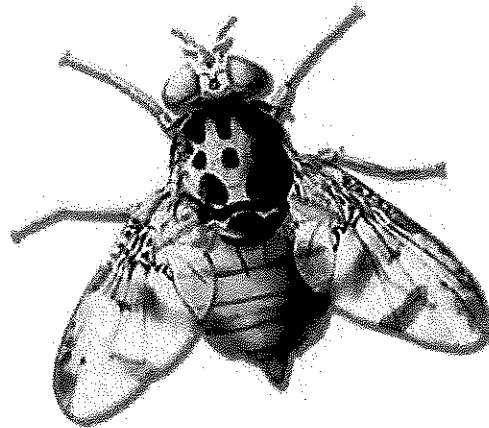


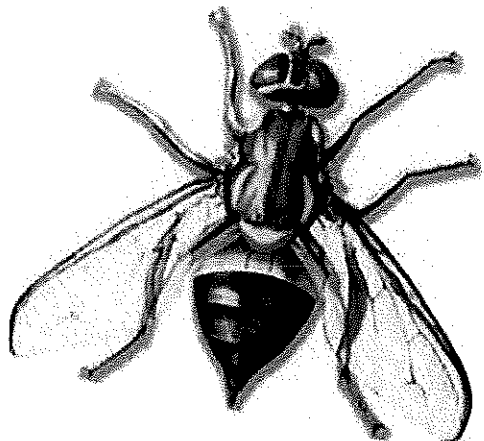
# PLANT HEALTH OPERATIONS

## Fruit Fly Eradication Induction and Training Manual

BIOSECURITY SA  
**PIRSA**



**Mediterranean Fruit Fly**



**Queensland Fruit Fly**





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# 1. Work Health & Safety

## 1.1 Work Health & Safety Act 2012

UNDER THE ACT PENALTIES APPLY FOR BOTH OF THE FOLLOWING

### 1.1.1 Employer's Responsibility

#### 19—Primary duty of care

1. A person conducting a business or undertaking must ensure, so far as is reasonably practicable, the health and safety of—
  - a) workers engaged, or caused to be engaged by the person; and
  - b) workers whose activities in carrying out work are influenced or directed by the person, while the workers are at work in the business or undertaking.
2. A person conducting a business or undertaking must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.
3. Without limiting subsections (1) and (2), a person conducting a business or undertaking must ensure, so far as is reasonably practicable—
  - a) the provision and maintenance of a work environment without risks to health and safety; and
  - b) the provision and maintenance of safe plant and structures; and
  - c) the provision and maintenance of safe systems of work; and
  - d) the safe use, handling and storage of plant, structures and substances; and
  - e) the provision of adequate facilities for the welfare at work of workers in carrying out work for the business or undertaking, including ensuring access to those facilities; and
  - f) the provision of any information, training, instruction or supervision that is necessary to protect all persons from risks to their health and safety arising from work carried out as part of the conduct of the business or undertaking; and
  - g) that the health of workers and the conditions at the workplace are monitored for the purpose of preventing illness or injury of workers arising from the conduct of the business or undertaking.

### 1.1.2 Employee's Responsibility

#### 28—Duties of workers

1. While at work, a worker must—
  - a) take reasonable care for his or her own health and safety; and
  - b) take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons; and
  - c) comply, so far as the worker is reasonably able, with any reasonable instruction that is given by the person conducting the business or undertaking to allow the person to comply with this Act; and
  - d) co-operate with any reasonable policy or procedure of the person conducting the business or undertaking relating to health or safety at the workplace that has been notified to workers

## 1.2 Protecting yourself

There are some important documents that you need to be aware of. These need to be read thoroughly and understood before commencing work on the program. They are; Standard Operating Procedures (SOP) and Safety Data Sheets (SDS), They MUST be read and adhered to at all times.

NOTE: Only Authorised Inspectors under the Plant Health Act 2009 or accredited personnel are permitted to handle Chemical Concentrates



## 1.3 Standard Operating Procedures (SOP)

SOP's provide you with the information required to complete a work procedure both safely and effectively. They may often refer to other SOP's or SDS's which should be read before commencing work on the outbreak. You will be supplied SOP's for the tasks you will undertake AND will be required to acknowledge receiving and reading them.

SOP Name	SOP #	Appendix
Safe use of ladders ( Only to be used as a last resort)	123	11
Bait tank use	194	12
Knapsack use	197	13
Garden Hygiene	210	14
Treating fruit and vegetables	218	15
Outbreak chemical spill Naturalure	238	16
Technical check	239	17
Ground Treatment	252	18

Copies of these documents have been provided in the rear of this manual, are carried in each vehicle and are available from the Local Control Centre.

## 1.4 Safety Data Sheets (SDS)

SDS's are important documents provided by the manufacturer or supplier of a hazardous substance, containing relevant information about safe use which are readily available to workers. If you are supplied an SDS for a substance that you might come into contact with whilst working on the program, or if a SOP refers to one, you must read it.

### 1.4.1 \*Australian Pesticides and Veterinary Medicines Authority

The \*APVMA Permit for Naturalure® must be read by all persons using Naturalure® (Refer to Support Material)

## 1.5 Risks, Hazards and Incidents

### 1.5.1 Risk Assessments

In our work environment we come across different scenario's every day, one day we might be working in a residential area, the next we are operating in orchards/vineyards both abandoned/neglected and managed.

In each case it is up to every person to do a risk assessment to determine; what are the hazards – can we do our job safely?

**Remember that just because it is not there today does not mean it will not be there tomorrow or next week.**

### 1.5.2 Common Risks

#### 1.5.2.1 Residential

- **Vehicles;** walking along foot paths, alongside roads and entering driveways - Take note of vehicles, you might see them, but don't assume they see you.
- **Surfaces;** if you come across uneven foot paths, damaged utility inspection pits, alert your team worker and record it. Details can be forwarded to the proper authority and it might save someone else.

- **Clotheslines; Wall mounted air-conditioners;**
- **Uneven surfaces;** i.e. pavers, lawn edges, clutter left lying around.
- **Animals;** i.e. dog, snakes and insect bite (e.g. European wasps, bees and spiders)

#### 1.5.2.2 Abandoned/Neglected Orchards, Paddocks & Parks

- **Snakes**
- **Wildlife;** kangaroos
- **Long Grass;** if you cannot see where you are stepping do not enter, any grass above ankle high is too high

#### 1.5.2.3 Dogs

- Look for signs – 'BEWARE DOG'
- Ask occupant if a dog is present
- Bones, food bowls, toys or droppings in the lawn
- Rattle gates to see if any dogs are present

**DON'T ENTER IF IN ANY DOUBT.**

#### 1.5.2.4 Personal Injury

- Do not overfill knapsacks.
- Rotate baiting between fruit fly controllers.
- Do not climb or jump off retaining walls use the correct access and exit points.
- Take care with knives whilst cutting fruit.
- Take care to look for syringes/ glass etc. among fruit debris under trees.
- Use rakes and shovels.
- Always wear gloves and other PPE provided.

IF A HOUSEHOLDER BECOMES UPSET, ANGRY OR VIOLENT, LEAVE THE AREA IMMEDIATELY, RECORD THE HOUSE DETAILS AND REPORT THE INCIDENT TO THE TEAM LEADER TO DOCUMENT. TEAM LEADER TO PASS ON TO FIELD SUPERVISOR.

#### 1.5.2.5 Trips and Falls

- Do not climb over fences or gates.
- Look where you are walking.
- Don't run.
- Beware of uneven surfaces.
- Avoid cluttered areas.

#### 1.5.2.6 UV Radiation Risks

- Sunburn / Skin cancer.
- PPE and sun block are supplied and must be worn
- PPE includes approved hats, full length overalls, enclosed shoes, gloves and eye protection.

#### 1.5.2.7 Dehydration Risks

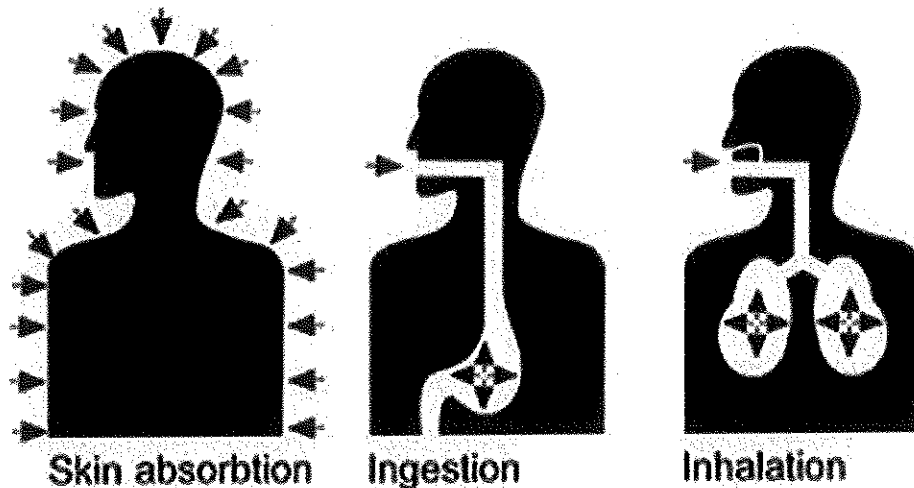
- Take regular drink breaks, water has been supplied

#### 1.5.2.8 Personal Hygiene

- Wash hands regularly – especially before eating

## 1.5.2 Chemicals & Chemical Entry Routes

Before using any chemical you must read the SDS and abide by the safety procedures associated with said chemical.



Chemical can be absorbed into your system through a number of different entry paths.

- SKIN – can absorb vapour as readily as inhalation  
largest organ of the body / 1.5m<sup>2</sup>
- INGESTION
- INHALATION – chemicals directly into the blood
- EYES – can absorb chemicals

### **PPE and hygiene prevent most entry**

#### 1.5.2.1 Spill & Fire Response

If a Spill occurs on an Outbreak use the appropriate procedures outlined in SOP 238 (Emergency Crisis Response) or the relevant SDS. **NEVER PLACE YOURSELF OR OTHERS IN DANGER - IF IN ANY DANGER, STOP, EVACUATE AREA, CALL & AWAIT EMERGENCY SERVICES.**

#### 1.5.2.2 In the Event of a Chemical Spill during an Outbreak

- Put on appropriate PPE; coveralls, gloves, boots, glasses etc. (and if dealing with concentrate, a respirator). Open provided Spill Kit.
- Ensure that no unnecessary personnel enter the area and immediately report the spill to Inspector/supervisor.
- If a large spill (i.e. >120L diluted mix or >20L of Concentrate) take all steps necessary to contain the spill. Other teams may be deployed to share spill kits and the hygiene team can be called to assist. An Inspector must attend such incidents. If the spill cannot be contained the Inspector must alert authorities. (i.e. Police / Fire Brigade on 000 or 131444).
- Work upwind if possible and if safe to do so, contain or stop any leak.
- Use provided absorbent material (Proisorb) to contain and soak up spill. **PREVENT ANY CHEMICAL FROM ENTERING DRAINS OR WATERWAYS.**
- Clean up chemical and absorbent material with provided shovel/broom. Place into provided plastic bags (then 25L Buckets when available). Seal and clearly label. Inspector will arrange proper disposal.
- Clean contaminated surfaces with water/rags. Collect cleaning water/rags for proper disposal i.e. store in Bags and 25L buckets.

### 1.5.2.3 In the Event of a Fire during an Outbreak

- Evacuate unnecessary personnel. Alert Inspector/supervisor and if necessary the POLICE / FIRE BRIGADE by ringing 000 or 131444.
- NOTE; Fumes / Smoke from chemical concentrates may be toxic. Put on PPE and if available, breathing equipment.
- **IF SAFE TO DO SO** attack Fire with a Dry Powder extinguisher, working upwind if at all possible.
- Maximise your distance from the source in case of any explosion.
- Once under control keep bystanders away until fumes/smoke are gone.

Use caution if cleaning up after fire as chemical containers/equipment may be damaged, resulting in chemical spillage.

## 1.6 Reporting of all hazards, near misses & incidents

**Whilst PIRSA has an obligation to provide a safe and healthy workplace, remember you are also responsible for your own safety and must not endanger others. Any hazard, injury, unsafe practice or equipment must be reported to an Inspector as soon as possible.**

- A first aid kit has been provided in each vehicle for treating minor injuries.
- In the case of a serious injury seek urgent medical attention and inform an Inspector immediately. You do not need permission to call emergency services if required.
- All injuries and near misses, however minor, must be reported to an Inspector AND your labour provider (including minor issues such as insect bite e.g. bee or wasp sting).
- Injury report forms are available from the Local Control Centre and **MUST** be completed.
- This ensures you receive the appropriate medical attention and the injury is recorded.
- Any employee/contractor attended to by a doctor must provide a Return to Work Certificate from the treating doctor.

**A CRITICAL INCIDENT is one which involves the death of a person, a serious injury or illness of a person or a dangerous incident**

**IF ANY CRITICAL INCIDENT OCCURS LET THE INSPECTOR OR THE PLANT HEALTH OPERATIONS CENTRE KNOW IMMEDIATELY**  
**A CRITICAL INCIDENT DEBRIEF MUST FOLLOW**

All injuries and near misses will be followed up as per **PIRSA WHS HAZARD & INCIDENT REPORTING & INVESTIGATION PROCEDURE.**

A list of all relevant contact details are contained in the vehicle folders.

## 2. Introduction

This manual is provided by Biosecurity S.A. Plant Health for you to keep and use as a reference. It is designed to provide you with information about the fruit fly eradication program and to guide and assist you to properly and safely perform your duties.

Before commencing work, new employees and /or contractors receive induction and procedural training in all relevant aspects of the program including on the job 'buddy training' in regards to the use of equipment and application techniques.

If you are unsure of any procedure or have questions please refer to;

- A Field Supervisor
- Your Team Leader
- The Standard Operating Procedures (SOP's)

### 2.1 Fruit Fly Eradication

It is important to eradicate all species of fruit fly immediately due to the impact fruit fly have on the horticultural industries. South Australia is the only mainland state to hold the status of being fruit fly free. Not only does this allow residents across the state to grow their own fruit and vegetables, it allows commercial growers to export their product into both interstate and overseas markets without post-harvest disinfestation treatments. These treatments can compromise the quality of the product.

Outbreaks of fruit fly are the result of infested fruit being brought into South Australia; Mediterranean fruit fly from Western Australia and Queensland fruit fly from the Eastern States where there are permanent populations or current outbreaks of the respective species.

#### Queensland Fruit Fly (*Bactrocera tryoni*)

Queensland fruit fly (QFF) is a native Australian fruit fly species, which has permanent populations distributed throughout the east coast of Australia, from Cape York in Queensland to East Gippsland in Victoria. This species is also known to be present in the Northern Territory. QFF is sometimes detected in metropolitan Adelaide, Sunraysia and the Murray Irrigation area (MIA) where it is subject to eradication procedures.

QFF can target a wide range of tropical and temperate fruit crops (see Appendix A).

#### Mediterranean Fruit Fly (*Ceratitis capitata*)

The Mediterranean fruit fly (MFF) was first introduced into Australia in the late 1800's, and is currently present in permanent populations in Western Australia. Despite its subsequent spread to eastern Australia, it was displaced by QFF. The last MFF fly detected in eastern Australia was in 1941. MFF is occasionally detected and eradication measures undertaken in metropolitan Adelaide and country centres.

MFF has a wide host range including both tropical and temperate cultivated hosts (see Appendix A).

#### Papaya fruit fly / Oriental fruit fly (*Bactrocera dorsalis*)

Papaya fruit fly (PFF) was first detected on mainland Australia in the Cairns area of North Queensland in October 1995. A successful eradication program was undertaken.

PFF is considered to be the most serious fruit fly in South East Asia. It has an extensive host range which includes most tropical fruits, citrus, stone fruit, pome fruit and a range of vegetable crops (see Appendix A).

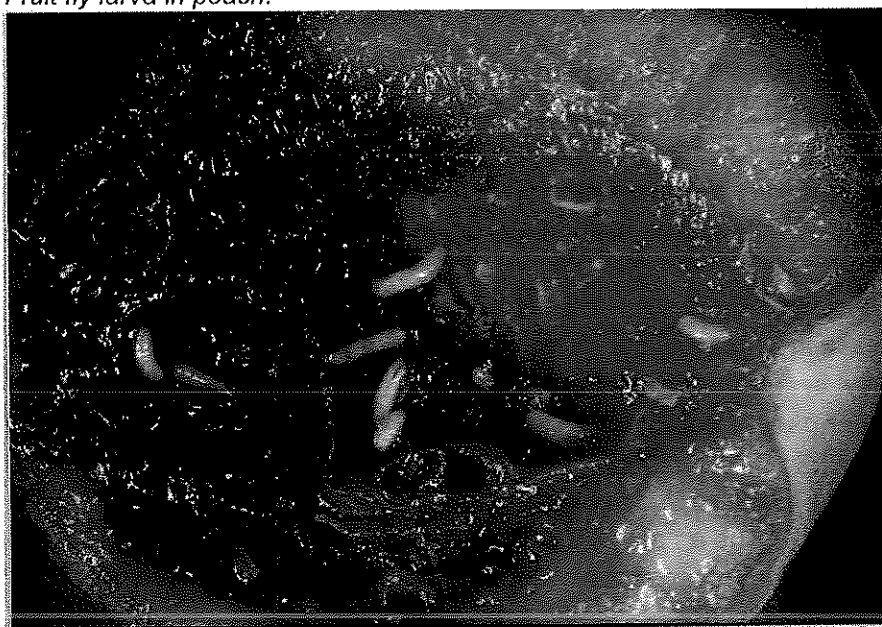
## 2.2 Declaration

An outbreak is declared when either the required number of flies are caught within the set monitoring period, a gravid female is caught or fruit fly larvae is found in locally grown fruit. There is a slight variation to the required number of flies which are required to declare an outbreak for each species. Mediterranean fruit fly require 3 flies to be caught within 1-kilometre within 14 days, where Queensland fruit fly requires 5 flies within 1-kilometre in the same time period. Gravid females and larvae will result in immediate declaration of an outbreak regardless of species.

As soon as an outbreak is declared in South Australia, householders within the "Outbreak Area" are notified by leaflet that they are now in a quarantine zone and a Fruit Fly Eradication program involving Bait Spotting, Hygiene and/or Sterile Insect release (SIT) is about to commence. This leaflet will inform the householder the requirements for moving fruit, veg and green waste within and out of the quarantine area ensuring the outbreak does not spread.

These procedures are followed to prevent the permanent establishment of fruit fly in South Australia and subsequent loss both to home gardens and commercial fruit and vegetable growers.

*Fruit fly larva in peach.*



*Picture Biosecurity SA*

If fruit fly larvae are detected all fruit from the infested tree/s is removed. Any ripened or fallen fruit from adjacent trees is also removed.

With the householder's permission a ground treatment using Karate insecticide will be applied under the infested trees out to 1 metre past the tree's drip line, (this treatment will be done by the field supervisor), a plastic ground sheet will then be laid to cover the treated area, this ground sheet is to be inspected weekly to ensure that it has not moved or been tampered with.

Fallen fruit is collected from all properties in the outbreak zone (red centre) for the duration of the program.

In certain circumstances an exemption from treatment may be granted. In these instances, all fruit fly host material on the exempted property must be removed.

In compliance with eradication procedures, all fruit taken from properties is placed into bags, returned to base, treated with Maldison powder, sealed and disposed of as directed.

## 3. Operations

### 3.1 Behaviour in the field

**You are in the public eye. Be courteous. Be neat.**

We take pride in the standard of service we provide. Committing any one of the following acts could be counterproductive to Biosecurity SA aims and objectives and require implementation of disciplinary action, **which can include immediate dismissal**:

- Being under the influence of any intoxicants or drugs at any time when on duty.
- Dishonesty or failure to report any act or plan of dishonesty, whether knowledge of such act or plan is obtained directly or indirectly.
- Destruction, damage, unauthorised disruption, possession, misuse of, removal, or the threat of any listed, from a premise or property that does not belong to the employee irrespective of its condition or value.
- Excessive absence from work or repeated tardiness in reporting to work or returning from breaks.
- Failure to notify the labour provider at the earliest opportunity if you are going to be late or unable to attend work.
- Insubordination or countermanding supervisor's orders without authorisation.
- Misuse of government property.
- Smoking in vehicles or other prohibited areas.
- Failure to observe WH&S practices.
- Violation of, or disregard for a known Biosecurity S.A. policy or procedure.
- Negligence in the performance of duties or abuse of work time.
- Sexual harassment, racial discrimination or victimisation will not be tolerated. If you believe you are a victim become aware of such behaviour contact the Inspector in charge or The Labour Hire Recruitment Provider.

