

# prunings



## EastPack update

### EastPack storage season

- As can be seen from table 1 below, fruit loss figures year to date for both Green and Gold are lower than last year.
- Loadouts for Gold are expected to continue until week 34 (26 August). Green loadouts are expected to continue at rates similar to last year.
- EastPack has approximately 3.6m Green trays stored in CA, and the first of these rooms will be opened on 9 July 2012.
- Our staff are continuing with the implementation of EastPack's Growing Excellence programme with further improvements being implemented for the CA packing season and the storage season.
- Our quality focus has meant that we are seeing less trays being repacked year-to-date compared with previous seasons.
- We have a commitment to maximise orchard gate returns to Growers and the improvements in costs and efficiency will assist with this goal. We would like to thank all our staff and Growers for their efforts over the main pack season. Your support is appreciated.
- EastPack banked into its Grower shareholders' accounts a 20 cent/ tray rebate on Friday 29 June 2012.
- Our Grower services team is focusing on minimising the effect of Psa and increasing productivity so that Grower returns are improved. We look forward to catching up with you at the planned Psa breakfasts and new variety field days.



*A. P. Hawken*

Tony Hawken – CHIEF EXECUTIVE

Table 1 below shows the storage results for Green and Gold as at 1 July for both the 2011 and 2012 seasons.

	GREEN		GOLD	
	01/07/2012	01/07/2011	01/07/2012	01/07/2011
Packed	12.792m	12.796m	5.451m	8.540m
Total Out	4.797m	4.857m	3.737m	6.380m
% Out	37.4%	38%	68.5%	75%
Losses	3,330	19,000	14,599	66,000
% Lost	0.02%	0.15%	0.02%	0.75%
Industry Losses	0.05%	0.15%	0.18%	0.55%

# Technically Speaking

## Winter pruning with Psa-V

Psa is an important consideration when undertaking winter pruning.

Regardless of where you are, Psa is a real threat and you will need to be able to mitigate the risk to your orchard in the coming season. The only effective tools that we have to mitigate the risk over winter are protective cover sprays.

These are the copper sprays:

- Nordox 75WG
- Kocide Opti
- Champ DP



These products are protective cover sprays. They have to be in place on the outside of the kiwifruit plant as there are no treatments that can successfully kill Psa once it becomes established inside the plant.

### Good spray coverage is imperative.

You should have a complete protective cover in place prior to the start of winter pruning. This will include sprays to protect the picking scars on the end of the fruit stalks, and the leaf scars where the leaves have dropped off the canes.

The risks to your cover will be:

#### • Breaks in the cover

This includes any cuts that you have to make, or any injury to the vine that may provide an entry point for Psa. You will need to re-establish the cover on those breaks as soon as is practical. This will include:

- Spraying immediately after winter pruning.

#### • Use of ineffective products

Do not get sucked in by the salesman's patter. You may feel the need to try

some new things. This is great but make sure that you have an effective cover in place or if that is not practical, that you are only experimenting with something that you can afford to lose.

## Winter pruning

All cuts will have to be treated to re-establish your protective cover.

- Paint all saw cuts with some sort of wound sealing dressing.
- Spray all of the winter pruning cuts with a standard copper solution. Do this as soon as practical after the cut is made.
- Pruning tools should be treated to disinfect them bay by bay or plant by plant.
- Encourage the larger lopper cuts to be made with a saw instead. This will make a cleaner cut which can then be painted giving a more reliable result.

Pruning should only be done when the canopy is dry.

Psa needs free water to move so pruning wet canopies or wet wood is a significantly high risk and should be avoided.

Tying down and clipping winter canopies can be done on the damp days.

The aim of winter pruning is to set up the framework which will carry next year's crop.



In Hayward this framework should consist of good quality fruit stalk wood of moderate vigour with prominent buds that have been grown in sunlight for the whole of the season.

This wood should be evenly spaced with 35-40cm gaps between the fruiting wood in all directions.



## Pruning Gold varieties

The principle for winter pruning Gold is just the same – moderate vigour, well lit (grown in sunlight) fruiting wood with prominent (fat) buds and short internodes, well spaced.

The real difference with Gold is that it is both much more vigorous and much more floral than Hayward.

The key to pruning Gold is to limit the number of buds to the sort of number that you need and to have these buds on the best possible quality winter wood.

Because of its relatively vigorous growth habit, it is important that Gold canopies are kept as flat as possible.

