Australian Government
Australian Pesticides and Veterinary Medicines Authority

PERMIT TO ALLOW MINOR USE OF A REGISTERED AGVET CHEMICAL PRODUCT FOR CONTROL OF BASIDIOMYCETES DISEASES 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 – PER91752

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 21 FEBRUARY 2022 TO 28 FEBRUARY 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:

Azoxystrobin + tebuconazole:
QUALI-PRO EVOLUTION FUNGICIDE (APVMA No. 82231)
PLUS OTHER REGISTERED PRODUCTS
Containing: 120 g/L AZOXYSTROBIN + 200 g/L TEBUCONAZOLE as the only active constituents.

***Bacillus amyloliquefaciens*:**
SERIFEL BIOFUNGICIDE (APVMA No. 82600)
PLUS OTHER REGISTERED PRODUCTS
Containing: 110 g/kg (>5.5 x 10^{10} CFU/g) *BACILLUS AMYLOLIQUEFACIENS* strain MBI600 as the only active constituent.

Copper:
NUFARM CHAMP FLOWABLE 350 FUNGICIDE (APVMA No. 69154)
PLUS OTHER REGISTERED PRODUCTS
Containing: 350 g/L COPPER (CU) PRESENT AS CUPRIC HYDROXIDE as the only active constituent.

NUFARM CHAMP DRY PRILL WG FUNGICIDE (APVMA No. 53935)
PLUS OTHER REGISTERED PRODUCTS
Containing: 375 g/kg COPPER (CU) PRESENT AS CUPRIC HYDROXIDE as the only active constituent.

BLUE SHIELD DF COPPER FUNGICIDE (APVMA No. 46869)
PLUS OTHER REGISTERED PRODUCTS
Containing: 500 g/kg COPPER PRESENT AS COPPER HYDROXIDE as the only active constituent.

OXYDUL DF FUNGICIDE (APVMA No. 51820)
PLUS OTHER REGISTERED PRODUCTS
Containing: 500 g/kg COPPER PRESENT AS COPPER OXYCHLORIDE as the only active constituent.

Oxycarboxin:
PLANTVAX 750 WP SYSTEMIC FUNGICIDE (APVMA No. 56010)
PLUS OTHER REGISTERED PRODUCTS
Containing: 750 g/kg OXYCARBOXIN as the only active constituent.

Propiconazole:
TILT 250 EC SYSTEMIC FUNGICIDE (APVMA No. 30490)
PLUS OTHER REGISTERED PRODUCTS
Containing: 250 g/L PROPICONAZOLE as the only active constituent.

TILT 500 EC FUNGICIDE (APVMA No. 89226)
PLUS OTHER REGISTERED PRODUCTS
Containing: 500 g/L PROPICONAZOLE as the only active constituent.

***Streptomyces lydicus*:**
ACTINOVATE BIOFUNGICIDE (APVMA No. 64384)
PLUS OTHER REGISTERED PRODUCTS
Containing: 1x10^{7} cfu/g STREPTOMYCES LYDICUS strain WYEC108 as the only active constituent.

Thiophanate-methyl + etridiazole:
BANROT 80G BROAD SPECTRUM FUNGICIDE FOR ORNAMENTALS (APVMA No. 53163)
PLUS OTHER REGISTERED PRODUCTS
Containing: 50 g/kg THIOPHANATE-METHYL + 30 g/kg ETRIDIAZOLE as the only active constituents.

BANROT 400WP BROAD SPECTRUM FUNGICIDE FOR ORNAMENTALS (APVMA No. 52741)
PLUS OTHER REGISTERED PRODUCTS
Containing: 250 g/kg THIOPHANATE-METHYL + 150 g/kg ETRIDIAZOLE as the only active constituents.

Triforine:
SAPROL FUNGICIDE (APVMA No. 48090)
PLUS OTHER REGISTERED PRODUCTS
Containing: 190 g/L TRIFORINE as the only active constituent.

Directions for Use:
Refer to the ***Application Rates***, ***Critical Use Comments*** and ***Additional Conditions*** listed in the following tables:

Basidiomycetes
- Table 1: Rust (*Puccinia spp*.)
- Table 2: Soft rots (*Rhizoctonia spp*.)
- Table 3: Myrtle rust (*Uredo rangelii*)

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 fungicide 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 fungicide may demonstrate toxicity under certain situations, application methods, application rates and weather conditions to susceptible nursery stock. Some fungicides 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 fungicide products in accordance with existing *Fungicide Resistance Management Strategies* and in accordance with best practice. Fungicide products should be used as part of an integrated disease management program which incorporates as many control options as possible to minimise disease pressure. It is important that approved fungicide products are rotated between different chemical mode of action (MoA) groups at regular intervals within a structured disease management plan.

