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**BETTER RESULTS
THROUGH WORKING TOGETHER**

Directors' Review

Taking pride in our product

Directors JOHN CARROLL and ALISTAIR YOUNG tell us how AVOCO was able to deliver on its commitments to growers and key customers during a challenging year.

Every season has its issues and 2018-19 will be remembered for two things – troubling fruit quality and the huge amount of effort that is needed to successfully bounce back from these challenges. As an export marketing company, our reputation hinges on our ability to deliver quality fruit that meets the expectation of our customers. We strive hard to deliver on our commitments each and every season and we will go the extra mile to avoiding letting anyone down. This was our approach last season – a year when more than 500 growers supplied us with 1.869 million trays of avocados for export. We committed 20% or 368,000 trays to Asia and the AVANZA markets, with the balance of fruit shipped to Australia. Of that, 80% went to supermarkets and 20% was sold in the Australian wholesale market.

Our Quality Focus team is committed to efforts that aim to improve fruit quality and mitigate the risks.

As outlined in recent grower meetings, the large volume of poor quality fruit arriving in Australia became a significant concern for us from about November 20. The commercial environment we operate in sees our fruit inspected every day at distribution centres by key retail customers. During this period, we discovered that we were facing quality issues at a scale not seen before – with the bulk of rejections due to fruit rot and lenticel damage. Through the season, we also experienced a small amount of issues with chill injury. Examining the economics, it became clear that, to salvage the season and restore customer confidence in New Zealand fruit, we would need to immediately repack every tray of avocados arriving at our ripeners' facilities. This required a mammoth effort from our business partners in Australia who, on our behalf, employed staff to work round the clock to inspect and repack

more than 10,000 trays of avocados every 24-hour period. For the balance of the season, we discarded about 10% of all shipped fruit because we knew that selling 90% would be better for us financially than if we approached it any other way. Our 'Inherent Vice' insurance policy enabled us to recover the cost of this repacking along with some fruit value. **OPEN COMMUNICATION ESSENTIAL** Australia is our closest market and one where we compete with very high quality fruit from Western Australia, and whose volumes were higher than anticipated last season. This added to the woes of New Zealand exporters, who you'll recall made a decision to pull back on our combined supply to take the heat out of the Australia market, which had up to 400,000 trays of fruit arriving from all sources during the peak period. It was unsettling to deal with fruit quality issues with the regularity that we did. AVOCO works with six packers in three different growing regions and the issues were across the board. However, it appeared that the most fragile fruit was picked from around the time of last season's new fruit set.



Our Australian customers have high-quality expectations that we need to meet.

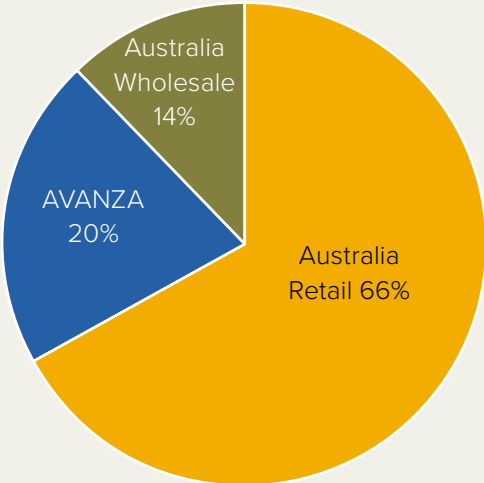
Our Australian customers were kept informed every step of the way and were also made aware of the unusually warm and wet climatic conditions our New Zealand growers were enduring – a fact that exacerbated our advanced and irregular fruit maturities and quality challenges generally. Post-season meetings with our Australian retailers have confirmed last season was a very good season for avocado sales and, in our view, the values that the market sustained through summer were excellent. The previous summer we had less fruit in the market and incredible avocado prices but, viewed within the context of competing with Western Australia's large crop, we believe this year the market performed extremely well and achieved very acceptable values. The key to this has been the ongoing growth in consumer demand. Retailers gave us credit for how AVOCO dealt with the challenges we faced. Now, we must

focus our efforts on taking greater pride in the fruit we're growing and supplying to markets in Australia and across Asia. Our Quality Focus team, made up of our technical and packhouse partners and led by Alistair Young, is committed to efforts that aim to improve fruit quality and mitigate the risks associated with adverse weather – a factor we know influences quality outcomes. We aren't expecting further problems but be assured, we have a plan in place to deal with them should they arise.