Prune out all the vertical growth, spurs, stubs and any hooped structures that may still be part of the permanent framework.

## Step by Step Winter Prune

Establish the framework to carry next year's crop.

1. Remove the obsolete and unsuitable wood. This is a skilled job and involves significant decision making. It may be considered as being separate from the normal winter prune.
2. a. make any saw cuts that may be necessary.  
b. take out any wood that is not to be considered part of the pruning job.  
c. paint the saw cuts with a pruning paint.
3. Remove all the spent wood.
4. Remove all the weak wood (thinner than pencil thickness) and all the shaded or late grown hairy wood.
5. Select the best quality wood and tie down. Use a clip for each wire and secure the ends of canes with a bungy if they are overhanging.



6. Adjust the spacings, 35-40cm in each direction for Hayward and 30-40cm for Gold.
7. Maintain at least a 30cm space between the wood of opposing females.
8. Maintain at least the 30 cm spacing between female wood and male wood.
9. Adjust the bud numbers.
  - a. Count the bud numbers in a number of bays each day as they are being pruned.
  - b. Reduce the buds to your target range if they are too high by removing the weakest wood and adjusting the spacings.
10. Fine tune the winter prune. Ideally this can be done at a later time.
  - a. Go through the pruning bay by bay and focus on removing weak and late grown wood.
  - b. Remove any vertical stubs or spurs.
  - c. Remove wood that is too thin.
  - d. Adjust the spacings.
  - e. Secure any unsupported canes or spurs with a bungy.
  - f. Try to even up any bays that stand out as being too different.
  - g. Check on the bud numbers in several bays in each maturity area and adjust if necessary.x

## Winter Psa spray programme 2012

WHEN	WHY	RATE PER 100 L	NOTES
Immediately after harvest	To protect picking wounds	Use Nordox at 55g (or Kocide Opti at 90g)	Target the picking scar at the end of the fruit stalk. Use lower pressure and no fan
After the start of leaf drop	To speed up leaf drop	Urea at 2kg Repeat as required	Use a wetting agent, spray under slow dying conditions, target the upper leaf surface
Approximately half way through leaf fall	To protect the leaf scars	Use Nordox at 55g (or Kocide Opti at 90g)	Time the application to provide cover before the next major rain event
At the end of leaf fall	To protect the leaf scars	Use Nordox at 55g (or Kocide Opti at 90g)	As close to the end of leaf fall as can be managed
Immediately after winter pruning	To protect pruning cuts and cracked canes	Use Nordox at 55g (or Kocide Opti at 90g)	No closer than 7 days before or 7 days after Hi-Cane spray
As close to bud burst as possible	To protect the bud scale split	Use Nordox at 55g (or Kocide Opti at 90g)	Target fruiting wood

- Notes:
1. When spraying winter coppers make sure the spray is targeted to the wood, use an appropriate water rate (approx 600-700L/ha) and make sure the coverage is as close to perfect as possible.
  2. Copper sulphate at 1.25kg/100L plus a wetting agent can be substituted for the urea leaf drop spray or both can be used together.
  3. Always apply copper protectant sprays on their own.
  4. The above recommendations are a guideline only.



## Technically Speaking *continued*

### The use of coppers for Psa protection

#### A thumbnail sketch

##### Why coppers?

- Coppers have been used for bacterial disease control in fruit crops around the world for more than 150 years.
- We are still using coppers today because we have not found anything that works better on bacterial diseases in fruit crops.

##### How do coppers work?

- Coppers are protectant bactericides, they have to be present on the plant before the pathogen arrives.
- Coppers sit on the outside surface of the plant.
- Coppers work by releasing cupric and cuprous ions on the plant surface when water is present.
- The copper ions cross the cell

membrane of the bacterium and physically disrupt its metabolic function (kills it).

- Complete coverage of the plant surface with the copper product is required for complete protection.
- The smaller the particle size of the copper product, the longer the retention on the plant surface.
- The smaller the particle size of the copper product, the more cupric and cuprous ions are released. The more active the product.

##### Cautions around the use of coppers on kiwifruit.

- Soluble copper may cause phytotoxicity on kiwifruit leaves.
- Copper inside plant tissues can be very destructive. Avoid using systemic coppers or chelated products.
- Coppers may cause minor russetting on kiwifruit.