The above guidelines extend also to your relationships with fellow employees. By observing them and helping each other we can all enjoy a harmonious working environment.

All employees are expected to:

- Treat the public and other employees with respect and courtesy.
- Utilise resources at their disposal in an efficient, responsible and accountable manner.
- Conduct themselves in public in a manner that will not reflect adversely on the public sector, their agencies and other employees.

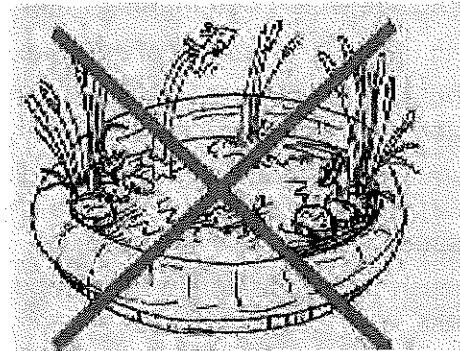
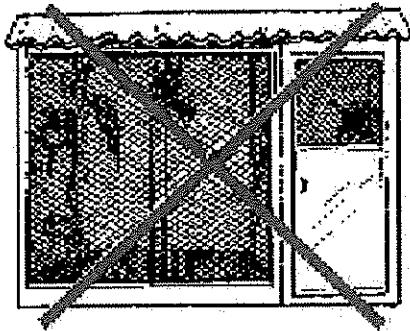
Maintain a safe working environment by adopting appropriate hazard management practices consistent with the role.

#### 3.1.1 Rules when on property

Under the *Plant Health Act 2009* Plant Health Inspectors and persons assisting those Inspectors have the authority to enter private properties for the purpose of fruit fly eradication. However, this does not give us the right to invade people's privacy or mistreat their property.

- Your identification card must be clearly displayed at all times.
- Don't remove fruit from properties for personal use, even if a householder offers it. You are in a quarantine area and fruit must be disposed of in compliance with eradication procedures.

- No smoking.
- Don't bait a tree unless you can see what is on the other side.
- Don't bait near people or pets, including fish (ponds), birds (aviaries) or bees.
- **Don't let bait drift get into aviaries, fish ponds or anything containing water for humans or animals.** With field supervisors' approval - tarps are available to cover these areas **before** baiting if required.



- Don't let bait drift onto laundry, motor vehicles, garden furniture, windows or other parts of the house. Watch where you bait and when bait spotting do not use too much force on the pump.
- Do not bait over fences unless given permission by the Inspector in charge.
- Never enter a property where a dog is present unless you are sure it is safe.
- Don't forget to shut gates on both entry and exit.
- Don't drip bait on concrete paths and patios –carry the pump in an upright position.
- If you receive enquiries from householders about any aspects of the program you are uncertain of do not attempt to answer, refer them to an Inspector or advise them to contact Plant Health Operations. The phone number is on your I.D. or the information leaflet distributed to all properties in the area at the start of the program. A contact card may assist communication.

### 3.1.2 Face to Face

When door knocking, tell the householder that you are here to apply the fruit fly bait. **NOTE THAT WE REFER TO THE APPLICATION AS 'BAIT', NOT 'SPRAY'**

If the householder has any questions that you are unsure of tell them that you will ask the field supervisor to respond, **DO NOT PROVIDE AN ANSWER IF YOU ARE UNSURE.**

If the householder is irate or angry immediately leave the property and pass details on to your team leader.



## 3.2 Equipment

### 3.2.1 Vehicles

- A Non Public Sector Driver Vehicle Use Agreement form is to be completed before any government vehicle can be driven.
- **Full** drivers licence to be produced to Outbreak Admin Officer or Labour Hire Recruitment Agency at time of completion of this form.
- The drivers licence must non restricted and currently valid in South Australia.
- The drivers licence must be appropriate for the vehicle being driven – no provisional licences
- Any fines or traffic infringement notices are to be paid for by the driver.
- The log book is to be maintained by the driver
- Any accidents or damage must be reported to the Inspector in charge no matter how minimal.
- The vehicle is only to be used for the delegated task at hand.

### 3.2.2 Knapsacks

Knapsacks are used to carry and dispense the correct amount of bait onto each appropriate tree. The hand pump has been calibrated to dispense 40 ml of bait by using one action of pumping out then in.

Knapsacks should be worn firmly on the back and the straps should always be properly adjusted, and the pump carried in an upright position.

The pump must be lubricated with lithium grease on a regular basis to ensure ease of action and stop the pump from seizing.

Never:

- Hit or mistreat the pump.
- Dismantle the pump.
- Fill the knapsack whilst on the Fruit Fly Controllers back. (Always fill while on the trailer.)
- Overfill the knapsack.

At the end of the day any bait left in the knapsack is to emptied back into the waste drum.

The knapsack and pump are to be flushed with clean water by operating the unit until clean water passes into a bucket, with all flushing's to be poured into the waste drum, unless directed otherwise.

### 3.2.3 Maintaining Equipment

Do not attempt to do any maintenance on any equipment. Even if you are qualified to undergo the maintenance, unless requested by an inspector, the operations manager or incident controller to do so.

## 3.3 Leafleting

**Every letter box** of all houses, flats, units, townhouses and businesses are to be leafleted.

Information leaflets are delivered at the beginning of the program advising householders;

- That they are in an eradication area.
- Explaining the eradication program.
- Instructing them not to remove fruit from their property unless it is cooked or preserved.

At the end of the program residents are advised by leaflet that the eradication program has been completed and to thank them for their co-operation.

You must ensure that all houses and units on all properties have received a leaflet. Do NOT cross roads until you have completed the entire block, this ensures no cul-de-sacs or properties will be missed.

Once a block is completed, record on map provided and continue with new block. Ensure only blocks allocated to your team are leafleted and all are recorded once completed. Finish the block you are working on before taking any breaks or moving from the block.

### 3.4 Coloured Ribbons

Blue ribbons signify that a fruit fly trap is in this tree, do not touch the trap or bait the tree.

Yellow ribbons mean that only these trees are to be baited. These will be recoded on the arrangements sheet provided.

Red ribbons indicate that the tree is to be stripped of its fruit by the hygiene team and the baiting team are not to apply bait to that tree.

### 3.5 Arrangements

Throughout the outbreak properties may be added to an arrangement/exemption list, for a variety of reasons. They will be highlighted on both your running sheets and the daily maps and you will be provided with a list of all relevant arrangements in your area. It is the team leader's responsibility to ensure they have 3 copies of an up to date arrangements list.

### 3.6 Bait

#### 3.6.1 Preparing the bait

**The dispensing and mixing of bait and chemicals in their concentrated form is to only be done by an authorised Plant Health Inspector or Delegate.**

Each team will be given a predetermined amount of bait a day, which is provided at working strength in a trailer-mounted bulk tank.

The bait must be continuously agitated in the tank prior to filling knapsacks. **This is essential** to make it fully effective.

#### 3.6.2 Bait Spotting Team

A bait spotting team typically consists of a Team Leader and 4 Fruit Fly Controllers (Bait Spotters). The team leader may be required to work as one of the Fruit Fly Controllers in conjunction to team leader duties. Working in teams of two: 1 person will check and record the property's details, doorknock and advise the householder that their property is about to have the bait spotting treatment applied. The 2<sup>nd</sup> person will apply the bait spotting treatment.

The team is allocated properties that they are responsible to bait during the program (weekly in the Outbreak Area, twice weekly in the Outbreak Zone (Red Centre)). The daily quota of properties must be completed on time.

*(Refer to work instructions for roles)*

### 3.6.3 Bait spotting

Fruit flies shelter in shady fruit trees, ornamentals and shrubs. Bait spotting this vegetation will help to eradicate them.

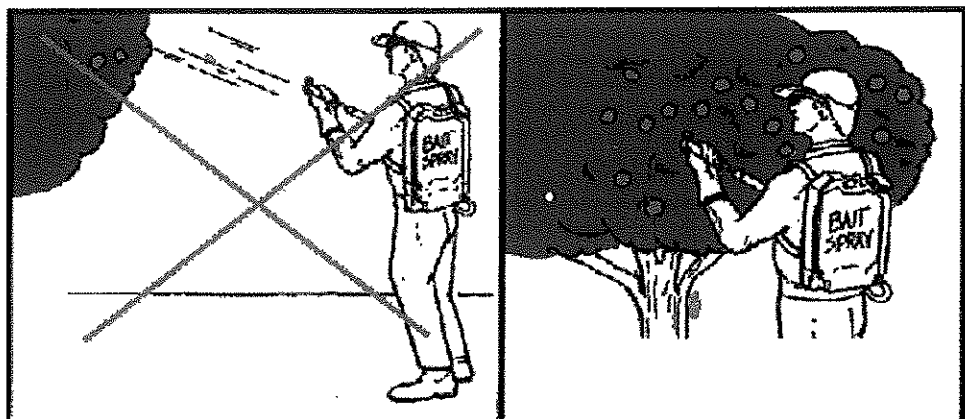
Every property in the Outbreak Area (Outer Area) requires Bait Spotting weekly, with those in the Red Centre (Inner Area) requiring treatment twice weekly. The Red Centre for fruit fly is defined as those properties within a 200m radius.

The Bait consists of a diluted mixture of Naturalure® fruit fly bait concentrate and water which attracts and kills adult fruit flies. Naturalure® has been certified organic by Biological Farmers of Australia. There is no 'withholding period' required for Naturalure® so residents can pick or consume fruit from a tree or plant that has been bait-spotted after washing.

Priority should be given to fruit trees and where possible street foliage should also be bait spotted. Always ensure you are aware of what is on the other side of a tree so you don't bait property, people, children's play equipment, bird aviaries, ponds, pets or their water/food. Bait should **not** be applied to foliage that overhangs a fish pond or a tank.

Beware of wind direction to ensure bait doesn't carry onto yourself, householder's washing or other property.

Bait must be applied in 40 ml doses (two squirts of the pump – out and in) to at least twelve spots per average sized property if possible – equal in front and back to achieve the desired 120 spots per hectare.



This method of bait spotting will achieve a grid of bait spots over the entire outbreak area. Bait spotting will be most effective if you stand as near as possible to the tree or shrub and ease the bait into the centre and upwards into the foliage.

This will also prevent burning of the leaves by the sun during hot weather.

To avoid injury or spillage place the empty knapsack onto the trailer box for filling and avoid carrying unnecessary load. Only fill knapsacks with sufficient bait for the properties on the block and once filled Team Leaders are to assist the Fruit Fly Controller putting on their knapsack.

Do not apply bait to pines, roses, skinny shrubs, plants with thin leaves or herbs.

**Householders in the outbreak area, outside of the red centre (outbreak zone), are required to clean up any fruit which has fallen on the ground. If you find a property outside of the red centre where the householder is unable to pick up fallen fruit for legitimate reasons, make note of the properties address, block number, team number and date, then pass the details onto the field inspector or place in allocated boxes in office on return to base. A hygiene team will visit all properties in the red centre and undertake hygiene.**



### 3.7 Hygiene / Technical Checks

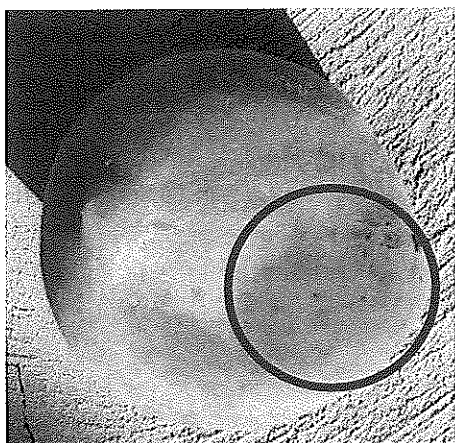
The hygiene/tech check team typically consists of a Team Leader and 1 or more Fruit Fly Controllers. Once in the field you are to work in teams of 2 or 3 only.

Technical Checks (otherwise known as a tech check) may occur throughout the outbreak area. Check ripe and ripening fruit, any fruit on the tree that looks bruised, distorted or rotting should be carefully removed, dissected and inspected for fruit fly larvae, this procedure is also to occur with fallen fruit. If any larvae are detected, place the fruit along with the larvae in a small plastic sample bag and notify the field supervisor immediately.

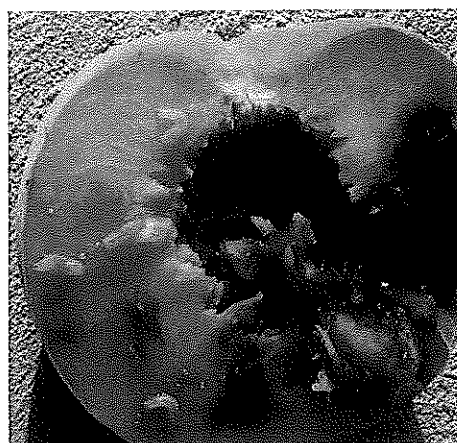
**Householders in the outbreak area, outside of the red centre (outbreak zone), are required to clean up any fruit which has fallen on the ground. If you find a property outside of the red centre where the householder is unable to pick up fallen fruit for legitimate reasons, make note of the properties address, block number, team number and date, then pass the details onto the field inspector or place in allocated boxes in office on return to base. A hygiene team will visit all properties in the red centre and undertake hygiene.**

Fruit collection (otherwise known as Hygiene) occurs throughout the program, with visits to every house in the red centre, and pickups from households in the outbreak area. When conducting hygiene collect all fruit on the ground and conduct a tech check of ripe and ripening fruit. Call an inspector immediately if anything is found in the fruit.

**You are not to accept any hygiene clean-up slips from the baiting or tech check teams. They are to be allocated from field inspectors or the office.**



Peach showing bruising and sting marks.  
(Photo Biosecurity SA.)



Cut peach showing larvae and damage.

### 3.8 Property Records

Details of all properties are to be recorded on running sheets.

This record will be prepopulated with the street address and keep record of any hazards or issues (i.e. dogs, aviaries, bees, pools and any issue of importance) and the types of trees on the property. You are required to fill in in these records with as much detail as possible.

When the property is highlighted blue an arrangement has been made and you will be required to refer to the arrangement list for further details. If the property is highlighted red you are not to enter the property under any circumstance. When the property is marked as no further work to be completed the row will be purple.

All record sheets are to be returned in order of block number. They are to be collated into one folder and returned with all maps and folders to the allocated pigeon hole every night.

These records will be used when revisiting each block for further bait applications and to assist in further planning of the eradication program. Do NOT use any codes or shorthand unless approved by the operations manager.

### 3.9 Daily Maps

Each team will be allocated with 3 property maps which will have the borders of every property outlined. On these maps, arrangements will be highlighted and will be what each team uses to record what work was completed that day. On each map team leaders are required to ensure that the team number, day number and date are clearly recorded.

Each scribe is to fill in each property with the approved key to mark where work was completed. They then provide this to the team leader who is required to transfer the data onto the team leader map using the colour key. All maps are to be returned at the end of the day.

### 3.10 Vehicle Folders

Each outbreak vehicle will contain a folder with relevant Standard Operating Procedures (SOP's), Safety Data Sheets (SDS) and other relevant documents.

- Log Sheets (to be filled in daily)
- Vehicle checklists (to be completed and handed in weekly)
- Contact Lists
  - Plant Health phone list
  - Staff phone list / team list
- Permit
- Naturalure SDS and label
- SOP's

### 3.11 Daily Operations

You must; read, understand or seek clarification on the provided documents before commencing new work or handling a chemical and at all times follow the provided SOP's.

- Appropriate gloves are provide and must be worn.
- Coveralls must be laundered by PIRSA and must **NEVER** be taken or worn home - leave them in the designated area at day's end. Change coveralls as necessary to ensure high levels of personal hygiene and good public appearance.
- Safety equipment; including coveralls, gloves, glasses, hat and closed footwear must be worn at all times when working. A respirator **MUST** also be worn when treating fruit with Maldison dust.
- Always keep the sleeves of your coveralls down.
- Maintain personal hygiene. Regularly wash your face and hands. Always wash hands before smoking, eating or going to the toilet.
- You are required to wear the supplied approved hat and UV-filtered protective glasses.
- Sun screen and barrier cream are provided and we strongly recommend you use them.
- Never enter a property with a dog present unless you are sure it is safe.
- Never attend work under the influence of drugs or alcohol.
- Do not ride on trailers or in the back of 'utes'.
- Take frequent small drinks of water during hot weather.
- Knapsacks should be worn firmly on the back and the straps should always be properly adjusted.
- Do not fill a knapsack with bait while it is on the Bait Spotter's back.

- Lock vehicles, trailers, and other equipment when unattended.
- Do not smoke whilst on a property, applying chemical or when in the near vicinity of the trailer.
- Smoking is prohibited in Government buildings, on Government properties or in Government vehicles.
- Keep the equipment clean, tidy and in good working order.
- Always think before you act.
- Do not touch or examine the fruit fly traps, you are not trained for fruit fly identification so do not try.

### 3.11.1 Staff Responsibilities

**It is the Team Leader's responsibility to ensure:**

- The daily vehicle, trailer and stock list is completed.
- The weekly vehicle checklist is completed.
- All Team members are wearing their ID badges at all times.
- The work is completed efficiently and on time, team members use safe work practices and follow the relevant Standard Operating Procedures (SOP's).
- All properties are baited correctly, including attending to arrangements, exemptions and call-backs.
- Team members wear, clean overalls and maintain the provided Personal Protective Equipment (PPE).
- Team members maintain their personal hygiene throughout the day.
- They maintain property baiting records (i.e. exemptions, no access, hazards etc.) to use as reference on subsequent visits.
- The Inspector is informed of any lost time or problems, especially those involving the public.
- They report to the Inspector at the end of each day any relevant information on the day's proceedings.
- Team members fill out time sheets on time and correctly.
- The vehicle and trailer are cleaned at the end of each day.
- The vehicle and trailer are locked when not in attendance.
- Keys to vehicles are handed in at the end of the day and mileage records are maintained.

Work hours are 8 a.m. to 4:00 p.m.  
Smoko is 15min between 10:00-10:30 a.m.  
Lunch break is from 12:30 to 1:00 p.m.

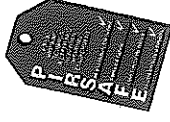
### 3.11.2 Daily Briefing

There will be a morning and afternoon debrief held daily between all staff working on the Fruit Fly Emergency Response, this is to ensure that all information is passed on and to reinforce that all procedures and protocols are followed during the emergency response.

A final debrief will be conducted at the end of the response program between all parties involved to review all aspects of the Emergency Response Campaign.







## WHS SAFE OPERATING PROCEDURE (SOP)

SOP title: **Sun Protection During Outdoor Work** ..... SOP number: 118

Risk assessment Objective Reference No: A286743 ..... *PIRSA WHS Document Control Register HR OHS&W F 001*

Division: Biosecurity SA ..... Date of last revision: 05/11/2020

Site/workgroup: Plant Health ..... Date for review: 05/11/2021

Task description: Sun Protection ..... Developed by (author/s): Gary Cox .....

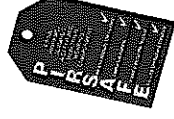
Associated job roles: Plant Health Staff ..... Approved by: Nick Secomb .....

Recorded in Divisional Job Task Risk Register ✓ ..... Reviewed by: Dave Hall .....