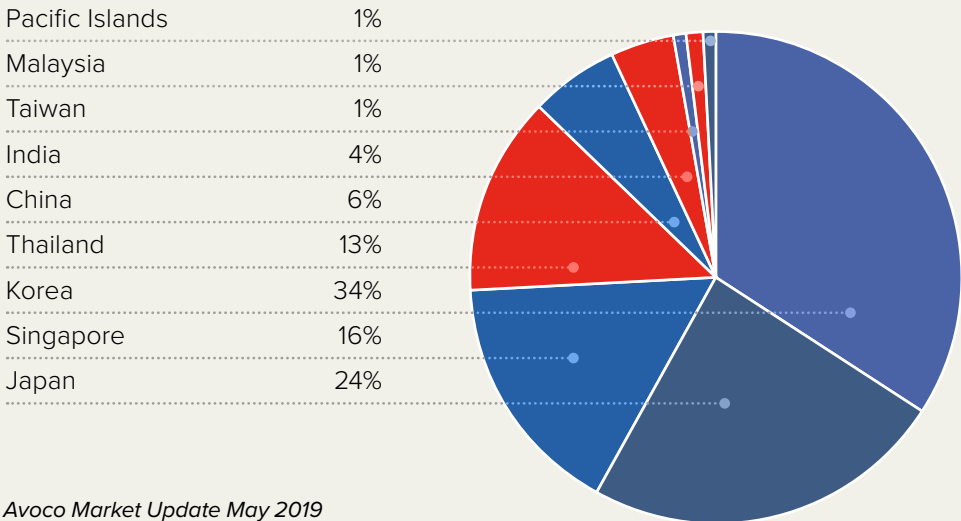
FUTURE STILL BRIGHT

Our early estimation predicts a crop that will be up on last year by as much as 20%. About 70% of our crop will come from the Bay of Plenty which is expected to produce a crop 50% up on last year's regional volume. Crops are expected to be up in the Far North but down around Whangarei. We will have a significant presence again in our AVANZA markets which will be used to strategically uphold values at key periods and futureproof our industry's growth. We also have strong commitments from our Australian retailers for next year too – a sign of the confidence they still have in us. As growers, we ask you to take on board industry best practices that look to improve overall orchard health and production. Your role at the start of the supply chain is incredibly important. Our technical team will be supplying you with more information and advice over the coming months to support you. Our involvement within the chain of custody of your fruit will look to tighten up other practices that we believe will positively influence the outcomes of next season. The 2018-19 season was difficult for everyone but we've demonstrated how AVOCO's scale and experience works to manage challenges thrown our way. This was reflected in the final OGR announced in April. All the best for a successful season ahead. ■

AVOCO MARKET SPLIT 2018-19



AVANZA ALL MARKETS 2018-19



Avoco Market Update May 2019

Behind The Scenes

Your AVOCO Grower Relationship Committee, led by chairman HUGH MOORE, reports on policy updates and issues important to growers and the supply group.

When you get this newsletter, your finals will be paid, and you will realise it is not a stellar year like the last two or three. This season has given us a return similar to four or five years ago hanging around the \$20.00 mark depending on if you picked up any late harvest incentive.

Fruit quality has left over \$7.00 on the table due to rots and in some cases cosmetic standards. As you should be aware, storage and ripe rots have been increasing over the last three seasons resulting in a major blow out this season. No doubt the wet weather conditions in November and December paid a large part in the increase but we must also remember these issues have been increasing year on year.

There is no doubt that fruit can be damaged through poor handling systems from orchard to the market place. We must not forget that ripe rots start in the orchard when fungal spores land on the fruit. I hope you have all listened to recent AVOCO presentations and taken on board the quality messages to mitigate this problem.

This issue is not new, and we have always known our fruit is subject to more rots than our competitors, but we have also used good practice in the past to overcome the risk. The situation is no different than the problem in 2000 and 2002 when we had the same issue in the American market. This was overcome by using good practice in the supply chain

and taking pride in the product we send to our customers. We must achieve this again or we will not have a market to supply.

The AGRC met twice since the December newsletter with the following being discussed:

- Insurance claim update and the likelihood of this cover not being available in the future.
- Late harvest incentive payments and grower uptake of the system.
- AVOCO directors marketing report on volumes by market, dealing with quality issues and planning for the coming season.
- AVOCO submission to the EMS and Quality standards committees seeking a change in grade standards, temperature controls and water blaster research for the coming season.
- Review of Christmas/New Year harvest incentive relative to cost and outcomes.
- Australian process grade supply, future volumes and regional supply equity issues.
- Food safety costs to date and packhouse audit costs charged direct to growers going forward.
- End of season quality report to be presented at regional roadshows by Colin and Danni.
- Quality audit proposal for internal audit of packers and service providers targeting grade standards and its likely pool cost.
- Pool incentives and their performance for copper, China packing costs, growers' compliance cost for China. At this point, the AGRC has determined there will be no incentive for copper application but there will be an education program on best practice. It was accepted that the extra compliance required for packers has increased costs so an additional payment will have to be considered with supporting information. For growers exporting fruit to China, 50 cents per tray shipped will be paid for this season. It is envisaged no further payments will be made going forward.

Please feel free to contact your local AGRC member for further information on any of the above subjects or to discuss any issues you would like raised at the next meeting being held on the June 11.

All the best for the coming season. ■



Good practice in our supply chain will ensure that our fruit arrives in market in premium condition.

AGRC COMMITTEE MEMBERS

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Q&A

Toni Morrison

Supporting passionate growers as they strive to achieve their goals keeps Kauripak's TONI MORRISON happy in her work.

What does your role involve and what are you responsible for?
I am a Grower Services Representative for Kauripak. I work with the Grower Services Team to help connect our avocado orchardists with the growing help and information they want and any orchard support they need.

What were you doing before you worked at Kauripak?
I have been working with avocados in the BOP and Coromandel since 2010. Starting with picking and packing, I have had various roles including processes, procedures and compliance. When I realised how complex and interesting it is to grow avocados in New Zealand's marginal conditions I became somewhat intrigued to find out more and deepen my understanding. After work hours, I studied extramurally for a Lincoln University Diploma in Horticulture which I successfully completed in 2018.

How did those roles prepare you for the work you do now?
Picking, Grading, Packing, Processes & Procedures, Compliance, Chemicals & Fertiliser, Client Liaison... Spending hands-on time in all those areas has given me a better appreciation of how it all fits together. I think it makes communication more fluent if you can listen with a certain level of awareness and understanding.

In your experience, what do the top performing growers all have in common?
They give attention to detail. They love to analyse what has happened before and think about what is likely to happen next. They are passionate and their passion for growing keeps them excited and motivated. These attributes keep them striving to grow better crops each season.

When you talk to growers, what do they say is most important to them?

Most growers want to master the art of growing their avocado trees well. New growers want to find out what makes their avocado trees tick. More experienced growers want to change it up a gear and take it to a new level. Most importantly, all growers want to be rewarded well for their time, effort and investment.

When you're not working for Kauripak, how do you spend your free time?
I enjoy skiing and each winter my family and I try to find as many opportunities to get to Mt Ruapehu as we can. We also love being at the beach and Waihi Beach is our go-to place for summer fun.


Avocados are such a versatile meal ingredient. How do you enjoy eating them?
I love avocados, fresh, baked, mashed, sweet, blitzed, sliced, spiced and diced... anyhow! As a teenager my friend's mother introduced us to her version of guacamole and crackers – roughly mashed avo with red onion, chunky tomato, lemon juice and salt and pepper – I was delirious!