- Copper protectant sprays must be applied in good drying conditions.
- The pH of the copper spray solution must be near neutral (pH 6.5 to 7.5).
- Copper sprays should **not** be applied to kiwifruit with a surfactant (wetting agent).
- Do not use copper products that contain surfactants or solvents (liquid coppers).
- The protection provided by a copper spray will be only as good as the spray coverage.
- Any gaps in the spray coverage will be gaps in the protection provided.
- Coppers may slow down the rate of extension growth in kiwifruit.
- More applications of copper at lower rates is more effective and less likely to cause phytotoxicity than applying high rates in fewer applications.

**Always apply coppers on their own.**

## A useful protective pruning paint recipe

### Mix in a sealable bucket

- One part Bitumix (any water-based bituminous concrete block sealer paint will do)
- One part water
- Sporekill (or any other soluble disinfectant/sanitiser) at 5ml/litre

Mix well being careful to avoid splashing skin or clothes as it does not come off easily.

Stir well before use. Apply to freshly cut stumps or pruning cuts.

Seal tightly to store



## HiCane 2012

### HiCane

Hydrogen cyanamide, (HiCane) is used on kiwifruit to aid in the breaking of winter dormancy. It is best applied so that its effect coincides with the natural dormancy breaking factors of day length and the accumulation of winter chill units.

HiCane works best where it is applied 25-35 days before bud break.

HiCane works by penetrating the bud



scale and acting on the embryonic bud inside the dormant cane. The HiCane needs time to penetrate through the bud scale and have the desired effect. If the

HiCane application dries too quickly or the spray coverage is not even, then the HiCane effect on the embryonic bud can be incomplete leading to patchy and unacceptable results.

This can be countered by ensuring good spray coverage, higher than minimum water rates and sometimes the use of a suitable penetrant can be helpful.

##### Some key observations about the use of HiCane:

- The closer the HiCane application

coincides with 25-35 days before the natural bud break date, the better the percentage bud burst.

- Later HiCane applications tend to have more flowers per winter bud.
- The better the spray coverage, the more effective the HiCane.
- HiCane sprayed on windy days gives very patchy results.
- The weaker the dormancy breaker effect, the greater the incidence of triples and flats in Hayward.
- HiCane burning is most often related to poor drying conditions after the application of the chemical.

### Timing

HiCane has been applied early in the past to attempt to bring forward harvest dates by producing an earlier bud burst.

This mismatching of the dormancy breaking signals for the kiwifruit plant, tends to produce bud burst over an extended period. The initial bud burst will be very floral and the later buds tend to be vegetative.



During this period the plant is surviving on stored reserves and the longer it takes before the plant is producing more carbohydrates than it needs for growth, the more reserves are used up and the less energy is available for flower development.

In contrast, canopies which are responding to an adequate dormancy breaking stimulus, due to a very cold winter or HiCane and natural dormancy breaking stimuli acting together, show bud burst over a relatively short period with high percentage of buds burst and most of them tending to be very floral. More of the initial shoot growth tends to be self-terminated and because of the higher percentage bud burst, canopy



closure is achieved earlier, often using less of the stored reserves to do so.

These canopies need a lot less winter buds to achieve the target number of flowers and because they have less vegetative shoots are much easier to keep under control in the summer. These canopies are cheaper to summer prune and tend to have higher dry matter because there is relatively little wastage with growth having to be pruned off to keep the plant under control.

It will be easier to maintain an effective cover spray on these canopies for the prevention of Psa.

### Canopy closure and flower development

The initial development of leaves and shoots in the spring is fuelled by energy stored by the plant over winter in the form of carbohydrates. It may be quite some time after bud burst before the leaf canopy becomes self-supporting with energy captured by photosynthesis. Canopy development is a function of leaf size and numbers. The larger the initial leaf size, the fewer leaves are required to fill up the canopy space.

Large fully developed leaves are more efficient at capturing sunlight and producing energy to be used elsewhere in the plant.

At the same time as these new leaves and shoots are growing, the flowers are developing and growing. This flower development is also powered by the



same reserves of energy stored by the plant over winter.

If the canopy establishment happens efficiently, with a minimum of time between bud burst and canopy closure, (the point at which the canopy has become self-supporting) then there is sufficient energy for strong flower development with long, robust flower stalks and large flowers.

The converse is also true. If the canopy development is slow with small initial leaves and extension growth stalled out from time to time, then there is less energy available for flower development and we tend to see smaller flowers on thinner stalks.

Flower size is widely held to be a critical factor in determining the ultimate size of the fruit particularly in Hayward. Bigger flowers give bigger fruit.