Recorded in Divisional WHS Training Needs Analysis (Objective Reference: fA392848) ✓

Recorded training in *PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA OurDevelopment System* ☐

ITEM NO	SEQUENCE OF JOB STEPS List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP Against each step list the hazards/ risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE How to do it	PROTECTIVE EQUIPMENT Please specify (refer below)
1.	Employers Responsibility	Sunburn Skin Cancer	<ul style="list-style-type: none"> <li>An employer must "ensure so far as is reasonably practicable that the employee is, while at work, safe from injury and risks to health".</li> <li>An employee must "take reasonable care to protect his or her own health and safety at work" and to "avoid adversely affecting the health of any other person through any act or omission at work".</li> </ul>	
2.	Employees Responsibility	Sunburn Skin Cancer	<ul style="list-style-type: none"> <li>An easy effective way to minimise the risk of skin cancer is to make some simple changes to the way outdoor work is done.</li> <li>Outside jobs can sometimes be done inside or moved to a new location outside that is in the shade.</li> <li>A temporary shelter can be erected or trees and buildings used for protection from ultraviolet rays.</li> </ul>	
3.	What can be done in workplaces to avoid skin cancer	Sunburn Skin Cancer		



## WHS SAFE OPERATING PROCEDURE (SOP)

		<ul style="list-style-type: none"><li>• A shady spot should be available for lunch and tea breaks, so that employees can get out of the sun.</li><li>• Another way is to organise jobs so that tasks requiring work outdoors get done early in the morning, when the ultraviolet rays are less intense.</li><li>• Between 11 am and 3 pm the ultraviolet is strongest.</li><li>• This is the most important time to minimise exposure to the sun.</li></ul>	
4.	Protective Clothing	<p>Sunburn Skin Cancer</p> <ul style="list-style-type: none"><li>• Skin covered by clothes will not need any other protection.</li><li>• Coveralls or long sleeved shirts and long trousers or skirts provide the best protection.</li><li>• Clothes that you can see light through should not be worn.</li><li>• If light is getting through, then the ultraviolet is getting through as well.</li><li>• For this reason long trousers or skirts give more protection than shorts.</li><li>• If shorts are worn, a pair that comes down towards the knee will offer more protection.</li><li>• Loose clothes are more comfortable as they do not restrict movement and they allow ventilation.</li><li>• Light coloured clothes are cooler in summer as they reflect the heat.</li><li>• Natural fibres such as cotton often allow perspiration to evaporate better than artificial fibres.</li><li>• A collar on a garment is a good idea as it will protect the skin on the back of the neck.</li></ul>	7 Suitable Protective Clothing
5.	Wearing Sunglasses	<p>Sunburn Skin Cancer Inflammation-Cornea Cataracts Conjunctiva Pterygium (Growth)</p> <ul style="list-style-type: none"><li>• The simplest way of protecting the eyes from Ultra Violet Radiation (UVR) is to limit the exposure.</li><li>• A good pair of sunglasses will reduce the amount of UV reaching the eyes and cut out the amount of glare.</li></ul>	1 Eye Protection



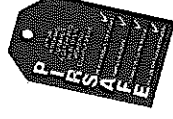
## WHS SAFE OPERATING PROCEDURE (SOP)

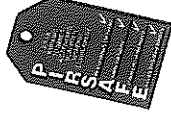
		Blindness	
		<ul style="list-style-type: none"> <li>Sunglasses must comply with the UVR requirements of the Australian Standard 1067 (revised 1990).</li> <li>This means they block at least 99% of UVB radiation and allows less than 1% to go through to the eye.</li> <li>Wrap-around sunglasses provide extra protection against UVR and glare.</li> <li>Where outdoor workers need protection from flying particles, dust, splashing materials and harmful gases, sunglasses must comply with the Australian Standard 1337 and as well as Australian Standard 1067.</li> </ul>	
6.	Wearing Sunscreen and Lip Cream	<p>Sunburn Skin Cancer</p> <ul style="list-style-type: none"> <li>Sunscreens do not provide complete protection against UV rays and should be used as an adjunct to natural protection, not as a substitute.</li> <li>Where the job requires working with water, a water resistant sunscreen should be used.</li> <li>For maximum protection, outdoor workers should wear an SPF 30+ broad spectrum water resistant sunscreen.</li> <li>Sunscreen can be bought as a cream, lotion or gel - all work equally well, but a preference for one or the other may depend on things like stickiness or skin type.</li> <li>The sunscreen should be put on at least a quarter of an hour (15 minutes) before going out in the sun.</li> <li>Always put sunscreen on dry skin.</li> <li>Make sure the face, neck, ears, arms and the back of hands are covered.</li> <li>Reapply sunscreen every two hours.</li> <li>If perspiring freely, it must be reapplied more often.</li> </ul>	9 Appropriate Sunscreen
7.	Wearing a Hat	<p>Sunburn Skin Cancer</p> <ul style="list-style-type: none"> <li>A hat will keep the sun off the face, neck and ears and will also protect any bald spots.</li> <li>The skin on your head is one of the places where you can easily get skin cancer.</li> </ul>	3 Head Protection



## WHS SAFE OPERATING PROCEDURE (SOP)

		<ul style="list-style-type: none"><li>• Broad-brimmed hats made of stiffened material or cotton floppy hats are best.</li><li>• The material must be a close weave that does not allow the penetration of sunlight.</li><li>• Tasks which are performed in windy conditions or involve constant movement will require a hat which stays firmly on the head.</li><li>• A tie and toggle on a hat can be used on windy days.</li><li>• For tasks that require a lot of bending, have a flap on the back of the hat (like the French Foreign Legion) to keep the sun off the back of the neck.</li><li>• The legionnaire style hat must have the following features:<ul style="list-style-type: none"><li>• Front peak with a minimum of 8-10 cm to shade the face and nose.</li><li>• A one-piece back flap to protect the back of the neck.</li><li>• The side of the flap should extend to cover the ears and neck.</li><li>• No velcro, clips or press studs for raising the flap.</li></ul></li><li>• A hard hat can have a flap or extra brim fitted to it.</li></ul>
8.	Hydration	Dehydration
9.	Special Notes	<ul style="list-style-type: none"><li>• Windy days can hide a strong dose of ultraviolet.</li><li>• People talk about windburn, but wind can only dry the skin.</li><li>• Windburn is sunburn.</li><li>• Your skin can easily burn when the sky is cloudy.</li><li>• The ultraviolet rays are scattered in all directions by the cloud.</li><li>• Ultraviolet radiation bounces off water, sand, concrete, light-coloured surfaces and snow.</li></ul>





## WHS SAFE OPERATING PROCEDURE (SOP)

								<ul style="list-style-type: none"><li>• People who work near a lake or at sea will need to take extra care.</li><li>• The radiation is more intense the higher you go above sea level.</li><li>• It doesn't have to be hot or sunny for ultraviolet radiation to reach and burn your skin.</li></ul>				
10.	Supervisorss Responsibility							<ul style="list-style-type: none"><li>• SUPERVISORS MUST ENSURE THE SUN PROTECTION OBJECTIVES ARE REACHED BY CONTINUALLY AND CONSISTENTLY ENFORCING THE PROPER USE OF SUN PROTECTION CLOTHING AND EQUIPMENT.</li></ul>				
Eye Protection 1	Breathing Protection 2	Head Protection 3	Hearing Protection 4	Hand Protection 5	Foot Protection 6	Protective Clothing 7	Face Protection 8	High Visibility 9	Dust Mask 10	Safety Harness 11	Life Jacket 12	Comply with Site Safety Rules 13





## PIRSAFEE STANDARD OPERATING PROCEDURE (SOP)

SOP title: Safe use of ladders..... SOP number: 123 .....

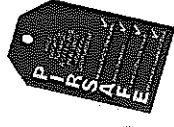
Division: Biosecurity SA..... Date of last revision: 18/07/2016

Workgroup: Plant Health..... Date for review: 18/07/2021

Brief task description: Using ladders..... Developed by (author): Gary Cox.....

Reviewed by: Garry Fundak ..... Approved by: Nick Secomb.....

ITEM No	SEQUENCE OF JOB STEPS  List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP  Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE  How to do it	PROTECTIVE EQUIPMENT  Please specify (refer below)
1.	Pre-operational ladder safety check		Is the ladder the safest, practical means of access for the task? (Can the job be done another way?)  The ladder is appropriate for the task and used only for the purpose it was designed.  Joints between step and side rails are tight, all fittings are secure, moving parts operate freely; all components are intact and not damaged.  Rungs are free of mud or grease.	Appropriated footwear  PPE as required for the task at hand
2.	Pre-operational site safety check		The ladder can be based on firm even footing and secure against slipping.  Ladder position not blocking doorways, aisles or other egresses if so barriers are to be set up.  If using a straight ladder is the contact point of a solid and secure structure.  Only non-metal ladders are used for work near electrical equipment or wires.	
3.	Setting up the ladder	Falls  Slipping  Injury to self and others nearby  Pinching injury	Ladder based on firm footing and secure against slippage.  Ladder tied off at the top, blocked, secured or held by a second worker when in use.  Straight ladders erected at the angle 4:1 (75° - 80°).  Step ladders opened fully and ladder locks, spreaders or braces engaged before climbing.  Upper and lower sections of extension ladders overlapped to provide stability.  Ladders not blocking doorways; barriers are setup if necessary to block a	Appropriated footwear  PPE as required for the task at hand



## PIRSAFE STANDARD OPERATING PROCEDURE (SOP)

				passageway. Weight of the ladder placed squarely on the ladder feet and not on the rungs. Two or more people used to erect long or heavy ladders.	
4.	Using the ladder	Falls Slipping Injury to self and others nearby		Three points of contact maintained at all times when climbing. Only one person on the ladder at a time and weight limit of ladder not exceeded. Tools carried on a belt or tool pouch and materials hoisted. Appropriate footwear is worn. Rungs grasped rather than side rails for more safety if a foot slips. Over reaching prevented; ladder is repositioned if needed (limit side reaching – your belt buckle / centre of body should not be further than the side rail).	Appropriated footwear PPE as required for the task at hand
5.	House-keeping	Electrocution Serious Bodily Injury		Portable metal ladders are clearly marked with 'CAUTION – DO NOT USE AROUND ELECTRICAL EQUIPMENT' or similar. Ladders are stored so as to avoid damage or personal injury.	
1	Eye Protection				
2	Breathing Protection				
3	Head Protection				
4	Hearing Protection				
5	Hand Protection				
6	Foot Protection				
7	Protective Clothing				
8	Face Protection				
9	Other				PLEASE SPECIFY



## WHS SAFE OPERATING PROCEDURE (SOP)

SOP title: Bait Tank Use ..... SOP number: 194

Risk assessment Objective Reference No: ..... PIRSA WHS Document Control Register HR OHS&W F 001

Division: Biosecurity SA ..... Date of last revision: 7/06/2021

Site/workgroup: Plant Health Operations ..... Date for review: 7/06/2023

Task description: Connecting, filling and maintaining a bait tank ..... Developed by (author/s): Gary Cox .....

Associated job roles: Plant Health Inspector, Plant Health Officer, Lure Inspector, Casual staff. .... Approved by: Nick Secomb .....

Recorded in Divisional Job Task Risk Register ✓ ..... Reviewed by: David Hall .....

Recorded in Divisional WHS Training Needs Analysis (Objective Reference: FA392848) ✓

Recorded training in PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA OurDevelopment System) ☐

ITEM NO	SEQUENCE OF JOB STEPS List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP Against each step list the hazards/ risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE How to do it	PROTECTIVE EQUIPMENT Please specify (refer below)
1.	Connecting Bait Tank Trailer to vehicle	Back Injury Fire/Burns Crushing Injury Twisting	To connect the bait tank trailer to vehicle, seek assistance and use the jockey wheel. Bend correctly and bend knees whilst lifting trailer. Carefully place draw bar hitch to tow ball and release. Connect safety chains to vehicle towbar. Plug in 7 pin trailer plug into back of vehicle.	Appropriate Footwear
2.	Pre-start check		Ensure blinkers, brake lights and agitator are working on the trailer	Appropriate Footwear
3.	Connect hose to trailer water connector	Pinching of skin Overstretching Bruising	Correctly bend down and pick up hose and position self-next to trailer and then connect hose onto bait tank connector.	Appropriate Footwear
4.	Fill the tank first with half the required amount of water		Turn tap on and monitor until required amount of water is met. Turn tap off. Turn agitator On.	Appropriate Footwear



## WHS SAFE OPERATING PROCEDURE (SOP)



5.	Adding Chemical to Tank – Undertaken by <u>Plant Health Officers Only</u>	Back Injury Twisting Chemical Contamination	Only Plant Health Officers (PHO) may undertake this task. Ensure MSDS is read prior to chemical use. Trained Plant Health Officer to place the required amount of chemicals into tank from ground level. Add exact proportions of Chemical through the sieve slowly to prevent spillage and splashes. If a spillage occurs on clothing or skin, wash immediately with soap and water and change clothing. Report any incidents immediately to your supervisor. The dispensing containers are to be rinsed thoroughly with water and contents poured into the bait tank. Top up tank with water. After approximately 30 minutes recirculate bait back into the tank using the gun for about 5 minutes to assist to agitate the mix and ensure the liquid is free flowing. Once pressurised, check hose and connections for leaks and ensure clamp on gun swivel is tight and secure. If leaks are detected, shut down unit, report, rectify/replace hose connections where necessary and clean up chemical residue according to SOP 238. Clean and maintain all Personal Protective Equipment and change coveralls as necessary but at least once a week. Spills should be cleaned up in accordance with the SOP 238 and previously provided training. Any waste is to be disposed of according to State Legislation. Report any incidents immediately to your supervisor.	Appropriate Footwear Coveralls Gloves Safety Glasses Respirator (only required for Hymal)								
6.	Clean Up	Chemical Contamination		Appropriate Footwear Coveralls Gloves Safety Glasses Respirator (only required for Hymal)								
Eye Protection 1	Breathing Protection 2	Head Protection 3	Hearing Protection 4	Hand Protection 5	Foot Protection 6	Protective Clothing 7	Face Protection 8	High Visibility 9	Dust Mask 10	Safety Harness 11	Life Jacket 12	Comply with Site Safety Rules 13



## PIRSafe STANDARD OPERATING PROCEDURE (SOP)

SOP title: Knapsack Use ..... SOP number: 197 .....

Division: Biosecurity ..... Date of last revision: 10/01/2020

Workgroup: Plant Health ..... Date for review: 18/07/2021

Brief task description: Filling, Using Cleaning and Maintaining Knapsack ..... Developed by (author): Garry Fundak .....

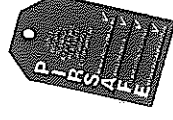
Reviewed by: David Hubbard ..... Approved by: Nick Secomb .....

ITEM NO	SEQUENCE OF JOB STEPS	POTENTIAL HAZARDS/RISKS OF EACH STEP	STANDARD OPERATING PROCEDURE	PROTECTIVE EQUIPMENT
	List the steps required to perform the task in the order they are carried out	Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	How to do it	Please specify (refer below)
1.	Filling the Knapsack Team Leader Only	Back Injury Spills and Splashes Twisting	The Team Leader is to fill knapsacks and must wear appropriate PPE during the process. Ensure Agitator is turned on and use handgun to circulate bait in hose line into the main tank for a few seconds to allow for any settling which may have occurred. Place knapsack on left-hand trailer mudguard, remove lid carefully as any residual bait may be splashed or spilled. Place the handgun into the top of the knapsack and pour the required amount of bait slowly and carefully into the knapsack. Secure knapsack lid. Ensure knapsack lids are not cracked, fit firmly, do not leak, and are attached. Place knapsack on the lid of the storage container at the rear of the trailer.	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear
2.	Fitting the Knapsack	Back Injury Twisting	Before fitting the Knapsack and Applying Bait, the Naturalure MSDS and the APVMA Naturalure permit must be read and understood. The Team Leader is to help the baiter to put the knapsack	Coveralls Hat Eye Protection PVC Gloves



## PIRSafe STANDARD OPERATING PROCEDURE (SOP)

			on, ensuring harness and/or straps fit correctly and are properly secured. The Team Leader is to pass the wand to the baiter, avoiding any bait drips or damage to the wand.	Appropriate Footwear
3. Baiting with the Knapsack	Spills and Splashes Back Injury Twisting Absorption Ingestion Public Safety Trips and Falls Dog Bites	<p>Ensure hose and hand wand does not leak. Report any faulty equipment, access issues, or other problems to the Team Leader as soon as practicable. The Team Leader will then refer to an inspector as required. The baiter is to ALWAYS:</p> <ul style="list-style-type: none"><li>• Ensure that there is nothing on the other side of foliage to be baited;</li><li>• Be alert for and NEVER apply bait near people, animals, birds, or fish;</li><li>• Stand as close as possible to the foliage when baiting;</li><li>• Aim for the centre of the plant;</li><li>• Using a gentle pumping action;</li><li>• Apply bait downwind;</li><li>• Never apply bait over a fence unless you have been given direct permission to do so by an inspector AND you can clearly see what is on the other side;</li><li>• Never enter a property with a dog present unless you are sure it is safe to do so;</li><li>• Never run, climb over fences, or onto raised surfaces when wearing a Knapsack.</li></ul> <p>If exposure symptoms portrayed in the MSDS are witnessed, take the suggested appropriate action and contact your supervisor immediately.</p> <p>NOTE: MAINTAIN PERSONAL HYGIENE THROUGHOUT THE DAY. REGULARLY WASH HANDS/FACE. ESPECIALLY BEFORE EATING</p>	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear	



## PIRSafe STANDARD OPERATING PROCEDURE (SOP)

			DRINKING, SMOKING, OR GOING TO THE TOILET.
4.	Unfitting the Knapsack	Spills and Splashes Back Injury Twisting	The knapsack is to be sat on the lid of the storage container at the rear of the trailer. The team leader is to hold the wand and help the baiter undo the harness and/or straps
5.	Fatigue management	Repetitive strain injury Fatigue	Do not operate the knapsack/hand pump for a continuous period of greater than 2 hours without a break (30 minutes) e.g. orchards and vineyards Baiting teams must rotate roles (baiting/scribes) throughout the day. The team leader must monitor and ensure rotation of these roles is occurring to reduce RSI and fatigue. It is recommended to rotate every (1) hour where practical e.g. house blocks.
6.	Knapsack Cleaning and Maintenance	Spills and Splashes Contamination Back Injury Contact with eye	Knapsacks should be thoroughly rinsed out with water by the baiter at the end of the day and water pumped through the wand using 6 – 8 pumps. All rinse water must be returned to the tank as make-up water for the following day. (Waste is to be disposed of according to State Legislation). When clearing the knapsack with water take the opportunity to adjust the nozzle if required. It should be producing a stream of water that exits the nozzle freely without creating a spray. Always point the nozzle away from your body, face and eyes. Avoid adjusting the nozzle in the field when insecticide is in the knapsack. If required wear gloves and safety glasses point the nozzle away from your body, face and eyes. Check for any leaks or problems and report/rectify accordingly. Hand wand should then be lubricated with lithium grease. Knapsack should then be placed in the storage container IN THE TRAILER.
			<p>Follow steps 2,3 and 4 when changing operators.</p> <p>Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear</p>



## PIRSAFES TANDARD OPERATING PROCEDURE (SOP)

			NOTE: DO NOT STORE KNAPSACKS/BAIT IN THE BOOT OR INTERIOR OF SEDANS.																							
1	Eye Protection		2	Breathing Protection		3	Head Protection		4	Hearing Protection		5	Hand Protection		6	Foot Protection		7	Protective Clothing		8	Face Protection		9	Other	



## WHS SAFE OPERATING PROCEDURE (SOP)

SOP title: Hygiene ..... SOP number: 210

Risk assessment Objective Reference No: ..... PIRSA WHS Document Control Register HR OHS&W F 001>

Division: Biosecurity SA ..... Date of last revision: 22 / 08 / 2019

Site/workgroup: Plant Health Netley Metro ..... Date for review: 22 / 08 / 2024

Task description: Picking up/stripping fruit from properties in outbreak areas .....

Associated job roles: Fruit Fly outbreak, technical check.....