(in a 14-year-old girl kind of way!) and I've been addicted ever since.

What do you love about horticulture and the avocado industry?
Getting out and about, meeting the people and learning their individual stories. I love working with the avocado trees, the amazingly nutritious fruit and working with the beautiful, often majestic looking trees, but it's the people you meet that make this job so awesome. ■

Best practice



Actions taken on orchard will improve fruit quality.

Pride in our product

We’re all in this together. With the focus squarely on fruit quality, there are practices we can all follow as growers that offer the best prospect of that quality being high.

Here we summarise NZ’s Avocado’s best practice guidelines, as well as our own harvest advice. Our technical team is always available to offer further advice – just be in touch should you have any questions.


NZ AVOCADO’S BEST PRACTICE TIPS:

- **ORCHARD HYGIENE:** Remove mummified fruit, dead wood and dead leaves where practical. Prune to increase air flow.
- **FUNGICIDE USE:** Copper is what we currently have available. It is a protectant and therefore must be applied before infection occurs.
- **TREE HEALTH:** A healthy root system can help to maximise nutrient uptake. This may include practices such as regular fertilisation, injecting, pruning, pest control and soil management.

AVOCO’S HARVEST GUIDELINES:

- **PICKING BAGS:** Don’t use dropped picking bags on elevated working platforms. Use the height limited draw cords (strings) in picking bags to reduce fruit drop distances.
- **HYGIENE:** Sterilise harvest equipment at least daily (including clippers, bags etc.)
- **TREAT FRUIT GENTLY:** Do not drop fruit more than 25cm into or when emptying picking bags. Transport fruit with minimal jostling (e.g. tractors should be driven slowly, and rear forks should be used).
- **KEEP PICKED FRUIT COOL:** Keep fruit on the orchard in the deepest shade possible. Deliver fruit to the packer as soon as possible (must be within 24 hours).

For more information about fruit rot management, visit NZ Avocado’s website: industry.nzavocado.co.nz/grow/fruit-rot-management



Every care must be taken to treat fruit gently during harvesting.

Technical team report

Cultivar extension

AVOCO technical manager COLIN PARTRIDGE visited South Africa in March to attend ‘Maluma Day’, renew contact with avocado technical advisors and learn more about the country’s industry developments. He filed this report.

The ‘Maluma Symposium’ is organised by Allesbeste Nursery (Dr Andre Ernst and his family). Andre Ernst holds the master licence for the patented cultivar ‘Maluma’ (a Hass-like selection found in the early 1990’s in the Levubu area of Limpopo Province) and he has gone to extraordinary efforts to promote and commercialise the cultivar.

In South Africa, Maluma is a precocious and heavy producer of large, Hass-like fruit. It has not performed that well in NZ to date however, but it is still early days. You can read more about the variety at: [https://en.wikipedia.org/wiki/Maluma_\(avocado\)](https://en.wikipedia.org/wiki/Maluma_(avocado)).

This was the ninth Maluma Day and it was extremely well supported. Due to generous sponsorship, attendance, food and drinks, a sack full of goodies and transport between sites was all free. I am told there were 480 people attending with 10 different countries represented. Mary-Lu Arpaia (USA), Graham Anderson (Australia) and Guy Whitney (now back in SA from the USA) were amongst the many familiar faces I saw.

The Maluma Symposium took place in the form of sit-down presentations in the Hall of Merensky School for one day and field visits the following day.

While the symposium was in some ways a promotion for the cultivar ‘Maluma’, with proceedings live-streamed via YouTube, there were some excellent general presentations that would interest any orchardist. In particular, Koos Badenhorst’s talk on ‘Financial Benchmarking and Tweaks for Increased Profitability’ was great. While it was based on studies made over many years in the deciduous fruit industry of SA, it highlighted the need to be early adopters of new technology or be doomed to become dodos. The ability to renew/replant to increase production as better varieties and systems become available was especially highlighted as a feature of the most profitable growers.

Irrigation efficiency and planning and the increasing adoption of drip irrigation for avocados in SA was spoken about at some length. I have always considered drip to be inferior to microjets, but we need to keep an open mind. The expansion boom in avocados and macadamias in SA is incredible and water has become much more limiting than land. Also, practically every new planting of all varieties is now done on high ridges with varying degrees of intensive spacings. Drip irrigation can suit such new plantings where roots are essentially confined to a relatively limited soil volume.



Hass on Dusa. 7m by 3m, 18 months old at a ZZ2 planting under drip irrigation.

Andre estimates that with Maluma, water usage drops from 6200 cubic meters per ha per annum with microjets, to around 2000 cubic meters per annum under drip. I think Maluma and Hass water consumption will be similar. Netafim is heavily involved with his irrigation design and their motto is, ‘Grow more with less’.

Maluma has an upright growth habit with willow-like drooping side branches which has led Allesbeste to establish semi-commercial trials of Maluma ultra-high density under single and V-trellising systems in 2017. Advantages of V trellising are seen as:- simplified pruning, limiting alternate bearing, minimised time to fill space, good platform for mechanisation, better spraying efficiency, faster harvesting, provides structure for hail netting and better sunlight interception (the most important factor). Disadvantage is increased overall costs of establishment and labour. No specifics given however. They are sufficiently encouraged that they now plan to establish a further 30 hectares under V trellising with horizontal wires spaced about 30cm apart. This allows fruit to hang freely without getting caught up on wire and branches.

A further important point about ridging – soil compaction is recognised as a serious threat to root health in SA and we lag far behind in recognising this as a problem in NZ. While ridges increase water usage (addressed by increasingly using drip irrigation), they minimise the risk of soil compaction and allow for incorporation of essential elements prior to planting.

The meetings I had with various technical people were very productive and I hope that some of the information I returned with, will be able to be used in our quest for quality. Growers who attended the meetings in April will have been updated on this. ■



Maluma on Dusa 4m by 2m new planting at Allesbeste. Drip irrigation. This will be V-trellised.



Almost every new planting in SA is done on high ridges.

