



PUTTING THE KVH WINTER MANAGEMENT PROGRAMME INTO PRACTICE

A case study from Colin Jenkins, General Manager Ngai Tukairangi Trust, Matapihi, Mount Maunganui

Our organisation has developed the following guidelines to attempt to put into practice some of the information we have been given at industry meetings about Psa and from the KVH newsletters we have received. New information and our experience in the field will change these guidelines as we progress through the winter – so we view this as a living document.

What we do on our orchard could be quite different to what orchardists are doing in the priority zone or on an orchard in say, Katikati.

We are only 10 kms from the priority zone and in many ways, we are treating our

orchards at Matapihi as though they already have Psa-V. We have divided our orchard into four 'zones' with thorough wash down/ hygiene procedures between each. In addition, we have initiated Matapihi grower meetings to discuss strategies and how we are going to do things this winter. If we do things well and keep Psa out of Matapihi for as long as possible, then we can take advantage of the new strategies for Psa control that will come out of the huge research programme which is underway. In the meantime, we need to be serious about creating bio-security zones on our orchards and with our neighbours.

What we are attempting to do may seem daunting, but in reality they are often quite simple things and for many growers, they just need to take a few simple steps first.

What is going to be very important for our industry is the sharing of information between growers. We need forums where new practical ideas and experiences can be shared quickly so others can implement them and then build on them. That will bring exponential growth.

Ngai Tukairangi Trust - Psa and Winter Pruning Staff Guidelines

WET WEATHER GUIDELINES

- Ideally, do not create plant wounds in wet weather (Psa comes in on moisture).
- Practically this is difficult, although some growers still intend to only prune when vines are bone dry.
 - First Rule: No pruning in the rain and when the vines are very wet.
 - Second Rule: When vines are damp, prune if you are confident vines will dry.

There will be difficult decisions, for example: it's damp and rain is coming, or a shower passes through.

- Further options for contract gangs in damp conditions:
 - Prune when dry (or prune and tie down to the first wire only). Complete tying down when damp or expecting rain,
 - Tie down strip male blocks (could cut ends later),
 - Target open, quick drying canopies when damp,
 - Try drying the canopy quicker with an air-blast sprayer.

COPPER AND HI-CANE®

- It is important to have a four-week gap between copper and Hi-Cane® (with a one-week gap after).
- Develop a strategy to complete pruning on time:
 - Start pruning and tying down together (so pruners get "their eye in"), but later switch some pruners over to pruning only (or pruning and tying down to the first wire),
 - Spread Hi-Cane® application dates i.e, GOLD 18 to 30 July and GREEN 1 to 30 August.

- Hi-Cane® a few blocks which are unpruned,
- Commence GREEN pruning immediately after GOLD,
- Investigate using alternative protectants close to Hi-Cane® application.

PRUNING HYGIENE – IN THE BLOCK

- Dip loppers and secateurs in disinfectant after every bay,
- Use a small bucket that can hang from the canopy to hold this disinfectant,
- Citrox is a good, cheap and user-friendly disinfectant,
- Pruners must wire brush their loppers and secateurs at the start of the day and during the breaks,
- All prunings must be thoroughly kicked out,
- Investigate using a tractor-prunings sweep,
- Fine mulch all pruning (slow mulch or do two passes),
- The mulcher should be washed down at breaks and at the end of the day,
- To help mulched prunings break down quickly, investigate the application of a soil digester now, and a mycorrhiza application in the spring (alternatively a 50:50 digester/urea-mix now).

PASTING LARGE PRUNING CUTS

- Paste all pruning cuts over 15mm to 20mm in the leader area (to the first wire),
- Paste must be applied the same day,
- Use a dedicated team to apply on an hourly rate as opposed to pruner application,
- Use a wound dressing with a bactericide (e.g Greenseal Ultra or Garrison),
- Use the small bottles and brushes provided with the wound dressing with the bactericide.