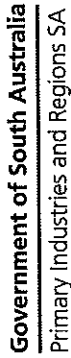
Recorded in Divisional Job Task Risk Register ☐

Recorded in Divisional WHS Training Needs Analysis (Objective Reference: A4141960) ☐

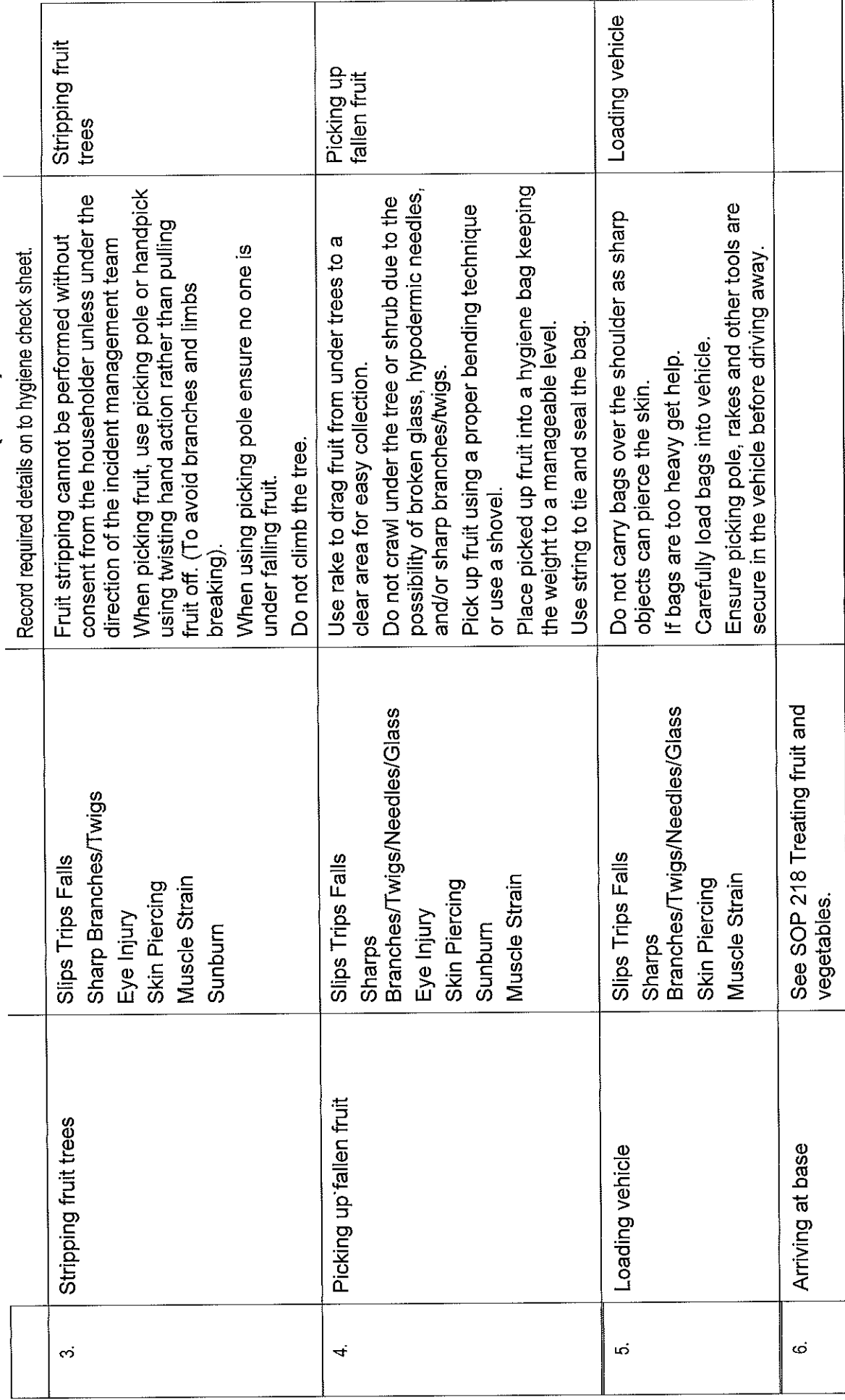
Recorded training in PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA Our Development System) ☐

Recorded training in PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA Our Development System) ☐

ITEM NO	SEQUENCE OF JOB STEPS List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE How to do it	PROTECTIVE EQUIPMENT Please specify (refer below)
1.	Access to property	Slips Trips Falls Dog Bites	All properties are to be door-knocked before entering the rear yard. If 24-hours' notice has previously been given and no-one is home, hygiene duties can be performed as long as access is available. Do not force entry or jump fences or gates. If yard is locked record the details and pass the information onto the Operations Manager who will endeavour to make contact with the householder.	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear
2.	Site Inspection	Slips Trips Falls Dog Bites Head Knocks	Inspect property for potential hazards, e.g. Dogs (Refer SOP 267), ditches, slippery or uneven ground etc. If hygiene or tree-stripping is required ensure area is safe and avoid or rectify hazards where possible. Beware of clotheslines, overhead air conditioners etc. If a ladder is required ensure it will be able to be erected safely and correctly i.e. level and steady. REFER TO: SOP 123 - SAFE USE OF LADDERS.	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear



HR OHS&W F 052







PIRSAFHS WHS Safe Operating Procedures  
**WHS SAFE OPERATING PROCEDURE (SOP)**

HR OHS&W F 052



Eye Protection	Breathing Protection	Head Protection	Hearing Protection	Hand Protection	Foot Protection	Protective Clothing	Face Protection	High Visibility	Dust Mask	Safety Harness	Life Jacket	Comply with Site Safety Rules
1 	2 	3 	4 	5 	6 	7 	8 	9 	10 	11 	12 	13 





## PIRSAF STANDARD OPERATING PROCEDURE (SOP)

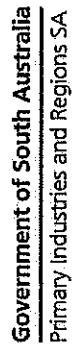
SOP title: Personal Hygiene; Baiting..... SOP number: 212.....  
Division: Biosecurity SA..... Date of last revision: 28/6/2016  
Workgroup: Plant Health..... Date for review: 28/6/2020  
Brief task description: Personal Hygiene..... Developed by (author): Garry Fundak.....  
Reviewed by:..... Approved by: Nick Secomb.....

ITEM NO	SEQUENCE OF JOB STEPS  List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP  Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE  How to do it	PROTECTIVE EQUIPMENT  Please specify (refer below)
1.	EMPLOYER'S RESPONSIBILITY	Chemical Ingestion/ Absorption Poisoning	An employer must "ensure so far as is reasonably practicable that the employee is, while at work, safe from injury and risks to health".	
2.	EMPLOYEE'S RESPONSIBILITY	Chemical Ingestion/ Absorption Poisoning	An employee must "take reasonable care to protect his or her own health and safety at work" and to avoid adversely affecting the health of any other person through any act or omission.	
3.	SPECIAL NOTE		<b>EACH TEAM MEMBER MUST FOLLOW ALL RELEVANT SOP's AND HAVE READ THE MSDS FOR NATURALURE</b>	
4.	UNDERSTANDING THE RISK	Chemical Ingestion/ Absorption Poisoning	<p>➤ Chemicals can enter the body through the lungs, mouth, eyes or skin. If hands or gloves come in contact with chemicals or contaminated equipment, chemicals can be easily transferred to other surfaces or parts of the body, resulting in ingestion or absorption of chemicals into the body.</p> <p>➤ Eating, smoking, going to the toilet or wiping your face without first washing your hands can result in your body ingesting or absorbing chemicals.</p>	



## PIRSAF STANDARD OPERATING PROCEDURE (SOP)

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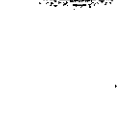


PIRSA OHS&W and Injury Management System.

**HR OHS&WF**



# PIRSAFE STANDARD OPERATING PROCEDURE (SOP)



PLEASE  
SPECIFY





## PIRSAF Standard Operating Procedure (SOP)

SOP title: Treating fruit and vegetables ..... SOP number: 218.....

Division: Biosecurity..... Date of last revision: 18/07/2016

Workgroup: Plant Health ..... Date for review: 18/07/2021

Brief task description: Treating Fruit and Vegetables collected by hygiene

Developed by (author): Garry Fundak.....

Reviewed by: Garry Fundak ..... Approved by: Nick Secomb.....

ITEM NO	SEQUENCE OF JOB STEPS List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE How to do it	PROTECTIVE EQUIPMENT Please specify (refer below)
1.	Unloading collected bags from vehicle	Back Injury Twisting Piercing (Sticks)	Carefully unload the bags of fruit into the treatment tray by the disposal bin. Do not carry bags over the shoulder as sharp objects can pierce the skin. If bags are too heavy get help.	Coveralls Hat Eye protection PVC Gloves Appropriate Footwear
2.	Treating the fruit	Back Injury Twisting Chemical Exposure, Absorption, Ingestion	Do not treat fruit if strong wind is blowing, leave the bags tied and wait for wind to ease. Collect container of poultry dust from store. Untie bags. Using the scoop provided, CAREFULLY AND SLOWLY place poultry dust into each bag of fruit, so as not to create dust or spill the powder. Twist top of bag, tie up securely with string provided, then agitate bag to distribute the powder.	Coveralls Hat Eye protection PVC Gloves Appropriate Footwear Dust Mask
3.	Loading the treated fruit into the disposal bin	Back Injury Twisting Chemical Exposure, Absorption,	Carefully pick up the bags of fruit and gently place the bags into the disposal bin. Do not drop the bags into the bin from a height as they might split.	Coveralls Hat Eye protection



## PIRSAFE STANDARD OPERATING PROCEDURE (SOP)

	Ingestion Piercing (Sticks)	Do not carry bags over the shoulder as sharp objects can pierce the skin. If bags are too heavy get help.	PVC Gloves Appropriate Footwear						
4.	Clean up  Back Injury Twisting Chemical Exposure, Absorption, Ingestion	Clean up area and return dust container to store. Any spilt dust should be swept up, placed into a plastic bag and disposed of in the large waste bin.	Coveralls Hat Eye protection PVC Gloves Appropriate Footwear Dust Mask						
1 Eye Protection	2 Breathing Protection	3 Head Protection	4 Hearing Protection	5 Hand Protection	6 Foot Protection	7 Protective Clothing	8 Face Protection	9 Other	PLEASE SPECIFY





## PIRSafe STANDARD OPERATING PROCEDURE (SOP)

**SOP title:** Outbreak Chemical Spill Naturalure ..... **SOP number:** 238 .....

**Division:** Biosecurity SA ..... **Date of last revision:** 18/08/2021

**Workgroup:** Plant Health ..... **Date for review:** 18/08/2025











**Brief task description:** Containing and/ or cleaning up a Naturalure chemical spill ..... **Developed by (author):** Garry Fundak .....

**Reviewed by:** Garry Fundak and Nic Smith ..... **Approved by:** Nick Secomb .....

ITEM NO	SEQUENCE OF JOB STEPS	POTENTIAL HAZARDS/RISKS OF EACH STEP	STANDARD OPERATING PROCEDURE	PROTECTIVE EQUIPMENT
1.	Assess Personal Safety	Other Vehicles Impact injury.	<p><b>BEFORE RESPONDING TO ANY CHEMICAL SPILL, FIRE OR OTHER CRISIS, ALWAYS QUICKLY CONSIDER YOUR OWN SAFETY AND THE SAFETY OF OTHERS AROUND YOU</b></p> <p><b><u>NEVER PLACE YOURSELF OR OTHERS IN DANGER. IF IN ANY DANGER, STOP, EVACUATE AREA. CALL &amp; AWAIT EMERGENCY SERVICES.</u></b></p> <p>NOTIFY FIELD SUPERVISORS IMMEDIATELY</p>	Please specify (refer below)
	Ensure all staff wearing correct PPE	Contamination	<p>ENSURE OVERALLS ARE FULLY BUTTONED UP, INCLUDING BUTTONING SLEEVES.</p> <p>ENSURE THAT PVC GLOVES AND CLOSED FOOTWEAR ARE WORN</p>	<p>Orange overall fully buttoned up.</p> <p>PVC Gloves</p> <p>Closed footwear</p>
	Check contents of spill kit.		<p>Spill kit equipment:</p> <p>Plastic 50 litre container with lid</p> <p>15 or 50L bag of ProSORB or Spillfix</p>	<p>Orange overall fully buttoned up.</p> <p>PVC Gloves</p>



## PIRSafe STANDARD OPERATING PROCEDURE (SOP)

			1 x shovel, 1 x broom and 6 x large bags	Closed footwear				
3.	Open Spill kit Call for back-up if not enough ProSORB	Contamination Bending and twisting Slips and falls Back injury	Turn on any warning/hazard lights if available. Isolate source to prevent further release of spill if possible. Carefully remove spill kit from rear of vehicle.	Orange overall or hi vis clothing PVC Gloves Closed footwear				
4.	Form bunding by stopping run off Call for back-up if not enough proSORB	Contamination Bending and twisting Slips and falls Back injury	Using the ProSORB form a bunding around the spill to stop run off entering drains/waterways. If more ProSORB is needed call for back-up. Let the ProSORB soak up the liquid spill. Using the broom and the shovel clean up the saturated ProSORB and place into plastic bags keeping the weight manageable (less than 10kg).	Orange overall or hi vis clothing PVC Gloves Closed footwear				
5.	Disposal and refilling spill kit	Contamination Bending and twisting Slips and falls Back injury	Notify the hygiene team to collect the bags of saturated ProSORB. Pack up the remainder of the equipment. Replace ProSORB on returning to base. Dispose of saturated bags of ProSORB as instructed by Operations Manager (Waste bin or other EPA approved site).	Orange overall or hi vis clothing PVC Gloves Closed footwear				
1	2	3	4	5	6	7	8	9
Eye Protection	Breathing Protection	Head Protection	Hearing Protection	Hand Protection	Foot Protection	Protective Clothing	Face Protection	Other
								
								

## WHS SAFE OPERATING PROCEDURE (SOP)

SOP title: Larval Search (Technical Check)..... SOP number: 239

Risk assessment Objective Reference No: A1920710.....

Division: Biosecurity SA.....

Site/workgroup: Plant Health Operations.....

Task description: Inspecting fruit for larval infestation.....

Associated job roles: Plant Health Inspector, Lure Inspector, Casual staff.....

Recorded in Divisional Job Task Risk Register ✓

Recorded in Divisional WHS Training Needs Analysis (Objective Reference: FA1850212) ✓

Recorded training in PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA OurDevelopment System ✓

PIRSA WHS Document Control Register HR OHS&W F 001>

Date of last revision: 05/02/2021

Date for review: 05/11/2022

Developed by (author/s): Dave Hall.....

Approved by: Nick Secomb.....

Reviewed by: Dave Hall.....

ITEM NO	SEQUENCE OF JOB STEPS	POTENTIAL HAZARDS/RISKS OF EACH STEP	STANDARD OPERATING PROCEDURE	PROTECTIVE EQUIPMENT
1.	Access to property	Slips Trips Falls Dog Bites Head Knocks Sunburn	Seek landholder approval to enter and inspect land. If necessary, give formal notification of intent to enter. Inspect property for potential hazards, e.g. Dogs, ditches, slippery or uneven ground etc. Beware of clotheslines, overhead air conditioners etc. Record required details on to hygiene/technical check/ hazard risk sheet. Refer South Australian Fruit Fly Monitoring, Detection & Eradication Manual. (Objective Reference : A4083267)	1,3,6,9 Safety Glasses, Sun hat, sunscreen, Closed footwear, Hi Vis clothing
2.	Conducting technical check	Slips Trips Falls Sharp Branches/Twigs Eye Injury Skin Piercing Muscle Strain Cuts	Whilst wearing PVC gloves, host plants in an outbreak area or the 200m radius area around a supplementary trapping site must be inspected for infestation. A minimum of 1 kg of suitable host material should be collected from host plants within these areas and inspected for larvae where possible.. Host material should be examined for the presence of soft spots, blemishes or sting wounds that could	1,3,5,6,9 Safety Glasses, Sun hat, sunscreen, PVC gloves Closed footwear, Hi Vis clothing

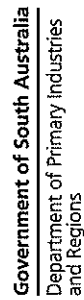


# PIRSAFE WHS Safe Operating Procedures WHS SAFE OPERATING PROCEDURE (SOP)

HR OHS&W F 052



		Environmental Exposure	<p>indicate the presence of larvae. When cutting, host material slices should be less than 1cm wide to ensure the interior of the material is examined thoroughly.</p> <p>If the flesh inside the host material is discoloured (turning brown) and soft, this can be an indication that larvae are present</p> <p>All information collected should be recorded on an appropriate larval inspection form. This includes keeping a chain of custody for samples sent for identification.</p> <p>Dispose of any uninfested cut fruit into bucket or bag keeping weight to no more than 10kg weight.</p> <p>Wash hands using soap and water.</p>	
3.	Larvae Discovery		<p>Samples (suspect infested host material and larvae) should be placed into sealable containers. Absorbent paper should be placed in the bottom of the container to soak up any excess liquids. Where plastic sample bags are used these should be double bagged and securely packaged. Samples must be kept cool to minimise their deterioration. Containers should be appropriately labelled.</p> <p>Label container/bag with the following details:</p> <ul style="list-style-type: none"> <li>• Date</li> <li>• Inspector</li> <li>• Address</li> <li>• Type and location of tree if applicable</li> <li>• GPS location</li> </ul> <p>If at a commercial premise and fruit fly larvae are strongly suspected, place produce under quarantine by isolating it from other produce and preventing further distribution or movement until formal diagnosis can be made.</p> <p>Larvae detected in host material from different host plants in the survey area should be submitted for identification as separate samples. Where multiple samples are collected from the same tree/plant, a representative sample of up to six pieces of host material should be forwarded for identification.</p>	



# WHS SAFE OPERATING PROCEDURE (SOP)



									Samples are to be submitted and notifications must be made immediately in line with procedures described in the South Australian Fruit Fly Monitoring, Detection & Eradication Manual. ( <i>Obj. Ref. A4083267</i> ) Any host material collected during inspection activities not sent for identification must be disposed of by freezing, solarisation or deep burial.				
Eye Protection	Breathing Protection	Head Protection	Hearing Protection	Hand Protection	Foot Protection	Protective Clothing	Face Protection	High Visibility	Dust Mask	Safety Harness	Life Jacket	Comply with Site Safety Rules	
1 	2 	3 	4 	5 	6 	7 	8 	9 	10 	11 	12 	13 	





## PIRSAF STANDARD OPERATING PROCEDURE (SOP)



SOP title: Ground Treatment for Larval Infestation Sites

SOP number: 252

Division: Biosecurity

Date of last revision: 18/07/2016

Workgroup: Plant Health

Date for review: 18/07/2021

Brief task description: Chemical Ground Treatment and Plastic Sheeting

Developed by (author): Garry Fundak

Reviewed by: Garry Fundak

Approved by: Nick Secomb

ITEM NO	SEQUENCE OF JOB STEPS	POTENTIAL HAZARDS/RISKS OF EACH STEP	STANDARD OPERATING PROCEDURE	PROTECTIVE EQUIPMENT
	List the steps required to perform the task in the order they are carried out	Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	How to do it	Please specify (refer below)
1.	Site Inspection Preparation	Sunburn Eye injury from branches/twigs Trips and falls Muscle strain Cuts from sharp objects	Obtain the property owner/resident consent prior to any fruit stripping and application of ground treatment. Conduct a risk assessment of the property and area of treatment for any hazards e.g. dogs (Refer SOP No 267), ditches, slippery or uneven ground to ensure the area is safe and /or avoid or rectify. Strip all fruit from infested trees and collect all fallen fruit (refer SOP No 210). Remove any weeds or unwanted foliage. DO NOT treat where there is a risk of pets, livestock or children accessing the treated area.	Coveralls Hat PVC Gloves Glasses Closed Footwear
2.	Measurement and preparation of plastic ground sheet	Sunburn Eye injury from branches/twigs Trips and falls Muscle strain Cuts from sharp	Care must be taken to avoid eye and head injury when preparing the plastic under trees from branches and twigs. Unroll plastic sheeting. Measure and cut the plastic sheeting to fit the treatment area from the trunk out to a radius of 2m past the external extremities of the canopy or to any	Coveralls Hat PVC Gloves Glasses Closed Footwear