AVANZA markets

Japan

Promotional activity focused on social media platforms (Instagram and Facebook), with media coverage, in-store sampling and targeted event sampling introducing even more people to our brand.



Share of population that consumes avocados.

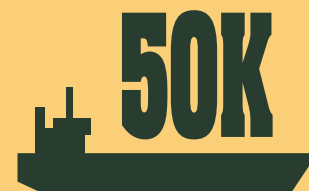
(Great news – there's plenty of room for consumer growth.)

South-East Asia

Markets are becoming increasingly competitive, making the NZ avocado story an important tool to help us drive demand for our premium quality product. New guides for retailers help to uphold quality standards and meet customers' expectations.



AVANZA's share of NZ's avocados to Thailand.



Trays shipped to Thailand.

26.9K was the previous mark in 2017/18.

96%

AVANZA's share of NZ's avocados to Japan.



Trays shipped to Japan.

75,500 was the previous mark in 2017/18.



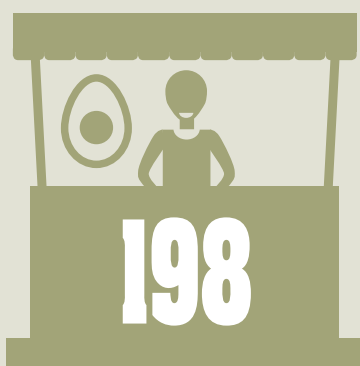
AVANZA's export volume growth in Singapore in 2018-19.



Demonstration days in Thailand.

Korea

Brand partnerships and targeted marketing continue to serve AVANZA well. Our association with Maeli Dairies allows us to leverage their reputation in the market and introduce our premium brand of avocados to new consumers.



In-store supermarket demonstrations targeting 101,000 consumers.

India and China

Promotional activity in India continues to educate the consumer and introduce more people to AVANZA avocados and our unique New Zealand story which appeals to discerning, health-conscious consumers. In China, we started strongly with new brand messaging and premium prices.



to establish AVANZA's reputation for delivering the 'full-package' service model.

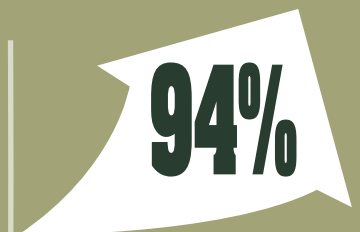
62%

AVANZA's share of NZ avocados to Korea.



Trays shipped in 2018-19.

96,000 was the previous mark in 2017/18.



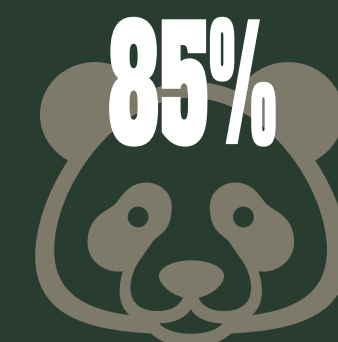
Growth in avocado consumption.



Trays shipped to India this season.



Copies of booklet distributed to India's food service sector.



AVANZA's share of NZ's exports to China.

23K

Trays shipped to China.

(Sourced from 30 growers)

Autumn technical update

The autumn temperature change happened overnight and with that growth has slowed and the summer flush is hardening off. AVOCO technical adviser JEROME HARDY outlines what your orchard priorities should now be.

In April/May you should be injecting, pruning, taking soil and leaf samples, and remaining watchful of pest populations. On some orchards, six-spotted mite populations have increased on many orchards so beware. I have listed below a little more detail on these key autumn priorities:

ROOT HEALTH

One common factor between highly productive orchards is that they inject their trees every year, on a maintenance or preventative basis. If you pull the mulch away under your trees you will notice the autumn root flush now well underway; roots are now a strong 'sink' for resources and it's a good time to inject right now. Sicker trees that have not responded to one to two years of phosphonate treatment should be pruned back heavily in the late autumn (May/June). Inject all healthy trees 'preventatively' in autumn, every year at 13-15% active ingredient as follows:

- **400g/litre product (e.g. Foschek):**
one part product to two parts water = 13.3%
three parts product to five parts water = 15%
 - **600g per litre product (e.g. Agriphos)**
one part product to three parts water = 15%
 - Apply 1.5 x 20ml syringes per meter of canopy health and ensure the syringes are evenly spready around the tree structure.
- For more information please read Colin Partridge's article on Phytophthora Control.

SOME COMMENTS ON LEAF AND SOIL TESTING

One of several things we measure when we take a soil test is soil pH. At pH extremes mineral nutrients become unavailable to the avocado roots (see chart below). This is why we use lime to keep soil pH within an ideal band of 6.0 - 6.6. When you get your results (assuming a traditional, productive Hass on Zutano seedling rootstock orchard) you should assess them against the norms below and in the case of the key nutrients, re-consider your strategy for the year ahead.

SOIL NUTRIENT TARGETS

Soil	Units	Target
pH		6.0-6.6
Olsen P	mg/L	>40
Potassium	me/100g	1.0-1.2
Calcium	me/100g	12-20
Magnesium	me/100g	2-5
CEC	me/100g	15-25
Base Saturation	%	75-90
K Base Saturation	%	3-10
Ca Base Saturation	%	55-65
Magnesium Base Saturation	%	12-15
Boron (M3 test)	mg/L	2.5-5.0

LEAF NUTRIENT TARGETS

Leaf	Units	Target
Nitrogen	%	2.7-3.0
Phosphorous	%	0.15-0.19
Potassium	%	1.0-1.2
Calcium	%	1.5+
Magnesium	%	0.4-0.8
Manganese	Ppm	80-300
Zinc	Ppm	50-150
Boron	Ppm	40-60

PEST CONTROL

Mite infestations can readily occur in autumn and winter and we have noticed this on some orchards in early April. Mites are an arch-enemy of leaf/canopy health; pest-monitor regularly and contact your advisor for guidance if you need to control a rising population. Spray options are:

- **Paramite:** Our most effective tool. Apply once a year only

- **Avid:** A cheap and effective knock-down option especially if applied back-to-back, and it also controls leafroller. Apply a maximum of three sprays a year.
Many orchards may have applied a clean-up thrip spray in April and if you are carrying a good crop you should be reacting to a 2% threshold with a back-to-back spray. **Remember to spray your Cryptomeria shelter as this is a strong host for greenhouse thrip.**
Finally, always keep an eye on leafroller numbers: don't let a late infestation catch you off-guard.
- NOTE:**
- Please aim to apply a monthly copper application to protect your fruit from rots.
 - Any spray opportunity from now on is also an opportunity to include foliar boron, especially if you are struggling to keep your leaf boron levels above 40ppm (the most cost-effective option is Solubor at 80g per 100 litres).

