

AGRI-FOS® 600

Systemic Fungicide

A powerful and effective buffered formulation for the control of Downy Mildew and Phytophthora diseases

BENEFITS OF AGRI-FOS® 600

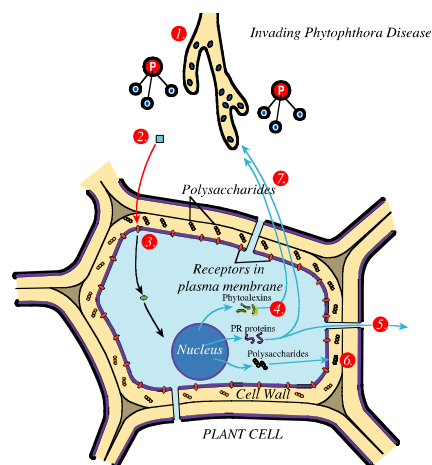
- Independently tested to be on or above specification every time.
- Provides effective control of Downy Mildew and Phytophthora diseases on a wide range of crops.
- Formulated from a non-toxic potassium phosphite base.
- Systemic action provides complete translocation throughout the plant ensuring effective disease control of all diseased plant parts.
- Can be applied with a wide range of other agricultural chemicals, reducing the number of spray applications needed.
- Clear liquid formulation makes it easy to decant into spray equipment and mixing tanks.
- High concentration reduces quantity of product needed and saves on packaging and freight costs.

MODE OF ACTION

AGRI-FOS® 600 is absorbed by the plant and translocated via the xylem and phloem to all parts of the plant. It is directly fungitoxic and enhances the plants immune system giving the plant the ability to fight the disease itself.

Disease invasion and prevention in the presence of phosphite.

1. Pathogen is affected by phosphite
2. Suppressors either under or not produced
3. Recognition of disease by plant cell
4. Phosphite encourages defensive molecules, such as phytoalexins and PR proteins, to attack the disease directly; and
5. Defensive molecules send "alarm signals" to cells that have not yet been attacked to prepare their defences
6. Polysaccharides strengthen the cell wall adding additional protection
7. Disease is limited or killed by plant response



DIRECTIONS FOR USE:
RESTRAINTS
DO NOT apply Agri-Fos® 600 at volumes, which cause excessive run off.
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 runoff for at least 3 days after application.
DO NOT apply at volumes, which cause excessive run-off.
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 table/s 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. DO NOT apply by a boom sprayer unless the following requirements are met: Minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for vertical and boom sprayers') are observed. 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, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for vertical and boom sprayers') are observed.

BUFFER ZONES FOR VERTICAL AND BOOM SPRAYERS
Application rate: Mandatory downwind buffer zones. Natural aquatic areas
Up to maximum label rate: 15 metres

TREE AND VINE CROPS

CROP	DISEASES		STATES	TREATMENT METHOD	RATES	CRITICAL COMMENTS
	COMMON NAME	LATIN NAME				
ALMONDS	SUPPRESSION OF PHYTOPHTHORA	PHYTOPHTHORA SPP.	ALL STATES	FOLIAR SPRAY	333 mL/100 L	Ensure thorough coverage of foliage and branches. Spray to the point of runoff using air blast sprayer or equivalent equipment. DO NOT apply more than two (2) applications per season. DO NOT apply after hull split. DO NOT apply under high temperatures, particularly if humidity is low.
				THROUGH IRRIGATION WATER	5.2 L/ha	Ensure even mixing with irrigation water. DO NOT apply more than two (2) applications per season. DO NOT apply after hull split. DO NOT apply under high temperatures, particularly if humidity is low.
AVOCADO	PHYTOPHTHORA ROOT ROT	PHYTOPHTHORA CINNAMOMI	QLD, NSW, SA, VIC, WA, ACT	INJECTION	Trunk injection, skeletal trees: 1st year 5 ml undiluted product per metre of canopy diameter. Other situations: 2.5 ml product diluted with 7.5 ml water per metre of canopy diameter	Inject trees at spring flush maturity - repeat treatment in February or March. Drill holes 5mm in diameter and 25mm to 50mm deep with slight downward angle in trunk. Syringes should be placed in the main trunk of the tree and spaced evenly around the circumference of the trunk. Suitable for use with Chemjet tree injectors, Ag-murf gun or hydraulic tree injection. Do not prune trees back before injection process as burning of new growth may occur. Do not inject trees in winter months. Do not cut back the canopy of injected trees. Do not add anything other than water to AGRI-FOS® 600 for trunk injection. Do not inject more liquid in a lesser number of syringes than directed.
				FOLIAR SPRAY	825 mL/100L	Check the pH of the tank mix and buffer to a pH of 7.2 • DO NOT apply more than 5 applications per year with a minimum retreatment interval of 21 days between applications. • Apply as a foliar spray by knapsack or air-blast sprayer. • Only spray trees with a good leaf canopy. • DO NOT add wetters or stickers or other pesticides to the solution. • Commence spraying when autumn leaf and root flush is complete. • Ensure applications are completed 6 weeks prior to flowering. • Apply spray to the point of run-off, ensuring all leaves and branches are covered. • Apply spray volume of 2,000-3,000 L/ha for mature trees (depending on tree size). • Allow 10 days to elapse after a phosphorous acid spray before applying copper fungicides. • DO NOT spray with phosphorous acid if residues of copper hydroxide are present; otherwise severe leaf defoliation may result.
CHESTNUT	SUPPRESSION OF PHYTOPHTHORA TRUNK AND ROOT CANKER	PHYTOPHTHORA CINNAMOMI	NSW, VIC, SA, WA & TAS	STEM INJECTION ONLY	Dilute 1 to 3 with water; then inject 20 mL solution per meter of canopy	DO NOT apply to trees under severe water stress or during very hot weather. Apply trunk injection up to three (3) times per year, two (2) during the production (growing) season and one (1) post harvest.

