Australian Government
Australian Pesticides and Veterinary Medicines Authority

PERMIT TO ALLOW MINOR USE OF A REGISTERED AGVET CHEMICAL PRODUCT FOR CONTROL OF THYSANOPTERA 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 – PER91929

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 19 MAY 2022 TO 31 MAY 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:

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

Flonicamid:
MAINMAN 500 WG INSECTICIDE (APVMA No. 66373)
PLUS OTHER REGISTERED PRODUCTS
Containing: 500 g/kg FLONICAMID as the only active constituent.

Petroleum Oil:
PESTOIL INSECT CONTROL SPRAY (APVMA No. 49266)
PLUS OTHER REGISTERED PRODUCTS
Containing: 839 g/L PETROLEUM OIL as the only active constituent.

SACOA SUMMER INSECTICIDAL SPRAY OIL (APVMA No. 54001)
PLUS OTHER REGISTERED PRODUCTS
Containing: 844 g/L PETROLEUM OIL as the only active constituent.

Pyrethrins:
PYGANIC ORGANIC INSECTICIDE (APVMA No. 59684)
PLUS OTHER REGISTERED PRODUCTS
Containing: 13 g/L PYRETHRINS as the only active constituent.

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

Spirotetramat:
MOVENTO 240 SC INSECTICIDE (APVMA No. 61864)
PLUS OTHER REGISTERED PRODUCTS
Containing: 240 g/L SPIROTETRAMAT 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.

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.

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

DIRECTIONS FOR USE:

Table 1: Thysanoptera 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
Thrips (Thysanoptera) including Western flower thrips (*Frankliniella occidentalis*)	500 g/kg **flonicamid** (9C)	10-20 g/100 L (*suppression*) Addition of adjuvant according to label rates.	•Apply as foliar spray at the first sign of insect pest infestation. •Apply in sufficient water to provide thorough and uniform coverage of the plant. •Use the higher rate under high pest pressure. •Maximum of 3 applications per year, with a minimum re-treatment interval of 14 days. •DO NOT apply this product while bees are foraging, spray early morning or late evening to reduce the risk to bees.	

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Thrips (Thysanoptera)	839 g/L **petroleum oil** 844 g/L **petroleum oil**	1-2 L/100 L	•Apply a maximum of 6 sprays with a 7-14 day re-treatment interval. •Apply as foliar spray using airblast sprayer or boom sprayer. •Apply in sufficient water to ensure complete and thorough coverage of foliage and/or crop. •Thrips which spend a majority of their life cycle protected from sprays are unlikely to be controlled.	Petroleum oil products have demonstrated phytotoxicity and undesirable commercial effects in nursery plant species. DO NOT tank mix with any other chemicals or fertilisers unless fully evaluated. DO NOT apply if temperature exceeds or is likely to exceed 32°C within 24 hours of treatment. DO NOT apply within one month prior to, or following a sulphur spray or other incompatible pesticide as listed on approved label. DO NOT apply to crops in weak, damaged or stressed conditions.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Greenhouse thrips (*Heliothrips haemorrhoidalis*)	13 g/L **pyrethrins** (3A)	150-200 mL/100 L	•For optimum performance, apply cover spray immediately following egg hatch to capture early nymphal stages. •Apply by a ground-based sprayer (hydraulic spray equipment or equivalent). •Thorough coverage of foliage is essential for optimum performance. •DO NOT apply more than 4 applications per crop. Consecutive treatments should be applied 7 to 10 days apart. •DO NOT apply more than 5 spray applications of pyrethrins within an annual nursery production cycle. •Pyrethrins provide no residual control, but are useful in an IPM program where other control methods are in place. •Pyrethrins have broad range insecticidal activity and will kill beneficial insects when present.	DO NOT apply spray if rainfall is imminent, or spray conditions are unfavourable.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Thrips including Melon thrips (*Thrips palmi*) and Plague thrips (*Thrips imagines*)	120 g/L **spinetoram** (5)	40 mL/100 L OR 400 mL/ha	•Use a spray adjuvants at recommended rates. •Monitor crops and commence application when pest are first detected. Follow up treatment may be necessary to control new infestations 7 to 14 days later. •Apply as a foliar spray using ground based sprayer (hydraulic spray equipment, backpack sprayer or equivalent). •DO NOT apply more than 2 applications per crop per year with a minimum re- treatment interval of 7 days. •Use sufficient water to ensure coverage of all plant surfaces. •DO NOT apply this product while bees are foraging in the crop to be treated.	Spinetoram should not be used on vegetable or herb seedlings in a production nursery system.
Thrips (Thysanoptera)	240 g/L **spirotetramat** (23)	**Foliar:** 20-40 mL/100 L plus spray adjuvant (as per label)	•Monitor crops and commence application when thresholds are reached. Use higher rates where rapid build-up or crop growth is observed. •DO NOT apply more than three (3) applications per crop per year. •DO NOT re-apply within 7 days of previous applications.	If applying by spraying equipment carried on the back of the user wear cotton overalls, over normal clothing, buttoned to the neck and wrist and chemical resistant gloves. Products containing spirotetramat have demonstrated phytotoxicity and undesirable commercial effects in some plant species. The addition of surfactant may contribute to those effects.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Thrips (Thysanoptera) including Western flower thrips (*Frankliniella occidentalis*)	50 g/L **cyclaniliprole** (28)	120-200 mL /100 L (*suppression*)	•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 methylated seed oil (eg. Banjo or Hasten at 200 mL/100 L up to 1 L/ha) will assist with the control of thrips. •Apply a maximum of 3 applications of any Group 28 insecticides to the crop.	Comply with *Spray drift restraints for use of Cyclaniliprole listed below* 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. **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. **Protection of Wildlife, Fish, Crustaceans and Environment** Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers. **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.

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