Product Name: Vayego 200 SC Insecticide

APVMA Approval No: 86756/133671



Label Name:	Vayego 200 SC Insecticide
Signal Headings:	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	200 g/L TETRANILIPROLE
Mode of Action:	GROUP 28 INSECTICIDE
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Statement of Claims:	For the control of various pests in various crops as specified in the DIRECTIONS FOR USE table
Net Contents:	1L - 110L
Restraints:	This section contains file attachment.
Directions for Use:	This section contains file attachment.
Other Limitations:	
Withholding Periods:	WITHHOLDING PERIODS Harvest (H)

Sweet corn: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION

DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION

Mangoes, stone fruit: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION Pome fruit, table grapes: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION Almonds and macadamias: DO NOT HARVEST FOR 10 DAYS AFTER APPLICATION Maize:

Grazing (G)

Orchards: DO NOT GRAZE TREATED ORCHARD Vineyard: DO NOT GRAZE TREATED VINEYARD

Sweet corn: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 1 DAY AFTER

APPLICATION

Maize: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER

APPLICATION

#### Trade Advice:

# EXPORT SLAUGHTER INTERVAL (ESI) - 7 DAYS

Livestock that has been grazed on or fed treated crops should be placed on clean feed for 7 days prior to slaughter.

# **EXPORT OF TREATED PRODUCE**

Growers should note that MRLs or import tolerances may not exist in all markets for edible produce treated with Vayego 200 SC Insecticide. If you are growing edible produce for export, please check with Bayer Crop Science for the latest information on MRLs and import tolerances before using Vayego 200 SC.

### General Instructions:

### **GENERAL INSTRUCTIONS**

# Mixing

Shake the container well before using. Partially fill the spray tank with clean water and add the required volume of product to the water whilst agitating. Where recommended, add non-ionic surfactant, then top up the tank with clean water to the required volume. Vayego 200 SC should be agitated constantly before and during application and applied as soon as possible after mixing.

# Application

Dilute spraying – all crops except maize and sweet corn

- Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.
- Add the amount of product specified in the Directions for Use table for each 100 L of water up to a maximum of 300 mL Vayego per hectare in a single application. Spray to the point of run-off.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate spraying - table grapes, macadamias, mangoes, pome fruit, stone fruit

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen spray volume.
- Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way: Example only
- 1. Dilute spray volume as determined above: For example 1500 L/ha
- 2. Your chosen concentrate spray volume: For example 750 L/ha
- 3. The concentration factor in this example is 2X (i.e.  $1500 L \div 750 L = 2$ )
- 4. If the dilute label rate is 10 mL/100 L, then the concentrate rate becomes  $2 \times 10$ , which is 20 mL/ 100 L of concentrate spray.
- The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.

- Do not use at a concentration factor greater than 2X (e.g. at a rate higher than 25 mL/ 100 L where a dilute spraying rate of 12.5 mL/ 100 L is specified), unless indicated otherwise in the Critical Comments section under Directions for Use.
- Note that the concentration mixing rate is applicable only to Vayego. The adjuvant remains unchanged (i.e. no concentration factor applies).
- For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry best practice.

### Maize and sweet corn

Thorough coverage of the target area is essential. Apply in a minimum spray volume of 100 L/ha. Adjust water volumes according to the crop growth stage. Use suitable application parameters (nozzles, pressure, boom height, speed, etc.) to ensure thorough and even coverage. Use only nozzles capable of delivering COARSE or VERY COARSE spray quality droplets.

Sweet corn: Where a standard "over the top" boom spray is used, the use of droppers will help improve spray coverage to the target area i.e. silks and cobs.

#### COMPATIBILITY

For the latest compatibility recommendations contact the Bayer Crop Science Technical Information Line 1800 804 479 or your local Bayer Crop Science representative.

# Resistance Warning:

# INSECTICIDE RESISTANCE WARNING GROUP 28 INSECTICIDE

For insecticide resistance management Vayego 200 SC Insecticide is a Group 28 insecticide.