TREE AND VINE CROPS continued

YOUNG OR SMALL CITRUS	PHYTOPHTHORA ROOT ROT AND COLLAR ROT	PHYTOPHTHORA NICOTIANAE PHYTOPHTHORA CITROPHTHORA	ALL STATES	FOLIAR SPRAY	170 - 330 ml / 100 L To leaf wetness (by boom or similar high volume sprayer)	Two Applications 1. Late winter prior to flowering. 2. Autumn applied to mature fruit. Repeat application annually to maintain protection for the plant. Depending on condition at time of application use a non-ionic wetting agent in conjunction with AGRI-FOS 600 WHERE DISEASE INCIDENCE IS HIGH OR WELL ESTABLISHED For effective control apply as a protectant before above ground symptoms of decline and collar rot become evident, spray trees for even coverage. Do not apply under high temperatures (above 35°C) particularly if humidity is low or to moisture stressed trees. LOW PHYTOPHTHORA PRESSURE, WELL DRAINED SOIL Removal of fruit from affected plants will enhance recovery. WARNING: Soft skinned citrus trees may develop leaf burn and growth retardation following foliar application or soil drench of Potassium Phosphonate at rates recommended for established trees. <div> WARNING: 1. Foliar application to fruit may cause damage to fruit. 2. Soft skinned citrus trees may develop leaf burn and growth retardation following foliar application or soil drench. Before applying this product for the first time, a small test area should be sprayed and observed for at least 1 week. </div>
			ALL STATES	FOLIAR SPRAY	13.3 L / ha in 3000 - 4000 L of water 53 ml / 12 L / tree 8.3 L / ha in 2000 - 5000 L of water 33 ml / 12 L / tree	
GRAPES	DOWNY MILDEW	PLASMOPARA VITICOLA	ALL STATES	FOLIAR SPRAY	2 L / ha Early season, small canopies 2.7 - 4 L / ha Mid-late season, large canopies	It is essential that the rate of AGRI-FOS® 600 is adjusted to the vine-row volume (ie the volume of vine foliage per hectare). An application volume of 500 L / ha is suggested at the start of the season, increasing to 2000 L / ha in a vigorous crop at full canopy. Spray timing is critical. For best results apply AGRI-FOS® 600 as a tank mix with protectant fungicides such as Mancozeb/ Dithane, Copper Oxychloride, etc., to ensure both pre- and post-infection activity. AGRI-FOS® 600 should be applied at times of high disease risk, especially between the time that conditions are conducive to Downy Mildew infection and the appearance of oil spots. Ensure spray coverage is adequate and that the appropriate rate of AGRI-FOS® 600 is applied to match vine growth, particularly from mid-season onwards, and especially where grapes are grown on root stock.
MACADAMIAS	PHYTOPHTHORA ROOT ROT TRUNK (STEM) CANKER	PHYTOPHTHORA SPP. PHYTOPHTHORA CINNAMOMI	NSW, QLD AND WA ONLY	FOLIAR SPRAY	170 – 200 mL/100 L	Apply to affected macadamia trees at mature leaf flush during Spring and Autumn. Apply to each leaf flush if disease persists during the production season. DO NOT apply to young leaf flush, as phosphorous acid may burn the foliage. Apply spray to the point of run-off, ensuring all leaves and branches are covered. Apply a maximum of two (2) applications per crop. Apply using a spray volume of 2,000 – 3,000 L/ha for mature trees (depending on tree size) OR 7.5 – 10 L of solution per tree. Apply using air blast sprayer or equivalent equipment. DO NOT apply to trees under severe water stress or during hot weather.
				TRUNK APPLICATION	1 part product plus 2 parts water (334 mL/1 L)	Apply to affected macadamia trees at root flush and 28 days after root flush. Apply a maximum of two (2) applications per crop. Apply by dilute spray to the point of run-off around the trunk to approximately 1 m above soil level, ensuring thorough coverage/ wetness around the entire trunk. Apply using a knapsack sprayer or equivalent equipment. A bark penetrant such as Pulse or similar is to be applied at the rate of 2%.
WALNUTS	PHYTOPHTHORA ROOT ROT (PREVENTATIVE TREATMENT ONLY)	PHYTOPHTHORA SPP.	NSW, VIC, SA, WA & TAS	FOLIAR SPRAY	333 mL/100 L	DO NOT apply more than two (2) applications per season.
				INJECTION	5 mL diluted with 7.5 mL water per metre of canopy diameter.	The sensitivity of some species and varieties has not been fully evaluated. It is advisable to treat a small number of trees to ascertain their reaction before treating the whole crop.
				MICROJET TO ROOT ZONE	5 L/ha or 9.5 mL per tree.	