Anything that can be done to increase the size of those first leaves in the spring and to reduce the risk of extension growth stalling out will ensure that there is a maximum of stored energy available for flower development.

Spring temperatures at bud burst are probably the major factor responsible for limiting leaf size. Delaying bud burst can help reduce the risk of experiencing a period of cold weather which can limit leaf growth.

### Coverage

It is understood that there are a number of situations and views that result in different coverage regimes throughout the Industry.

EastPack Growers should be aware that the most important factor is to achieve complete coverage and good wetting of the canes. As a guide for Growers, HiCane applications are planned at water rates of 700-750 litres per hectare this year and chemical rates set at 6%.

As usual EastPack encourages Growers to consult with their Client Service Representative if they have any queries.

Spraying should only be attempted in relatively windless conditions, preferring to spray later, rather than risk the very patchy results achieved when there is

any significant air movement in the orchard. If we have to HiCane spray some non-pruned and untied orchards we will modify our sprayer calibration to ensure we achieve total coverage of all cane. Only apply HiCane in conditions that will give complete drying of the product before nightfall.

Check the drying at about 3:30 pm and if there are drops of spray hanging off the buds on the underside of the cane, perhaps it would be a good idea to drive through the orchard with only the sprayer fan going to dry off the canes before nightfall. This will minimise the risk of burning some buds.

Use air inclusion spray nozzles and spray drift reducing additives.



### Safety

HiCane and, in fact, all hydrogen cyanamide products are very toxic and have a specific code of practice for their application.

It is very important for your own health and safety that these are followed closely.

It has also become very important for the continued use of these products that they are seen to be used responsibly and

with care for the safety of people and the environment.

You must contact all neighbours of the orchard and notify them of:

- your intention to spray HiCane
- the period when spraying is likely to occur
- appropriate precautions

Also use the spraying cones to notify people of the need to take precautions if they are walking past the orchard and the yellow bags on your letter box to warn the postie of your intention to spray.

## Orchard Operations Reminder



### July

- Take soil samples and arrange a fertiliser recommendation if not already done
- Prepare for grafting to New Variety
  - Repair structures
  - Cut off canopy and remove old leader wire
  - Paint stumps
  - Mulch prunings
  - Spray weed strips
- Continue winter pruning
  - Only prune in dry weather
  - Sanitise all tools at least every plant
- Apply copper spray to protect winter pruning cuts
- Collect New Variety graft wood and start grafting
- Graft to New Variety
  - String for graft support

- Apply slug and snail bait
- Apply base fertiliser
- Organise teepee poles and strings
- Apply hydrogen cyanamide (HiCane) to Gold crops

### August

- Finish grafting to New Variety
  - String for graft support
  - Apply slug and snail bait
- Start erecting teepee poles and strings
- Complete winter prune and tie down Hayward
- Apply copper spray to protect winter pruning cuts
- Apply HiCane to Hayward
- Apply base fertiliser dressings
- Complete repairs of support structures
- Do final pruning review
- Apply bud burst fertiliser (Gold)
- Start bird scare programme (Gold)
- Take a break!

### September

- Continue erecting teepee poles and strings
- Apply nitrogen fertiliser to newly grafted plants
- Finish any pruning still required
- Late tip Hayward shoots (if required)
- Continue Bird scare programme (Gold)
- Apply first pre-blossom scale spray (Gold)
- Apply bud burst fertiliser (Green)
- Start canopy control of Gold (squeeze tipping) as required
- Take another break



# Financial Update

EET Forecast Average Class 1 payments for July 2011 are as follows:

	Zespri Progress	Taste	Base Charges and Port & Transport	Estimated July Average
Green	\$0.45	\$0.11	-\$0.16	\$0.40
Gold	\$1.09	\$0.59	-\$0.35	\$1.33
Organic	\$0.35	\$0.19	-\$0.15	\$0.39
GA	\$0.59	\$0.72	-\$0.35	\$0.96
GL	\$0.54	\$0.76	-\$0.35	\$0.95
HE	\$0.48	\$0.68	-\$0.35	\$0.81

The average fruit value rates per Class 1 tray are shown in the table below.

These payments will be direct credited into your account on 13 July 2012.

