

SFF&F Project 19025 – Meeting the increasing demand for New Zealand Extra Virgin Olive Oil

Milestone MS04 Focus Grove and Field Days Report

April 2021

Contents

Introduction	2
Focus Groves Status	4
Hawke’s Bay	4
Aquiferra	4
Northland	9
Olives on the Hill	9
Canterbury	12
Terrace Edge, Waipara Valley	12
Visit to Lincoln University	18
Nelson	20
Kakariki Olives, Redwood Valley	20
Neudorf Olives, Upper Moutere	25
Wairarapa	30
Leafyridge Olive Grove, Masterton.....	30
Bella Olea Olive Grove, Greytown	35
General Comments	39
Summary	39

Introduction

The purpose of the Sustainable Food and Fibres Futures project is:

To increase the production of established olive groves to meet the increasing demand for New Zealand Extra Virgin Olive Oil. The target is an additional 5kg (20%) per tree.

A second objective is to develop an alternate/more organic approach to improving grove production.

The project uses five focus groves in each main growing region that have demonstrated a commitment to best practice principles. These groves have already implemented the recommendations of the previous Sustainable Farming Fund Project and have demonstrated their success. They will now implement and trial new approaches, measure outcomes and host field days to share their experiences with other growers.

The project also includes a number of groves who wish to trial an alternative or more organic approach to improving tree health and benefit from increased crop loads. These groves will also implement and trial recommended new approaches, measure outcomes and host field days to share their experiences with other growers.

The methods use expert tree crops horticultural advice focusing in four key aspects of grove management.

1. Introducing practical, affordable tree pruning regimes that improve light distribution for stimulating flowering and fruit growth, aiding effective spray coverage and inducing adequate annual shoot growth to provide the required bud sites for new flower production – on an annual basis.
2. Introducing an appropriate nutritional programme that will ensure there are sufficient nutrients for plant growth which will impact on yield.
3. Improving tree health by disease control using affordable protectant spray programmes to manage foliage diseases that defoliate olive trees, a primary cause of low productivity in NZ groves.
4. Developing an alternate/more organic programme methodologies that will improve tree health to manage foliage diseases as above.

This report outlines the progress made by the Focus Groves and is based on the fourth round of Focus Grove visits and Field Days held in April 2021, carried out by the specialist consultant engaged as part of the project; Dr Stuart Tustin ex Plant and Food Research.

There were some common topics covered off at all Field Days.

1. Manzate update - to be banned in EU but is permitted in New Zealand. Stuart is keeping abreast of happenings in the apple industry. The issue is with the (European) destination markets and the apple industry is already working on an application programme to best ensure no residue.

NOTE – Olives NZ has twice had residue testing on the Focus Grove oils with a negative result.

Garry Burlace from Horticulture has advised the price could increase as the product will now be imported by pallet rather than containers. However he advised there is a plentiful supply available.

2. Glyphosate residue - has become an issue for honey exporters. Problem is probably caused by bees foraging on sprayed fields. The issue may also be with the testing regime in Japan. In our NZ groves two sprays are really only required, perhaps early spring and six months later. Minimal weed spraying is now the norm because of historic weed control. Alternative could be clover but needs water so will die off over dry periods. Groves are advised to spray only if necessary.

This report is based on the comments from the Focus Grove visits by the project consultant, Branch Chairs, Focus Grove owners and other Field Day attendees.

Focus Groves Status

Hawke's Bay Aquiferra

Bob Marshall and Shona Thompson welcomed 18 people to the Field Day held on Friday 9th April. In addition to local olive growers, Garry Burlace from Horticulture also attended and several apologies received.

Geoff Crawford, Hawke's Bay Branch Chair and Olives NZ Executive member, thanked Bob and Shona for their welcome and noted that this would be the last Field Day at Aquiferra under their stewardship as the grove has been sold. He said that Aquiferra was now one of the most, if not the most, highly regarded olive grove in the country.

