



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

**PERMIT TO ALLOW MINOR USE OF A REGISTERED AGVET CHEMICAL
PRODUCT FOR CONTROL OF DIPTERA IN (NON-FOOD)
NURSERY STOCK, INCLUDING SEEDLINGS, TUBES, PLUGS, POTTED COLOUR,
TREES, SHRUBS, FOLIAGE PLANTS, PALMS, GRASSES, FRUIT PLANTS, CUT
FLOWERS* AND ORNAMENTALS**

PERMIT NUMBER – PER91811

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 29 MARCH 2022 TO 31 MARCH 2027

Permit Holder:

GREENLIFE INDUSTRY AUSTRALIA LIMITED
c/- AGAWARE CONSULTING PTY LTD
21 Rosella Avenue
STRATHFIELDSAYE VIC 3551

Persons who can use the product under this permit:

Persons generally.

CONDITIONS OF USE

Products to be used:

VECTOBAC WG BIOLOGICAL LARVICIDE WATER DISPERSIBLE GRANULE
(APVMA No. 52642)
PLUS OTHER REGISTERED PRODUCTS
Containing: 3000 ITU/mg BACILLUS THURINGIENSIS SUBSP. ISRAELENSIS strain
AM65-52 as the only active constituent.

BENEVIA INSECTICIDE (APVMA No. 66684)
PLUS OTHER REGISTERED PRODUCTS
Containing: 100 g/L CYANTRANILIPROLE as the only active constituent.

TEPPAN 50SL INSECTICIDE (APVMA No. 68689)
PLUS OTHER REGISTERED PRODUCTS
Containing: 50 g/L CYCLANILIPROLE as the only active constituent.

DIPTEX 150 WP INSECT GROWTH REGULATOR (APVMA No. 67871)
PLUS OTHER REGISTERED PRODUCTS
Containing: 150 g/kg CYROMAZINE as the only active constituent.

SUCCESS NEO JEMVELVA ACTIVE INSECTICIDE (APVMA No. 64109)
PLUS OTHER REGISTERED PRODUCTS
Containing: 120 g/L SPINETORAM as the only active constituent.

Directions for Use:

Refer to the *Application Rates*, *Critical Use Comments* and *Additional Conditions* listed in **Table 1** below.

Withholding Period:

DO NOT use on plants grown for human or animal consumption.

Jurisdiction:

All States and Territories, except VIC.

Note: Victoria is not included in this permit, as their Control-of-Use legislation means a permit is not required to legalise this off-label use in that State.

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.

To Avoid Crop Damage

Nursery stock is not known to be sensitive to the chemical insecticide products listed in this permit when used in strict accordance with the rate, conditions of use and other warnings.

However, the large number of disparate crop lines produced in commercial production nurseries means that not all these products have been fully evaluated for crop safety on all species, or in all situations where treatment may be undertaken. Some of these insecticides may demonstrate toxicity under certain situations, application methods, application rates and weather conditions to susceptible nursery stock. Some insecticides may also leave undesirable spray residue on foliage and flowers.

If unsure of crop tolerance, users must treat a sample number of plants or a small area prior to whole crop treatment and monitor any phytotoxic effects that will compromise production goals. This action cannot guarantee crop safety as application, environmental and crop conditions may vary from test treatment to whole of crop treatment. Any instances of phytotoxic damage should be reported immediately to the permit holder.

Resistance Management

Use insecticide products in accordance with existing *Insecticide Resistance Management Strategies* and in accordance with best practice. Insecticide products should be used as part of an integrated pest management program, which incorporates as many control options as possible to minimise pest pressure. It is important that approved insecticide products are rotated between different chemical mode of action (MoA) groups at regular intervals within a structured disease management plan.

Insecticide Resistance Management Strategies have been developed by CropLife Australia. An updated version of these strategies is available from CropLife Australia's website at: <http://www.croplife.org.au/industry-stewardship/resistance-management> or search on-line for Resistance Management CropLife Australia.