**The first instalment of Kiwistart and shoulder pricing will also be paid with this payment.**

**This is approximately 50% of the Green & Organic and 60% of the Gold total Kiwistart rates (the balance being paid in late September, once monies are received from Zespri).**

**The shoulder pricing rates are 98% of the Zespri Kiwistart rates.**

	Zespri Fruit Payment To 29/06/2011	Zespri Progress 13/07/2011	Total Zespri Receipts	EP Base Coolstorage YTD	EP Port & Transport YTD	EET Advance (Base CS, P&T and Progress )	EET Total Paid YTD
Green							
18/22	2.25	0.25	2.50	-0.27	-0.06	0.16	2.34
25/27	2.25	0.85	3.10	-0.27	-0.06	0.16	2.94
30/33	2.25	0.60	2.85	-0.27	-0.06	0.16	2.69
36/39	2.25	0.33	2.58	-0.27	-0.06	0.16	2.42
42	2.25	0.00	2.25	-0.27	-0.06	0.16	2.09
Gold							
16/18/22	2.80	0.50	3.30	-0.50	-0.10	0.25	2.95
25/27	2.80	0.70	3.50	-0.50	-0.10	0.25	3.15
30/33	2.80	1.05	3.85	-0.50	-0.10	0.25	3.50
36/39	2.80	1.45	4.25	-0.50	-0.10	0.25	3.90
Organic							
18/22	2.25	0.10	2.35	-0.27	-0.06	0.18	2.20
25/27	2.25	0.40	2.65	-0.27	-0.06	0.18	2.50
30/33	2.25	0.45	2.70	-0.27	-0.06	0.18	2.55
36/39	2.25	0.35	2.60	-0.27	-0.06	0.18	2.45
42	2.25	0.00	2.25	-0.27	-0.06	0.18	2.10
GA							
16/18/22	2.80	0.49	3.29	-0.46	-0.10	0.21	2.94
25/27	2.80	0.60	3.40	-0.46	-0.10	0.21	3.05
30/33	2.80	0.65	3.45	-0.46	-0.10	0.21	3.10
36/39	2.80	0.65	3.45	-0.46	-0.10	0.21	3.10
GL							
16/18/22	2.80	0.56	3.36	-0.47	-0.10	0.21	3.01
25/27	2.80	0.47	3.27	-0.47	-0.10	0.21	2.92
30/33	2.80	0.55	3.35	-0.47	-0.10	0.21	3.00
36/39	2.80	0.55	3.35	-0.47	-0.10	0.21	3.00
HE							
18/22	2.80	0.00	2.80	-0.60	-0.12	0.37	2.45
25/27	2.80	0.50	3.30	-0.60	-0.12	0.37	2.95
30/33	2.80	0.50	3.30	-0.60	-0.12	0.37	2.95
36/39	2.80	0.50	3.30	-0.60	-0.12	0.37	2.95
42	2.80	0.00	2.80	-0.60	-0.12	0.37	2.45

# New Varieties Update



## The 'Groover' – new grafting technology or 'Kerf' grafting revisited

Nearly 100 Growers attended recent grafting field days organised by EastPack in Te Puke and Opotiki.

The main message was a presentation of some new technology which will make 'Kerf' grafting a feasible option for grafting kiwifruit stumps.



The technique involves cutting a slot or kerf in from the edge of the stump and then placing the scion in the slot with the cambium layers matching and then taping and waxing as per normal.

The slot is usually cut with a chainsaw but the new technology demonstrated by Cedric French, the inventor, cuts the slot with a specially adapted saw blade which produces a very clean precise cut and has the safety advantage over a chainsaw, where the operator is working with the kickback zone at the tip of the chainsaw bar.

new growth of the rootstock. The remains of the original graft wood can be seen with the pith that was the centre of the scion clearly evident.

Also evident here is the extent of the split in the stump and the associated decay in the middle of the trunk.

The Kerf graft slot will produce the same sort of growth joining the stump and the new graft without the damage to the trunk associated with the splitting of the stump.

This should result in good strong graft unions and a clean healthy trunk.



The main advantages are that the stump has not been split and that the scion is held firmly in place.

This transect of a G9, stump grafted in 2010, shows how the cambium layers unite and the new graft becomes part of the





## New Variety cut over

With the harvest of Gold over, for most of us living with Psa, the next priorities are ones around the cut out of 16A and the change to a more Psa-tolerant variety.

The main issues to address at present are:

- When to start cutting out Psa vines
- When to start dropping off the leaves of the rest of the 16A
- How to dispose of the cut out material
- Preparing for grafting

### When to start cutting out Psa vines

This is a bit of a compromise, on one hand, the longer that you can keep some leaf on the plant the better the plant will handle the grafting shock and the more successful the grafting will be. On the other hand the longer you leave Psa-infected vines before cut off, the more risk there is that the rootstock may become infected.