Geoff said most notable achievements during the development of the grove included:

- a. The most productive grove in NZ, consistently
- b. Fantastic oil quality, consistently
- c. Strong following of customers, retail and hospitality
- d. 'Shona pruning' has become a lexicon in Stuart's vocabulary
- e. Generous with the sharing of their knowledge, learnings and time
- f. The sale of an ongoing olive business is an achievement.

Geoff presented Bob and Shona with flowers and thanks on behalf of Olives NZ for their amazing contribution to the NZ olive industry. The presentation was met with acclaim from those present.

As noted, Aquiferra was one of the original Focus Groves and is regarded as an exemplary grove. It again led grove production nationally in 2020. For 2020 the average harvest at Aquiferra was 21kg per tree and with 19% yield. The regional averages were 14.65kg and 16.6% respectively. The national averages were less than 10kg and 14.43%.

Disease Management

Bob said he had continued the regular Manzate 3 weekly and 3 x Protek sprays over flowering. There was no evidence of any disease in the grove. With Hawke's Bay in another drought year, irrigation has been in operation since before Christmas.

It was accepted by all the current spray programme is working very well as is evidenced by the health of the trees.

One grower commented that Protek is like magic dust, his observation was 100% fruit set. Chris Thorman said they had applied Protek after harvest to address Anthracnose. Stuart said this would only be applicable if grove has old diseased wood which is being worked on. Garry cautioned this application also, and reiterated that applying at flowering is best.

Bob commented that one neighbor, who is progressing through organic registration, has raised the need to ensure no spray drift. Olives NZ has also had a complaint about spray

drift from a horse stud bordering on an olive grove. It was noted that most olive growers would be following best practice and only spraying when there was no wind to ensure effectiveness and therefore minimal/no spray drift.

Nutrition

Stuart said that nutrition leaf tests across most groves have shown low Nitrogen. A foliar spray is the most effective approach to address this and the recommended product is urea. This could also be applied in late spring or early summer Oct/Nov before leaf tests.

At Aquiferra the leaf test showed Nitrogen deficiency, and Bob gave 3 foliar applications of urea at 5kg per hectare/10kg per tank. It is Manzate compatible mix.

Stuart reminded that leaf tests should be done Jan and July. Nitrogen deficiency can also be evident with yellow leaves.

Gary commented nitrogen is needed at flowering for fruit set.

Stuart said with an overall nutrition programme bulk fertiliser can be applied to ground, based on soil tests, and then tweaked with the foliar spray based on leaf tests.

Pruning

The trees at Aquiferra continue to be in excellent shape and the pruning regime is in 'maintenance' mode. The trees are pruned for machine harvesting. There is no need for secondary pruning to manage crop load as the trees are coping well and the fruit is very plump.

Garry reminded that pruning is critical to offsetting biennial bearing.

Crop Load

Looking excellent again. Lots of bunches, also fat, heavy fruit. This year would normally be regarded as an "off year" but looking to be at least 20kg per tree.

In response to a comment about an organic approach to olive growing, Garry commented that to be successful with an organic approach a dry land area is preferable. The disease management products are more expensive than Manzate. At this point there appears to be no premium in price associated with being organic. Stuart commented that in the wine industry, organic is part of brand differentiation rather than margin. Garry said that organic groves would also need more aggressive pruning than we promote.

This was another visit to this exemplary grove, where the discussion focused on tweaking the inputs to maximize production.

The afternoon concluded with refreshments and special thanks to those who brought a plate or supplied beverages. The afternoon tea provided an opportunity for the presentation of the Hawke's Bay Best EVOO 2020, based on the highest scoring local oil in the NZ EVOO Awards. Bob was delighted to present the trophy to Geoff Crawford for Telegraph Hill. Thanks to Bob and Shona for hosting the visit and best wishes for the future.



Attentive audience at Ngatarawa



Stuart discussing new growth extension



Beautiful fat Manzanilla olives - good enough to eat!