Issued by the Australian Pesticides and Veterinary Medicines Authority

* Includes wildflower crops. Refer to Wildflower crops list in Appendix 1.

DIRECTIONS FOR USE:

Table 1: Diptera control in nursery stock (non-food) and ornamentals

Including (non-food) – seedlings, tubes, potted colour, trees, shrubs, foliage plants, palms, grasses, fruit plants (non-bearing), cut flowers* and ornamentals.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Fungus gnats (Sciaroidea)	<i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> Strain AM65-52 (11)	Ornamentals Including potted plants 100-200 g/100 L	<ul style="list-style-type: none"> •This product is a larvicide and will not control adult gnats. Application must be timed for stage of development when larvae are present in the soil. •Apply by soil drench or spray application to sufficiently wet the soil or growing media to a depth of 3-4 cm or deeper if gnats are present. Re-apply as needed. •For existing infestations, make 3 weekly applications at the higher rate. Apply regular follow-up applications with the lower rate to establish a long term maintenance program. •Avoid continuous agitation of the spray mixture during spraying. 	DO NOT allow diluted spray to remain in the tank for more than 72 hours.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
<p>Larvae of: Leafminer flies (Agromyzidae) and Sciarid flies (Sciaridae)</p> <p>Including: Fungus gnats (Sciaroidea) and Shore flies (Ephydriidae)</p>	<p>150 g/kg cyromazine (17)</p>	<p><u>Addition to potting substrate</u> 333 g product in a minimum of 20 L water to 10 tonnes potting mix</p> <p><u>Foliar application or drench to all surfaces</u> 950 g/ha OR 95 g/100 L applied in 1000 L/ha spray solution</p>	<p><u>Addition to potting substrate</u></p> <ul style="list-style-type: none"> •Follow all label recommendations and restrictions. •Apply in a minimum of 20 L water to 10 tonnes potting mix. •Ensure thorough mixing into potting substrate prior to use. <p><u>Foliar application or drench to all surfaces</u></p> <ul style="list-style-type: none"> •Follow all label recommendations and restrictions. •Apply at first signs of pests being present. •Apply in a minimum of 1,000 L water per hectare (or to the point of run-off). •Ensure thorough coverage of all plant surfaces and the soil surface. •Apply a maximum of 6 foliar application per crop, with a minimum re-treatment interval of 7 days between consecutive applications. •DO NOT apply foliar spray within 7 days of a scheduled shipment. 	<p>DO NOT use on vegetable seedling crops.</p> <p>DO NOT used on fruit trees that will bear fruit within 12 months of treatment.</p> <p>DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers downwind from the application area and within 15 metres.</p> <p>Toxic to beneficial arthropods. Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.</p> <p>Spent potting mix/ soil that has been treated must be carefully disposed of to avoid contamination of streams, rivers or waterways, or where it can damage sensitive vegetation. Cyromazine and its primary metabolite, melamine, are very toxic to aquatic life and are moderate to highly persistent in soil. It is recommended that spent potting mix/ soil be stored in a holding container and disposed of at an authorised waste disposal facility, or via a licensed waste disposal contractor. Alternative disposal methods must be in strict accordance with guidelines for managing disposal of spent agricultural chemicals, as regulated by the respective State or Territory Government department/agency. Seek expert advice prior to disposal in situations where spent chemical cannot be stored on-site and transported to an authorised waste disposal facility, or removed by a waste disposal contractor.</p>

