

Health and Safety On Orchards (External Reference)



Contents

1. Purpose.....	1
2. Scope	1
3. References	1
4. Definitions.....	2
5. Eurofins Health and Safety Policy	2
6. Risk Management Strategy	2
7. Eurofins Sampler Training and Equipment	3
8. Standard Operating Procedures	3
9. Orchard Hygiene.....	11
10. On Orchard Communication Strategy	11
11. Emergencies, Accidents, Incidents and Near Miss Event Reporting and Investigation.....	11
12. Change Management from Draft (Version 6) dated 12 October 2017.....	12
13. Approvals.....	19

1. Purpose

To keep Eurofins BOP Workers safe on orchards. This document outlines Eurofins BOP Health and Safety policies and procedures as they relate to external parties and to give clarity and definition around the circumstances on orchards that are not considered safe.

2. Scope

Eurofins BOP Health and Safety policies and procedures as they relate to external parties.

3. References

Eurofins Health and Safety Policy
Risk Register: Travel/Orchard Sampling

Health and Safety On Orchards (External Reference)



Hazard Identification and Risk Management Procedure
Orchard Stop Sampling Procedures
Emergency and Evacuation
Accidents, Incidents and Notifiable Events
Lone Worker Policy
Zespri Crop Protection Standard

4. Definitions

Orchard Representative:

Is the person responsible for managing health and safety on orchards on a day to day basis and will be the main person Eurofins BOP can communicate with on health and safety related matters on orchards including access, risks, emergency procedures. This may be the Grower, an Orchard Manager, a Packhouse contact, a 'Primary Contact' or CRM. This person must be able to either remedy any risks or hazards directly or work directly with e.g. a Grower/Orchard owner to achieve the same.

5. Eurofins Health and Safety Policy

The purpose of this policy is to provide an overarching framework that demonstrates Eurofins BOP commitment to health and safety in the workplace. This document is also available on the Eurofins BOP website.

6. Risk Management Strategy

Risk management at Eurofins BOP is achieved through a systematic and iterative process of identifying and assessing risks in our workplace, eliminating or minimising those risks, monitoring risk controls, and reviewing their effectiveness. This process is comprehensively detailed in the document Hazard Identification and Risk Management Procedure and is articulated in Risk Registers.

On Orchard

Risks on orchards are communicated to Eurofins BOP by growers or grower representatives e.g. Packhouse's or orchard managers through the Eurofins website. This is articulated on collection reports and sometimes orchard maps for hazards (or terrain features) that cannot be changed e.g. ponds, power lines rivers, steep banks etc.

Where risks are found on orchards, Samplers can report these through the in-house software app Tracking 3. These are then communicated to the Orchard Representative (e.g. Packhouse representative, grower, orchard manager as provided). Any new orchard hazards can be added to the collectors report.

Health and Safety On Orchards

(External Reference)



Where an orchard is considered unsafe for sampling due to unmitigated health and safety risks, the Orchard Stop Sampling Procedure will be followed.

7. Eurofins Sampler Training and Equipment

Eurofins BOP invests significant resource and effort into training Eurofins BOP Samplers to carry out sampling activities. This includes a combination of classroom-based in-house training, field based on the job training and supervision. Samplers are retrained seasonally and regularly audited for quality and safety. All Samplers are trained in the use of quad bikes by [Drivezone](#) before they are sent onto orchards and receive refresher training every 4 seasons. In addition, all Samplers will complete annual refresher driver training for quad bikes, cars and trailers.

Samplers are trained to carry out and record safety checks on Eurofins BOP equipment before going onto orchard and to follow the health and safety information pertaining to that orchard as detailed on the collectors report and/or upon arrival at an orchard e.g. hazard board/site induction.

Where no health and safety information is provided either in advance on the collectors report, map, or on arrival at orchards, Eurofins BOP Sampler will carry out a health and safety risk assessment prior to carrying out sampling activities.

Furthermore, Samplers are also trained to assess risk whilst on orchard acknowledging that orchards are dynamic work environments and a shared workspace with multiple contractors.

Eurofins Sampler Personal Protective Equipment (PPE)

All Eurofins BOP Samplers are equipped with the latest in lone worker technology using the [Loner Bridge System](#) which communicates continuously with our Dispatch team and can be activated if a fall is detected, no motion or in the event of an emergency.

Samplers must wear high viz vests, helmet and face/eye protection (when quad sampling), carry a working cell phone, (also used to track samples and Samplers), a charging backup facility, flagging tape to mark any on-orchard hazards, their Loner device and a first aid kit in their vehicles when conducting sampling activities.