Fungicide 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 online 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: Rust 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.

Disease	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Rusts (*Puccinia* spp.	110 g/kg (>5.5 x 10^{10} CFU/g) ***Bacillus amyloliquefaciens*** strain MBI600	50-75 g/100 L SUPPRESSION ONLY	•Apply preventatively, prior to an infection period and development of disease only. Use a higher rate when high disease pressure is expected. •Apply using ground based spray equipment in an adequate spray volume to ensure thorough coverage of all plant surfaces. •Continue applications on a 3-14 day interval as required. •DO NOT apply more than 10 applications per crop. •This product is best applied as part of an integrated disease management program	DO NOT apply during rain or if rain is expected. DO NOT apply more than 10 applications per growing season. DO NOT apply more than 5kg/ha per growing season.

Table 2: Soft rot 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.

Disease	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Rhizoctonia rot (*Rhizoctonia* spp.)	120 g/L **azoxystrobin (11)** + 200 g/L **tebuconazole (3)**	2-3 L/ha or 200-300 mL/100 L	•Use preventatively. Commence applications when conditions favour disease development, prior to, or at the first symptoms of disease development. •Repeat application 21-28 days later, if necessary. •Use the higher rate and shorter intervals when conditions are favourable for disease development •Apply as a foliar spray using air-blast sprayer, air-shear sprayer, mister, hand lance sprayer, spray boom or equivalent. •Use sufficient water to ensure coverage of all plant surfaces. •DO NOT apply more than 2 applications per crop per year.	DO NOT apply using spraying equipment carried on the back of the user. Phytotoxic to certain apple varieties: DO NOT spray any apple varieties as crop damage may occur. If a registered or permitted Group 11 or 3 fungicide has been previously used for disease control in nursery stock, this product should not be used unless alternative fungicides from a different chemical group are used at least twice in between.
	110 g/kg (>5.5 x 10^{10} CFU/g) ***Bacillus amyloliquefaciens*** strain MBI600	50-75 g/100 L (Soil Drench) SUPPRESSION ONLY	•Apply preventatively, prior to an infection period and development of disease only. Use a higher rate when high disease pressure is expected. •Apply soil drench using calibrated drenching equipment to thoroughly soak soil through the root zone. •Continue applications on a 3-14 day interval as required. •DO NOT apply more than 10 applications per crop. •This product is best applied as part of an integrated disease management program	DO NOT apply during rain or if rain is expected. DO NOT apply more than 10 applications per growing season. DO NOT apply more than 5kg/ha per growing season.

Disease	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Rhizoctonia rot (*Rhizoctonia* spp.)	$1x10^7$ cfu/g ***Streptomyces lyricism*** strain WYEC108	20-85 g/100 L or 200-850 g/ha (Foliar Application) 45 g/100 L (Soil Drench) 10 g/1 kg seed (Seed Treatment) SUPPRESSION ONLY	•FOLIAR APPLICATION: Apply initial application prior to the onset of disease, and then as required. Apply in a spray volume of 1000L/ha. Apply via a ground based sprayer. Follow label instructions on the use of an adjuvant. •SOIL DRENCH: Apply initial application prior to planting, then as required. Apply to the area immediately surrounding the roots or seeds until the soil around the seed/root ball is saturated (without creating runoff). Minimum of 14 days between consecutive applications. •SEED TREATMENT: Apply through mist-type commercial seed treatment equipment, slurry or other compatible methods that provide complete coverage of treated seed •Follow the fungicide resistance warning and restraints on the approved label. •This product is best applied as part of an integrated disease management program. •DO NOT use this product if the disease is already present, as it will not be controlled.	DO NOT apply if a disease known to be cause by *Streptomyces* is present.

Disease	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Damping-off and root and stem rot diseases (*Rhizoctonia* spp.)	50 g/kg **thiophanate-methyl (1)** + 30 g/kg **etridiazole (14)** 250 g/kg **thiophanate-methyl (1)** + 150 g/kg **etridiazole (14)**	<u>Pre-plant soil mix additive</u> 300 g/m^3 60 g/m^3	•Apply in accordance with approved product label directions. •Preventative treatment only and needs to be applied as close to infections events as possible. •Apply using a commercial soil/potting mixer. •DO NOT apply more than 4 applications per crop, with a minimum treatment interval of 4-8 weeks. •Follow the fungicide resistance warning on the product label.	DO NOT use in the home garden Over-dosage may result in toxicity to sensitive plants. Do not continue treatment if the crop adversely reacts to the fungicide.
	50 g/kg **thiophanate-methyl (1)** + 30 g/kg **etridiazole (14)** 250 g/kg **thiophanate-methyl (1)** + 150 g/kg **etridiazole (14)**	<u>Post-plant broadcast or pre-plant treatment</u> 2-4 kg/100 m^2 400-800 g/100 m^2	•Apply in accordance with approved product label directions. •Apply using calibrated soil drench equipment. •DO NOT apply more than 4 applications per crop, with a minimum treatment interval of 4-8 weeks. •Use the lower rate when lower disease pressure is expected and the higher rate for higher disease pressure. •Follow the fungicide resistance warning on the product label.	

