



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

**PERMIT TO ALLOW MINOR USE OF A REGISTERED AGVET CHEMICAL
PRODUCT FOR CONTROL OF VARIOUS INSECT PESTS 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 – PER91806

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 10 NOVEMBER 2022 TO 30 NOVEMBER 2026

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:

PEGASUS MITICIDE/INSECTICIDE (APVMA No. 45252)

HIGRAN TURF MITICIDE (APVMA No. 68340)

PLUS OTHER REGISTERED PRODUCTS

Containing: 500 g/L DIAFENTHIURON as the only active constituent.

AVATAR INSECTICIDE (APVMA No. 52546)

PLUS OTHER REGISTERED PRODUCTS

Containing: 300 g/kg INDOXACARB as the only active constituent.

PROVAUNT TURF INSECTICIDE (APVMA No. 85434)

PLUS OTHER REGISTERED PRODUCTS

Containing: 200 g/kg INDOXACARB (S:R 3:1) as the only active constituent.

RESTRAINTS (diafenthiuron products):

DO NOT apply if rainfall is expected within 6 hours of application.

DO NOT apply through any type of irrigation system or ultra-low volume spray system.

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

DO NOT apply by aircraft.

DO NOT apply by boomspray or airblast unless the following mandatory buffer zones are observed:

Boom sprayer application

Application rate	Boom height	Bystander buffer zone (metres)	
		Spray droplet size	
		COARSE	MEDIUM
Up to max label rate	0.5 metre or lower	NR*	NR*
	1 m or lower	8	18
600 mL/ha or lower	0.5 metre or lower	NR*	NR*
	1 m or lower	4	14

*NR= not required

Vertical sprayer application

<i>Crop use pattern</i>	Vertical sprayer-canopies smaller than 2 metres	Vertical sprayer-canopies taller than 2 metres (non-foliated)	Vertical sprayer-canopies taller than 2 metres (fully foliated)
All other crops	NR*	16	6

*NR= not required

RESTRAINTS (indoxacarb products):

DO NOT apply if rainfall is expected within 2 hours of application or if heavy rains or storms are forecast within 3 days.

DO NOT apply within 20 m upwind of water bodies.

DO NOT apply less than 80 m upwind of land potentially producing feed for livestock. If the wind direction is at an angle with regard to the field then the in-field buffer must be observed on both upwind sides of the feed producing land.

Directions for Use:**Table 1: Diafenthiuron pest control in nursery stock (non-food) and ornamentals**

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

Pest	Product (MoA)	Rate
Aphids (Aphidae)	500 g/L diafenthiuron (12A)	60-80 mL/100 L
Mites (Arachnida)		
Whitefly (Aleyrodidae)		

Critical Use Comments (diafenthiuron):

- Apply at first sign of pest infestation before damage occurs.
- Apply using knapsack sprayer, or airblast, boom sprayer or powered head held sprayer to the point of runoff, ensuring complete coverage. Spray in sufficient volume to provide adequate penetration and coverage, without excessive run-off onto ground.
- DO NOT apply more than 2 applications per crop.
- DO NOT reapply to the same crop within 6 weeks or as a consecutive treatment.
- DO NOT apply if rainfall is expected within 6 hours of application.
- DO NOT apply through any type of irrigation system or ultra-low volume spray system.

Safety directions for use of 500 g/L diafenthiuron products

Harmful if swallowed or inhaled. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves, washable hat and disposable mist facemask covering mouth and nose. When using the prepared spray by hand-held equipment, wear cotton overalls over normal clothing, buttoned to the neck and wrist and elbow-length chemical resistant gloves, disposable mist face mask covering mouth and nose. Wash hands after use. After each day's use wash gloves and contaminated clothing.

Re-entry

DO NOT enter treated areas until the spray has dried unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

DO NOT undertake Irrigation (handset) for 12 days, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be washed after each day's use.

Table 2: Indoxacarb pest control in nursery stock (non-food) and ornamentals

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

Pest	Product (MoA)	Rate	Critical Use Comments
European earwigs <i>(Forficula auricularia)</i> (SUPPRESSION ONLY)	300 g/kg indoxacarb (22A)	17 g/100 L or 170 g/ha	Only apply treatments if damage is likely to occur. DO NOT retreat within 10 days.
Heliothis <i>(Helicoverpa spp.)</i>			Target sprays against eggs and newly hatched larvae before they become entrenched. A maximum of 3 applications of indoxacarb is to be applied at 10 day intervals to each crop. Further treatments should be made with alternative mode of action insecticides (non-group 22A).
Lightbrown apple moth <i>(Epiphyas postvittana)</i>			Applications to be timed for egg hatch. A maximum of 3 applications of indoxacarb is to be applied at 10 day intervals to each crop.
Weevils (Curculionidae)			Apply a maximum of 2 applications per season. Do not retreat within 10 days.
Fall Armyworm <i>(Spodoptera frugiperda)</i>	300 g/kg indoxacarb (22A)	17-25 g/100 L or 170-250 g/ha	Apply as egg and larvae reach threshold numbers. Apply a maximum 3 sprays per crop at minimum 7 day intervals. Further treatments should be made with alternative mode of action insecticides.
Leafminers <i>(Liriomyza spp.)</i>			Monitor crops and apply when pests are first detected. Apply a maximum 3 sprays per crop at minimum 7 day intervals. Further treatments should be made with alternative mode of action insecticides.

<p>Fall Armyworm <i>(Spodoptera frugiperda)</i></p>	<p>200 g/kg indoxacarb (22A)</p>	<p>37.5 g/100 L or 375 g/ha Soil treatment only.</p>	<p>DO NOT retreat within 10 days. To ensure optimum control, delay watering (irrigation) for 24 hours after application. DO NOT apply if rainfall is expected within 2 hours of application, or 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>
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Critical Use Comments (indoxacarb):

- 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.
- Follow recommendations on individual product labels for spray adjuvants.
- DO NOT apply if rainfall is expected within 2 hours of application.
- DO NOT apply less than 80 m upwind of land potentially producing feed for livestock. If the wind direction is at an angle with regard to the field then the in-field buffer must be observed on both upwind sides of the feed producing land.
- DO NOT apply within 20 m upwind of water bodies.

Withholding Period (all products):

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.

The holder of the permit must notify the APVMA of new information, including relevant information in accordance with section 161 of the Schedule to the Agricultural and Veterinary Chemicals Code Act 1994, in accordance with the obligation imposed by that section.

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. Discontinue applications when any adverse symptoms post-treatment are observed. Any instances of phytotoxic damage should be reported immediately to the permit holder.

Further reference to specific known issues may also be made under Critical Use Comments to additional notes relating to Crop Safety and a potential risk of phytotoxicity. These notes are an important part of the Critical Use Conditions.

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 insect pest management program, which incorporates as many control options as possible to minimise insect 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 insect pests 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.

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