PRUNING

Pruning should be an annual exercise. Preferably in both autumn (main prune) and a follow-up in the spring. The emphasis (pruning severity) will be heavier in the lighter crop years. If you do not do an annual sweep of the orchard you will miss opportunities (i.e. that tall branch that carried a heavy crop over the past season needs to be cut down NOW or it will be even taller next year (and carrying another heavy crop). Reduce complexity in your canopy and create bold space around your selected leaders.

- 10 years ago: One large tree meant one huge bearing unit which was difficult to access.
- Today: One large tree means three smaller bearing units with ample light and space around each, and much easier to access
Create 'succession', i.e. variable height with the guiding principle being that the highest wood will be your heaviest cropping wood over the next season but also the next in line for removal.

I hope you enjoy the quieter winter months like I will. ■



What's that bugging my trees?

How industry and Biosecurity New Zealand are supporting growers through the process of making pest and disease observations.

BRAD SIEBERT
BIOSECURITY & PROGRAMME
MANAGER, NZ AVOCADO

The process of calling a government 0800 number about your own orchard can be extremely daunting especially when you are unsure of the process and what implications this may have for your business. Growers are at the front line of pest reporting and without ongoing grower awareness, vigilance and knowledge of how to pass on these observations the industry can be left with far bigger issues to deal with if pests are given the chance to spread.

Whether it's a strange bug, insect damage you've never seen before or bizarre disease symptoms, if you do spot unusual pest activity on your orchard the below outlines the process you will encounter when calling for assistance.

Biosecurity New Zealand's Exotic Pest and Disease hotline 0800 80 99 66 is manned by an external call centre 24 hours a day/365 days a year. Staff will take your details and a brief description of the issue into a secure and confidential database.

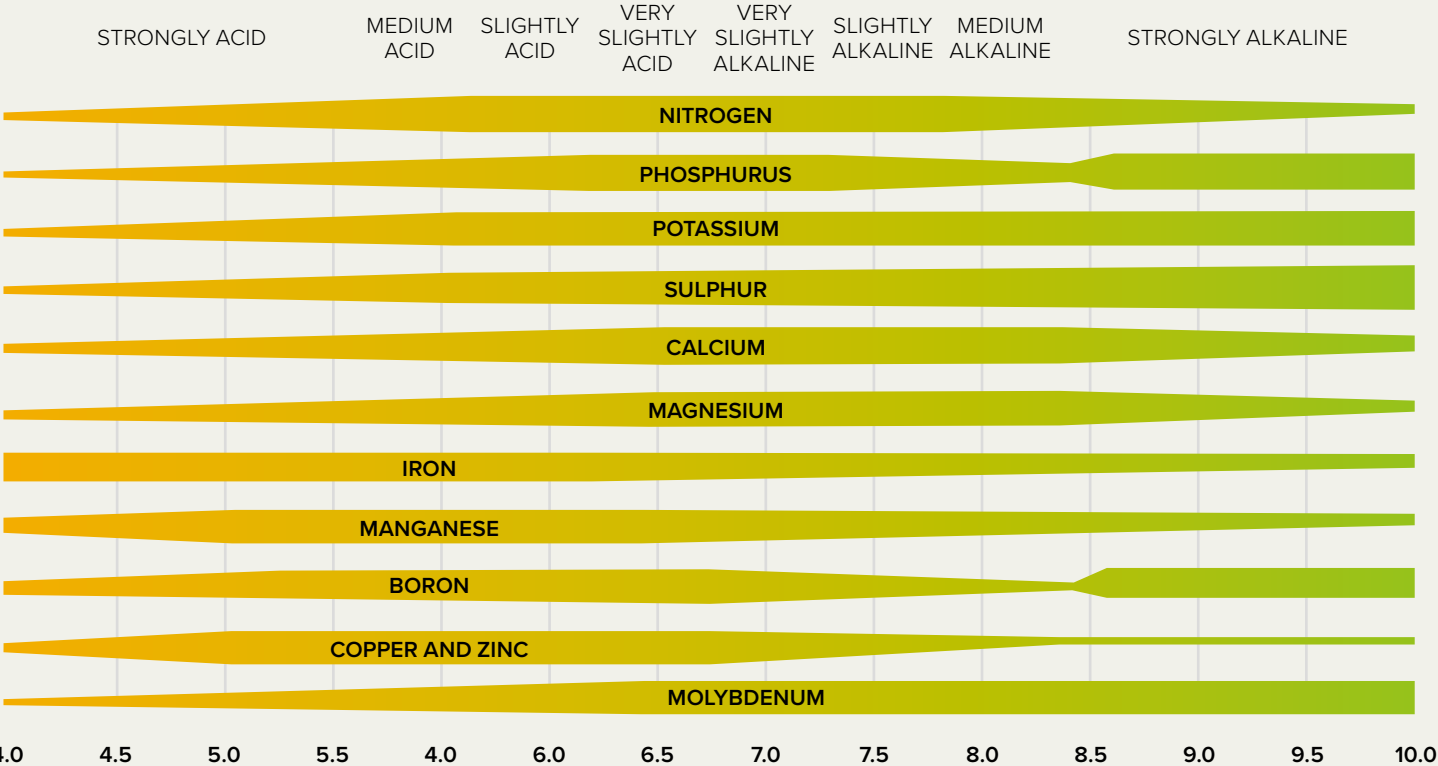
Biosecurity New Zealand's Incursion Investigators in your area will then receive notification and will contact you to discuss the situation and assess the immediate biosecurity risk. Depending on the situation, the investigator will often request a photo by email to try and rule out an exotic organism i.e. something that is not present in New Zealand. Many high-risk organisms such as the Brown Marmorated Stink Bug (BMSB) can be ruled out from a high quality photo.

