooking oil) and petroleum-derived (horticultural mineral oil, dormant oil, summer oil, supreme oil, superior oil, white mineral oil) usually refer to particular types, uses or brands of petroleum oil.

- Do not use more than an **annual total** of 3 % of petroleum based spray oils in tropical and subtropical climates, and 2.5% in temperate climates.
- Do not use more than a 0.5 % concentration of oil with a copper spray.
- Do not apply an oil spray within one month of a sulfur spray.

For effective control of OLB, try this:

1. In late winter start to inspect your grove often. Early identification of an infestation will limit the number of trees you need to spray.
2. Spray those trees very thoroughly, remember to get the spray under the leaves; naturally it is much easier if you only have to spray a few trees because you caught the infestation early.
3. Go back and check again at weekly intervals; spray any new infestations as you find them.

When you are choosing your spray oil, make sure that you respect the regulations in your state. Potassium carbonate is used successfully as a foliar nutrient spray, and also helps to control OLB and black scale. Some growers have successfully used it in combination with spray oil.

**In summary, healthy trees, early spotting of hatching insects and thorough early spray treatment can help you beat olive lace bug this season!**

For more information, contact Dr Vera Sergeeva on her website <http://olivediseases.com>