Shona in front a 'Shona pruned tree' – ideal shape for machine harvest



Vigorous new growth



Bob presents Geoff with the trophy for best Hawke's Bay EVOO 2020

Northland

Olives on the Hill

There were 6 attendees from Auckland, Northland and Wairarapa, who were welcomed to Olives on the Hill with a lunch by owners Chris and Linda Smith on Monday 12th October 2021. Unfortunately fog at Whangarei airport precluded the flight on which were Stuart, Gayle and Lisa Wilson (Industry and Stakeholder Engagement, MPI), from landing and the plane returned to Auckland. There was inadequate time to then hire a car and drive to Mangawhai so Chris and Linda hosted the Field Day themselves.

This grove is one of the original Focus Groves and has benefited from continuous improvement to overall grove health and increased grove production. In 2020 Olives on the Hill produced on average 16kg per tree and with 16% yield. The Northland regional averages were 10.92kg and 17.1% respectively.

Disease Management

It has been warm and humid in the Northland and Linda commented that the spray regime needed to be more frequent, especially since New Year. There were three good sprays on over flowering last year with Protek, Difference and Boron. However, that was clearly not enough, and the Anthracnose is back with a vengeance.

Pruning

Olives on the Hill are now on the last year of big pruning cuts. Coupled with heavy winds and lots of fruit on the ground, this has affected production.

Nutrition

The leaf test was carried out at the end of January and Boron was particularly low and Nitrogen also rather low. The recommendation was a foliar spray with urea and magnesium. However that recommendation was missed.

It was noted that fertilising during the spring will give the trees a good feed of nutrients and boost some of the other deficiencies like the nitrogen, calcium etc.

Following on from advice from their Horticulture rep, Stuart agreed that a new soil test would now be very helpful and should be done in August as suggested. Any recommendations from that should be actioned in August-September with ground applied fertilisers. There is no point in applying fertiliser now as it will be wasted with the winter rains.

Stuart said that the ground applied fertilisers are the major nutrient adjustments for the soil reservoir of minerals e.g. N, K, P, Mg, Ca and trace elements as per the soil test results and for any pH adjustment that may be required. There would be some merit in doing a Boron foliar application after harvest so long as it can be done with a decent interval of 'no rain' once applied (a week). He said to still plan on the pre-bloom Boron too because the floral tissues themselves will take up the Boron at that time. He agreed with adding soil Boron to the ground applied fertiliser plan to provide a long term correction to Boron levels.

Stuart suggested that ground applied Boron is likely needed but that soil applied boron will not be available for flowering in November. He said that boron moves very slowly from soil to plant and also within the plant. It takes several years to get changes in leaf boron from ground applied boron. So that is why he has been recommending to also do a pre-flowering foliar application of Boron. This can be applied with the first Protek spray pre-bloom.

Stuart recommended the next step for nutrition management at Olives on the Hill is to do a soil test in August and go from there. Next leaf test should be done in December-January. He said they needed to be ready for some top-up foliar responses from January to March as indicated by the leaf test.

Crop Load

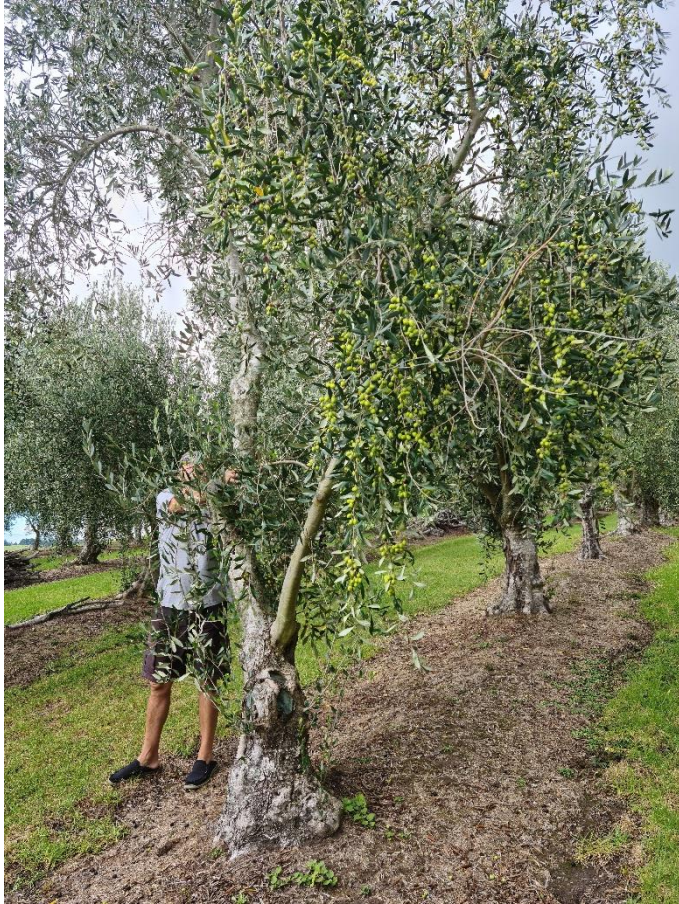
While flowering was okay, it was not as prolific as last year. Olives on the Hill have already harvested most of the Leccino. There was a pretty heavy crop of Leccino, but unfortunately, there was some Anthracnose evident, and the contract harvester stopped harvesting before he had done all the trees. The yield was quite good, 14.5% and 15.6% for two batches.