CHAINSAW PRUNING

- Remove unwanted and high-growth points on leaders, which will in turn reduce summer pruning:
 - Initially target GREEN blocks that have not been chainsawed for some time,
 - Target two to four cuts per vine,



Colin Jenkins in one of the Matapihi orchards

- Use a long-reach electronic chainsaw,
- Make it a two-person job, one person chainsawing while the other person pastes,
- Additional chainsawing could be done after pruning using small chainsaws,
- Large chainsaw prunings need to be picked up and burnt.
- Apply one copper sulphate spray at a higher rate on GREEN,
- Start spraying GOLD blocks early so they are ready to prune early,
- The GREEN canopy can be left longer until there is a reasonable amount of leaf fall,
- Follow up a few days later with a copper protectant e.g. Nordox, Liquicop.

LEAF REMOVAL SPRAYING

- To remove leaves quickly and protect the exposed leaf scars:
 - Apply two copper sulphate sprays on GOLD (with a good spreader/sticker, eg, Du-wett),

COPPER SPRAYING AROUND PRUNING

- Spray before pruning to sanitise and as quickly as possible after pruning to protect i.e. aim to keep any inoculum levels low:

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On-orchard hygiene is very important

- Prune blocks quickly and spray immediately after,
- This will require pruners to work closely together in blocks, i.e, pruning individual rows or from both ends or pruning across the block etc.,
- The number of protectants we use will depend on the weather and the timing of pruning and tying down,
- What protectants we continue to use will depend on the latest information available,
- The sprayer must be well setup – coverage is king,
- Having your own sprayer is a real advantage.

PRUNING STRATEGY

- Select where possible, high quality medium-vigour fruit stalk wood,
- Aim to reduce summer pruning by removing vigorous cane, spacing evenly, minimising overlapping, and tying canes down flat,
- Remove unwanted growth points along the leader area, e.g, saw cuts.

Question: Will wider cane spacing reduce summer pruning?

Answer:

- Probably not on our vigorous site, so maintain similar bud numbers to last year's level as the crop load will reduce

vigour and we may also need good bud numbers if we have a mild winter,

- Keep cane cracking to a minimum. You could clip to the first wire and complete later,
- The disadvantages of tee-pees outweigh the advantages, especially with regard to spray coverage,
- Newly grafted vines on low tee-pees should be okay to spray,
- The worst Psa is found on zero-leafed canopies, followed by strung canopies,
- Reduce nitrogen applications and discuss with a consultant.

CONTRACTORS' HYGIENE CHECK

- List gang members and find out where they have been working (you must be informed if new gang members have been added),
- Contractors' staff must have clean, washed clothing and only take clean personal items into the orchard.

HYGIENE STATIONS – AT ENTRY POINTS

- Every day contractors on arrival must:
 - Park in designated parking areas where a hygiene station is set up,
 - Wire brush loppers and pruners,
 - Place loppers and secateurs in 'red buckets' for two minutes (to sterilise),
 - Empty clip pouches, clean and spray,
 - Top-up pruning buckets with disinfectant,
 - To enter the orchard, contractors must go through a foot bath and use the hand wash.

SUPERVISION OF GANGS

- Ensure gangs are well supervised at all times,
- The pruning gang supervisor and NTT supervisor must quality control all vine work and audit all procedures,
- Supply chemical top-ups etc.

Please note: Kiwifruit Vine Health initiated the above article as a case study of best orchard practices to mitigate the risk of Psa. ■

NOTICE OF ELECTION

Kiwifruit New Zealand was established under the Kiwifruit Export Regulations 1999 to authorise ZESPRI to export New Zealand grown kiwifruit to other than Australia, to determine collaborative marketing applications, and to monitor and enforce measures that mitigate the potential costs and risks of a single desk exporter.

The Board consists of four Directors and one Chairman. Three Directors are elected by kiwifruit producers, of which one Director retires each year in rotation. The Director due to retire this year, John Allen, is seeking re-election.

Nominations are invited for an election to be held during September 2011 for one Director of the Board of Kiwifruit New Zealand.

Voting is by post. The candidate receiving the most votes will take office for a three-year term, effective from 1 October 2011. The timetable is as follows:

Nominations open	1 August 2011	Nomination forms are available from Kiwifruit New Zealand, P O Box 4683 Mt. Maunganui South, 3149, by phoning 07 572 3685 or by email, jo.cunningham@knz.co.nz.
Nominations close	15 August 2011	
Voting Papers posted to Growers	2 September 2011	
Voting opens	5 September 2011	
Voting closes	19 September 2011	
Results announced	20 September 2011	
Newly elected Director to take office	1 October 2011	