NON TREE AND VINE CROPS

CROP	DISEASES		STATES	TREATMENT METHOD	RATES	CRITICAL COMMENTS
	COMMON NAME	LATIN NAME				
CUCURBITS	DOWNY MILDEW	PSEUDOPERONOSPORA CUBENSIS	ALL STATES	FOLIAR SPRAY	3 L / ha in min 800 - 1000 L of water	Use weekly spray intervals when conditions favour disease development. To avoid phytotoxicity with some plant species, it is recommended that the product be tested on a few plants of each species prior to the main application.
ORNAMENTALS	PHYTOPHTHORA ROOT AND CROWN ROT	PHYTOPHTHORA SPP.	QLD, NSW, VIC, WA, TAS, NT, ACT	FOLIAR SPRAY	170 ml / 100 L boom or knapsack 330 ml / 100 L air blast	Apply at 4-6 weekly intervals when conditions favour disease development. To avoid phytotoxicity with some plant species, it is recommended that the product be tested on a few plants of each species prior to the main application. DO NOT apply when ornamental plants are dormant or stressed. DO NOT apply to ornamental plants under extremes of temperature.
PINEAPPLE	PHYTOPHTHORA ROOT AND HEART ROT	PHYTOPHTHORA CINNAMOMI PHYTOPHTHORA PARASITICA	QLD, WA	FOLIAR SPRAY	4 L / ha 1:200 - 1:500 water	Apply to tops, two (2) weeks prior to harvest of planting material.
POPPIES	DOWNY MILDEW	PERONOSPORA CRISTATA	TAS	FOLIAR SPRAY	2 L / ha	Commence application from 10-12 leaf stage to row cover. Use in combination with Mancozeb products at registered rate. Repeat 7-10 days later. Apply no more than 2 sprays per crop season. Note: Crop toxicity problems may occur when application is made with low water volumes. Users should determine an appropriate water volume on a small area prior to large scale field use. Consult your field officer for assistance.
SUBTERRANEAN CLOVER	PHYTOPHTHORA ROOT ROT	PHYTOPHTHORA CLANDESTINA	NSW, SA, VIC, WA, TAS, ACT	FOLIAR SPRAY	500 ml / ha approx. 200 L water / ha	Apply 8 to 9 days after first irrigation but before second irrigation. Apply in Autumn when Subterranean Clover is at the cotyledon to unifoliate leaf growth stage.