The varieties grafted on to Leccino have been very successful, see photo of wonderful crop load. Unfortunately this was not really representative of the whole grove. Most of the trees are quite sparsely covered and the grove will be well down on volume this year.

Thank you to Chris and Linda for hosting the visit.



Excellent crop on a grafted tree at Olives on the Hill



Chris showing the major pruning cuts made



Two state tree at Olives on the Hill

Canterbury

Terrace Edge, Waipara Valley

Bruce and Jill Chapman welcomed 23 growers to Terrace Edge on Thursday 15th April. This included members of the Canterbury branch of Olives New Zealand, several contemplating membership, two members from Marlborough and two people from Lincoln University.

Terrace Edge is one of the original Focus Groves and, while facing challenges in following the recommendations, has still managed to produce double the average harvest for the Canterbury region. In 2020 Terrace Edge harvested on average 11kg per tree and with 14% yield. The Canterbury regional average harvest was 5.44kg per tree and with the same yield.

When Stuart and Gayle drove up to Terrace Edge, their reaction was “wow, look at the grove!” Out in the grove this initial reaction was confirmed, Terrace Edge is looking the best it ever has.

The Field Day started with a shared lunch, thanks to all who contributed. Branch Chair, Alan Blakemore welcomed all. He led discussion around the region’s potential and market opportunities. In Canterbury there is at least one food show that a group of growers could attend. He noted there was major issue with throughput at the Waipara processing plant coupled with under-productive groves.

Gayle said that selling of certified EVOO between members has been consistent for quite a few years. Typically hundreds of litres at a time but also thousands, but these at a differentiated price. There is potential to work with MPI on exploring an export market. Waipara already has a reputation for wine so opportunity to lever off that.

Stuart said product is needed prior to exploring the market. Thus there is a need to fully harvest and have EVOO available. He emphasised that inventory is needed to be able to sell, so investment is required in harvesting initially and then in developing supply. The press would be a good hub.

Niall and Chris advised previous work has been done on the potential of the region and this should provide a good starting point. To progress the export potential of the region a “champion” is needed.

Malcolm hopes he has someone lined up to take over harvesting. This is also the last year for them contacting their previous grove. Maybe an opportunity for someone to lease this grove. Note that the grove has consistently producer Gold medal oil.

Bruce then introduced the new Waipara press operator. He advised Yvonne will be managing bookings. Harvest looking to be early. A round table estimated 65-70 tons for press.

Malcolm says that some groves are not irrigating because of concern over selling.

Disease Management

Bruce had prepared two diseases management handouts for attendees; one was a summary of the Manzate programme and the other was of the organic programme. He explained that Terrace Edge has been working on two spray regimes, organic and non organic as per handout. He wants to get the grove in top condition before moving a block to the full organic regime. Manzate has been applied pretty much every 20 days and there have been additional sprays of copper, Applaud/Ovation and Boron and three applications of Protek. The success of this programme is evident in no obvious Peacock Spot or Cercospora and minimal Anthracnose. There is also good extension growth and minimal leaf lost.

