Product Name: APPARENT WHIRLWIND 430 FUNGICIDE

APVMA Approval No: 66903/125369



Label Name:	APPARENT WHIRLWIND 430 FUNGICIDE					
Signal Headings:	CAUTION					
3 1 11 31	KEEP OUT OF REACH OF CHILDREN					
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING					
Constituent Statements:	ACTIVE CONSTITUENT: 430 g/L TEBUCONAZOLE					
Mode of Action:						
	GROUP 3 FUNGICIDE					
Statement of Claims:	For the central of leaf and and leaf angula on bananas, rust leaf and not blotch of					
Statement of Glaims.	For the control of leaf spot and leaf speckle on bananas; rust, leaf spot and net blotch of peanuts; foliar diseases on cereal crops; other diseases on beans, lettuce, peas, onions, papaw, pyrethrum, ryegrass and fescue seed crops according to the directions for use table					
Net Contents:	5 L - 20 L					
Restraints:						
Directions for Use:	This section contains file attachment.					
Other Limitations:						
Withholding Periods:	WITHHOLDING PERIODS					
	BANANAS, AVOCADOS: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION. BEANS, PEAS: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.					

BEANS, PEAS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 3 DAYS AFTER APPLICATION. CEREALS: DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION.

CEREALS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER

APPLICATION.

LETTUCE: DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION.

ONIONS: NOT REQUIRED WHEN USED AS DIRECTED.

PAPAW: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION. PEANUTS: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

PEANUTS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER

APPLICATION.

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General Instructions:

This section contains file attachment.

# Resistance Warning:

## FUNGICIDE RESISTANCE WARNING

GROUP 3 FUNGICIDE

APPARENT Whirlwind 430 Fungicide is a member of the DMI group of fungicides. For fungicide resistance management the product is a Group 3 fungicide. Some naturally occurring individual fungi resistant to the product and other Group 3 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 this product and other Group 3 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, AIRR APPARENT Pty Ltd accepts no liability for any losses that result from failure of this product to control resistant fungi.

# RESISTANCE MANAGEMENT RECOMMENDATION - PEANUTS

Apply no more than 3 consecutive sprays of DMI fungicide (eg APPARENT Whirlwind 430 Fungicide) before switching to a non-DMI fungicide. Apply no more than 5 DMI sprays per season.

#### Precautions:

#### **PRECAUTION**

Re-entry: Do not allow entry into treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and footwear. Clothing must be laundered after each day's use.

#### Protections:

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or watercourses with the chemical or used containers. A spray drift minimisation strategy should be employed at all times when aerially applying sprays. Spray drift may occur under adverse meteorological conditions or from certain spraying equipment. DO NOT allow spray to drift onto sensitive areas including, but not limited to, susceptible plants/crops, cropping land, pasture, natural streams, rivers, wetlands, waterways or human dwellings. The strategy envisaged is exemplified by the cotton industry's Best Management Practices Manual.

# Storage and Disposal:

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. 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 for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available,

bury the empty packaging 500mm 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.

Returnable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

# Safety Directions:

### **SAFETY DIRECTIONS**

Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container, preparing the spray, and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves. After each use and before eating. drinking or smoking, wash arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

#### First Aid Instructions:

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131 126, New Zealand 0800 764 766.