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

WITHHOLDING PERIODS:
 Almonds, Chestnuts, Walnuts: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.
 Macadamias: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.
 Subterranean Clover: DO NOT GRAZE OR CUT FOR STOCKFEED FOR 14 DAYS AFTER APPLICATION.
 Citrus, Cucurbits, Avocado, Grapes, Pineapples: NOT REQUIRED WHEN USED AS DIRECTED.
 Poppies: DO NOT HARVEST FOR 6 WEEKS AFTER APPLICATION.

GENERAL INSTRUCTIONS

For effective disease control a good leaf cover must be achieved before a widespread disease outbreak occurs.

CONDITIONS CONDUCTIVE TO DOWNY MILDEW INFECTION

1. PRIMARY INFECTION - Overnight conditions of:
- | | |
|--------------|---------------------------------|
| Temperature | 10°C |
| Rainfall | 10mm |
| Soil Wetness | 24hrs |
| Leaf Wetness | 3-4 hrs at end of a 24hr period |

2. SECONDARY INFECTION - Overnight Conditions of:
- | | |
|--------------|-------------------------------------------------|
| Temperature | 11°C |
| Humidity | 98% for at least 4 hours from midnight to dawn. |
| Leaf Wetness | 24 hrs |
- TO AVOID RESISTANT STRAINS OF DOWNY MILDEW DEVELOPING, AGRI-FOS® 600 SHOULD BE APPLIED AS CLOSE AS POSSIBLE TO THE DAY OF INFECTION AND ALTERNATED WITH OTHER SYSTEMIC FUNGICIDES.

COMPATIBILITY:

Compatible with Mancozeb, Copper Oxychloride, Bayleton, Tilt, and most common powdery mildew fungicides. Most foliage nutrients are also compatible. When using in conjunction with 'EC's' always form emulsion with water prior to adding Agri-Fos® 600 Systemic Fungicide.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Spillage should not be directed to drains but absorbed in sawdust and the absorbent material disposed of in a sealed container at an approved disposal site. Triple-rinse containers 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 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. For refillable containers: Empty contents fully into application equipment. Close all valves and return to collection point for refill or storage.

SAFETY DIRECTIONS

May irritate eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves, goggles and disposable face mask. If clothing becomes contaminated with product

or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles and contaminated clothing. Wash hands after use.

FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone Australia 13 11 26.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet which is available from the supplier.

LIABILITY/CONDITIONS OF SALE:

This product must be used strictly as directed. Liquid Fertiliser Pty Ltd trading as Agrichem may not be liable for loss or damage arising from failure to follow directions for use.

- 1 All goods supplied are made from high-grade materials and are believed to be suitable for use.
- 2 As no control can be exercised over storage, handling, mixing application or use or weather, plant or soil conditions before, during or after application (and all of which may affect the performance of the goods), NO RESPONSIBILITY for or liability for any failure in performance, losses, damages, or injuries (consequential or otherwise) arising from such storage, mixing, application or use, will be accepted under any circumstances whatsoever, and buyer assumes all responsibility for use of the product.
- 3 These conditions cannot be modified, varied or waived by our staff, distributors or retailers, whether or not they advise or assist in the storage, handling, mixing or use of the goods, and such persons shall be entitled to the benefit of Clause 2.
- 4 MAXIMUM LIABILITY. Limited to replacement of faulty goods only.

APVMA Approval No.:54430/130209

GROUP

P07

FUNGICIDE

FUNGICIDE RESISTANCE WARNING

For fungicide resistance management, Agri-Fos® 600 is a Group P07 fungicide. Some naturally occurring individual fungi resistant to Agri-fos 600 Systemic Fungicide and other Group P07 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi will not be controlled by Agri-Fos® 600 Systemic Fungicide, and other Group P07 fungicides, thus resulting in a reduction in efficacy and possible yield loss.

Since the occurrence of resistant fungi is difficult to detect prior to use, Liquid Fertilisers Pty Ltd accepts no liability for any losses that may result from the failure of Agri-fos 600 Systemic Fungicide to control resistant fungi.

MIXING

Half fill spray vat and with agitation system running, add the required amount of product.

EMERGENCIES:

In case of an emergency please contact:

AGRICHEM
Phone: 1800 654 758 (R&D Department) or Phone: 000

AGRICHEM
2 HOVEY ROAD, YATALA, QLD, 4207
PHONE: +61 7 3451 0000 FAX: +61 7 3451 0093
TOLL FREE: 1800 654 758