If the biosecurity risk seems high, an Incursion Investigator may travel to your property to look at the pest or fruit/tree symptoms and, with your permission, may even collect a sample for diagnostic purposes. These enquiries including any subsequent diagnostic services for suspected exotic pests is free of charge to any grower.

Calling the 0800 number might not be the first step for many growers who simply want to question the identity of a strange insect or plant symptom. This could be as simple as asking your consultant, packhouse liaison or sharing it with NZ Avocado's biosecurity manager by email or through the First Detector Network Facebook page. Where questions remain and with the permission of the grower, the free diagnostic service can be utilised by collecting and sending in samples.

Everyone involved in the avocado industry has a role in protecting New Zealand from biosecurity threats by making these observations early. ■

EFFECT OF SOIL PH ON NUTRIENT AVAILABILITY



Source: avocadosource.com

Caring for the land

FRANZ and SANDY IMLIG have taken best practice orcharding to the next level with their innovation and environmental passion recognised with three wins in this year’s Bay of Plenty Ballance Environment Awards.

Motivated by a desire to improve their orchard’s performance and find ways forward for the industry, the hard-working pair are proving that profit and environmental sustainability aren’t mutually exclusive.

The awards are held in 11 regions annually to recognise and celebrate good farm practices which promote sustainable land management. Sandy says entering the Bay of Plenty competition was an opportunity to share their orchard initiatives with people outside the avocado industry.

“Developing our orchard has been an enjoyable journey so far. Of course, there are always challenges along the way but we still enjoy what we do. With our focus on sustainability, we’re always challenging ourselves to do things smarter.”

The Imligs bought their 14ha block in the Lower Kaimai, north of Tauranga, in 1996 while

Their Hill Laboratory Agri-Science Award recognises their management successes and ability to consistently crop in a marginal climate.

Franz says there are advantages to producing a crop at higher elevation. “We can hold our crop for longer which suits AVOCO’s flow plan, having fruit available for the valuable Australian market after Christmas. “We’ll hold half our crop for harvest in late January early February and we’ve done that for the past three years.”

They fertilise by hand which lets them evaluate each tree and give more to those that need it. Fertigation enables them to use less hard fertilisers and allows them to apply nutrients little and often.

For three years, they have been applying reconstituted gypsum, made from old processed house wallboards, due to its sustainable qualities.

The Imligs are also active participants in research trials run in conjunction with NZ Avocado and industry partners. Trials have



Award presenter (left) with Sandy and Franz Imlig, collecting their Waterforce Integrated Management Award.

living in Galatea where they owned and operated an electrical business. The property had around 60 avocado trees planted around its fringes but steadily over the course of 15 years during weekend visits, they extended the canopy by planting about 200 trees a year.

Today Springfield Orchard has about 5ha of avocados, with 480 mature trees and 200 young trees planted three years ago.

Selling their electrical business and moving to the orchard in 2011 has given them more time to focus on their property and adopt more environmentally sustainable practices.

The couple has always been prepared to do things differently due to the orchard’s elevation. At nearly 155M above sea level, the altitude means their orchard doesn’t produce as much fruit as nearby lower orchards but that has never phased the pair who are still able to generate a crop every year by turning limitations into opportunities.

explored planting methods, new rootstocks, soil microbiology, copper alternatives and use of the plant growth regulator, Sunny.

Like many growers, they’re also advocates for autumn structural pruning. They’ll prune 20% off a tree to let more light in and make it easier, and more cost effective, for hydaladas.

Due to climatic conditions flower pruning is carried out but not as heavily as the lower orchards because set can be variable so they choose to re-evaluate it after fruit set and prune where necessary.

ABUNDANT INSECT LIFE

Sandy’s passion for insect life and their combined love for birds was recognised with the Predator Free Farm award.

She handles their pest monitoring, takes photos and collects insects for NZ Avocado so they can be preserved in resin to educate other growers on what to look for in their



Franz in his irrigation hut.

orchards. Every February, she also hosts Level 4 Horticulture students from Toi Ohomai on the orchard, teaching them about pest monitoring.

They use soft pesticide sprays, when possible, and spray at night due to wild bees in their area.

Local bird life has been increasing since they started restoring 2.5ha at the end of the property where they’ve been killing large pine trees with a view to replacing them with 200 native trees this autumn. Over time, they expect the native fauna and plants will become less attractive to pests such as pigs, possum and deer.

permitting them to take and use no more than 35m3 of groundwater every 24 hours in their orchard.

They don’t go over their water allocation thanks to a system of five 30,000 litre water tanks. If they reach their allocation of water, the pump will switch off and not turn on again for another 24 hours.

“The aquifer that we draw water from is under demand from other irrigation users as well. But by ensuring that we draw only small amounts that are sustainable, the aquifer can keep up,” says Franz.

For irrigation they installed tensiometers in five blocks to measure soil moisture. This is to determine how much water to apply and avoid situations of under or over-watering the different blocks.

Franz installed a variable speed controller on the irrigation pump which controls the power output depending on the size block being irrigated at the time. “This has led to power savings of up to 46% on some blocks,” says Franz. “Little things like that are making a huge difference.”

After eight years living full-time on their property, they have a strong sense of how to get the most out of it – from both a financial and environmental perspective.

“Our aim is to remain sustainable while still making a profit,” says Sandy. “There’s no one-size-fits-all approach that works, so we’ll continue to carefully monitor what we do and how we do it to improve our performance,” says Franz. ■

“With our focus on sustainability, we’re always challenging ourselves to do things smarter.”