## PIRSAF Standard Operating PROCEDURE (SOP)



		objects	surrounding concrete path or structure. Lay out plastic sheeting to ensure correct coverage of treatment area. Once the coverage is correct, roll up plastic sheeting in preparation of the chemical ground treatment.	
3.	<b>NOTE:</b> Adding chemical to application device	Sunburn Chemical Spill Chemical Contamination	Only Experienced Fully Trained Inspectors Are To Fill Application Device And Apply Chemical. Always read Label, Material Safety Data Sheets and relevant APVMA Chemical Product Permit prior to handling unfamiliar chemicals. Permit, MSDS, Soap, Water and Spill Kit must be on site at all times. Put the required amount of water into the application device. Add exact proportion of chemical using the appropriate measuring device. To prevent spillage and splashes SLOWLY add the chemical to the application device. IF A SPILLAGE OCCURS ON CLOTHING OR SKIN, WASH IMMEDIATELY WITH SOAP AND WATER AND CHANGE CLOTHING. Rinse measuring device with water and pour into the application device. Stir the mixture with the supplied mixer slowly and carefully to avoid splashes and spillage.	Coveralls Hat PVC Gloves Glasses Respirator Closed Footwear Spill Kit Soap and Water
4.	Ground Treatment Application	Sunburn Chemical poisoning Eye injury from branches/twigs Trips and falls Muscle strain Cuts from sharp	DO NOT allow drift or runoff into fish ponds, aviaries, or pet food / water containers. Use tarps if necessary to prevent drift or runoff. Use only as a soil drench, do not allow contact with fruit or foliage. Care must be taken to avoid eye and head injury when applying ground treatment under trees from branches and twigs.	Coveralls Hat PVC Gloves Glasses Respirator Closed Footwear

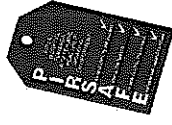




## PIRSAFEE STANDARD OPERATING PROCEDURE (SOP)



		objects	Avoid excessive twisting and turning. Apply the ground treatment slowly and systematically to ensure complete wetting of the ground below and out to a metre beyond the tree drip line at a rate of approximately 2-3lt per square metre.	Spill Kit Soap and Water
5.	Chemical equipment clean-up	Sunburn Chemical poisoning Eye injury from branches/twigs Trips and falls Muscle strain Cuts from sharp objects	Rinse out the application device, wash the mixer and rinse gloves then add rinsing's to the ground treatment area. Secure chemical, and place mixer, gloves and application device in plastic bag, then secure for transport back to chemical storage shed at base. Thoroughly wash hands with soap and water.	Coveralls Hat PVC Gloves Glasses Respirator Closed Footwear Spill Kit Soap and Water
6.	Rolling out and securing the plastic ground sheeting	Sunburn Eye injury from branches/twigs Trips and falls Muscle strain Cuts from sharp objects	Allow the chemical ground treatment to soak in and any vapours to dissipate before securing the plastic sheeting. Care must be taken to avoid eye and head injury when rolling and securing the plastic under trees from branches and twigs. Roll out the measured plastic sheeting being careful not to disturb the treated ground to much. All joins are to be sealed with tape as well as around the trunk. The edges are to be securely pegged down and secured (cover edges with soil if possible). Thoroughly wash hands with soap and water.	Coveralls Hat PVC Gloves Glasses Closed Footwear Soap and Water
7.	Removing the plastic sheeting	Sunburn Eye injury from branches/twigs	Refer to the Detection and Eradication Manual to ensure that the appropriate time has elapsed to leave the plastic ground sheet in place.	Coveralls Hat



# PIRSAFE STANDARD OPERATING PROCEDURE (SOP)

[illegible]



## WHS SAFE OPERATING PROCEDURE (SOP)

**SOP title :** Entering a Property which has a Dog or animal that may cause harm

**SOP number:** 267

**Risk assessment Objective Reference No:** .....

**Division:** Biosecurity SA Plant Health .....

**Date of last revision:** 05 / 05 / 2020

**Site/workgroup:** Fruit Fly Response

**Date for review:** / /

**Task description:** Entering Private Property

**Developed by (author/s):** Mark Drew, David Hubbard,

**Associated job roles:** To apply bait, deploy traps, larval and plant health inspections

**Approved by:** David Hubbard .....

**Recorded in Divisional Job Task Risk Register** ☐

**Reviewed by:** .....

**Recorded in Divisional WHS Training Needs Analysis (Objective Reference: fA392848)** ☐

**Recorded training in PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA OurDevelopment System)** ☐

ITEM NO	SEQUENCE OF JOB STEPS List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP Against each step list the hazards/risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE How to do it	PROTECTIVE EQUIPMENT Please specify (refer below)
1.	Prior to attending a property. Determine if a leaflet "notifying the property owner that access is required" has been left.	None	Leaflet drop notifying access will be required will be conducted 24 hours prior.	None
2.	Do not enter a property until a risk assessment has been done.	Slips Trips Falls Dog Bites Head Knocks	On the first visit to a property following leaflet <ul style="list-style-type: none"><li>Before entering the property, do a risk assessment and record on the running sheet all hazards.</li><li>If a dog or animal that may cause harm is present in the front yard DO NOT enter the property. Record on running sheet.</li><li>Leave a contact card requesting access due to dog.</li></ul>	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear
3.	Access to property - Occupier present	Slips Trips Falls Dog Bites Head Knocks	When entering a property, first notify the resident by approaching the front door. <ul style="list-style-type: none"><li>If you hear a dog inside the house, make sure the screen door is secured to prevent the dog from exiting. Place your foot or hand in front of the door to</li></ul>	Coveralls Hat Eye Protection PVC Gloves



## WHS SAFE OPERATING PROCEDURE (SOP)

			<p>prevent it from flying open in the event the dog jumps on the door.</p> <p>Explain to the resident the need to access the rear garden and ask if there is a dog.</p> <ul style="list-style-type: none"><li>• If no dog is present, proceed in a courteous manner.</li><li>• If a dog is present request, the owner restrains the dog. <b>Under no circumstances enter the yard without the dog being restrained. This is regardless of the owner's perception of friendliness of the dog/animal.</b></li></ul> <p>If the occupier refuses to restrain the dog.</p> <ul style="list-style-type: none"><li>• Discuss and empathize with the property owner about the issues to entry.</li><li>• Negotiate a safe resolution.</li></ul> <p>If the occupier refuses to restrain the dog, then leave the premises immediately and notify the team leader.</p> <p>If the team leader is unable to gain access escalated to the Operation Manager.</p>	Appropriate Footwear
4.	Access to property - Occupier not present	Dog present	<p>If no one answers on the first visit to the property, leave a contact card in the letterbox explaining the need to ring the Control Centre regarding unable to access due to a dog.</p> <p>On the second (or subsequent) visit, review the running sheet for any added arrangements that may have been included following your last visit and subsequent call to Control Centre.</p> <p>If the dog has not been restrained leave a contact card again requesting they call the Control Centre and mark on running sheet.</p>	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear
5.	Access to property - Occupier not present Determine if a dog is present	Slips Trips Falls Dog Bites	<p><b>Identify if a dog is present at the property</b> <b>STOP LISTEN LOOK</b> Look for signs indicating a dog is present:</p> <ul style="list-style-type: none"><li>• Dog vocalizing (barking, whining, growling, howling, scratching at fence)</li></ul>	Coveralls Hat Eye Protection PVC Gloves


















## WHS SAFE OPERATING PROCEDURE (SOP)

			<ul style="list-style-type: none"><li>Dog toys, food bowls, dog bones, kennel, and worn path around the gardens front fence.</li><li>Gates closed</li></ul> <p><b>Action to be taken</b></p> <ul style="list-style-type: none"><li>Make noise eg; rattle gates, clap hands, call out, whistle</li></ul> <p><b>If no one is home</b></p> <ul style="list-style-type: none"><li>Knock loudly to alert the owner and dogs</li><li>Move to the back of the property in pairs looking for signs of a dog.</li><li>STOP LISTEN LOOK</li><li>A closed gate may indicated a dog is in the back yard. Make noise rattle the gate whistle.</li></ul>	Appropriate Footwear							
6a.	Baiting, hygiene, tech check	Slips Trips Falls Dog Bites Head Knocks	<p><b>If a dog is present</b></p> <ul style="list-style-type: none"><li>Stay calm</li><li>Assess the risk of entry.</li><li>DO NOT enter if dog is not restrained.</li><li>Report that a dog is present on risk assessment sheet/baiting /hygiene sheet</li><li>Leave a contact card in the letter box explaining that the team had returned and notify the team leader that access was unavailable.</li></ul>	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear							
6b.	Baiting, hygiene, tech check	Slips Trips Falls Dog Bites Head Knocks	<p><b>If a dog is not present</b></p> <ul style="list-style-type: none"><li>Proceed to the yard and conduct the baiting, hygiene or Tech check.</li><li>Record all information on running sheet</li><li>Leave a contact card in the letter box that you have competed baiting, hygiene or Tech check</li></ul>	Coveralls Hat Eye Protection PVC Gloves Appropriate Footwear							
Eye Protection	Breathing Protection	Head Protection	Hearing Protection	Foot Protection	Protective Clothing	Face Protection	High Visibility	Dust Mask	Safety Harness	Life Jacket	Comply with Site Safety Rules

PIRSAFE WHS Safe Operating Procedures  
**WHS SAFE OPERATING PROCEDURE (SOP)**

1		2		3		4		5		6		7		8		9		10		11		12		13	
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## WHS SAFE OPERATING PROCEDURE (SOP)

SOP title: : **Reversing a vehicle**

SOP number: 268

Risk assessment Objective Reference No: .....

Division: Biosecurity SA Plant Health.....

Date of last revision: 20 / 08 / 2020

Site/workgroup: Fruit Fly Response

Date for review: 20 / 08 / 2025

Task description: **Reversing a Vehicle**

Developed by (author/s): Nic Smith

Associated job roles: Driving

Approved by: David Hubbard .....

Recorded in Divisional Job Task Risk Register ☐

Reviewed by: .....

Recorded in Divisional WHS Training Needs Analysis (Objective Reference: fA392848) ☐

Recorded training in *PIRSA WHS Safe Operating Procedures (SOPs) Sign Off Sheet or PIRSA OurDevelopment System* ☐

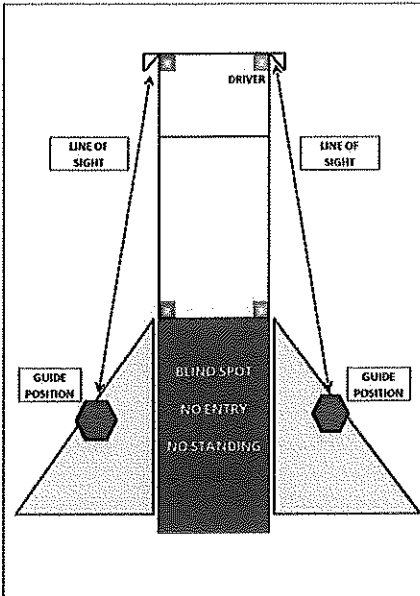
ITEM NO	SEQUENCE OF JOB STEPS  List the steps required to perform the task in the order they are carried out	POTENTIAL HAZARDS/RISKS OF EACH STEP  Against each step list the hazards/ risks that could cause injury or damage to equipment or the environment	STANDARD OPERATING PROCEDURE  How to do it	PROTECTIVE EQUIPMENT  Please specify (refer below)
1.	Identify the need to reverse the vehicle. <b>Stop.</b>		Do not stop suddenly. Slow down and Indicate intent to pull over well in advance. <b>Stop Vehicle.</b> Passenger exits vehicle and takes up position to rear (See diagram).  Trailer connected The driver should only reverse a car and trailer if they have the required skills/experience or are instructed by someone with the skills/experience.	
2	Driver on their own - Reverse the vehicle into the required position. <b>Stop. No spotter</b>	Collision with other vehicles/objects/pedestrians	<b>Driver:</b> Ensure that all mirrors are intact, functional, clean, and properly adjusted for the best view. Engage hazard lights and beacons. Turn off or silence mobile phones, vehicle AM/FM radios, and other radios including iPods etc  Get out of the vehicle and walk around it, being aware of objects and distance/space available.	

[illegible]





## WHS SAFE OPERATING PROCEDURE (SOP)



### GUIDE POSITIONING

Visible in the drivers mirror at **ALL** times.



### START REVERSING

With the palm of your hand facing toward you:

- Extend forearm from the elbow at waist height.
- Raise forearm to shoulder height.
- Repeat movement.
- DRIVER gives 3 short blasts with vehicle horn immediately prior to reversing.



### STOP

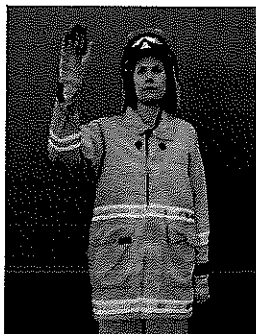
- Extend arm with open palm facing forward.





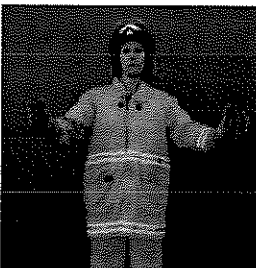
HR OHS&W F 052

## WHS SAFE OPERATING PROCEDURE (SOP)



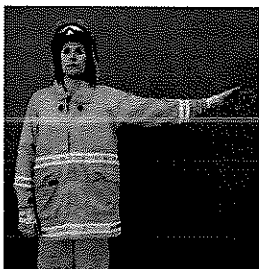
### MOVE FORWARD

- With the palm of your hand facing away.
- Extend forearm from shoulder.
- Lower forearm to waist height.
- Repeat movement.



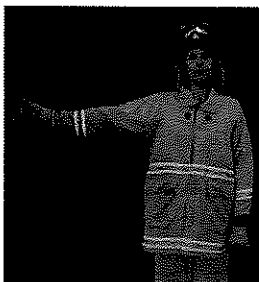
### CLEARANCE

- Hold hands apart, palms facing toward each other.
- Bring hand together closing the gap as the object / desired stop point gets closer.



### TURN LEFT

- Hold arm straight at shoulder height, palm open.
- Point to the left.
- Driver is to turn the wheel to the left.



### TURN RIGHT

- Hold arm straight at shoulder height, palm open.
- Point to the right.
- Driver is to turn the wheel to the right.

# SOP Sign Off - Induction

By signing this form you (employee described below) are confirming that you have been provided with copies of the following **Standard Operating Procedures (SOP's)** and have been instructed in the requirements of these SOP's during a face-to-face induction on the date stated below.

<b>Employee details</b>			
Surname: .....		Given names:.....	
Inspector Number: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Division: Biosecurity SA	Worksite: Gilles Plains/ Netley
		Date: ...../...../20.....	
<b>SOP number</b>	<b>SOP description</b>	<b>Signature of employee</b>	
118	Sun protection		
212	Personal hygiene		
267	Entering a Property which has a Dog or animal that may cause harm		
268	Reversing a Vehicle		
<b>Office use only</b>			
Name: Induction Officer		Signature: Induction Officer	
.....		Date: ...../...../20.....	



# SOP Sign Off – On Site

By signing this form you (employee described below) have read and understood the following Standard Operating Procedures (SOP's).

Employee details			
Surname: .....		Given names:.....	
Inspector Number: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Division: Biosecurity SA	Worksite: Gilles Plains / Netley
		Date: ...../...../20.....	
SOP number	SOP description	Signature of employee	
123	Use of ladders	Field if needed (not used in Riverland)	
194	Bait tank usage	Field	
197	Knapsacks	Field	
210	Hygiene	Field	
218	Treating fruit & Veg	Field	
238	Naturalure Spill	Field	
239	Technical Checks	Field	
252	Ground Treatment & Plastic Sheeting	Field	
	Acronym Legend	Field	
	Blank Baiting Record Form	Field	
	Data Record Form – Guidelines & Example	Field	
Office use only			
Name: Induction Officer		Signature: Induction Officer	
.....		Date: ...../...../20.....	





**Australian Government**  
**Australian Pesticides and  
Veterinary Medicines Authority**

**PERMIT TO ALLOW MINOR USE OF A REGISTERED AGVET CHEMICAL  
PRODUCT FOR CONTROL OF MEDITERRANEAN AND QUEENSLAND FRUIT FLIES  
IN VARIOUS CROPS**

**PERMIT NUMBER – PER80719**

This permit is issued to the Permit Holder in response to an application granted by the APVMA under section 112 of the Agvet Codes of the jurisdictions set out below. This permit allows a person, as stipulated below, to use the product in the manner specified in this permit in the designated jurisdictions. This permit also allows the Permit Holder and any person stipulated below to claim that the product can be used in the manner specified in this permit.

**THIS PERMIT IS IN FORCE FROM 9 APRIL 2015 TO 31 MARCH 2025**

**Permit Holder:**

BIOSECURITY SA – PLANT HEALTH OPERATIONS  
33 Flemington Street  
GLENSIDE SA 5065

**Persons who can use the product under this permit:**

Employees of or persons under the direction of Primary Industries and Regions SA (Biosecurity SA) and equivalent interstate departments or agencies, or persons generally within 15 km of a declared fruit fly suspension area.

## CONDITIONS OF USE

### Products to be used:

NATURALURE FRUIT FLY BAIT CONCENTRATE (APVMA No. 58234)

Containing: 0.24g/L SPINOSAD as the only active constituent.

### Directions for Use:

Crop	Pest	Rate
Fruit fly host plants including:  Ornamental plants, amenity trees, fruit and nut trees, vines and vegetables in commercial and residential areas.	Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> )  Queensland Fruit Fly ( <i>Bactrocera tryoni</i> )	<i>Spray preparation:</i> Apply 1 part product to 4 parts water.  <i>Application:</i> Apply prepared spray as a spot application (40 mL spot) to trees and foliage at a maximum rate of 120 spots per hectare.  DO NOT apply more than two (2) applications per week with a minimum re-treatment interval of 3 days between successive applications.

### Critical Use Comments:

- Avoid direct spray contact with fruit, nuts and vegetables.
- Application should specifically and carefully be targeted at only the foliage plants.
- Some fruits are particularly susceptible to blemishes, discolouration or severe spotting from protein based baits.
- The risk of phytotoxicity is increased during hot, dry conditions and re-application of spray to the same location on the plants. As part of a spray program involving consecutive sprays in short periods it is recommended to alternate applications amongst the trees or crop rows to which the product is applied in the treatment area to minimise potential for phytotoxicity.

### Withholding Period:

Not required when used as directed.

### Jurisdiction:

SA, NSW, TAS, VIC and WA only.

### Additional Conditions:

This permit allows for the use of a product in a manner specified on the permit. Persons who wish to prepare for use and/or use products for the purposes specified in this permit must read, or have read to them, the details and conditions of this permit. Unless otherwise stated, the use of the product must be in accordance with the product label.

### *Export of treated produce*

Maximum Residue Limits (MRLs) have been established to allow treated produce to be used for human and animal consumption. An MRL has been established for SPINOSAD in various FRUIT AND NUT TREES, VINES AND VEGETABLES. MRLs can be found in the *Agricultural and Veterinary Chemicals Code Instrument No. 4 (MRL Standard)*. MRLs apply only to produce marketed and consumed in Australia. If treated produce is to be exported, residues must not exceed the limits/tolerances of the importing country.

Issued by the Australian Pesticides and Veterinary Medicines Authority

Note: 01/02/2018. Permit updated to include Tasmania under Jurisdiction. Permit issued as Version 2.

23/03/2020 –Permit expiry extended to 31/03/2025. Permit issued as Version 3.



READ SAFETY DIRECTIONS BEFORE OPENING OR USING

# Naturalure<sup>®</sup>

## Fruit Fly Bait Concentrate

### INSECTICIDE

ACTIVE CONSTITUENT: 0.24 g/L SPINOSAD

GROUP

5

INSECTICIDE

For the control of Fruit flies, including Queensland fruitfly and Medfly, infesting various tree, fruit, nut, vine and vegetable crops and ornamentals and on fly resting sites, including non-crop vegetation.

Pack size: 4 L, 5 L, 10 L, 20 L, 100 L, 208 L, 1000 L

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre.  
Phone: *Australia* 13 11 26. *New Zealand* 0800 764 766.

