



The abundant crops achieved by the Focus Groves prove that fruit yield is dependent on healthy trees.

Olives NZ Focus Grove Project – an organic approach

The new Olives New Zealand Focus Grove Project, *Meeting the increasing demand for New Zealand Extra Virgin Olive Oil*, is now well underway, with the second round of Focus Grove field days being held this month.

Recognising the increasing demand for NZ EVOO, which already exceeds current supply capability, the project primarily aims to lift productivity to enable the industry to meet that demand – specifically, from the successful 25kg/tree currently being achieved to 30kg/tree. A secondary outcome is an alternate, more organic approach to the current requirement of an intensive spraying program to ensure tree health.

The three-year project outcomes include the publication of fact sheets as successful strategies are identified: Olives NZ Executive Officer Gayle Sheridan has allowed us to share the first of the key findings, detailing a more organic spraying regime, with *Olivegrower* readers.

Background

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

Recommendations have therefore been developed for groves wishing to adopt a more organic approach, based on a successful and well-established organic spray program for black spot control in certified organic apple orchards. Apple black spot is a wet weather disease closely related to the olive diseases we need to control.

Focus Grove Project consultant Stuart Tustin researched and consulted on organics in the apple sector and our trial is based on these findings. Thus it is based on a scientific and proven approach.

Organic certification

Groves wishing to become registered as organic need to contact a recognised organic certifier immediately as this is a three-year process. The most widely recognised organic association in New Zealand is BioGro. You may be able to backdate the official start date of your organic management – contact your organic certifier about this.

Note that the olive pressing process must also be certified before your oil can be labelled as organic. It may be possible to co-ordinate with other growers in your area to enable the press operation to become certified, either as a “certified subcontractor” under your

own licence, or as an independently certified processor.

Growers who are interested in organics also need to be aware that MPI is developing a national organic standard which will be legislated. Once the bill is passed all organic organisations will be obliged to comply with the standard, therefore growers need to check with their organic association that they will be working towards compliance with the new standard.

Note: growers wishing to become registered as organic should also check that the spraying advice below is acceptable to the organic certifier they are working with.

Spraying for disease control

After research and consultation, Stuart Tustin has recommended following the organic apple orchard approach for control of wet weather diseases. It uses 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



Growers following the proactive disease and canopy management program from the initial Focus Grove Project have healthy groves with lush growth and little or no disease. Recommendations have now been developed for groves wishing to adopt a more organic approach.

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 litres per ha if trees are very large and dense.

The spray should be applied every 20 days or after 20mm* rain. Please note, however, that the maximum copper application permitted by most organic registration bodies is 3kg per ha per annum, and growers using copper sprays must record and keep track of total copper applications per year.

Based on the Manzate program timing, organic groves could anticipate 12 to 15 sprays per year, which will be well within maximum copper limits if applied at 1000 Litres per ha.

*The 20/20 recommendation for this regime and Manzate is because of product efficacy.

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 running out to 30-40 days between Kumulus sulphur sprays. If this late summer low rate tactic is followed in dry conditions, however, grove owners must follow horticultural weather forecasting services closely because it will be essential to apply 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.

We are also researching to find possible organic-acceptable alternatives to the Protek sprays which would normally be recommended to address Anthracnose at flowering. All of the above recommendations will be monitored and reviewed as the project progresses, with updated bulletins issued accordingly.

Grass and weed management

There are currently no organic-approved alternatives to glyphosate herbicides such as Roundup. Cultivation is not recommended. Copper can be toxic to sheep, therefore

Overview: Olives New Zealand Focus Grove Projects

The Olives New Zealand Focus Grove Project, *Meeting the Increasing Demand for New Zealand Extra Virgin Olive Oil*, is funded by the MPI Sustainable Food and Fibres Futures program and member contributions.

It follows on from the initial Sustaining Farming Fund Focus Grove Project, *Increasing the Market Share for New Zealand Olive Oil*, which ran from 2016-2019 and saw participating groves dramatically increase both tree health and production levels, most achieving 25kg/tree.

The continuing project aims for further improvements via a regime of specified management practices, including an additional 5kg of fruit production per tree to 30kg/tree annually.

The new project will run over three years and commenced in October 2019. The primary focus areas are improved capability, higher value/ lower impact land use, and effective mitigation of pests and diseases.

sheep grazing should not be used in groves using copper sprays. If in doubt, consult your grazier.

So for groves wishing to be organic there appears to be no option apart from mowing. One option is to buy a tractor-mounted swing-arm mower attachment to mow between the trees, however this normally involves the lifting of any irrigation lines.

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.

More information

Olives NZ members can also access further information in the organisation's Best Practice Management e-manual, which has a section on Grove Floor Management.

For a list of approved copper and sulphur products that are allowed for organic production in New Zealand, visit www.biogro.co.nz and find the search box for "inputs for organic production". Here you can also find an extensive list of other inputs allowed for organics.

Australian growers can search for allowed inputs on the websites of organic certifying organisations including ACO Certification - www.aco.net.au and NASAA Organic - www.nasaa.com.au.