Some naturally occurring insect biotypes resistant to Vayego 200 SC and other Group 28 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Vayego 200 SC or other Group 28 insecticides are used repeatedly. The effectiveness of Vayego 200 SC on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Vayego 200 SC to control resistant insects.

# Resistance management strategy

Vayego 200 SC may be subject to specific resistance management strategies. For further information contact your local supplier, Bayer Crop Science representative, local agricultural department agronomist or visit www.croplife.org.au.

Precautions:		

# Protections:

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with the product or used containers.

### PROTECTION OF HONEY BEES AND OTHER INSECT POLLINATORS

Table grapes, maize and sweet corn: Following pre-flowering application ensure bees have adequate food sources other than the treated crop or remove bees to prevent foraging in the treated area.

All other crops: DO NOT apply to crops pre-bloom or from the onset of flowering until flowering is complete.

Highly toxic to bees. Tetraniliprole has a systemic action. DO NOT allow spray drift to flowering weeds or flowering crops in the vicinity of the treatment area. Before spraying, notify beekeepers to move hives to a safe location with an untreated source of nectar and pollen, if there is potential for managed hives to be affected by the spray or spray drift. Risk to bees is reduced by spraying in early morning or late evening while bees are not foraging.

# Storage and Disposal:

# STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

(Drummuster/not re-usable containers)

Triple rinse container before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. 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. Do not re-use empty container for any other purpose.

(Schutz/returnable/re-usable containers)

If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty container by pumping through dry-break connection system. Do not attempt to breach the valve system or the filling point, or contaminate the container with water or other products. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed and drained after each use. When empty, or contents no longer required, return the container to the point of purchase. This container remains the property of Bayer CropScience Pty Ltd. Do not re-use empty container for any other purpose.

# Safety Directions:

# SAFETY DIRECTIONS

Keep out of reach of children. When opening the container, mixing and loading and using the prepared spray, wear cotton overalls (or equivalent clothing) buttoned to the neck and wrists and elbow-length chemical resistant gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

First Aid Instructions:

FIRST AID

First aid is not generally required. If in doubt, contact a Poisons Information Centre (phone Australia 13 11 26) or a doctor.

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#### **RESTRAINTS**

**DO NOT** apply by aircraft.

**DO NOT** apply if heavy rains or storms are forecast within 3 days.

**DO NOT** irrigate to the point of field runoff for at least 3 days after application.

**DO NOT** apply in the Fitzroy region where vineyards contain a bare soil interrow.

# **SPRAY DRIFT RESTRAINTS**

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

**DO NOT** allow bystanders to come into contact with the spray cloud.

**DO NOT** apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

**DO NOT** apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

**DO NOT** apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

# **Boom sprayers**

**DO NOT** apply by a boom sprayer unless the following requirements are met:

- spray droplets not smaller than a COARSE spray droplet size category
- minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer zones for boom sprayers

	Boom height above	Mandatory downwind buffer zones					
Application rate	the target canopy	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas	
Up to 200	0.5 m or lower	0 m	0 m	0 m	0 m	0 m	
mL/ha	1.0 m or lower	0 m	25 m	0 m	0 m	10 m	

# Vertical sprayers

**DO NOT** apply by a vertical sprayer unless the following requirements are met:

- spray is not directed above the target canopy
- the outside of the sprayer is turned off when turning at the end of rows and when spraying the outer row on each side of the application site
- for dilute water rates up to the maximum listed for each type of canopy specified, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for vertical sprayers') are observed.

# **Buffer zones for vertical sprayers**

	Mandatory downwind buffer zones					
Type of target canopy and dilute water rate	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas	
Tree and Vine crops - 2 metres tall and shorter, maximum dilute water rate of 1000 L/ha	0 m	5 m	0 m	0 m	0 m	
Vine crops – taller than 2 metres, maximum application rate of 300 mL/ha	0 m	15 m	0 m	0 m	0 m	
Tree crops - taller than 2 metres (not fully-foliated), maximum dilute water rate of 3000 L/ha	0 m	25 m	0 m	0 m	10 m	
Tree crops - taller than 2 metres (fully-foliated), maximum dilute water rate of 3000 L/ha	0 m	15 m	0 m	0 m	5 m	