8. Standard Operating Procedures

This is not an exhaustive list to cover all circumstances encountered on orchards, rather a selection of commonly encountered risks and their controls, focusing on when stop sampling procedures may apply in order to protect our Samplers.

Refer to the document: Orchard Stop Sampling Procedures for this process.

Health and Safety On Orchards

(External Reference)



Eurofins BOP expect our Samplers to stop sampling where the following circumstances are encountered. A description of each circumstance is covered under the headings below:

- Dropped fruit on the ground
- Long grass
- Collapsed structures
- Spraying
- Curtains
- Reflective mulch or 'Extenday'
- Holes
- Loose wires, guy wires, tee pee strings, nooses at row ends or through canopy
- Aggressive/violent growers/orchard contacts or contractors

Note1: In all instances where the Sampler visits the orchard and a sample is unable to be taken, a sample collection fee will apply.

Note2: The stop sampling procedures below apply regardless of sampling method i.e. quad or foot, unless otherwise stated.

Dropped fruit on the ground

Where vines have been e.g. thinned recently and there is a significant amount of hard fruit on the ground, Foot Samplers will stop sampling and call Dispatch to discuss. A sample may need to be rescheduled in this instance and a collection fee will apply.

Long grass

Long grass restricts the visibility of the terrain i.e. slopes, holes, debris, fallen structures etc. These cannot be easily seen by our Samplers in long grass and increases the risk of slips, trips and injury (e.g. broken/sprained limbs) on foot and increases the risk of a quad bike tipping/rolling.

Grass should be mown in the areas sampling activities are to take place (including headlands and access ways) prior to a sample request. This is also an opportunity for growers/orchard managers etc to review and report any significant hazards on orchards prior to sampling commencing.

Where a Sampler arrives and the grass/weeds sward length is over 30cm in length in the areas where the sample is required (including access/headlands), the orchard will not be sampled. As above, the Sampler will take pictures and call Dispatch to confirm. Stop sampling procedures may then apply.

Note: The above does not apply to Spray strips under leaders or areas where Samplers will not be travelling/accessing.

Examples of unacceptable grass/weed length:

Health and Safety On Orchards (External Reference)



Collapsed Structures

Collapsed and damaged structures on orchards increases the risk of head, neck and eye injuries to our Samplers if struck while carrying out sampling activities. Collision with any propped structures may result in the canopy collapsing on top of our Sampler who may be crushed under its weight.

Samplers must stay at least one bay width from the start of a collapsed canopy/structure or a prop holding up structures due to the uneven displacement of loads under the canopy. This should be marked with flagging tape if possible, photographed and reported/sent via tracking 3 or to Dispatch directly.

Where more than 20 percent of the block canopy has collapsed, structures damaged or propped, stop sampling procedures will apply as this will affect the Samplers ability to complete a representative and safe sample. In this instance, Samplers will call Dispatch to discuss and confirm with the Orchard Representative.

If avoiding the collapsed structure/props results in the sample not being representative of the maturity area, Eurofins BOP will advise Zespri who will determine how the Maturity Area will be sampled.

Health and Safety On Orchards (External Reference)



Examples of unacceptable/unsafe structures



Spraying

Exposure to agricultural sprays and residues can be harmful to the health of our Samplers and may result in both acute and chronic effects. Eurofins BOP risk mitigation strategy is based on the precautionary principle and considers all workers in our supply chain e.g. from Samplers to lab staff that may also be exposed to spray residues.

It is the responsibility of the sample requestor to avoid sample requests where spraying is occurring.

Samplers are trained to check the Orchard spray board before entering the orchard. It is a legal requirement for spray signage e.g. the spray board to be completed correctly and in place outside the orchard 24 hours prior to spraying and updated or removed when the land is safe for re-entry.

There are a range of scenarios where stop sampling may apply:

- If spraying is in progress in the blocks requested to be sampled when a Sampler arrives then the orchard will not be sampled.
- If the Sampler suspects fruit could have been sprayed and the spray board has not been completed. This could be indicated by the following signs: There is no condensation on the fruit, the fruit is dripping and it is a fine day, recent tractor wheel ruts under the canopy.
- If the Sampler suspects fruit could have been sprayed and the spray board has been completed either correctly or incorrectly This could be indicated by the following signs: There is no

Health and Safety On Orchards

(External Reference)



condensation on the fruit, the fruit is dripping and it is a fine day, recent tractor wheel ruts under the canopy.

- If spraying starts in the blocks requested to be sampled while the Sampler is sampling the orchard, the Sampler will leave the orchard.
- Where there is a risk of spray drift e.g. when a neighbouring block (including a different KPIN) is being sprayed e.g. spray mist is visible or a spray unit can be seen operating in the orchard or block regardless of the spray applied.