Stuart reminded that the two biggest diseases to be controlled are Peacock Spot and Cercospora. Because olives are evergreen, management is required all year round. The Olives NZ programme has been based around what works in apples and is cost effective.

Anthracnose (fruit rot) requires a different application of Protek at flowering. Recommended three applications and first application at very first sign of flowering. It has been amazingly successful across the country except for Leccino in Northland.

Stuart said that Olives NZ has also developed an organic regime for those who want to become organic. Once again using a programme based on organic apple industry. One of the Focus Groves following an alternative spray regime and recommendation is to the same spray cycle as with Manzate. There has been new information from Puglia to prevent Anthracnose is to use Serenade which is being trialed. This will be evaluated after a year. Stuart noted that the Wairarapa organic grove is using sheep for weed control and disease management (eating diseased leaves thus preventing re-infection). So are not using copper as is toxic to sheep.

Bruce does one application of glyphosate each year. Does at a time when weeds will fold over and help with water retention. He added that Applaud has been effective in dealing with scale that had been apparent at previous Field Days.

Nutrition

Nutrition leaf tests across most groves have shown low Nitrogen, however this is fine at Terrace Edge. There was a need to boost calcium and iron and these were addressed with Dolomite Lime soil application. A foliar applied magnesium has also been applied.

Stuart said to do a soil test every 1-2 years and then leaf tests to show uptake of the trees and any adjustment required. Individuals should discuss with their horticultural supplier but always question if there is a more cost effective option.

Pruning

The major pruning programme is well underway and the trees looking in good shape for mechanical harvesting.

Irrigation

This is the second year of drought in Canterbury and Bruce has been using irrigation since December and the trees are looking very good across the grove. It was noted that some groves without irrigation won't have a harvest this year, so fortunate that Terrace Edge will have a surplus of oil available to others.

Crop Load

This is the best ever crop load, many trees looking to be at least 10-12kg. Noted that there is fruit through the canopy.

Malcolm offered to let Yvonne know when he was starting to harvest at Terrace Edge and people are welcome to come along and observe the mechanical harvester in action. Yvonne will let branch members know.

Stuart concluded the Field Day with complementing Bruce on how amazing the grove is looking and said he is confident of a good harvest.

Alan thanked all for attendance and wished those who would be harvesting, a bountiful crop.



Out in the grove at Terrace Edge



Admiring the crop



Discussing the vigorous growth and leaving the tree to select branches



Typical laden branch at Terrace Edge



Beautiful bunches



Kit and Niall admiring the regrowth



Revisit this tree for October prune R13 tree3

Visit to Lincoln University

Pauline Murphy and Robert Anding of the Field Research Centre, Lincoln University have taken over management of a grove at Lincoln. The grove was established as a trial to determine which varieties grow best in Canterbury by Mike Morley-Bunker in the late 1980's. The grove has been severely neglected and Pauline and Robert were after advice on how they could rejuvenate this. Accordingly Stuart and Gayle visited the grove after Terrace Edge along with Jan Whyte and Niall Holland.

The varieties planted were Leccino, Barnea and Frantoio. They had initially been pruned with a central leader like old style apple trees. They have not received any attention in probably 10 years. Unfortunately the trees now require severe intervention to revive them. Stuart recommended coppicing every second row this year and then the other rows in a subsequent year.

Pauline and Robert plan to harvest this season and it was recommended that they borrow an olinet harvest catcher and branch shakers.



Lincoln tree



Some trees have a reasonable crop, others have nothing



Stuart discussing rejuvenation

Nelson

The Focus Grove visits and Field Days were held on Wednesday 14th April 2021 as follows.

Kakariki Olives, Redwood Valley

Approximately 20 people, including the Warehouse Manager from Winequip, were welcomed to Kakariki Olive Grove by owners Ray and Brenda Gregory.