#### SAFETY DIRECTIONS

- May irritate the eyes.
- Avoid contact with eyes.
- If product is in eyes, wash it out immediately with water.
- After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

**EMERGENCY RESPONSE  
(ALL HOURS)**  
RING FROM ANYWHERE IN  
AUSTRALIA  
**1800 370 754**  
(LOCAL CALL FEE ONLY)

IN A TRANSPORT  
EMERGENCY ONLY  
**DIAL 000**  
FOR POLICE OR  
FIRE BRIGADE



Naturalure<sup>®</sup> Fruit Fly Bait Concentrate contains proteins from a plant extract to which some people may be allergic. If you are concerned about a potential allergic response, it is advisable to wear gloves and/or some face protection such as a dust mask when mixing or using the product. Take care to avoid contact of the product or spray solution with skin and eyes.

#### SAFETY DATA SHEET

Additional information is listed on the Safety Data Sheet for **NATURALURE<sup>®</sup> FRUIT FLY BAIT CONCENTRATE** which is available from Corteva Agriscience on request. Call Customer Service Toll Free on 1-800 700 096 or visit [www.corteva.com.au](http://www.corteva.com.au)



<sup>™</sup> ® Trademarks of Corteva Agriscience and its affiliated companies.

Visit us at [Corteva.com.au](http://Corteva.com.au)

## DIRECTIONS FOR USE

SITUATION	PEST	USE RATE	CRITICAL COMMENTS
Tree, fruit, nut, vine and vegetable crops and ornamentals	Fruit flies, including Queensland fruit fly ( <i>Bactrocera tryoni</i> ) & Mediterranean fruit fly ( <i>Ceratitidis capitata</i> )	1 L/ha	Mix 1 part of Naturalure® Fruit Fly Bait Concentrate with 6.5 parts of water. Spray solution can be applied as a band or spot spray (see Application section)
Non-crop vegetation and other fruit fly resting sites (for use in area-wide fruit fly eradication or control programs)			Dilute as above or use as a concentrate spray by mixing 1 part of Naturalure® Fruit Fly Bait Concentrate with 1.5 parts of water and apply as a spot spray (see Application section).
<b><i>AVOID spraying the fruit as phytotoxicity may occur. Mangoes and pears are particularly susceptible to blemishes, discolouration or severe spotting (superficial on the skin only) from protein-based baits. The risk of phytotoxicity is increased during hot, dry conditions and re-application of spray to the same location on the plants. If using a weekly spray program, alternate tree or crop rows to which the product is applied. Re-apply if rain washes bait off the foliage.</i></b>			

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION**

**WITHHOLDING PERIOD:** All crops  
NOT REQUIRED when used as directed

## GENERAL INSTRUCTIONS

Naturalure® Fruit Fly Bait Concentrate is a protein and sugar-based bait containing the active ingredient spinosad. Once applied, fruit flies can detect the bait from several metres away. Naturalure® Fruit Fly Bait Concentrate can be diluted with water (see **MIXING** section below) to produce either a concentrated or a dilute solution. Use the concentrated solution if application equipment will allow, as this will maximise bait longevity and improve rainfastness. If necessary, remove filters and strainers from spraying equipment to avoid blockages.

**Note:** Baiting for fruit fly control should be supplemented by good orchard management practices such as removal of fallen and/or rotting fruit.

## INSECTICIDE RESISTANCE WARNING

GROUP	5	INSECTICIDE
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For insecticide resistance management Naturalure® Fruit Fly Bait Concentrate is a Group 5 insecticide. Some naturally occurring insect biotypes resistant to Naturalure® Fruit Fly Bait Concentrate and other Group 5 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Naturalure® Fruit Fly Bait Concentrate or other Group 5 insecticides are used repeatedly. The effectiveness of Naturalure® Fruit Fly Bait Concentrate on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Corteva Agriscience Australia Limited accepts no liability for any losses that may result from the failure of Naturalure® Fruit Fly Bait Concentrate to control resistant insects

## MIXING

Once mixed, constant agitation of the spray solution is recommended to ensure uniformity of spray mixture. Allow agitation system to operate for at least 5 minutes before applying. Once diluted, the solution should be used within 24 hours.

**Concentrated Solution:** Mix 1 part of Naturalure® Fruit Fly Bait Concentrate with 1.5 parts of water. First add water (equivalent to one-half of the volume of Naturalure® Concentrate to be mixed) to the spray tank and start the agitation system. Then add the full amount of Naturalure® Concentrate followed by an equal amount of water.

**Dilute Solution:** Mix 1 part of Naturalure® Fruit Fly Bait Concentrate with 6.5 parts of water. First add water (equivalent to the volume of Naturalure® Concentrate to be mixed) to the spray tank or premixing tank and start the agitation system. Then add the full amount of Naturalure® Concentrate followed by the remaining amount of water.

## APPLICATION

Begin applications as soon as monitoring traps indicate flies are present and fruit is at a susceptible stage. Repeat applications every 7 days, re-applying sooner if rain washes off the deposit. A large spray droplet size of 4000 to 6000  $\mu$  (4-6 mm) is recommended to optimise duration of bait's attractiveness to flies. Apply as either a band or spot spray to the lower canopy of fruiting plants as follows:

**Band sprays (concentrated or dilute solution):** Apply as a coarse spray in a 1m wide band to the skirt of trees. Apply to one side of every row or every second row of trees.

**Spot sprays of the concentrated solution:** Apply to trees and foliage as coarse spots of 20 mL per spot of 1m<sup>2</sup>. Apply 125 spots per hectare.

**Spot sprays of the dilute solution:** Apply to trees and foliage as coarse spots of 50 mL per spot of 1m<sup>2</sup>. Apply 150 spots per hectare.

**Spots should be distributed evenly throughout an orchard to optimise effectiveness. Adjust the application of the spots to suit the number of trees per hectare, but do not exceed the application rate above.**

## CLEANING SPRAY EQUIPMENT

After using Naturalure® Fruit Fly Bait Concentrate empty the tank and completely drain the system. Rinse the tank, pumps, lines, hoses, filters and nozzles by circulating clean water through the system. Drain and repeat the rinsing procedure twice.

## PROTECTION OF LIVESTOCK

Dangerous to bees. Avoid direct application or drift of the spray mix onto beehives.

**DO NOT** spray on plants in flower if bees are active. Once the spray deposit has dried, foraging bees will not be affected.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

**DO NOT** allow the product or used containers to enter dams, ponds, waterways or drains.

**DO NOT** apply in strong winds or any other conditions that may result in drift onto adjacent pastures, crops or water supplies.

## PROTECTION OF NON-TARGET INSECTS

Beneficial insects contribute to control of pest outbreaks. Applications of Naturalure® Fruit Fly Bait Concentrate are unlikely to affect lacewings (*Chrysopa* spp.), predatory bugs (*Geocoris*, *Orius* and *Nabis* spp.), spiders and most species of ladybird beetles (*Coccinella*, *Diomus* and *Harmonia* spp.). However some species of beneficial insects may be sensitive to Naturalure® Fruit Fly Bait Concentrate and its use may temporarily reduce populations of parasitoid wasps (especially *Trichogramma* spp.), ants, some beetles and tachinid flies. This may lead to some disruption of IPM systems based on these species, but generally populations will recover.

## STORAGE AND DISPOSAL

Keep out of reach of children. Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.

### 4 L, 5 L, 10 L, 20 L containers

This container can be recycled if it is clean, dry, free of visible residues and has the *drumMUSTER* logo visible. Triple or pressure rinse container for disposal. Dispose of rinsate by adding to the spray tank. Do not dispose of undiluted chemicals on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any *drumMUSTER* collection or similar container management site. The cap should not be replaced but may be taken separately. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

### 100 L, 208 L, 1000 L containers

Do NOT remove or tamper with the dry valves or security seal. DO NOT contaminate the drum with water or any other foreign matter. Empty contents fully into application equipment. After each use of the product ensure that the dry valve coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained. Add the rinsings to the spray tank. When the drum is empty remove the dry valve coupler and return to the point of purchase. The drum remains the property of Corteva Agriscience and must be returned.

## SMALL SPILL MANAGEMENT

Sweep up material and contain in a refuse vessel for disposal in the same manner as for containers (see STORAGE and DISPOSAL section).

**APVMA Approval Number: 58234/57203**

**Corteva Agriscience Australia Limited** A.B.N. 24 003 771 659

67 Albert Avenue, Chatswood, NSW 2067

[www.corteva.com.au](http://www.corteva.com.au)

**CUSTOMER SERVICE TOLL FREE**

**1-800 700 096**



GMID

DOM/Batch No.:

This product is GHS compliant. No additional GHS hazard and precautionary statements are required under the WorkSafe Australia exemptions for AgVet products.



## SAFETY DATA SHEET

CORTEVA AGRISCIENCE AUSTRALIA LIMITED

**Product name:** NATURALURE® Fruit Fly Bait

**Issue Date:** 6.01.2021

CORTEVA AGRISCIENCE AUSTRALIA LIMITED encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container.

### SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product name:** Naturalure® Fruit Fly Bait

**Recommended use of the chemical and restrictions on use**

**Identified uses:** End use insecticide product

#### COMPANY IDENTIFICATION

CORTEVA AGRISCIENCE AUSTRALIA LIMITED  
LEVEL 9, 67 ALBERT AVENUE  
CHATSWOOD NSW 2067  
AUSTRALIA

**Customer Information Number:**

1800-700-096

[aucustomerservice@corteva.com](mailto:aucustomerservice@corteva.com)

#### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** +61 2 9474 7350

**Local Emergency Contact:** 1800-370-754

**For advice, contact a doctor (at once) or the Australian Poisons Information Centre:** 131 126

**Transport Emergency Only Dial** 000

### SECTION 2: HAZARD(S) IDENTIFICATION

#### GHS Classification

Not classified as hazardous according to the criteria of the Work Health and Safety Regulations, Australia.

#### Other hazards

No data available

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**SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8**

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This product is a mixture.

Component	CASRN	Concentration
Spinosad A & D		0.02%
Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivatives	9005-67-8	< 5.0 %
Propylene glycol	57-55-6	< 5.0 %
Balance	Not available	<= 94.98 %

*Note*

Spinosad is comprised of Spinosyn A (CAS # 131929-60-7) and Spinosyn D (CAS # 131929-63-0)

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**SECTION 4: FIRST AID MEASURES**

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**Description of first aid measures**

**General advice:** If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

**Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Suitable emergency safety shower facility should be available in work area.

**Eye contact:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** No emergency medical treatment necessary.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

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## SECTION 5: FIREFIGHTING MEASURES

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**Hazchem Code:** 2X

**Suitable extinguishing media:** To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

**Unsuitable extinguishing media:** No data available

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Corteva Agriscience for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

## SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

**Precautions for safe handling:** Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapour or mist. Wash thoroughly after handling. Use with adequate ventilation. Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto-ignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Spinosad A & D	Dow IHG	TWA	0.3 mg/m <sup>3</sup>
Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivatives	ACGIH	TWA	10 mg/m <sup>3</sup>
Propylene glycol	AU OEL	TWA	10 mg/m <sup>3</sup>
	US WEEL	TWA	10 mg/m <sup>3</sup>
	AU OEL	TWA particulate	10 mg/m <sup>3</sup>
	AU OEL	TWA Total (vapour and particles)	474 mg/m <sup>3</sup> 150 ppm

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Use chemical goggles.

#### Skin protection

**Hand protection:** Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to AS/NZS 2161.10) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.



**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapour cartridge with a particulate pre-filter.

**Other Information:** Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:

AS/NZS 1336: Eye and face protection – Guidelines.

AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.

AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.

AS/NZS 2161: Occupational protective gloves.

AS/NZS 2210: Occupational protective footwear.

AS/NZS 4501: Occupational protective clothing Set

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Physical state	Liquid.
Colour	Brown
Odour	Acidic
Odour Threshold	No test data available
pH	4.7 100% pH Electrode (neat)
Melting point/range	No test data available
Freezing point	No test data available
Boiling point (760 mmHg)	No test data available
Flash point	closed cup > 100 °C
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	No data available
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapour Pressure	No test data available
Relative Vapour Density (air = 1)	No test data available
Relative Density (water = 1)	1.2 at 20 °C <i>Unspecified</i>
Water solubility	Soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No test data available
Decomposition temperature	No test data available
Dynamic Viscosity	No test data available
Kinematic Viscosity	No test data available

Explosive properties	No data available
Oxidizing properties	No data available
Liquid Density	1.2 g/cm <sup>3</sup> at 20 °C <i>Calculated.</i>
Molecular weight	No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## SECTION 10: STABILITY AND REACTIVITY

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**Reactivity:** No data available

**Chemical stability:** Thermally stable at recommended temperatures and pressures.

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Some components of this product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible materials:** Avoid contact with: Strong oxidizers.

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data is available.*

### Acute toxicity

#### Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: LD<sub>50</sub>, Rat, female, > 5,000 mg/kg

#### Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: LD<sub>50</sub>, Rat, male and female, > 5,000 mg/kg

#### Acute inhalation toxicity

Prolonged exposure is not expected to cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

As product: LC<sub>50</sub>, Rat, male and female, 4 Hour, dust/mist, > 5.18 mg/l No deaths occurred at this concentration.

### Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

**Serious eye damage/eye irritation**

May cause moderate eye irritation.  
Corneal injury is unlikely.

**Sensitization**

As product: Did not cause allergic skin reactions when tested in guinea pigs.  
For respiratory sensitization: No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

For the active ingredient(s): In animals, Spinosad has been shown to cause vacuolization of cells in various tissues. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.  
For the minor component(s): Repeated excessive exposures may cause Diarrhea.

**Carcinogenicity**

For the active ingredient(s): Did not cause cancer in laboratory animals. Contains component(s) which did not cause cancer in laboratory animals.

**Teratogenicity**

For the active ingredient(s): Did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.  
For the component(s) tested: Did not cause birth defects or any other foetal effects in laboratory animals.

**Reproductive toxicity**

For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

For the minor component(s): In animal studies, has been shown to interfere with reproduction. In animal studies, has been shown to interfere with fertility. However, the relevance of this to humans is unknown.

**Mutagenicity**

For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.  
For the minor component(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases.

**Aspiration Hazard**

Based on available information, aspiration hazard could not be determined.

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**SECTION 12: ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data is available.*

**Ecotoxicity****Spinosad A & D****Acute toxicity to fish**

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, *Lepomis macrochirus* (Bluegill sunfish), 96 Hour, 5.9 mg/l

**Acute toxicity to aquatic invertebrates**

EC50, *Daphnia magna* (Water flea), 48 Hour, 1.5 mg/l, OECD Test Guideline 202 or Equivalent

EC50, eastern oyster (*Crassostrea virginica*), 0.295 mg/l

**Acute toxicity to algae/aquatic plants**

EbC50, diatom *Navicula* sp., 5 d, Biomass, 0.107 mg/l

EbC50, *Pseudokirchneriella subcapitata* (green algae), 7 d, 39 mg/l

EC50, *Lemna gibba*, 14 d, 10.6 mg/l

**Toxicity to bacteria**

Bacteria, > 100 mg/l

**Chronic toxicity to fish**

NOEC, *Oncorhynchus mykiss* (rainbow trout), flow-through test, mortality, 0.5 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC, *Daphnia magna* (Water flea), 0.0012 mg/l

**Toxicity to Above Ground Organisms**

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

Oral LD50, *Colinus virginianus* (Bobwhite quail), > 2000 mg/kg bodyweight.

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

Dietary LC50, *Colinus virginianus* (Bobwhite quail), 5 d, > 5253 mg/kg diet.

Oral LD50, *Apis mellifera* (bees), 48 Hour, 0.06 micrograms/bee

Contact LD50, *Apis mellifera* (bees), 48 Hour, 0.05 micrograms/bee

**Toxicity to soil-dwelling organisms**

LC50, *Eisenia fetida* (earthworms), 14 d, > 970 mg/kg

**Sorbitan, monoctadecanoate, poly(oxy-1,2-ethanediyl) derivatives****Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 > 100 mg/L in the most sensitive species tested).

LC50, *Oryzias latipes* (Orange-red killifish), 48 Hour, 240 mg/l

**Propylene glycol****Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 > 100 mg/L in the most sensitive species tested).

LC50, *Oncorhynchus mykiss* (rainbow trout), static test, 96 Hour, 40,613 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

LC50, Ceriodaphnia dubia (water flea), static test, 48 Hour, 18,340 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

ErC50, Pseudokirchneriella subcapitata (green algae), 96 Hour, Growth rate inhibition, 19,000 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

NOEC, Pseudomonas putida, 18 Hour, > 20,000 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC, Ceriodaphnia dubia (water flea), semi-static test, 7 d, number of offspring, 13,020 mg/l

**Balance****Acute toxicity to fish**

No relevant data found.

**Persistence and degradability****Spinosad A & D**

**Biodegradability:** Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%). Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail

**Biodegradation:** < 1 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301B or Equivalent

**Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	66.0 %
10 d	68.0 %
20 d	76.0 %
28 d	77.0 %

**Stability in Water (1/2-life)**

Hydrolysis, pH 7, Half-life Temperature 25 °C, Stable

Hydrolysis, half-life, 200 - 259 d, pH 9, Half-life Temperature 25 °C

Hydrolysis, pH 5, Half-life Temperature 25 °C, Stable

Photolysis, half-life, 0.84 - 0.96 d, pH 7

**Sorbitan, mono-octadecanoate, poly(oxy-1,2-ethanediyl) derivatives**

**Biodegradability:** No relevant data found.

**Propylene glycol**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

10-day Window: Pass

**Biodegradation:** 81 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301F or Equivalent

10-day Window: Not applicable

**Biodegradation:** 96 %  
**Exposure time:** 64 d  
**Method:** OECD Test Guideline 306 or Equivalent

**Theoretical Oxygen Demand:** 1.68 mg/mg  
**Chemical Oxygen Demand:** 1.53 mg/mg  
**Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	69.0 %
10 d	70.0 %
20 d	86.0 %

**Photodegradation**  
**Atmospheric half-life:** 10 Hour  
**Method:** Estimated.

#### **Balance**

**Biodegradability:** No relevant data found.

#### **Bioaccumulative potential**

##### **Spinosad A & D**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Partition coefficient: n-octanol/water (log Pow):** 4.01

**Bioconcentration factor (BCF):** 33 Fish 28 d Measured

##### **Propylene glycol**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water (log Pow):** -1.07 Measured

**Bioconcentration factor (BCF):** 0.09 Estimated.

#### **Balance**

**Bioaccumulation:** No relevant data found.

#### **Mobility in Soil**

##### **Spinosad A & D**

Potential for mobility in soil is low (Koc between 500 and 2000).

**Partition coefficient (Koc):** 701 Measured

##### **Propylene glycol**

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Potential for mobility in soil is very high (Koc between 0 and 50).

**Partition coefficient (Koc):** < 1 Estimated.

#### **Balance**

No relevant data found.

**Results of PBT and vPvB assessment****Spinosad A & D**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivatives**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Propylene glycol**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Balance**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Other adverse effects****Spinosad A & D**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivatives**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Propylene glycol**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Balance**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**Disposal methods:** If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

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**SECTION 14: TRANSPORT INFORMATION**

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**ADG**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Not regulated for transport  
Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

**Hazchem Code:** 2X**Further information:**

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the Australian Code for the Transport of Dangerous Goods (ADG). This applies when transported by road or rail in packaging's that do not incorporate a receptacle exceeding 500 kg(L) or IBCs per ADG Special Provision AU01.

Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197.

This information is not intended to convey all specific regulatory or operational requirements/ information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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**SECTION 15: REGULATORY INFORMATION**

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**Poison Schedule:** Not Scheduled**APVMA Approval Number:** 58234

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**SECTION 16: ANY OTHER RELEVANT INFORMATION**

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**Revision**

Identification Number: 101193550 / A143 / Issue Date: 6.01.2021 / Replaces: 28.11.2019

DAS Code: GF-1111

Sections amended: 1, 15, 16

**Legend**

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG	Dow Industrial Hygiene Guideline
TWA	Exposure standard - time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -



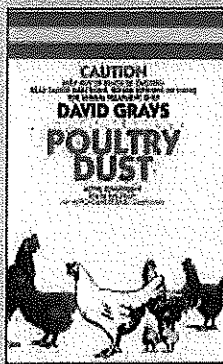
International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System.

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## David Gray & Co. Pty Ltd



### Poultry Dust.

Available in 400gm and 3kg.

Active Constituent 20g/kg Malidison an anticholinesterase compound.