In the above circumstances, sampling will stop and the Sampler will call Dispatch to report and discuss any of the above circumstances. Dispatch will contact the Orchard Representative or other parties associated with the orchard to confirm the presence/absence of spraying. Based on these discussions, sampling will either continue or be stopped. Eurofins BOP will endeavour to return and collect the sample on the same day where possible in line with the Zespri Crop Protection Standard for minimum re-entry periods.

If a sample has been scanned in the tracking app for collection and if any of the above circumstances above are encountered, the sample will be cancelled and a new sample will need to be requested by the Packhouse. A cancellation fee may be incurred.



Curtains

Most curtains are too heavy/cumbersome to be lifted by most Samplers on their own and may result in injury.

Curtains should preferably be lifted before a sample is taken. If a Sampler can access the sampling gaps without the need to lift curtains, then a sample will be collected.

If there is insufficient space to access the gaps for a representative sample to be completed within the curtained area or there are no suitable gaps in the curtain to manoeuvre a quad bike, or the Sampler cannot lift the curtain, the Sampler will call Dispatch to report and discuss. Stop sampling procedures may apply. Dispatch will contact the Orchard Representative or other parties associated with the orchard to discuss returning to the orchard after the curtains have been lifted or cancelling a sample and requesting a sample for the following day once the curtains have been lifted.

Health and Safety On Orchards

(External Reference)



Reflective Mulch or 'Extenday'

Extenday/reflective mulch conflicts with sampling activities because the material is slippery (particularly when wet) increasing the risk of injury from slips, trips and falls. In addition, the terrain beneath cannot be seen e.g. holes may be hidden which increases the risk of injury and may affect quad stability. Furthermore, the collection of fruit in lane one may be disrupted, affecting the representation of the sample taken. Lane 1 can be either 1/3 of the width across the bay for strip male configurations or 2/6 of the width for opposing

female canopies (up against the leaders on either side of the bay 1/6 of the distance).

In both configurations Lane 1 is up against the female leaders. If you are not able to take the sample randomly from the entire area for Lane 1 then the sample may be compromised and may not be representative of the Maturity Area.

Reflective mulch cloth/extenday should ideally be removed before a sample is taken. Where this is not considered practical, orchard representatives should check to ensure the extenday installation and terrain beneath the extenday is suitable for sampling on quad or foot.

Any decision to stop sampling will be risk assessed in the context of the overall condition of the orchard, how safely the extenday has been installed and weather conditions on the day. Stop sampling procedures may be considered where the following risk indicators present:

- bungees are attached high on bay posts
- high weeds/grass poking through either side of the cloth
- holed/torn/loosely fastened cloth (general state of repair)
- sloping terrain
- wet/damp conditions, especially when combined with any sloping terrain.
- Presence of multiple holes/large holes on the orchard

The Sampler will take pictures and call Dispatch to report and discuss, stop sampling procedures may apply.

Note: The risks associated with extenday/reflective mulch cloth will be closely monitored through the 2018 season.

Holes

Holes on orchards increase the risk of injury from trips and falls for foot sampling and significantly increase the risk of a quad tipping/rolling.

Where the holes are intermittently dispersed through the orchard, the Orchard Representative should flag/mark or isolate these hazards so that a sample can be safely completed.

Health and Safety On Orchards (External Reference)



Where the block(s) to be sampled including access routes have large, deep or multiple holes that may put the Sampler at risk, the Sampler will take pictures and call Dispatch to discuss. Stop sampling procedures may apply.

Examples of holes:



Loose wires, guy wires, tee pee strings, nooses at row ends or through canopy

Loose wires/strings or nooses can become caught around a Sampler's neck, helmet or quad bike and can cause serious injury including whiplash, strangulation, puncture wounds and eye injuries. Loose wires, strings etc may also become entangled with a quad bike resulting in a loss of control and steering.

Where wire/strings etc that are not easily visible are seen dropping through the canopy or at the end of the row.

The Sampler will take pictures and call Dispatch to confirm. Stop sampling procedures may apply until these are flagged or removed.

Health and Safety On Orchards (External Reference)



Examples of wires/strings:



Note wire at neck height

Aggressive/violent growers/orchard contracts or contractors

Workplace violence is a health and safety risk and includes any act where a person is abused, coerced, threatened, intimidated or assaulted. A number of Eurofins BOP Samplers experienced serious incidents of violence during the 2017 maturity clearance season. Therefore, additional controls have been put in place to protect them during the course of their work.