So in practical terms, now is probably late enough that the difference between cutting now or later when leaf drop has started naturally, is not terribly significant.

### Best Guess

- Start cutting out the worst affected vines now and deal with unaffected vines or parts of the orchard later once leaf drop has started.
- Use a wound paint to seal the cut stump.

### When to start dropping the leaves off the rest of the 16A

Ideally this should be once the leaf drop process has started naturally. Use a leaf drop spray such as copper sulphate or urea or a combination of both. If the plants are not going to be cut off immediately, apply a protectant (copper) spray to protect the leaf drop scar.

### How to dispose of the cut out material

The Gold standard is to buck rake the material out to a suitable place to be buried, at least half a meter deep. This is a big job and may be too expensive to be practical in all situations.

The next best would be to move the cut

off material out to a hole to be burnt in a hot fire.

Probably the cheapest method will be to mulch the pruned out canopy and allow it to decompose on the orchard floor. Spraying the canopy with a sanitiser to minimise the inoculum prior to cut off and repeating this to the mulched canopy on the orchard floor is probably a good idea.

The finer the mulching the faster the material will break down. It will also be necessary to add some nitrogen and possibly a digester product to speed up this process some more and ensure that lack of nitrogen does not become a limiting factor to graft growth in the Spring. One to two hundred kg of urea per hectare over this time would be our best guess at this time.

Leaders and leader wires will have to be buried or burnt and buried.

## Preparing to graft

Preparation is important. Good preparation will ensure that your grafter is comfortable and happy in your orchard. This will increase the success rate. Accurate marking of the new grafts will minimise mistakes and the amount of re-grafting required. Completing the leader removal, the mulching and the re-establishment of the new leader wire will minimise the risk of grafts being knocked out.



### A few key steps

These should be in place before grafting commences

1. All rows should be weed sprayed with a clear strip established by the time grafting is started.
2. Cut the kiwifruit trunks as high as possible below the leader.
  - These are called the 'tall men'.
  - Where there is more than one trunk, single down to the straightest trunk. If it is not obvious leave it alone.
  - Paint the cut top with a suitable protective paint.
3. Remove the canopy, the leader and leader wire.
4. The orchard should be mown and mulched. The grass should be less than 100mm long.
5. Get the new leader wire established in place.
6. There should be an accurate count of all grafts by variety.



7. All the grafts should be marked correctly.
  - The male grafting positions should all be colour coded with a different colour for each different male variety.
8. Good strong straight rootstock suckers originating from low down on the stump can provide a really good alternative to stump grafting.

### The Grafter will:

- Cut the stump to the correct height at the correct place.
- Graft, tape and wax.

*Continued over*

## New Varieties Update *continued*

### *Preparing to Graft continued*

- Give some indication of the basics of after graft care.
- Want to be paid a deposit on confirmation of the job.



- Want to be paid the balance owing soon after the completion of the job.

### **The Grower will:**

- Need to arrange the pick up and storage of the budwood.
- Need to arrange storage of some spare budwood for use to re-graft in case of graft failures in November.
- Cut the chainsaw slots in the stump below the graft immediately after grafting or the next day.
  - The upper chainsaw slot cut at right angles to the leader wire.
  - The lower chainsaw slot parallel to the leader wire.
  - Both slots cut with a slight downward angle.

### **The budwood:**

- Will come in bundles approximately 600mm long, bound with colour coded tape and have a label attached describing the variety and source of the budwood.
- Should be more than 10mm in diameter and be early grown wood with only a small central hollow core.
- Should be in a sealed plastic bag.
- Should be stored at a cool temperature and kept moist.

Like most things, careful attention to detailed planning and preparation will help to ensure a successful outcome, so avoid the temptation to cut corners and look after the needs of your grafter.

## Health and Safety A guide to safety with chainsaws

The Department of Labour (DOL) has a publication available from their website which helps outline obligations under the Health and Safety in Employment Act when allowing employees or contractors to operate chainsaws on your orchard. You can find the guide at: [http://www.osh.govt.nz/publications/booklets/chainsaws/chainsaws\\_01.asp](http://www.osh.govt.nz/publications/booklets/chainsaws/chainsaws_01.asp)

**Here are some basic do's and don'ts that apply no matter how experienced you or your workers are:**

- Do not operate a chainsaw above shoulder height or above ground level, such as in a tree or off a ladder, unless qualified and experienced to do so.
- Always have someone within calling distance – never work alone while using a chainsaw.
- Never operate your chainsaw under the influence of drugs or alcohol.
- Never operate your chainsaw when you are fatigued. If you get tired when using your chainsaw, have a rest – you need to stay alert and be in control.