To control Fleas, Flies, Bugs, Lice, Ticks and Mites on poultry.

#### CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

FOR ANIMAL TREATMENT ONLY

#### HOW TO USE:

To control Fleas, Flies, Bugs, Lice, Ticks and Mites on poultry. Dust between feathers of birds and repeat when necessary. To prevent breeding of poultry parasites apply poultry dust to roosts and crevices of buildings.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED.

**SAFETY DIRECTIONS** Avoid contact with eyes and skin, wash hands after use.

**FIRST AID** If poisoning occurs contact a doctor or Poisons Information Centre. If swallowed, and more than 15 minutes from a hospital induce vomiting, preferably using Ipecac Syrup APF.

REGISTERED UNDER THE VETERINARY PREPARATIONS AND ANIMAL FEEDSTUFFS ACT 1976 (WA). REGISTERED UNDER STOCK MEDICINES ACT

1939(SA)

Size	EAN	TUN
400gm	9310299035487	19310299035484
3kg	9310299247118	

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AMBER



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## MATERIAL SAFETY DATA SHEET

Product Name **DAVID GRAYS POULTRY DUST**

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name **DAVID GRAY & CO PTY LIMITED**  
Address **2 Rawlinson Street, O'Connor, WA, AUSTRALIA, 6961**  
Telephone **(08) 9337 4933**  
Fax **(08) 9337 8316**  
Emergency **(08) 9337 4933 (B/H)**  
Email **[general@davidgray.com.au](mailto:general@davidgray.com.au)**  
Web Site **<http://www.davidgray.com.au/>**  
  
Synonym(s) **24763 (15KG) • MANUFACTURER'S CODE: 3548 (12X400G), 24711 (3KG) • POULTRY DUST**  
  
Use(s) **INSECT CONTROL • USED TO CONTROL FLEAS, FLIES, LICE, TICKS & MITES ON POULTRY**  
MSDS Date **21 Jun 2010**

### 2. HAZARDS IDENTIFICATION

**NOT CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA**

**NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

UN No. **None Allocated** DG Class **None Allocated** Subsidiary Risk(s) **None Allocated**  
Packing Group **None Allocated** Hazchem Code **None Allocated**

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
MALATHION	C10-H19-O6-P-S2	121-75-5	2%
FILLER(S)	Not Available	Not Available	98%

### 4. FIRST AID MEASURES

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

**Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

**Advice to Doctor** Treat symptomatically.

ChemAlert.

Page 1 of 5

RMT

Reviewed: 21 Jun 2010

Printed: 21 Jun 2010

# AMBER

Product Name **DAVID GRAYS POULTRY DUST**

## 5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve toxic gases (carbon/ sulphur/ phosphorus/ nitrogen oxides) when heated to decomposition. May also evolve hydrogen chloride when heated to decomposition.
Fire and Explosion	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

## 6. ACCIDENTAL RELEASE MEASURES

Spillage	Use personal protective equipment. Wash the contaminated surfaces with a mild bleach (sodium hypochlorite) solution. For small spills, wear required protective equipment, then sweep up, contain and reuse spilt product. Wash contaminated surfaces with a mild bleach solution.
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## 7. STORAGE AND HANDLING

Storage	Store in a cool, dry, well ventilated area, removed from moisture, oxidising agents, acids, alkalis, iron, mild/galvanised steel, zinc, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should have appropriate fire protection systems.
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas (eg. If container is damaged). Use only according to the label directions.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Exposure Stds

Ingredient	Reference	TWA		STEL	
Malathion	ASCC (AUS)	--	10 mg/m3	--	--

Biological Limits No biological limit allocated.

Engineering Controls Avoid inhalation. Use in well ventilated areas. Maintain dust levels below the recommended exposure standard.

PPE Wear dust-proof goggles and rubber or PVC gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. Where an inhalation risk exists, wear: a Class P1 (Particulate) respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	LIGHT CREAM COLOURED DUST	Solubility (Water)	INSOLUBLE
Odour	SLIGHT ODOUR	Specific Gravity	NOT AVAILABLE
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	NOT AVAILABLE	Upper Explosion Limit	NOT RELEVANT
Melting Point	NOT AVAILABLE	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE		
Appearance	LIGHT CREAM COLOURED DUST	Odour	SLIGHT ODOUR

Product Name **DAVID GRAYS POULTRY DUST****10. STABILITY AND REACTIVITY**

Chemical Stability	Stable under recommended conditions of storage.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to Avoid	Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), alkalis (eg. hydroxides), iron, zinc, stainless/galvanised steel and heat sources.
Hazardous Decomposition Products	May evolve toxic gases (carbon/ sulphur/ phosphorus/ nitrogen oxides) when heated to decomposition. May also evolve hydrogen chloride when heated to decomposition.
Hazardous Reactions	Polymerization is not expected to occur.

**11. TOXICOLOGICAL INFORMATION**

Health Hazard Summary	Harmful. Use safe work practices to avoid eye or skin contact and inhalation. Cholinesterase inhibitor resulting in the accumulation of acetylcholine, causing rapid twitching of voluntary muscles and finally paralysis. Symptoms may include headaches, dizziness, nausea, diarrhoea, muscle twitching, tremors, abdominal cramps, tightness in chest, sweating, blurred vision, salivation, excessive urination and convulsions. Symptoms are often characterised as short acting yet having complete and rapid reversibility. No adverse health effects are expected when the product is used in accordance with label directions.
Eye	Irritant. Contact may result in irritation, lacrimation, pain, redness and blurring or dimness of vision.
Inhalation	Irritant. Over exposure to dust may result in irritation of the nose and throat, coughing, weakness, nausea, vomiting and diarrhoea. High level exposure may result in dizziness, incoordination, excessive salivation, sweating, and breathing difficulties. Cholinesterase inhibitor.
Skin	Irritant. Contact may result in irritation, redness, pain and rash. May be absorbed through skin with harmful effects. The reported dermal LD50 is > 102500 mg/kg.
Ingestion	Low to moderate toxicity. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, and sweating and/or salivation. Ingestion of large quantities may result in breathing difficulties, muscle spasms and convulsions. The reported oral LD50 (rat) is > 70000 mg/kg.
Toxicity Data	<b>MALATHION (121-75-5)</b> Health Surveillance: Required [NOHSC:1005(1994)] LC50 (Inhalation): 43790 ug/m3/4hrs (rat) LCLo (Inhalation): 1200 ug/m3/4hrs (rat) LD50 (Ingestion): 190 mg/kg (mouse) LD50 (Intraperitoneal): 193 mg/kg (mouse) LD50 (Intravenous): 50 mg/kg (rat) LD50 (Skin): 2330 mg/kg (mouse) LD50 (Subcutaneous): 221 mg/kg (mouse)

**12. ECOLOGICAL INFORMATION**

Environment	Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.
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**13. DISPOSAL CONSIDERATIONS**

Waste Disposal	For small amounts, the best way of disposing of the product is to use in accordance with the original label directions. Contact the manufacturer if large amounts are involved. Empty containers should be disposed of by wrapping in paper, placing in a plastic bag and putting in the garbage. Empty containers should not be burnt. For domestic packs, dispose of empty containers by wrapping in paper, placing in a plastic bag and putting in the rubbish.
Legislation	Dispose of in accordance with relevant local legislation.

**14. TRANSPORT INFORMATION**

## AMBER

Product Name **DAVID GRAYS POULTRY DUST**

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated			
UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s) None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	

### 15. REGULATORY INFORMATION

**Poison Schedule** Classified as a Schedule 5 (S5) Poison using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

**AICS** All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

### 16. OTHER INFORMATION

**Additional Information** ABBREVIATIONS:  
ADB - Air-Dry Basis.  
BEI - Biological Exposure Indices(s)  
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.  
CNS - Central Nervous System.  
EC No - European Community Number.  
IARC - International Agency for Research on Cancer.  
M - moles per litre, a unit of concentration.  
mg/m3 - Milligrams per cubic metre.  
NOS - Not Otherwise Specified.  
NTP - National Toxicology Program.  
OSHA - Occupational Safety and Health Administration.  
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).  
ppm - Parts Per Million.  
RTECS - Registry of Toxic Effects of Chemical Substances.  
TWA/ES - Time Weighted Average or Exposure Standard.

#### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

#### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**COLOUR RATING SYSTEM:** RMT has assigned all Chem Alert reports a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all Chem Alert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

**Report Status** This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide



**AMBER**

**Product Name**      **DAVID GRAYS POULTRY DUST**

any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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**SDS Date** 21 Jun 2010

**End of Report**



# FAQ's

**Q. "How many times will you be back?"**

A. "A typical outbreak requires baiting teams to visit once a week, or twice if you are in a high risk area, for 6 to 12 weeks depending on detections. However there may also be hygiene teams in the area who will also need access to your property."

**Q. "When will you be back again?"**

A. "We will be back on the same days each week, however bad weather may put the schedule back a day for that week."

**Q. "Will we be notified if you are pushed back a day?"**

A. "Unfortunately due to the volume of properties it would be unmanageable to notify all homes of the schedule change, however if you have made an arrangement or are worried you are able to call the local control center who will be able to provide that information."

**Q. "I don't have any fruit trees, why do you need access to my yard?"**

A. "We apply the bait to all sorts of trees. The fruit fly feed on the bacteria under leaves so it is important to bait a variety of trees."

**Q. "You were here yesterday, why are you back?"**

A. "We are sorry for the inconvenience this may be causing. The response requires a visit from both a baiting team and hygiene team undertaking different tasks."

**Q. "What happens if I am not home when you come back?"**

A. "Our procedure is to knock and do our best to make contact with a homeowner before we start any work, if you're not home or unable to answer the door we will bait the trees we are able to access. If we are unable to gain access hopefully we will catch you when we revisit, otherwise if we require access urgently a card will be left in the letter box requesting you to call to make an appointment for us to come back."

**Q. "Who gives you the right to enter my property if I'm not home?"**

A. "The state government has passed legislation giving us the authority to enter a property in order to effectively run an eradication program, however we do want to work with you as the homeowner."

**Q. "What if I refuse to be baited?"**

A. "To run a successful program we do need access to as many properties as possible to effectively eradicate this pest, if you are unwilling to allow us to apply the bait we need to pass your address onto our field inspector who will visit you with the intention to relieve any concerns and make an arrangement with you for future visits."

**Q. "I'm a shift worker, I don't want you knocking each week."**

A. "Would you be happy for us to make a note against this address not to knock and we can apply the bait without disturbing you?"

**Q. "How will I know if you have been here if I'm not home?"**

A. "If we have applied any bait to your property we will leave a contact card in your letterbox to notify you. You do not need to call to make a follow up visit as we will revisit when required."

**Q. "How do you apply the bait?"**

A. "We are looking to apply a 40mL spot of liquid organic bait above waist height to 10-12 spots per property on the foliage of plants."

**Q. "Is the bait harmful to animals?"**

A. "It is classified as an organic bait approved by the authorities, for applications like this we do take extra precautions around sensitive animals such as birds, fish and bees."



# Initial Script

## Door Knocking

### BAITING

Hi, my name is \_\_\_\_\_ from Primary Industries, how are you today?

*{Respond accordingly}*

- You should have received a pamphlet in the mail about the fruit fly outbreak
- It explained that an outbreak has been declared and this property is within the quarantine area
- Have you had a chance to read it?
- If no provide a pamphlet
- You are in a quarantine area due to the declaration of a fruit fly outbreak
- While the quarantine area is in place you are not able to remove any fruit or veg from the area unless it has been processed, this includes sharing your homegrown fruit between your neighbors
- We will be in the area for the next 6-12 weeks depending on any further detections and there may be hygiene teams who also visit you
- Do you have a dog? If yes is it secured? If no ask can it be secured?
- We are a baiting team and will be back weekly to reapply the bait
- As \_\_\_\_\_ baits the front, what is the best side of the house to gain access to the back?
- Is it usually locked?

#### YES

Make note if there is a dog on the property - ask owner to secure dog so you can apply bait to the back.

#### NO – if gate is usually

##### unlocked

“Are you happy for us to enter?”

#### NO – if gate is usually locked

“Can you open the gate so we can apply some bait.”

Provide with a dated contact card. “Thank you for your help, we will see you again next week. Have a good day.”

### TECH CHECK

Hi, my name is \_\_\_\_\_ from Primary Industries, how are you today?

*{Respond accordingly}*

- You should have received a pamphlet in the mail about the fruit fly outbreak
- It explained that an outbreak has been declared and this property is within the quarantine area
- Have you spoken to the baiting team or had a chance to read the pamphlet?
- If no provide a pamphlet
- You are in a quarantine area due to the declaration of a fruit fly outbreak
- While the quarantine area is in place you are not able to remove any fruit or veg from the area unless it has been processed, this includes sharing your homegrown fruit between your neighbors

- We will be in the area for the next 6-12 weeks depending on any further detections and there will be baiting team visiting once a week (twice if in red center) and hygiene teams visiting you (once a week if in red center) throughout the program
- Do you have a dog? If yes is it secured? If no ask can it be secured
- We are a tech check team.
- We need to check the property for any infestation and fallen fruit (red center), what is the best side of the house to gain access to the back?
- Is it usually locked?

**YES**

Make note that there is a dog on the property - ask owner to secure dog so you can check the back.

**NO – if gate is usually unlocked**

“Are you happy for us to enter?”

**NO – if gate is usually locked**

“Can you open the gate so we can quickly check for infestation?”

- Provide with a dated contact card. “Thank you for your help, we will see you again next week. Have a good day.”

## FIELD LABORER / baiting and hygiene

### DAILY WORK INSTRUCTIONS

#### Activities – In the morning

1. Ensure you have your ID and all PPE
2. Attend the morning briefing
3. Confirm your attendance by placing a tick alongside your name on the Daily Running Sheet
4. Meet with your team at the designated vehicle
5. Provide your team leader with your mobile number. **\*Please note: It is mandatory to keep your mobile with you throughout the day**

#### Activities - During the day

1. Complete properties allocated to you by team leader, following the workflow for each property
2. Ensure that you always knocked on the door and wait an adequate amount of time for a response prior to commencing with baiting
3. Introduce yourself in a courtesy and polite manner and make every effort to use the scripting from the document titled 'Door Knocking Scripts' – provided in the Plant Health Operations Training and Induction manual
4. Advise Team Leader of properties that may pose any safety risks to you or your team members
5. After completing allocated work hand all maps back to Team Leaders immediately on return

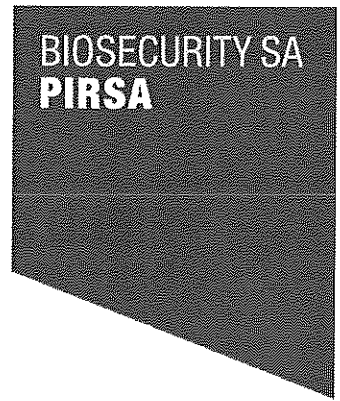
#### Activities – End of Day

1. Dispose of any bait or fruit brought back to the Local Control Centre using the approved methods – SOP??
2. Thoroughly clean vehicles and equipment (trailers and backpacks)
3. Check white board in front of office– report to office if your name is listed
4. Undertake kitchen and change room roster duties



Jan 2020

5. Help any teams returning back late to clean up
6. Get changed and meet in front of office for debrief at end of shift
7. Leave ID's and overalls in change room – DO NOT TAKE HOME





## Leafleting

### DAILY WORK INSTRUCTIONS / FIELD LABORER AND TEAM LEADER

#### Commencement

- Collect keys and maps from offices as allocated **TL**
- Check vehicles are stocked with first aid kits, drinking water, cups and vehicle folders (to remain in car at end of day) **TL**
- Ensure you have a team list and numbers **TL**
- Ensure you have been allocated an ID and PPE (Overalls and appropriate footwear)
- Stock vehicle with enough leaflets for the day **TL**

#### In the field

- Ensure risk assessments are continuously preformed (uneven paths, low hanging branches, sharp objects around letterboxes)
- Walk around the block ensuring that all homes, units and all properties within cul-de-sacs receive a leaflet
- DO NOT cross any roads until you have returned to the first leafleted property on the block
- Ensure only allocated blocks are leafleted
- Colouring maps correctly as blocks are completed

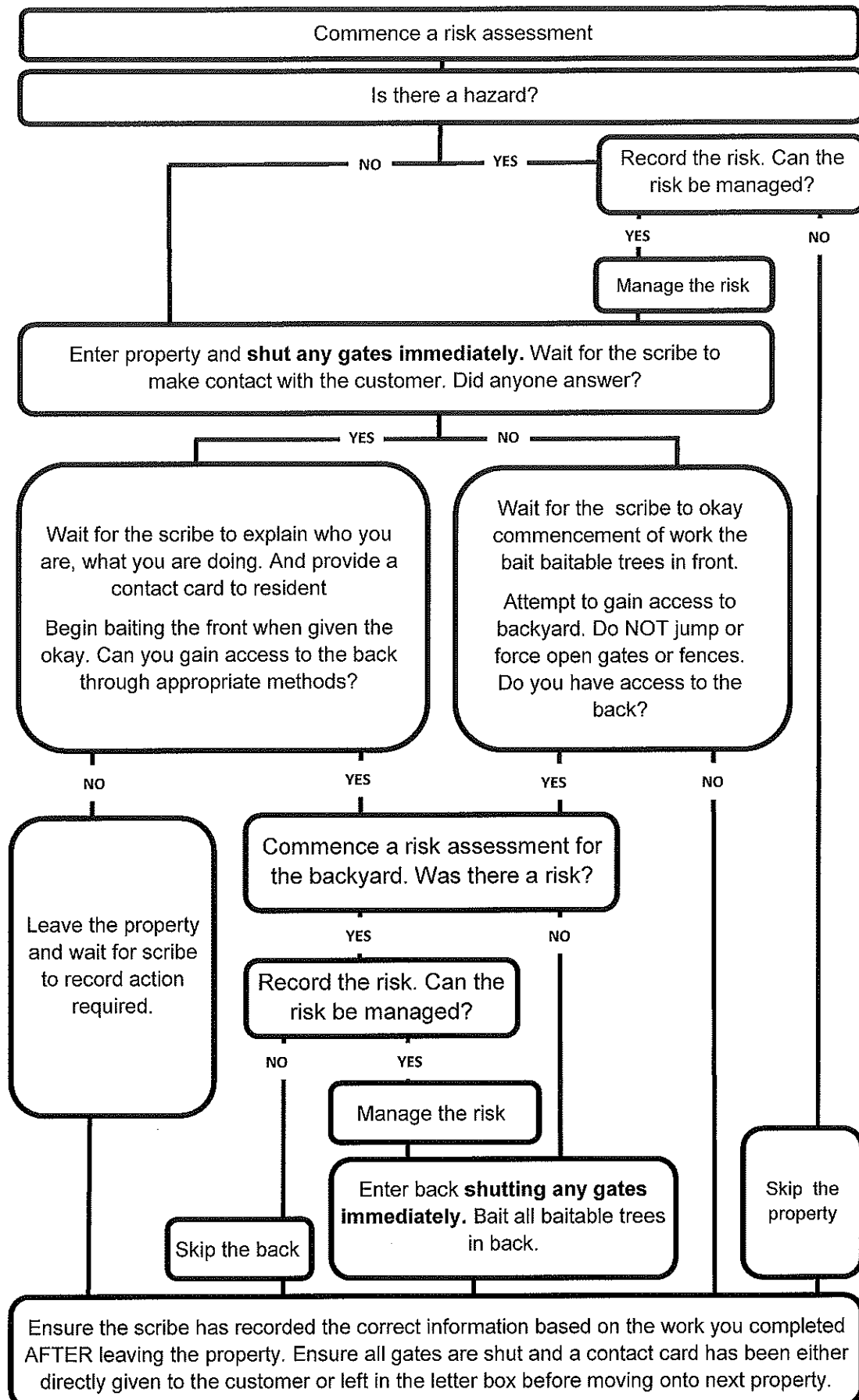
#### On return

- Finalise coloured map while team empties and cleans vehicle **TL**
- Return all work folders and maps to office **TL**
- Return unused leaflets to container (collate half full boxes and put in allocated shelves)
- Check and secure vehicle before returning keys to office
- Help other teams returning back late to empty and clean vehicles
- Get changed leaving overalls and ID cards in change rooms before meeting in front of office for debrief at end of shift



