

# SF&FF Project 19025 – Meeting the increasing demand for New Zealand Extra Virgin Olive Oil

## An Organic Approach – November 2019



### Background

Following on from the success of the first Focus Grove Project, some members requested an alternate approach to the Manzate spray programme for disease management be developed.

Recommendations have been developed for groves wishing to adopt a more organic approach based on a successful experimental organic spray programme for black spot control in organic apple orchards. Apple black spot is a wet weather disease closely related to the olive diseases we need to control.

Groves wishing to become registered as organic need to contact a recognised association immediately as this will be a three-year process. The most widely recognised organic association is Bio-Gro. Note that there will be requirements about processing for oil to be labelled as organic.

Growers who are interested in organics need to be aware that MPI is developing a national organic standard which will be legislated. The bill is due for its first reading in Parliament before Christmas and will eventually become established and all organic organisations must comply with the standard. Therefore growers need to check with their organics association that they will be working towards compliance with the new standard.

### Spraying for Disease Control

After research and consultation, Stuart Tustin has recommended following the organic apple orchard approach for control of wet weather diseases and using the same application timing rules we follow for Manzate. The products recommended are Copper Hydroxide (various commercial products available that are organically-approved) plus Kumulus Sulphur, which are the most cost effective options available and will give some persistency. The Copper Hydroxide and Kumulus Sulphur are applied together at a recommended rate effective for apple black spot control of 320g copper hydroxide plus 1.8kg Kumulus per 1000 litres. High volume spraying is recommended with a minimum of 1000 litres per ha and up to 2000 L per ha if trees are very large and dense.

The spray should be applied every 20 days or after 20mm<sup>1</sup> rain. However the maximum Copper application permitted by most organic registration bodies is 3kg per ha per annum. Growers using copper sprays must record and keep track of total copper applications per year. Based on the Manzate programme timing, organic groves could anticipate 12 to 15 sprays per year which will be well within maximum copper limits if applied at 1000 L/Ha.

From mid-summer to late summer, when it can be anticipated to be dry (no rain), it is possible to modify the spray regime by omitting the Copper and run out to 30-40 days between Kumulus Sulphur sprays. If this late summer low rate tactic is followed in dry conditions, grove owners must follow horticultural weather forecasting services closely because it will be essential to apply

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<sup>1</sup> The 20/20 recommendation for this regime and Manzate is because of product efficacy.

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protective sprays before any predicted rainfall. Once heavy dews/fogs occur that wet tree foliage in autumn, resume the 20/20 spray regime with Copper hydroxide/Sulphur

**People wishing to become registered as organic should check the above advice is acceptable by the registration body they are working with.**

We are researching to find possible organics-acceptable alternatives to Protek sprays which would normally be recommended to address Anthracnose at flowering.

**All of the above recommendations will be monitored and reviewed with updated bulletins issued accordingly.**

### Grass and Weed Management

There are no organics-approved alternatives to glyphosate herbicides, such as Roundup. For groves wishing to be organic there appears to be no option apart from mowing. Cultivation is not recommended.

**Copper is highly toxic to sheep therefore sheep should not be used in groves using Copper.**

It is possible growers could buy a tractor-mounted swing-arm mower attachment to mow between the trees but this could not be used if there were irrigation lines on the ground.

Another option for minimizing weeds around trees is to re-sow the typical strip between and around with a pure clover sward. This is relatively low growing and also contributes nitrogen through the nitrogen fixing micro-organisms that colonise clover roots

There is a section in the Olives NZ Best Practice Management e-manual on Grove Floor Management. Copy and paste the following link into your web browser.

[http://Member:!ONZ!2012!@olivesnz-emanual.org.nz/SITE\\_Default/SITE\\_members/SITE\\_BMP\\_IOP/Grove\\_Floor/Soil\\_surface/Main.html](http://Member:!ONZ!2012!@olivesnz-emanual.org.nz/SITE_Default/SITE_members/SITE_BMP_IOP/Grove_Floor/Soil_surface/Main.html)