Kakariki was one of the original Focus Groves and has shown outstanding improvement to grove health and increased production. This is an exemplary grove. For 2020 Kakariki produced on average 13kg per tree and with 17% yield. This compares with the regional averages of 9.27kg and 16.8% respectively.

Disease Management

Ray has been able to maintain the regular spray programme as there has not been the previous issues with not being able to get out in the grove due to bad weather.

Wuxal/NPK added to Manzate sprays @ \$30 ha. Wuxal is a general fertilizer. Any early signs of Peacock Spot were addressed with the spray regime. Protek first application ahead of flowering plus added Boron.

Ray has purchased a new sprayer because disease was still apparent in tree tops. As well as increased effectiveness, it now takes half the time and half the fuel cost. This is because of major improvements in spray plume and ground speed.

No apparent sign of disease and leaf retention is a good sign of tree health.

Stuart commented on using weeds and timing of spraying to aid soil regeneration and moisture retention. Therefore only spray in spring and autumn, if required. Once a year is good agricultural practice. Allow weeds to grow so make a thatch mulch when sprayed. People also tend to mow a bit short, leave height to 200mm.

Nutrition

Leaf tests showed low on Boron and Nitrogen. Ray said he applies fertiliser split into two applications; in October and late summer. However he did not get the second application done because of lack of rain.

In response to a question about EU plans for future chemical bans, Stuart explained that the EU has a programme for review of all products. He said this was not an issue for NZ olive industry at this point plus no one is exporting to Europe. He also provided the update on Manzate availability and Glyphosate residue. Olives NZ will obtain information on residue testing for the latter.

Pruning

Trees are looking in good shape for mechanical harvesting.

There was discussion around harvest timing and pungency and yield. Unfortunately timing has not been very consistent in Nelson.

Regular rainfall has kept up good growth and fruit development.

Crop Load

The crop is looking very good. Branches are laden from top to bottom. Actually looking a bigger crop than last year.

Last year there was an issue with fruit size and getting the crop off with the mechanical harvester - approximately third left behind. Hopefully that won't be an issue this year.

Ray said by following the Focus Grove recommendations Kakariki has doubled the grove production and biennial bearing has been substantially addressed.

In response to a question about timing of harvesting Picual, Ray recommend at the same when Frantoio is being harvested.

There was discussion around export markets and it was noted that some members are exporting to Japan, Taiwan and previously USA, UK , Canada and some European countries.

The attendees from Beulah Ridge had concerns about selling the oil and asked if it was time to get out the marketing plan that was shelved a bit over three years ago. At that time the response from members was that they struggled to meet local demand and wanted productivity addressed before investing in marketing. The 2018 Conference presentation on the consumer surveys and marketing plan can be found here.

<http://www.olivesnz.org.nz/wp-content/uploads/2021/04/Conference-2018-Consumer-Survey-and-Marketing-Plan-Presentation.pdf>

At the conclusion of the grove walk Ray and Brenda had arranged a BBQ lunch supplemented with salads brought along by local members. This was most enjoyable and may thanks to all who contributed.

Thanks also to Ray and Brenda for their hospitality.



Out in the grove at Kakariki



Typical laden tree



Stuart discusses why to leave new growth to sort itself out



Pruned for machine harvest



Lovely bunches



The new sprayer

Neudorf Olives, Upper Moutere

Susan Pine welcomed 8 fellow growers to their grove. It was a shame that some of the other boutique grove owners and olive grove sub-division owners did not come on out and visit Neudorf as the challenges and approach of the grove are probably more relevant. The Pines are also taking an alternate approach by following the Focus Grove pruning recommendations but limiting the Manzate spray programme to monthly applications.

In 2020 Neudorf has harvested on average 10kg per tree and with 17% yield. Susan said she is happy with the tonnage produced.

Disease Management

Susan commented that they have been doing the modified Manzate spray programme for two years but there are still issues with Peacock Spot. She is questioning if this is because the spraying is not frequent enough.

Susan said they are using Difference with Manzate when rain is predicted to compensate for less frequent spray programme.

However the trees are looking pretty good with much less disease evident than on previous visits.