- Your chainsaw is designed to cut wood – never cut any other material or use your chainsaw guide bar for levering or digging
- Always match the size of your chainsaw and bar with the material being cut. Don't try to use a small chainsaw and bar to fell a large tree.
- When it comes to PPE invest in the same equipment the professionals use. When you buy safety equipment, make sure that it bears a NZ Standards number or 'S' mark. This is a guarantee that it has been manufactured to stringent standards to offer maximum protection.



*NZ Standards mark of compliance*

Employers are responsible for providing safety equipment. Here's what should be worn when operating a chainsaw:

**Footwear** – Boots should have steel toe caps and give firm ankle support. Lace-up types must be securely fastened so that you don't trip on the laces.

**Leg protection** – Wear good quality chainsaw operators' safety trousers or chaps. These should be to AS/NZS 443.3:1997.

**Safety helmet** – Wear a helmet to protect your head from falling objects and to minimise the risk of injury to the face in the event of a kickback.

**Earmuffs** – Wear earmuffs rated Class 5

**Eye protection** – If you are working in very dusty conditions, wear goggles. If there's a danger of flying debris, use a helmet visor.

**General clothing** – This should fit fairly closely but be comfortable and allow free movement.



# Classified

## Situations Vacant

### Machinery Operator/General Hand

We are seeking an enthusiastic and reliable person with experience as a Machinery Operator for orchard mowing and spraying and general R & M work at Te Teko and Edgumbe.

#### Key Requirements

- Growsafe-approved handler's certification
- Mechanical abilities
- Accurate record keeping
- Good communication skills

For more information

Ph Kim Woolsey 07-315 7182

## For Sale

### Kiwifruit Kerf Cutter and bud wood preparation tool

- Cutters to make 4.5, 6 and 8.5mm slots.
- Fits on standard angle grinder.
- Can be fitted to bench grinder to make own bud wood scions. **\$67.00 each**

Check out [www.katools.co.nz](http://www.katools.co.nz)

Phone 021-103 8844

### Feijoa Trees

\$10.00 per tree

Ph 0276-672 2044

### Heat Dragon

Manufactured by Splash Equipment, Te Puke.

Excellent condition. \$9,500 + gst ono

Phone Chris Friis on

06-844 2905 evenings or 027-444 3091

### Electric Motor with Grundfos pump attached

Grundfos Pump: Model 100 x 65 - 200. Impeller diameter 198.

Motor is a 2009 model 22Kw TECO high efficiency (93.5) 3 phase induction

Pump is attached to the motor.

Please ring Mike on 07-312 3198 evenings.

### Mulcher

Trimax Mulchmasta, 2.2m width.

Excellent condition. \$2500

Phone Pete on 07-315 6849

### Casuarinas

1000 Casuarinas in PB5 1 metre

\$3.50 ea (+GST)

1000 Cryptomerias in PB5

\$3.50 ea (+GST)

Phone Hugh Stuckey on 027-223 5007

## For Sale

### Two pneumatic pruning hand pieces

\$250.00

Phone Alan on 027-485 9910

### Irrigation Laterals

Complete with Tornado Ray Jets

2 x 55 litres/hr

Per 5m bay 19mm, 16mm 13mm

Call Geoff Harcourt on 027-498 0672

## Wanted to Buy

**Bruno Rootstock** – Ph Jenny 07-573 4828

**Swing Arm Mower** – Ph Pat 027-473 5099

### All Terrain Mast Forklift

AUSA CH150X4 preferred, but all forklifts considered.

Phone Mark on 021-460 292

## Courses

### First Aid Courses

OSH, GAP, NZQA. Held monthly in Te Puke

Phone Doug 021-108 1515

Email: [dougallan@slingshot.co.nz](mailto:dougallan@slingshot.co.nz)

## Trade Services

### Fertiliser Spreading and strip spraying weeds

- 50-5000kg per ha – base and side dressings
- Delivered and spread
- Use low drift nozzles for spraying
- Product supplied or use your own

Competitive Rates – Book now!