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Almonds	Carpophilus beetles (incl. Carpophilus near dimidiatus)	12.5 mL/ 100 L	H 10 days	Monitor orchards before and during hull split for the presence of carpophilus beetles. If numbers have the potential to cause economic loss, apply at early to mid-hull split to control carpophilus beetles present in the orchard.
				Apply a maximum of two applications per crop with the second application 14 - 21 days later if there is a continual influx of carpophilus beetles from surrounding areas. Kernel damage can still occur if carpophilus beetles enter the orchard just prior to harvest, when the shell is open, and feed directly on the kernel.  Ensure thorough coverage of the target crop as thorough coverage of all hulls is essential – refer 'Application' section in GENERAL INSTRUCTIONS. Concentrate spraying for this pest is not appropriate. A non-ionic wetter should be added at label rates.  Do not apply more than 300 mL of Vayego per hectare in a single application.  Vayego should form part of an integrated program to manage carpophilus beetle populations with a focus on orchard hygiene.
	Carob moth (Ectomyelois ceratoniae)			Ist generation pest control Monitor carob moth activity during spring (after flowering). If pest numbers exceed thresholds, a late spring application (Oct - Nov) will provide control of eggs and larvae present in mummy nuts, reducing carob moth numbers in the orchard prior to hull split.  2nd generation pest control Apply Vayego at early hull split (typically 1 - 5% hull split) to provide control over the main egg laying period. Ensure thorough coverage of the target crop as thorough coverage of all hulls is essential – refer 'Application' section in GENERAL INSTRUCTIONS. Concentrate spraying for this pest is not appropriate. A non-ionic wetter should be added at label rates.  Do not apply more than two applications per season in each crop. Do not apply more than 300 mL of Vayego per hectare in a single application.
Table grapes only	Light brown apple moth (Epiphyas postvittana syn Tortrix postvittana), grapevine moth (Phalaenoides glycinae)	7.5 mL/100 L	7 days	Light brown apple moth  Monitor for light brown apple moth activity. Apply at 140 day degrees after biofix (first flight) to control the new generation.  Grapevine moth Apply when local grapevine moth economic thresholds have been reached (1st or 2nd instar larvae).
	Weevils e.g. apple weevil (Otiorhynchus cribricollis), Fuller's rose weevil (Asynonychus cervinus), garden weevil (Phlyctinus callosus)	10 mL/100 L		Weevils Once weevil activity is observed in the canopy and local thresholds have been met, apply a single application ensuring thorough coverage. If weevil emergence extends over a significant timeframe, a second application may be required.  Mediterranean fruit fly Commence applications when monitoring indicates fruit fly activity and fruit are vulnerable to damage (e.g. fruit ripening) in the lead up to harvest. Apply a second