Eurofins BOP operates a zero-tolerance policy in relation to violence in the workplace. This includes violent or aggressive persons that Samplers or any other member of staff may interact with on orchards or in the course of their work. This behaviour is completely unacceptable and will not be tolerated by Eurofins BOP or any of their staff. Stop sampling procedures will apply when a Sampler feels or is: intimidated, abused (either physically or emotionally), coerced or pressured into deviating from standardised sampling protocols.

The Sampler will not engage, will leave the orchard and call Dispatch to confirm and record the incident. Samplers are trained to minimise engaging with anyone on orchards unless necessary for safety reasons. Any incidents with aggressive growers or other persons will be recorded against the orchard for future reference on collection reports and additional controls may be applied which may result in a higher collection fee.

A register of aggressive growers is held by Zespri and will be updated periodically.

Health and Safety On Orchards (External Reference)



9. Orchard Hygiene

Eurofins BOP's procedures are consistent with KVH regional requirements.

10. On Orchard Communication Strategy

Eurofins BOP will send a text message to the Orchard Representative the day prior to sampling indicating the date sampling will occur and asking for any additional risks to be communicated to Eurofins BOP.

Where a grower or Orchard Representative has requested a call prior to sampling, but that contact person (or persons) cannot be reached, or if the Sampler is unable to locate the hazard board/sign in book on arrival, the Sampler will call the Dispatch team to discuss the matter. If Dispatch is not able to contact a person connected to that orchard within 10 minutes, sampling may be cancelled and a collection fee may still be applied.

Where a Sampler is not in cell phone range (this applies in areas such as Te Kaha, Mohaka for example), Eurofins BOP will use best efforts to contact an Orchard Representative. Note in these circumstances ticking the requirement 'call Orchard Representative' prior to sampling is not recommended.

Eurofins BOP Dispatch team are in continuous contact with our Samplers through our Loner technology which links to GPS and works independently of cell phone coverage. The Loner technology has a clearly defined protocol to follow in the event of a device being activated.

Due to the nature of the work we are in regular contact with our Samplers by phone. Phones also have an additional GPS tracking facility installed (Tracking 3) which is monitored by Dispatch and linked to the sampling process but may also be used as a safety backup system.



11. Emergencies, Accidents, Incidents and Near Miss Event Reporting and Investigation

Eurofins BOP have procedures in place to ensure all emergencies, accidents, incidents and near miss events are appropriately recorded, investigated, managed and reviewed. This procedure can be made available on request.

Health and Safety On Orchards (External Reference)





12.Change Management from Draft (Version 6) dated 12 October 2017

Original	Changed	Justification	Change Initials
Thinned Fruit Where vines have been thinned recently and fruit is hard on the ground, foot samplers will stop sampling and call Dispatch to discuss.	Dropped Fruit Where vines have been e.g. thinned recently and there is a significant amount of hard fruit on the ground, Foot Samplers will stop sampling and call Dispatch to discuss.	May not be only thinned fruit on the ground.	
Long Grass Where a sampler arrives and the grass/weeds sward length is over 15cm (Proposed length to be agreed) in length in the areas where the sample is required (including access/headlands), the orchard will not be sampled.	Long Grass Where a Sampler arrives and the grass/weeds sward length is over 30cm in length in the areas where the sample is required (including access/headlands), the orchard will not be sampled.	Significant amount of feedback received from the draft consultation document ranging from full support of 15cm to suggesting a max sward length of 40cm. The fundamental issue for sampling activities is being able to see ahead under the canopy to spot holes, surface undulations etc, this applies to both foot and quad sampling. A sward length of 30cm has been decided for the 2018 season.	


Health and Safety On Orchards (External Reference)



		This will apply to the headlands as well as under the canopy where sampling activities take place.	
Spraying Samplers are trained to check the Orchard spray board before entering the orchard. <u>It is a legal requirement for the spray board to be completed correctly and in place outside the orchard 24 hours prior to spraying</u>	Spraying Samplers are trained to check the Orchard spray board before entering the orchard. <u>It is a legal requirement for spray signage e.g. the spray board to be completed correctly and in place outside the orchard 24 hours prior to spraying and updated or removed when the land is safe for re-entry.</u>	Small amendments to bring in line with regulatory requirements below. Any spraying that does not meet the requirements of the Regional Air Plan (i.e. the appropriate signage not displayed) would contravene section 15(2A) of the RMA. The potential punitive enforcement outcomes for this can range from a formal warning to a \$300 infringement notice to prosecution, depending on the circumstances. This could result in issue an abatement notice formally requiring the rules to be adhered to for future spraying events.	
Curtains If there is insufficient space to access the gaps for a representative sample to be	Curtains If there is insufficient space to access the gaps for a representative sample to be completed within the curtained	It is anticipated that stop sampling would only apply where there are no/insufficient gaps in the curtain or the curtain is too heavy to lift.	