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# **DIRECTIONS FOR USE**

CROPS	DISEASE	APPLICATION	RATE	WHP	CRITICAL COMMENTS
Bananas (QLD,NSW, WA, NT only)	Leaf Spot (Yellow Sigatoka), Leaf Speckle, Black Sigatoka	Ground Application: Apply by misting machine or airblast sprayer in a convenient volume of water Aerial Application: Apply at least 20L of spray mixture per hectare	230mL/ha Add 3- 6L water miscible oil/ha	1 day	Maintain good deleafing practices to reduce disease inoculum. Very old leaves, and leaves with advanced lesions should be removed, or infected parts of the leaf removed, prior to the application of APPARENT Whirlwind 430 SC Fungicide.  Tropical areas (eg North QLD, NT, Ord River): Apply a regular schedule of protectant sprays. When conditions favour disease, apply a minimum of 2 and a maximum of 3 consecutive APPARENT Whirlwind 430 SC Fungicide sprays at 14 day intervals.  DO NOT apply more than 6 APPARENT Whirlwind 430 SC Fungicide sprays in any 12 month period.  DO NOT apply any APPARENT Whirlwind 430 SC Fungicide sprays in the months of July, August and September.  Sub-tropical areas (eg South QLD, NSW): Commence spraying with APPARENT Whirlwind 430 SC Fungicide at the onset of warm and humid/wet weather, normally December. Repeat at 21 to 28 day intervals using a minimum of 2 consecutive APPARENT Whirlwind 430 SC Fungicide sprays.  DO NOT apply more than 5 APPARENT Whirlwind 430 SC Fungicide sprays in any 12 month period.  APPARENT Whirlwind 430 SC Fungicide is approved for use in banana plantations interplanted with avocados.
Peanuts (South QLD, NSW only)	Early Leaf Spot, Late Leaf Spot, Rust, Net Blotch	Ground Application: Apply in at least 100L of water/ha Aerial application: Apply at least 30L of spray mixture per hectare		Grazing	Regularlycheckhighriskareasinthecropfordisease (eg lower leaves, shaded plants). When Leaf Spot or Net Blotch or Rust can easily be found then either; – spray immediately after the last disease conducive weather (eg rain or heavy dews) OR
		Low disease	175mL/ha+ Agridex* 1L/ha		<ul> <li>spray before the next disease conducive weather.</li> <li>Repeat after 14 days if conditions remain favourable to disease development. If not, repeat before or just after the next disease</li> </ul>
		High disease OR wet weather	290mL/ha+ Agridex 1L/ha		conducive weather. For resistance strategy, see General Instructions.
		High disease AND wet weather	440mL/ha+ Agridex 1L/ha		
Peanuts (North QLD,	Early Leaf Spot, Late Leaf Spot, Rust	Low disease	230mL/ha+ Agridex 1L/ha	3 weeks Grazing 3 weeks	Begin spraying at 3-4 weeks after planting. If band spraying, applyhalf the appropriate rate as a 45cm band directly
WA, NT only)		Moderate disease	290mL/ha+ Agridex 1L/ha		over the row.  Sprays should not be banded after 6 weeks from planting. Repeat applications at 14 day intervals.
		Severe disease	440mL/ha+ Agridex 1L/ha		If prolonged wet weather or heavy rains occur, shorten spray interval to 10-12 days. For resistance strategy, see General Instructions.
	Net Blotch	Low disease	290mL/ha+ Agridex 1L/ha		Apply at 14 day intervals. If prolonged cool moist weather occurs, shorten spray interval to 10-12 days. For resistance strategy, see General Instructions.
		Moderate - Severe disease	440mL/ha+ Agridex 1L/ha		
Green beans	Rust	Can be applied by aircraft or ground rig	350mL/ha+ Agridex 1L/ha	Harvest 3 days Grazing 3 days	Spray when rust infection begins or at budding, whichever is the earlier. Repeat application 10-14 days later. A third application may be necessary when infection occurs early or disease pressure is high.
Lettuce	Sclerotinia Rot	Apply by boomspray	350mL/ha	5 weeks	Apply only during the early stages of plant development (note the 5 week WHP).  Apply a maximum of 2 applications at 7-10 day intervals in rotation with other chemicals registered for this use (ie. procymidone, iprodione and benomyl). Apply only to field crops.  DO NOT apply in greenhouse (ie. protected cropping) situations or hydroponically grown lettuce crops.  Control of Sclerotina in lettuce should not be solely reliant on fungicides. Other control measures such as crop rotations, resistant varieties and planting techniques should be employed.