	Mediterranean fruit fly (Ceratitis capitata)	12.5 mL/100 L		application 7 - 10 days later. The addition of a non-ionic wetter at label rates may provide an increase in control.  General  Do not apply more than two applications per season in each crop. Do not apply more than 300 mL of Vayego per hectare in a single application. To ensure safety to honeybees, do not apply during flowering. Apply up to 7 days before flowering and/or post-flowering.  Do not apply at greater than 3X concentration.
Macadamias	Sigastus weevil (macadamia seed weevil, Kuschelorhynchus macadamiae)	12.5 mL/ 100 L	H 10 days	Monitor the weevil population and commence applications when weevils are active and after petal fall. Apply with a 14 - 28 day interval between applications as required until shell hardening. Do not apply more than three applications per season in each crop. Apply as a dilute application ensuring thorough and uniform spray coverage of foliage and branches – refer 'Application' section in GENERAL INSTRUCTIONS. Do not apply more than 300 mL of Vayego per hectare in a single application.  The addition of a non-ionic wetter e.g. Agral 600 added at 10 mL/100 L of spray solution, may improve control.  Vayego should be used as part of an integrated pest management approach which should include the use of other measures for control of sigastus weevil.
Mangoes	Mango seed weevil (Sternochetus mangiferae)	10 mL/ 100 L	H 3 days	Monitor the weevil population and commence applications when weevils are active in the canopy. Ideally apply early post flowering to control weevil feeding on the fresh foliage flush and protect young fruit from mango seed weevil. Applications must occur prior to fruit becoming susceptible to weevil egg lay which generally occurs when fruit reach 30 mm in diameter.  Do not apply before or during flowering.  A follow up application at a 21 - 28 day interval may be required under high or repeat pest pressure situations or in situations where crop tolerance to weevils damage is low.  Apply as a dilute application ensuring thorough and uniform spray coverage of foliage and branches – refer 'Application' section in GENERAL INSTRUCTIONS.  Do not apply more than two applications of Vayego per season in each crop. Do not apply more than 300 mL of Vayego per hectare in a single application.  Vayego 200 SC should be used as part of an integrated pest management approach which should include the use of other measures for control of mango seed weevil.
Maize, sweet corn	Fall armyworm (Spodoptera frugiperda)	200 mL/ha	Maize H & G 14 days  Sweet corn H & G 1 day	Monitor crops from emergence. Commence applications when monitoring indicates the presence of fall armyworm eggs or larvae from two leaf stage onwards. Target sprays against eggs and newly hatched larvae before they become established. Apply a maximum of three sprays with 5 - 7 day intervals between applications.  Ensure thorough coverage of the target crop – refer 'Application' section in GENERAL INSTRUCTIONS.  Only apply up to the V15 stage (when 15th leaf collar is visible), or after pollen shed (around 1 week after tassel is fully emerged).  Note: This use is subject to a CropLife resistance management strategy. Refer to www.croplife.org.au for more information.

Pome fruit	Codling moth (Carpocapsa pomonella syn Cydia pomonella), light brown apple moth (Epiphyas postvittana syn Tortrix postvittana)	10 mL/ 100 L	H 7 days	Apply with 14 - 21 day intervals between each application. Do not apply more than three applications per season in each crop.  Commence no earlier than post petal fall (or 110 degree days for codling moth or 140 degree days for light brown apple moth as detected in pheromone traps but after petal fall) until late December.  Ensure thorough coverage of the target crop – refer 'Application' section in GENERAL INSTRUCTIONS.  Do not apply more than 300 mL of Vayego per hectare in a single application.  Further treatments should be made with alternate mode-of-action insecticides.
Pome fruit, stone fruit	Weevils e.g. apple weevil (Otiorhynchus cribricollis), Fuller's rose weevil (Asynonychus cervinus), garden weevil (Phlyctinus callosus)	10 mL/ 100 L	Pome fruit H 7 days Stone fruit H 3 days	Monitor the orchards in early spring and commence applications no earlier than post petal fall when weevils begin to emerge. Apply a second application 14 days later if required.  Ensure thorough coverage of the target crop – refer 'Application' section in GENERAL INSTRUCTIONS.  Do not apply more than 300 mL of Vayego per hectare in a single application. Do not apply more than three applications per season in each crop.
Stone fruit	Dried fruit beetles (Carpophilus spp.) – suppression only, Oriental fruit moth (Laspeyresia molesta syn Grapholita molesta)  Mediterranean fruit fly (Ceratitis capitata)	10 mL/ 100 L 12.5 mL/ 100 L	H 3 days	Oriental fruit moth Commence applications post petal fall, when predictive models from local monitoring agencies indicate egg hatch of a generational peak. Apply with 14 - 21 day intervals between applications.  Dried fruit beetles – suppression only Monitor stone fruit orchards for beetles as fruit approaches maturity and become susceptible to attack. Commence application before beetle populations reach damaging levels and re-apply treatments if necessary at an interval of 10 - 14 days.  Mediterranean fruit fly Commence applications when monitoring indicates fruit fly activity and fruit are vulnerable to damage (e.g. fruit ripening). Apply with 10 day intervals between applications. Vayego applications should form part of an integrated fruit fly management program including baiting, trapping and a focus on orchard hygiene.  General Do not apply more than three applications per season in each crop. Ensure thorough coverage of the target crop – refer 'Application' section in GENERAL INSTRUCTIONS. Do not apply more than 300 mL of Vayego per hectare in a single application.

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