**Murray Holmes – Semloh Contracting Ltd**

07-573 7695 or 027-573 7695

Email: [semloh@eol.co.nz](mailto:semloh@eol.co.nz)

### SONICSPRAY Horticulture Spray Specialists

Experienced spray contractors for all your kiwifruit spraying requirements. Very high orchard hygiene standards for Psa control.

Phone Richard Alloway on 027-499 9459

### Bay Sluicing

For all your sluicing needs.

Call Kevin Massey on 0800 877 566

## Trade Services

### Active 4 Solutions

- Taca Tungsten Grit Hardfacing
- Proven solution for worn mulcher flails
- Applying Taca will increase flail life by up to 4 or 5 times depending on conditions.
- We can supply all types of mulcher flails, complete with Taca.

For enquiries please phone Terry on 021-274 2814

### Bay Farm & Industrial Pumps

Pumps and water meters

Frost protection and irrigation systems

Design, supply and install. Free Quotes

Phone Daryl Richardson

027-277 5295 or 07-578 4405

56 Fifteenth Ave, Tauranga

Email: [daryl@bayfarmpumps.co.nz](mailto:daryl@bayfarmpumps.co.nz)

### BOP Trenching Services

- Irrigation systems for orchard or farm
- Frost and irrigation, bores, rivers or dam supply
- Diesel or power pumps
- Design, supply and install
- Free quotes.
- New systems or reinstate old systems

Phone Roger Johnson on

07-533 1517 or 027-452 5330

### Superior Kiwifruit Vines

Needing to graft kiwifruit vines this winter? Let us do the hard graft for you!

Over 25 years grafting experience and a success rate of over 99%.

Call Stuart on 022-080 5669

Email: [Superiorkiwifruitvines@gmail.com](mailto:Superiorkiwifruitvines@gmail.com)

## Trade Services Wanted

### Kiwifruit posts and wire to be removed

4.5 canopy hectare lot to be removed

Contact Tere 07-573 5356

### EP Prunings Deadline

For articles and advertising 1st of each month. Please also advise when your adverts are to be removed.

Contact Kyra Ormsby:

Phone 07-573 9309 Fax 07-573 9310

[kyra.ormsby@eastpack.co.nz](mailto:kyra.ormsby@eastpack.co.nz)





EastPack Te Puke staff getting into theme as they raised money for the Pink Ribbon Breast Cancer Awareness Day.

## Contacts

### Edgecumbe Site

Phone 0800-722 554

Fax 07-304 8262

#### Tony Hawken

Chief Executive

027-497 1796

#### Tony Hooper

Manager – Grower Services/EKO (Edgecumbe)

027-292 4639

#### Jacki McCormack

Grower Services (Edgecumbe/Te Puke)

027-346 8942

#### Grant Allen

Grower Services (Edgecumbe/Te Puke)

027-203 4456

#### Paul Manson

EKO Orchard Manager (Edgecumbe)

027-677 4502

### Te Puke Site

Phone 07-573 9309

Fax 07-573 9310

#### Matt Hill

General Manager – Grower Services/EKO

027-489 5088

#### David Stephenson

Manager – Grower Services/EKO (Te Puke)

027-258 9820

#### Braden Hungerford

Manager – Grower Services/EKO

(Western Bay/Waikato)

021-280 6600

#### Tim Torr

Technical Transfer Manager

027-205 7520

#### Anthony Pangborn

Technical Manager – Pre-harvest and Grower Information

027-245 7295

#### Peter Savory

Grower Services (Te Puke)

027-742 6778

#### Ivon Pilcher

Grower Services (Te Puke)

027-430 4074

#### Glenn Carter

Grower Services (Te Puke)

027-274 9790

#### Bryan Leach

Grower Services (Te Puke)

027-573 8346

#### Alan Kale

Grower Services (Hawkes Bay)

027-286 4797

### Opotiki Site

Phone 07-315 5226

Fax 07-315 5224

#### Ross Steele

Manager – Grower Services/EKO (Opotiki)

027-479 4224

#### Daile McDonald

Grower Services/EKO Orchard Manager (Opotiki)

027-453 2752

#### Nicky Edwards

Grower Services/EKO Orchard Manager (Opotiki)

027-234 2513

#### Ngawai Amoamo

Grower Services/EKO Orchard Manager (Opotiki)

027-703 5671



ORCHARD to MARKET

[www.eastpack.co.nz](http://www.eastpack.co.nz)