Health and Safety On Orchards (External Reference)



completed within the curtained area, the sampler will call Dispatch to report and discuss	area or there are no suitable gaps in the curtain to manoeuvre a quad bike, or the Sampler cannot lift the curtain, the Sampler will call Dispatch to report and discuss		
Reflective mulch/ Extenday Reflective mulch sheeting must be removed before a sample is taken. Where this is applied in the areas sampling will occur, stop sampling procedures will apply. The sampler will take pictures and call Dispatch to confirm.	Reflective mulch/ Extenday Reflective mulch cloth/extenday should ideally be removed before a sample is taken. Where this is not considered practical, orchard representatives should check to ensure the extenday installation and terrain beneath the extenday is suitable for sampling on quad or foot. Any decision to stop sampling will be risk assessed in the context of the overall condition of the orchard, how safely the extenday has been installed and weather conditions on the day. Stop sampling procedures may be considered where the following risk indicators present:	Significant feedback received from the draft consultation document. This feedback ranged from full support of stop sampling due to fundamental inability to see terrain and potential hazards beneath the cloth with some growers already rolling up for sampling activities. Conversely, objection to stop sampling due to presence of reflective cloth was received on the grounds of significant commercial investment, inconvenience and cost associated with moving and conflicting perceptions of risk. The fundamental issue for sampling activities is being able to see changes in terrain, holes, undulations etc., this applies to both foot and quad sampling and is fundamentally impossible to assess adequately when riding/walking over	




Health and Safety On Orchards (External Reference)



	<ul style="list-style-type: none">• bungees are attached high on bay posts• high weeds/grass poking through either side of the cloth• holed/torn/loosely fastened cloth (general state of repair)• sloping terrain• wet/damp conditions, especially when combined with any sloping terrain.• Presence of multiple holes/large holes on the orchard <p>The Sampler will take pictures and call Dispatch to report and discuss, stop sampling procedures may apply.</p> <p>Note: The risks associated with extenday/reflective mulch cloth will be closely monitored through the 2018 season.</p>	<p>reflective cloth. However, in response to feedback, this document has been amended for the 2018 season in as noted in the adjacent columns.</p> <p>The risks associated with reflective cloth will be closely monitored for the 2018 season.</p>	
--	---	---	--




Health and Safety On Orchards (External Reference)



Holes Holes on orchards increase the risk of injury from trips and falls and significantly increase the risk of a quad tipping/rolling	Holes Holes on orchards increase the risk of injury from trips and falls for foot sampling and significantly increase the risk of a quad tipping/rolling	Clarification on risk	
Grammar & Spelling 	Grammar & Spelling Capitalisation of Sampler throughout document Collectors Report decapitalization Capitalisation of Orchard Representative Capitalisation of Dispatch	Grammar & Spelling	
Grammar & Spelling and may not representative of the Maturity Area	Grammar & Spelling and may not be representative of the Maturity Area.	Grammar & Spelling	


Health and Safety On Orchards (External Reference)



Grammar & Spelling Samplers neck	Grammar & Spelling Sampler's neck	Grammar & Spelling		
Other minor spelling/grammar corrections				
Eurofins Sampler training and equipment An additional fee may be applied	Eurofins Sampler training and equipment Sentence deleted			
Standard Operating Procedures Note3: Foot sampling will only be an option based on the KVH PSA Region Types or there is a supporting risk assessment that demonstrates a significant risk to sampling on quad bike.	Standard Operating Procedures Sentence deleted	Foot sampling can be selected without requiring a supporting risk assessment.		

Health and Safety On Orchards (External Reference)




On Orchard Communication Strategy If dispatch is not able to contact a person connected to that orchard within 15 minutes, sampling will not occur and a collection fee may still be applied.	On Orchard Communication Strategy If Dispatch is not able to contact a person connected to that orchard within 10 minutes, sampling may be cancelled and a collection fee may still be applied.	Alignment with other Eurofins business processes	
No changes to the following sections: Collapsed/Dangerous Structures Loose wires, guy wires, tee pee strings, nooses at row ends or through canopy Aggressive/violent growers/orchard contacts or contractors.			

Health and Safety On Orchards (External Reference)



13.Approvals

Name	Company	Title	Signature	Date
Floris Van Rhyn	Eurofins	Business Unit Manager		20 November 2017

Health and Safety On Orchards (External Reference)