Table 3: Myrtle rust 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.

Disease	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Myrtle rust (*Uredo rangelii.)*	120 g/L **azoxystrobin (11)** + 200 g/L **tebuconazole (3)**	2-3 L/ha or 200-300mL/100L	•Use preventatively. Commence applications when conditions favour disease development, prior to, or at the first symptoms of disease development. •Repeat application 21-28 days later, if necessary. •Use the higher rate and shorter intervals when conditions are favourable for disease development •Apply as a foliar spray using air-blast sprayer, air-shear sprayer, mister, hand lance sprayer, spray boom or equivalent. •Use sufficient water to ensure coverage of all plant surfaces. •DO NOT apply more than 2 applications per crop per year.	DO NOT apply using spraying equipment carried on the back of the user. Phytotoxic to certain apple varieties: DO NOT spray any apple varieties as crop damage may occur. If a registered or permitted Group 11 or 3 fungicide has been previously used for disease control in nursery stock, this product should not be used unless alternative fungicides from a different chemical group are used at least twice in between.
	Copper hydroxide (M1) 350 g/L products	150 mL/100 L	•SUPPRESSION ONLY •Commence foliar spray application at the first sign of disease. •Ensure complete and thorough coverage of foliage and/or crop. Use a minimum spray volume of 250 L/ha using air-blast spray or boomspray. •DO NOT apply more than 6 applications per crop with a re-treatment interval of 7-14 days between consecutive sprays.	DO NOT apply if it is likely to rain before the spray is dry. DO NOT apply to wet crops. DO NOT apply when either hot or frost prone conditions prevail. DO NOT apply during the hottest part of the day when temperatures exceed 35°C. DO NOT apply when slow drying conditions prevail. DO NOT apply to copper-shy crops or cultivars. DO NOT apply in spray solutions with a pH of less than 6.5.
	Copper hydroxide (M1) 375 g/kg products	140 g/100 L		
	Copper hydroxide (M1) 500 g/kg products	100 g/100 L		
	Copper oxychloride (M1) 500 g/kg products	300 g/100 L		

Disease	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Myrtle rust (*Uredo rangelii.)*	750 g/kg **oxycarboxin (7)**	130 g/100 L	•Apply by ground application only e.g. knapsack, powered hand-gun, boom, air-assisted. •Apply in sufficient volume to ensure thorough coverage of all plant surfaces. •DO NOT apply more than two (2) consecutive applications of a chemical from the same chemical class (Mode of Action Group). Rotate approved products from different chemical mode of action groups at regular intervals within a structured disease management plan. •Apply in accordance with the procedures outlined in the appropriate State Import Requirement or Interstate Certification Assurance (ICA) Document. DO NOT apply the same chemical (or chemical class) on despatch that will be used by an importing authority for decontamination on receipt. •Refer to *Resistance management strategy for control of myrtle rust in nursery stock and ornamentals* below.	SUPPRESSION ONLY
	250 g/L **propiconazole (3)**	32 mL/100 L		DO NOT make more than 5 applications to any individual tree during the season.
	500 g/L **propiconazole (3)**	16 mL/100 L		
	190 g/L **triforine (3)**	130 mL/100 L		DO NOT use a wetting agent as this may cause excessive run-off. Some apple varieties and chrysanthemum cultivars may be sensitive to triforine. It is advisable to treat a sample number of plants or a small area prior to whole crop treatment and monitor for any phytotoxic effects.

Resistance management strategy for control of myrtle rust in nursery stock and ornamentals

Fungicide	Activity	Chemical group	Minimum re-treatment interval between consecutive applications
AZOXYSTROBIN + TEBUCONAZOLE	Systemic, curative and protectant	11+3	21 days
COPPER	Protectant	M1	7 days
OXYCARBOXIN	Systemic, curative and protectant	7	14 days
PROPICONAZOLE	Systemic, curative and protectant	3	7 days
TRIFORINE	Systemic, slightly curative and protectant	3	7 days

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