Nutrition

The leaf test showed nothing out of the ordinary and just some trace element (iron, boron) deficiency. Stuart recommended correcting this in spring. He noted that Neudorf already do an annual foliar feed.

Pruning

Major pruning continues and there is big job with sucker management. The focus has been on reducing height to suit hand harvest and keeping compact so that tractor can work through the rows. Plus cleaning out the middle of the trees to help light and spray penetration.

Accordingly the trees are looking lush but with vigorous bushy regrowth.

Stuart explained it is more effective and efficient to rip off the bushy growth. Also drooping new growth. He noted the need to remove old bare branches that have had Anthracnose.

Crop Load

The crop load is looking less than usual because of the major pruning. Some trees have very good crop but heavily pruned trees are very patchy. However, Stuart pointed out that the new growth points towards a much bigger crop next year.

Susan explained that because she does their processing there is a need to match harvesting to capacity. Therefore hand harvest works well on the grove.

Susan had arranged a very tasty afternoon tea to conclude the afternoon and Jonathan Pine joined us. Many thanks to Susan and Jonathan for their hospitality.



In the grove at Neudorf



Ideally pruned for hand harvest



Stuart showing the healthy extension growth



Good regrowth from pruning cuts



Stuart and Susan discussing branches for next cuts



Stuart showing how to rip off superfluous growth as being more efficient than using pruners



Pleasing crop load at Neudorf



Lovely plump olives

Wairarapa

The Focus Grove Visits/Field Days were held at Wairarapa on Friday 16th April.

Leafyridge Olive Grove, Masterton

Craig and Ruth Leaf-Wright welcomed more than 35 people to Leafyridge. Craig explained that the Branch Chair was in Northland and had sent his apology, as had several others. Garry Burlace from Horticulture was in attendance and one of the new owners from Aquiferra, Hawke's Bay with the previous owner. There were also new owners from several local groves.

Leafyridge is one of the original Focus Groves and has followed an aggressive pruning regime to get the trees back into the desired shape and size. Whilst this approach had initially impacted on harvest tonnage, the benefits of this are now becoming apparent. In 2020 Leafyridge has harvested on average 18kg per tree and with 15% yield. The Wairarapa regional average was 7.06kg and 13% respectively.

Disease Management

Regular spraying as per the recommended programme and approximately every 4 weeks because of dry weather. Pronto seaweed was applied in October and there were three applications of Protek. Craig said he had done the first Protek a week before flowering.

There was little disease apparent in the grove.

Nutrition

Craig had had leaf tests done at the beginning of November and Nitrogen and Boron were low. He followed the recommendation to apply Tech urea (foliar) and CAN for front field (ground). Plus Boron was also applied.

Second leaf tests were done in April with the same results. Stuart explained that the uptake of the November application has most likely already been used on fruit production. He said that Nitrogen should be applied in spring to avoid leaching away. Applications can be split over August and January if large applications are required but noted that moisture needed for uptake. Nitrogen will be immediately used.

Stuart explained the preferred leaf test time for olives is January because of leaf maturity. Peter Graham asked about timing of leaf tests in relation to last spray. Stuart said the lab thoroughly washes the leaves so that is not really an issue. The Hill Labs report is tailored for olives and both chart and figures shown. Stuart suggested it is adequate to do soil tests every two years unless major deficiency is identified and needs to be monitored. However he recommends leaf tests be done annually.

Garry said there is a risk of over applying Nitrogen and this will impact on fruit. The emphasis should be on matching application to return and not being over-sold. He added that the aim with nutrition is to get a return crop.

Stuart said first goal of grove rejuvenation is to get the disease under control and get the canopy management underway. If after two years trees still need improvement then nutrition is probably the issue so the soil and leaf tests are absolutely required.

In response to a question on fertigation Stuart said this was very expensive and suited to higher value crops.

Because of the size of the property and the three distinct blocks, Craig does tests on the three distinct blocks and tailors fertiliser application accordingly.

Pruning

The trees are looking in excellent shape for mechanical harvesting.