# Baiter

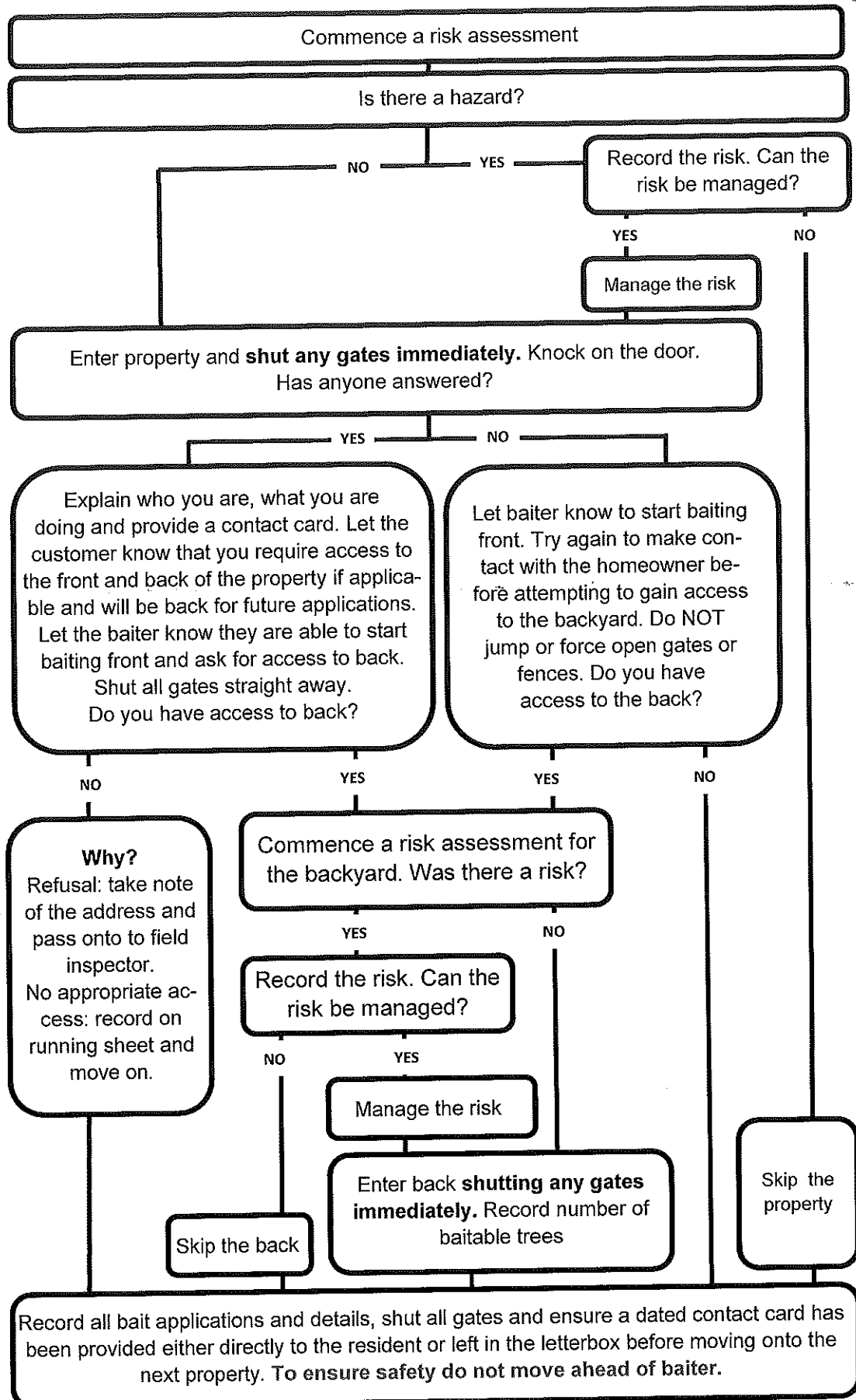
## BAITING TEAM WORKFLOW





# Scribe/Door Knocker

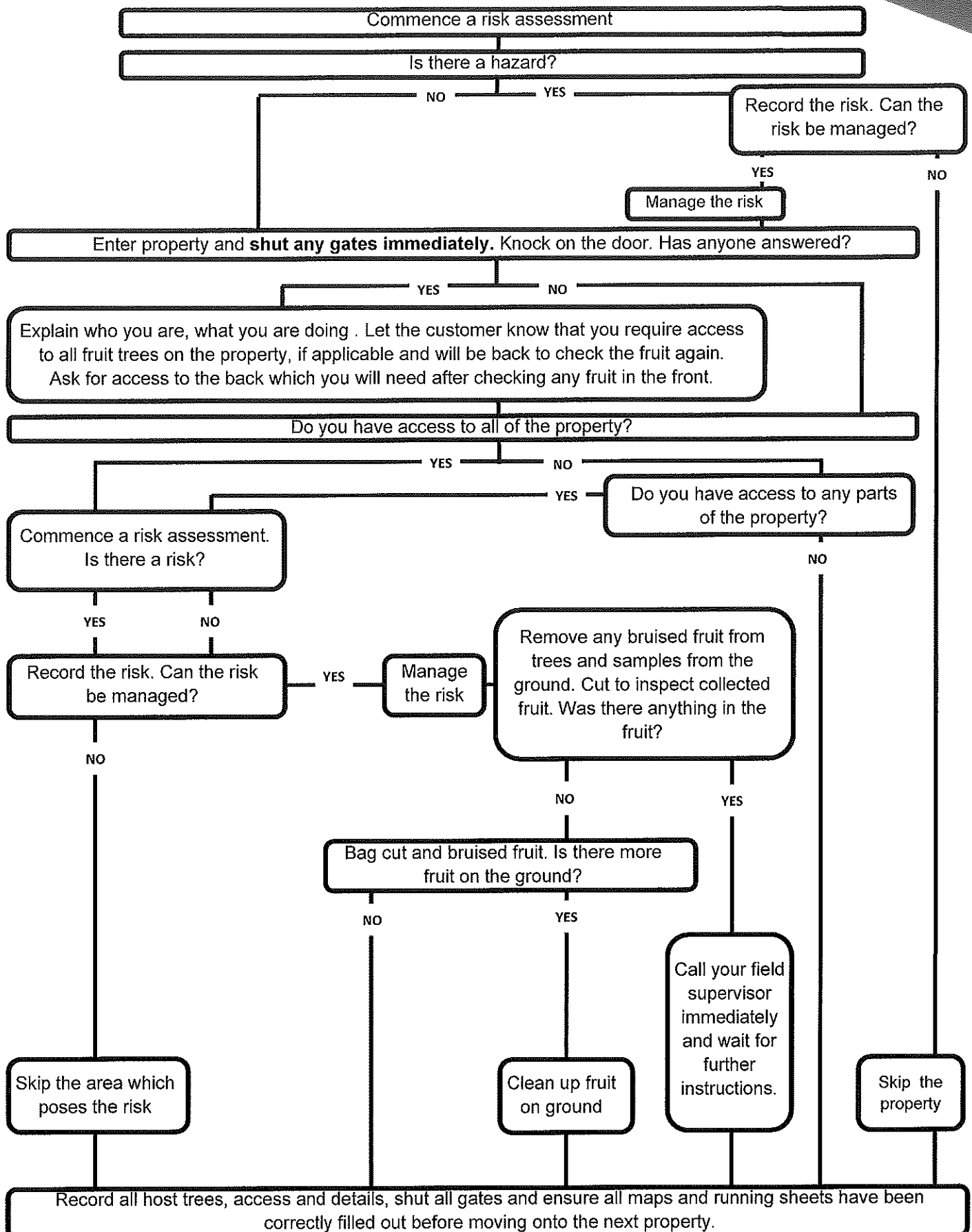
## BAITING TEAM WORKFLOW





# Hygiene/Tech Check

## HYGIENE TEAM WORKFLOW







# Team Leader – Baiting

## WORK INSTRUCTIONS

### Everyday

#### Morning

- Collect car keys, work folders and all items from pigeonhole
- Ensure vehicle is appropriately stocked before leaving the yard
- Travel to allocated work area – efficiently plan out application
- Check all staff have phones on them and the numbers listed are correct
- Fill backpacks for baiter and allocate blocks to each scribe – emphasis any arrangements. Pair up baiters and scribes.

#### During the day

- Drive between team to keep backpacks full when required, walk with team to ensure correct process.
- Ensure allocated break times are adhered to (smoko 15min between 10:00-10:30AM, lunch 30min at 12:30PM)
- Do not leave work area without permission from field supervisor

#### On return

- Fill in Log Sheet upon return to base.
- Collect scribe maps and fill in team leader map using approved key colours (to be done while team cleans vehicle and equipment)
- Put running sheets in block number order in one folder with all maps on top and return all folders to pigeonholes.
- Collect any access notes to pass onto field supervisor. Keep hygiene notes separate and put in allocated box in office (do not pass onto to field supervisor or directly to team)
- Check trailer, backpacks and car are clean before restocked. Secure vehicles and return keys to office.
- Switch off bait pumps

### Weekly

- Monday: collect vehicle checklist and return completed Tuesday afternoon.
- Friday:
  - o Complete and submit vehicle log sheets to administration Officer
  - o Team Leader meeting to address any concerns



# Team Leader – Hygiene/Tech Check

## WORK INSTRUCTIONS

### Everyday

#### Morning

- Collect car keys, work folders and all items from pigeonhole
- Ensure vehicle is appropriately stocked before leaving the yard
- Travel to allocated work area – efficiently plan out work allocated
- Check all staff have phones on them and the numbers listed are correct

#### During the day

- Emphasise any arrangements – begin work on blocks. Work in teams of 2-3 only
- Ensure allocated break times are adhered to (smoko 15min between 10:00-10:30AM, lunch 30min at 12:30PM)
- Do not leave work area without permission from field supervisor

#### On return

- Fill in Log Sheet upon return to base
- Collect all maps and fill in team leader map using approved key colours, while team disposes of fruit
- Put running sheets in block number order in one folder with all maps on top and return all folders to pigeon hole
- Collect any access notes to pass onto field supervisor. Keep tech check hygiene notes separate and put in allocated box in office (do not pass onto field supervisor, teams or keep them for next day)
- Fill in whiteboard in second office with numbers for the day & duties undertaken (i.e. tech check (TC) or full hygiene (FH))
- Check the car is clean, restocked and secured then return keys to office

### Weekly

- Monday: collect vehicle checklist and return completed by Tuesday afternoon
- Friday:
  - o Complete and submit vehicle log sheets to administration Officer
  - o Team Leader meeting to address any concerns



# Team Leader Map Colour Key

**No baitable foliage**

**ALL (Front & Back)**

**FRONT ONLY**

**BACK ONLY**

**ARRANGEMENT**

**(See Arrangement Sheet for details)**

# Scribe Map Legend Key

☐ X NO BAIT APPLIED

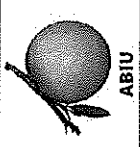

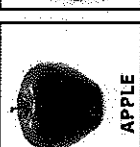

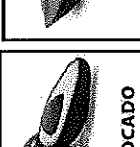
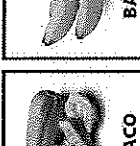
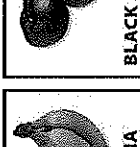
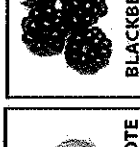
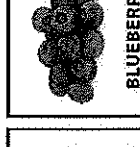

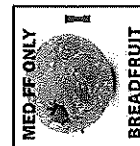
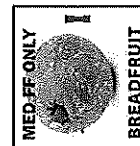


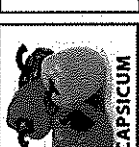
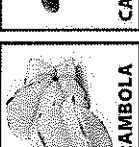
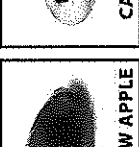
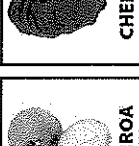
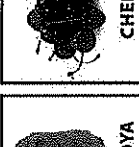
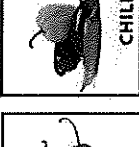
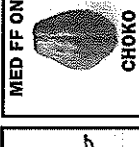
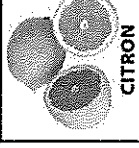




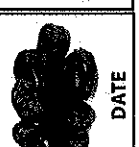

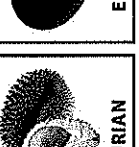
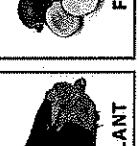
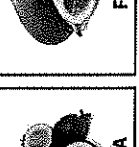
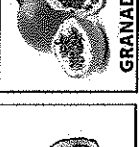

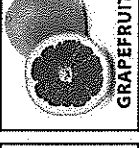




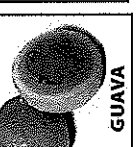
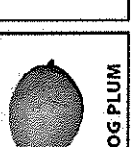
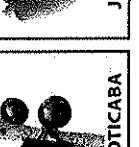
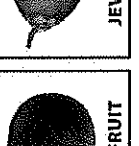
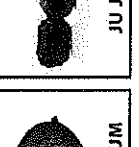
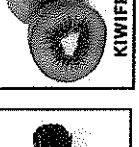
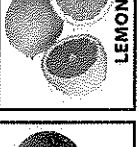
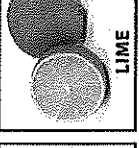





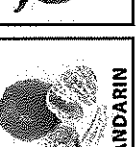
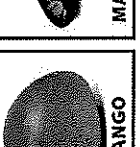


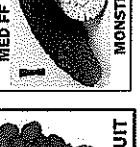


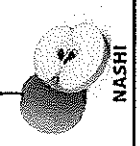
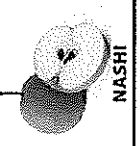

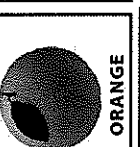

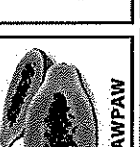
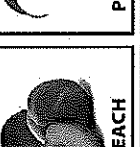
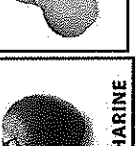
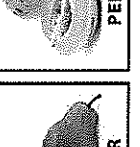


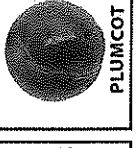





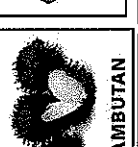
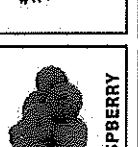
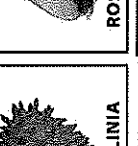
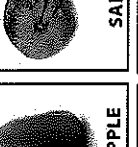
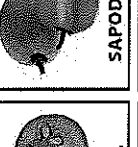
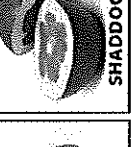








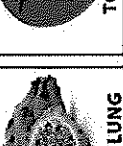
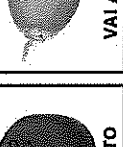
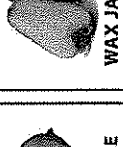
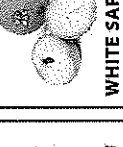



☒ BAIT APPLIED TO FRONT AND  
BACK

☐ F BAIT APPLIED TO FRONT ONLY

☐ B BAIT APPLIED TO BACK ONLY

☐ Z NO BAITABLE TREES

# What fruit and vegetables do fruit fly like?

 ABIU	 ACEROLA	 APPLE	 APRICOT	 AVOCADO	 BABACO	 BANANA	 BLACK SAPOTE	 BLACKBERRY	 BLUEBERRY	 BRAZIL CHERRY	 MED FF ONLY
 CAIMITO	 CAPE GOOSEBERRY	 CAPSICUM	 CARAMBOLA	 CASHEW APPLE	 CASIMIROA	 CHERIMOYA	 CHERRY	 CHILLI	 MED FF ONLY	 CITRON	 COFFEE BERRY
 CUMQUAT	 CUSTARD APPLE	 DATE	 DRAGON FRUIT	 DURIAN	 EGGPLANT	 FEIJOA	 FIG	 GRANADILLA	 GRAPES	 GRAPEFRUIT	 GRUMICHAMA
 GRAPEFRUIT	 GRUMICHAMA	 GUAVA	 HOG PLUM	 JABOTICABA	 JACKFRUIT	 JEW PLUM	 JU JUBE	 KIWIFRUIT	 LEMON	 LIME	 LOGANBERRY
 LONGAN	 LOQUAT	 LYCHEE	 MANDARIN	 MANGO	 MANGOSTEEN	 MEDLAR	 MED FF ONLY	 MIRACLE FRUIT	 NECTARINE	 MULBERRY	 NASHI
 OLIVE	 ORANGE	 PASSIONFRUIT	 PAWPAW	 PEACH	 PEACHARINE	 PEAR	 PERSIMMON	 PLUM	 PLUMCOT	 POMEGRANATE	 STAR APPLE
 PRICKLY PEAR	 PUMMELO	 QUINCE	 RAMBUTAN	 RASPBERRY	 ROLLINIA	 ROSE APPLE	 SANTOL	 SAPODILLA	 SHADDOCK	 SOURSOP	 MED FF ONLY
 STAR FRUIT	 STRAWBERRY	 SWEETSOP	 TAMARILLO	 TANGELO	 THAN LUNG	 TOMATO	 VAI APPLE	 WAX JAMBU	 WHITE SAPOTE	 MED FF ONLY	 MED FF ONLY

\* Strawberries attract only Queensland fruit fly. Restrictions apply to moving strawberries in affected areas in the Riverland and some parts of metro Adelaide.

! Breadfruit and monstera attract only Mediterranean fruit fly. Restrictions apply to moving them in affected areas of metropolitan Adelaide.





# PLANT HEALTH OPERATIONS OUTBREAK TRAINING ACKNOWLEDGEMENT FORM

## Part 1

The Fruit Fly Induction and Training Manual presented by Biosecurity S.A. - Plant Health Operations training is designed to provide information about Fruit Fly Eradication and to guide and assist you to properly and safely perform your duties. Use this manual for reference during the eradication program. If you are unsure of any procedure or have any questions please refer to your Team Leader, the Standard Operating Procedures (SOP's) indicated, or don't hesitate to ask an Inspector assigned to the program.

Inductee's Name:

Phone Number:

**I hereby certify that I have:**

1. Received vocational training in regards to the Plant Health Operations Fruit Fly Eradication Program.
2. Received a copy of the Plant Health Operations Fruit Fly Eradication Program Training Manual.
3. Received a copy of the Plant Health Operations Standard Operating Procedures and Safety Data Sheets (SDS's) needed to undertake the tasks involved in the current Fruit Fly Eradication Program.
4. Received training and information regarding Biosecurity S.A. Work Health Safety issues.
5. Received training and information regarding Biosecurity S.A. protocols and procedures.
6. Received training and information regarding Biosecurity S.A. code of ethics protocols and procedures.
7. Received and read the APVMA Permit for Naturalure®.

**I agree to abide by all the procedures stated therein:**

Inductee's Signature: ..... Date: ...../...../20.....

### Administration Use Only

Received by: .....

Manager, Plant Health Operations or Delegate: .....

Date: ...../...../20.....



# PLANT HEALTH OPERATIONS OUTBREAK TRAINING ACKNOWLEDGEMENT FORM

## Part 2

The Fruit Fly Induction and Training Manual presented by Biosecurity S.A. - Plant Health Operations training is designed to provide information about Fruit Fly Eradication and to guide and assist you to properly and safely perform your duties. Use this manual for reference during the eradication program. If you are unsure of any procedure or have any questions please refer to your Team Leader, the Standard Operating Procedures (SOP's) indicated, or don't hesitate to ask an Inspector assigned to the program.

Inductee's Name:
Phone Number:

**I hereby certify that I have:**

8. Received a site induction specific for the site I am working.
9. Received Personal Protective Equipment (PPE) that I will need to safely fulfil my role whilst working on the current Fruit Fly Eradication Program.
10. Been shown where the EMERGENCY RESPONSE PLANS are located for my site.

**I agree to abide by all the procedures stated therein:**

Inductee's Signature: ..... Date: ...../...../20.....
<b>Administration Use Only</b>
Received by: .....
Manager, Plant Health Operations or Delegate: .....
Date: ...../...../20.....