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Leafminers (<i>Liriomyza</i> spp.) including Vegetable leafminer (<i>Liriomyza sativae</i>)	100 g/L cyantraniliprole (28)	50–75 mL/100L or 500–750 mL/ha	<ul style="list-style-type: none"> •Monitor crops and apply when pests are first detected. •Apply foliar treatments by ground based sprayer (hydraulic sprayer equipment, backpack sprayer or equivalent) •Use a spray volume adequate to ensure thorough coverage of all plant surfaces (300 – 1000 L/ha), near to the point of run off. •Apply at the lower rate for low to moderate infestations, and the higher rate for high pressure or heavier infestations. •DO NOT apply more than 2 applications per season. •Follow up treatments may be necessary to control new infestations 7-14 days after the first application. •DO NOT apply less than 7 days after the initial treatment. •Follow recommendations on individual product labels for spray adjuvants. 	
	100 g/kg cyromazine (17)	95 g/100 L or 950 g/ha		DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers downwind from the application area and within 15 metres. Toxic to beneficial arthropods. Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.
	120 g/L spinetoram (5)	40 mL/100 L or 400 mL/ha		Comply with all Spray Drift Restraints on the product label.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Leafminers (<i>Liriomyza</i> spp.)	50 g/L cyclaniliprole (28)	120-200 mL/100 L	<ul style="list-style-type: none"> • Monitor crops and commence application when pests are first detected. Targeting the younger insect growth stages (e.g. nymphs/crawlers) will be most efficacious. • Apply as a foliar application by hydraulic spray equipment, backpack sprayer, or equivalent. • Use a spray volume sufficient to ensure thorough coverage of all plant surfaces. • Apply spray mixture near to the point of run-off to ensure thorough coverage of all plant surfaces. • DO NOT apply more than 2 applications per crop. • DO NOT apply less than 10 days after the initial treatment. • The addition of a non-ionic wetter (eg. Agral at 10 mL/100 L or Activator 90 at 50 mL/100 L) will assist with coverage and improve efficacy on sucking pest. • Follow the insecticide resistance warning and restraints on the product label. • Apply a maximum of 3 applications of any Group 28 insecticides to the crop. 	<p>Comply with <i>Spray drift restraints for use of Cyclaniliprole listed below</i></p> <p>DO NOT apply by a boom sprayer. DO NOT apply if heavy rains or storms are forecast within 3 days. DO NOT irrigate to the point of runoff for at least 3 days after application.</p> <p>Integrated Pest Management Toxic to beneficial arthropods. Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.</p> <p>Protection of Wildlife, Fish, Crustaceans and Environment Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.</p> <p>Protection of Honey Bees and Other Insect Pollinators Toxic to bees. Harmful to bee brood. DO NOT apply to crops from the onset of flowering until flowering is complete. 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.</p>

Spray drift restraints for use of Cyclaniliprole

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 table 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 three 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.

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 are observed (see the following table titled 'Buffer zones for vertical sprayers').

Buffer zones for vertical sprayers

Type of target canopy and dilute water rate	Mandatory downwind buffer zones
	Natural aquatic areas
2 metres tall and shorter, maximum dilute water rate of 1200 L/ha	10 metres
Taller than 2 metres (not fully-foliated), maximum dilute water rate of 1200 L/ha	20 metres
Taller than 2 metres (fully-foliated), maximum dilute water rate of 1200 L/ha	15 metres

Appendix 1

Wildflower crops

Banksia species (*Banksia* spp.) - cultivars and hybrids

Berzelia or button brush (*Berzelia* spp.)

Black kangaroo paw species (*Macropidia* spp.) - cultivars and hybrids

Christmas bells (*Blandfordia grandiflora*)

Christmas bush (*Ceratopetalum gummiferum*)

Geraldton wax, Waxflower species (*Chamelaucium* spp.) - cultivars and hybrids

Kangaroo paw species (*Anigozanthos* spp.) - cultivars and hybrids

Leucadendron species - cultivars and hybrids

Leucospermum species (*Leucospermum* spp.) - cultivars and hybrids (pincushions)

Protea species (*Protea* spp.) - cultivars and hybrids

Riceflower (*Ozothamnus diosmifolius*)

Waratah species (*Telopea speciosissima*) - cultivars and hybrids