There was a comment about branches flopping over being the ones to cut off. Despite machine harvest Craig said he has left drooping branches because these will be hand harvested. He commented that the 2020 Frantoio harvest was 25kg with machine harvest, followed up with hand harvest of another 15kg. This approach worked extremely well because Leafyridge operates its own press. Looks to be a similar crop load this year.

Irrigation

Craig said the grove had been irrigated as required since prior to Christmas and this was reflected in the plump fruit and healthy looking trees.

Crop Load

The crop is looking excellent, with some trees looking to have 40+kg again. Stuart said it was good to see also areas of new growth for next year with healthy 15-25cm extension.

Stuart concluded saying that Leafyridge is looking in excellent condition with an impressive crop again. Thank you to Craig and Ruth for hosting our visit.



Out in the grove at Leafyridge



Typical crop load at Leafyridge



Stuart explains cuts for bushy regrowth



Craig is pretty happy with the 2021 crop



Beautiful plump bunches



Even more beautiful bunches

Bella Olea Olive Grove, Greytown

Chris Penman welcomed 25 people to the grove, including our MPI Advisor Fiona Clark. The Penmans are following an organic approach and are well on their way to certification as an organic grove.

Because of the heavy pruning regime Bella Olea reported a small harvest for 2020 but were able to supplement their supply through harvesting another grove. However their grove is now looking vastly improved since October. In fact the grove is looking very good and the new regime is obviously working well.

Nutrition

Chris explained that they are concentrating on nutrition to improve the overall condition of the grove and for productivity. Leaf test results were pretty much pleasing with really only Magnesium being deficient. Iron is also a little low.

The products being used on the grove are Biosea liquid seaweed, Moana fertilizer supplemented with Boron and magnesium.

Disease Management

Chris said the liquid seaweed fungicide is used for disease management. While this has been effective it is rather expensive and works out twice the price of Manzate.

The aim for spraying aim is monthly but at present is about every 6-8 weeks. He noted that Anthracnose was minimal this year.

Pruning

Pruning is ongoing with the aim to reduce the trees in size and reduce bushiness. Stuart pointed out that you can now see extension growth as a result of better disease control and the pruning regime.

Crop Load

Chris said that a great flowering has translated to good fruit set and in fact he thinks the crop load is the best he has seen at the grove.

Lack of rain had been a worry but recent rain has been good for trees.

Chris said he thought they would continue to see biennial bearing but hoped that this will even out over time with the organic approach.

The sheep are doing a great job of grove floor management, cleaning out suckers, and eating fallen and diseased leaves. Plus Chris has the prunings mulched which helps with water retention.

Thank you Chris for hosting our visit and we look forward to hearing how harvest works out.



Out in the grove at Bella Olea



Products being used at Bella Olea



Trees have responded well with a pleasing crop load



Sheep are doing a great job



Bella Olea is looking really good



Pleasing crop

General Comments

The participation of the Focus Groves is much appreciated and critical to the success of the project. They have shown an unquestioned willingness to follow recommendations and incur the associated costs. As well as welcoming other members to their groves and providing hospitality. Thank you all.

A new innovation is being trialed – personalized visits to other groves on a user-pays visit.

Summary

All of the original Focus Groves visited as part of the Field Days that have been following the recommended programme for proactive disease management and canopy management have reached an exemplary stage and are exemplars for the wider olive growing industry in New Zealand. For other groves following the recommendations, the results are apparent in their harvest tonnage as well as their observations on overall grove health.

The organic and alternate approach groves are also looking hugely improved.

The vastly improved tree health is apparent across all of the groves visited with very little or no disease and plenty of lush leaf. The tree structure also across these groves has dramatically improved, enabling light and spray penetration and ease of effective harvest. Typically there is an excellent crop load.

All of the Focus Groves are already producing a substantially greater harvest tonnage than the regional average. It will be interesting to see their 2021 harvest figures.

The three Fact Sheets associated with this project have been reviewed and at this stage, no updating is required. They will be reviewed again ahead of the October Focus Grove visits and Field Days.