SMART SYSTEMS

They are very proud of the Waterforce Integrated Management Award which recognises Franz’s strong interest and background in electrical engineering. His skills in this area led to him developing a smart irrigation system that optimises use of water and electricity.

The Imligs have an unconsented bore,



Tensiometers in the Imlig’s orchard measure soil moisture levels.

Grower profile

Working with Mother Nature

Environmental stewardship and careful management of natural resources is generating top results for an Athenree family.

Focussing on “the basics” has enabled an Athenree family to increase their orchards’ production without compromising their ability to support new industry initiatives and care for their environment.

The successes enjoyed by Kevin and Ann-Marie Evans over 20 years of growing avocados is also shared by daughter Rochelle Kean who, in 2018, took over the day-to-day management of the family’s two orchards near Waihi Beach, north of Katikati.

Last year was a baptism by fire for Rochelle who was handed the reins in a season punctuated by the industry’s fruit quality challenges, compliance costs associated with picking for China and a random workplace safety audit carried out by Worksafe.

Despite the extra workload, Rochelle also found time to enter their Walnut Grove and Waiau Park properties into the 2019 Ballance Farm Environment Awards. Judges rewarded their efforts with a Bay of Plenty Regional Council Award, recognising the work they do on and off orchard to protect their environment while still striving for consistent production.

Rochelle says entering the awards turned out to be a season highlight for her whole family.

“Dad has been growing avocados for more than 20 years so this was a chance for him to reflect on how much progress he’s made during that time.

“We also learned a lot from the whole process and the recommendations passed on by the judges are giving us more to work on, which is great.”

PROGRESSIVE RE-PLANTING

With a background in sheep and beef farming, Kevin and Ann-Marie started their avocado business in 1995 with the purchase of their first orchard at Athenree. Three years later, the opportunity arose to purchase a second orchard only 3.5km away. Both properties required remedial work to bring them into full production. This included a programme to replace their most mature trees, including a 2ha block originally planted in 1978. These were progressively removed and replaced at a rate of about 20 trees per year.

Their 3.45ha and 2.8ha orchards produce an average of 13 tonnes and 19 tonnes/ha respectively – well above the industry’s average yield of 11 tonnes/ha.

The family’s approach to growing avocados makes tree health a priority. Often this means working alongside nature to create an environment in which avocado trees can thrive.

“We put a huge focus on injecting trees and we put in a lot of syringes to protect them from phytophthora,” says Rochelle. “They are big, old trees but we manage them by keeping them well pruned so everything stays in balance. Once they’re well, Dad’s idea has always been to feed them and leave them.

“His experience in the industry means he is comfortable now to trust the trees to do their thing.”

Operating a low-cost system, Kevin and family do as much as they can on the orchards

themselves. Working across both blocks, Kevin and Rochelle are tuned in to each tree and respond quickly to any changes they see happening. “Dad knows the history of just about every tree and can tell a few stories about each one when we’re working together,” says Rochelle.

They use contractors for pruning and mulching and rely heavily on this mulched product to help them establish a dense, moisture-rich environment under each tree.

“We don’t irrigate so the dense mulch helps us replicate what a rainforest looks like by keeping the orchard floor rich with organic matter. It definitely helps us get through the hot summers,” she says.

“He always tells me that in this industry, you need to roll with the punches.”

Mowing infrequently also allows grass to reach longer lengths, a strategy that award judges praised for its positive impact on soil moisture and local bee colonies.

“We keep long swards of grass over the whole orchard to keep soil moisture levels up and give bees an alternative food source where wild flowers naturally grow.

“Dad still mows the blocks twice a year to keep the grass manageable. But living off orchard about 3km away, we’re not concerned about the cosmetics of the two properties.”

EXPERIENCE COUNTS

Both orchards receive a heavy prune in March every year, with Kevin and Rochelle favouring the “umbrella” shape so fruit sets all the way down the sides of each tree.

The shape also allows for good spray penetration when the orchard is sprayed using a helicopter. This method also helps prevent spray drift affecting neighbours.

Rochelle does the pest monitoring for both orchards and closely follows AvoGreen protocols whenever pests are spotted.

“We use softer sprays but because Dad has been here for so long, we have a better understanding of the seasonal life cycle of a lot of pests too. This means we will occasionally hold off on a spray based on our knowledge that thrips, for example, would be coming to the end of their season and will naturally die out when the weather gets colder.”

AVOCO technical manager Colin Partridge advises the family on nutritional inputs and their timing. Their fertiliser programme has remained steady, receiving some “tweaking” to ensure their applications are kept up over winter.

Copper is applied to their trees and the family supports further research examining the viability of possible alternative applications that would also help to preserve fruit quality.

The industry-wide problem with fruit quality



means growers and the whole supply chain needs to examine its practices, says Rochelle.

“There seems to be different ideas on what’s occurring throughout the supply chain and we need to better understand where the problems lie.”

With the experience of managing two orchards, Rochelle says finding solutions won’t be easy.

“We treat our orchards exactly the same. One is slightly higher but they get fed and pruned the same. We can definitely say though that the higher one gets more pest pressure and more fruit affected by wind rub.

“Dad has seen the cycles now and with his experience, he’s not so overly concerned about trying to control everything. He always tells me that in this industry, you need to roll with the punches.”

It was for the benefit of the New Zealand avocado industry that the family also chose to support market development in China. Their orchards were among those that successfully supplied China with fruit last season – a decision that required Rochelle to spend an additional four days in her office.

“There was a lot of extra paperwork and there are costs that come with that but we did it to

support the industry.”

PROTECTING THEIR ENVIRONMENT FOR THE FUTURE

Both on and off the orchard, the family prioritise their environment and take every measure to protect it from pests.

Ann-Marie set up the Athenree Harbour Care group to help eradicate rats and remove mangroves. Working bees are organised twice a year to hand-pull mangroves from the water and rats traps are set to protect the local fern bird populations.

With a family succession plan in place to ensure ownership of the orchards is progressively transferred to family, they know the efforts they make now will ensure grandchildren can experience all the benefits of native plants, birds and insect life.

And while her first year was full of challenges, Rochelle says entering the awards was a satisfying experience. “All the participants were energetic and enthusiastic about making a difference in their own farms and orchards for the benefit of the environment and themselves.

“Certainly, everyone agreed that no one can do it alone and you need to have a good team around to support you.” ■



Photo: Kimberley Collins

Community partnership extended

AVOCO’s commitment to the community continues with the announcement it is extending its partnership with the Waihi Beach Volunteer Coastguard.

AVOCO teamed up with the Coastguard unit in 2016, pledging an initial annual sponsorship of \$20,000 for three years. That sponsorship has now been renewed at \$25,000 for another three years. The money will go towards Coastguard’s yearly operational costs of \$110,000 as well as the running costs of its rescue vessel named AVOCO Rescue, a 5.8m Naiad designed RHIB (rigid hull inflatable boat) powered by twin 115hp Yamaha outboards.

The vessel was launched at the end of 2016, giving the Coastguard the capability to cover two completely different areas. Its larger vessel, Gallagher Rescue, oversees the Bowentown Bar, one of the most notorious in New Zealand, while AVOCO Rescue is used to protect the channels and shallow areas of the Northern Tauranga Harbour.

“Run by hard working volunteers, we’re pleased our financial contribution will keep vital services like the Coastguard on the water.”

AVOCO marketing and communications manager Steve Trickett says extending the partnership was proof of AVOCO’s unwavering commitment to the community.

“Everyone can see the wonderful service that the Coastguard provides to not just the Western Bay of Plenty, but at the height of the season, to people visiting from all over the North Island.

“Run by hard working volunteers, we’re pleased our financial contribution will keep

vital services like the Coastguard on the water so everyone can safely enjoy our maritime playground.”

December through to February is traditionally a busy time of year for the Coastguard due to the local population swelling from 2700 permanent residents to an estimated 25,000-30,000 people. Boating activity increases during this period and last summer, volunteers were involved in 19 call outs, between AVOCO Rescue and Gallagher Rescue. During these events, 58 people were brought safely back to shore. Most of the callouts were due to breakdowns, including flat batteries and unexpected mechanical failures.

In March, Coastguard volunteers, including Katikati grower Sam Dunlop and the unit’s operations manager Jim Pooley, hosted members of the AVOCO management team and took them out on the water on AVOCO Rescue. The aim was to give staff a better idea of how they operate and what the sponsorship achieves for the community.

Jim says the Coastguard’s sponsorship and surety of funding for a further three years had taken away the burden on volunteers of having to consistently fundraise to keep their service afloat.

“Over the busy Christmas period, we usually roster four volunteers to sell lottery tickets for us every day. That’s a big commitment.

“Now that funding is secure, our volunteers are now free to concentrate more of their time and effort on training and doing their bit for the service.”

“It’s also meant more volunteers have joined our unit and that puts us in a stronger position to support more community events where we’re asked to provide a boat for event safety.”

These include the Nugget Multisport Festival in Waihi, Waka Ama Nationals, Oceania Masters swimming and events involving the local Surf Lifesaving Club. ■



AVOCO Rescue provides a reassuring presence on the water.

Your AVOCO Grower Services Team		
TECHNICAL ENQUIRIES	Colin Partridge Danni van der Heijden	027 270 7219 022 062 0602
BAY OF PLENTY		
APATA	Kate Truffitt Therese Temple Peter Sneddon Kevin Ravenhill Niko Tahau Terry Russell	027 809 9779 027 404 7087 027 205 7496 0274 835 699 0272 265 489 027 836 2342
DMS	Phil Chisnall Hamish McKain Hugh O’Connell	027 4820 271 027 220 2005 027 749 0063
KAURIPAK	Jenny Gilliver Stuart Oates Matt Roeszler	021 157 6670 027 489 8098 022 319 3513
TREVELYANS	Daniel Birnie Jonathan Cutting Katherine Bell	0274 866 969 027 973 3513 027 211 9181
GOLDENMILE FRUITPACKERS		
TEAM AVOCADO	Louise Hailes	021 506 775
PRIMOR	Graeme Burnett	021 907 477
FAR NORTH PACKERS		
TEAM AVOCADO	Alistair Young	027 492 9486
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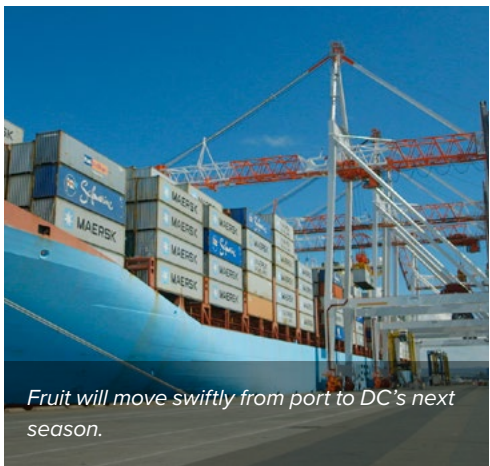
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Integrated clearance models

Keeping fruit flowing through to distribution centres after it arrives in Australia is a key focus for AVOCO next season.

AVOCO has specialist avocado receivers in both New South Wales and Queensland, where the majority of volume required for AVOCO’s retail chain programmes are directed.

Murray Bros. in Brisbane and Fresh Produce Group in Sydney have made significant investment in both staff and infrastructure to seamlessly and efficiently handle the importation and clearance of containers from the wharf



Fruit will move swiftly from port to DC’s next season.

directly to their purpose-built warehouse and distribution facilities.

Since the removal of the Offshore Product Inspection pre-clearance programme by Australian authority DAWR in 2018, the efficient handling of port clearance, transport to warehouse, inspection and treatment where required has become a vital part of supply chain management.

Both facilities are now accredited by DAWR to deliver all services required to ensure delivery to AVOCO’s retailers DC’s in the most timely way. Keeping fruit age to a minimum to optimise quality and freshness are key focus areas in this new era. ■