Peas	Powdery Mildew	Ground Application: Apply in at least 50L of water/ha Aerial Application: Apply in at least 10L of water/ha	145mL/ha	Harvest 3 days Grazing 3 days	Apply at flowering or at first sign of disease, whichever occurs first. A second spray 14 days later may be necessary under some conditions.
Wheat	Leaf Rust, Stripe Rust, Septoria Nodorum Blotch, Yellow Leaf Spot Septoria Tritici Blotch	Ground Application: Apply in at least 50L of water/ha Aerial Application: Apply in at least 10L of water/ha	145 or 290mL/ha 290mL/ha	Harvest 5 weeks Grazing 14 days	Use higher rate when longer disease control is required.  Stripe Rust: See spray timings under General Instructions.  Other diseases: Apply from full flag leaf emergence to early head emergence. The addition of mineral crop oil (eg D-C-Trate or equivalent) at 1%, may improve performance of APPARENT Whirlwind 430 SC Fungicide on wheat, oats and barley.
Oats	Crown Rust	Ground Application: Apply in at least 50L of water/ha Aerial Application: Apply in at least 10L of water/ha	145 or 290mL/ha		Use higher rate when longer disease control is required. <b>Stripe Rust:</b> See spray timings under General Instructions. <b>Other diseases:</b> Apply from full flag leaf emergence to early head emergence. The addition of mineral crop oil (eg D-C-Trate or equivalent) at 1%, may improve performance of APPARENT Whirlwind 430 Fungicide on wheat, oats and barley.
Barley	Scald	water/ria	145mL/ha		Apply at late tillering to early jointing.
	Powdery Mildew		145 or 290mL/ha		Apply when 5% of the leaf area is infected. Use higher rate when longer disease control is required.
Wheat, Oats	Stem Rust 145 or 290mL/ha			Apply if more than 5% of stems become infected between full flag leaf emergence to late flowering.  Where Stem Rust is the major disease, yield responses are usually optimised by delaying application until full head emergence, and using the higher rate. In severe cases, if a majority of stems are infected prior to full head emergence, apply at 145mL/ha as soon as possible and if necessary, repeat after 3 weeks when heads are fully emerged.	
Onions (TAS only)	White Root Rot	Before sowing, apply APPARENT Whirlwind 430 Fungicide onto lime super. Ensure good coverage of all lime super particles.	1.45L/100m of row mixed with 145-218g lime super/100m of row	_	Apply APPARENT Whirlwind 430 Fungicide treated lime super when sowing onion seed. Seed and lime super can either be mixed in the same box on the drill or placed in different boxes and sown down the same tube.  Apply in a band width of 2cm.  Ensure that the correct rate of APPARENT Whirlwind 430 Fungicide is used otherwise some delay in emergence and reduced stands of seedlings may occur.
Pawpaw	Black Spot	Ensure thorough coverage of leaves and fruit	290mL/ha	3 days	Ensure infected plant material is regularly removed and destroyed to reduce inoculum levels. Spray equipment must be properly calibrated to apply the correct amount of APPARENT Whirlwind 430 Fungicide.  Apply APPARENT Whirlwind 430 Fungicide at 14 day intervals.  Alternate APPARENT Whirlwind 430 Fungicide with sprays of a protectant fungicide (eg Dithane DF).  DO NOT apply more than 6 sprays of APPARENT Whirlwind 430 Fungicide (or any DMI fungicide) on any block in any 12 month period.
Pyrethrum	Sclerotinia sclerotiorum	_	350mL/ha	_	Apply twice, in rotation with other control measures, at 7-10 day intervals. Commence at 1 to 2% flowering. Use under direction of pyrethrum advisers.
Ryegrass and fescue seed crops	Leaf Rust, Stem Rust	Apply in at least 100L of water/ha	290mL/ha	_	Monitor crops closely and spray at the first signs of disease. Continuing disease pressure or reinfection may require a further application 3-4 weeks later. Ensure thorough coverage, and use higher water volumes in dense or advanced crops.

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

# GENERAL INSTRUCTIONS SPECIAL WARNING – BANANAS

There are certain conditions when the surface of recently emerged fruit is particularly prone to marking damage from spray applications. In circumstances where application will be made to very rapidly growing fruit in hot conditions with strong direct light, it is recommended that all emerged bunches be bagged prior to spraying to minimise risk of fruit marking. Never include adjuvants other than water miscible oils with APPARENT Whirlwind 430 SC Fungicide sprays. The inclusion of wetting agents is known to cause phytotoxicity to young fruit.

**LETTUCE** – to avoid crop damage: The sensitivity of some species and varieties of the crops to be treated has not been fully evaluated. It is advisable, therefore, to treat a small number of plants to ascertain their reaction before treating the whole crop.

#### **FOLIAR DISEASES ON CEREAL CROPS**

DO NOT apply to cereal crops more than once in a season.

Treatment will give approximately three weeks disease suppression. Economic responses may not be gained by spraying crops past flowering stage. The effects of fungicide application will not be clearly seen for 7-10 days after application.

Yield potential: crops with potential yield under 2t/ha are unlikely to give economic responses to a fungicide spray except under conditions of very severe disease. Economic responses are most likely with crops with potential yield of over 3t/ha.

# SPRAY TIMINGS FOR STRIPE RUST CONTROL

Obtain advisory literature from Department of Agriculture for classification of resistant and susceptible varieties. In South Australia consult Plant Protection Note PPN 21. In other states the following spray program is suggested:

Seedling infections: When approximately 20 out of 100 leaves show first signs of infection during tillering to jointing, apply a spray within one week.

Adult infections – susceptible varieties: When approximately 10 out of 100 leaves show first sign of infection, apply a spray within one week.

DO NOT delay.

Adult infections – moderately susceptible varieties: When approximately 15 to 20 leaves out of 100 leaves show first sign of infection, apply a spray within one week. DO NOT delay.

Adult infections – moderately resistant and resistant varieties: Monitor carefully. If rust appears and spreads, spray within one week.

# **RESISTANCE MANAGEMENT RECOMMENDATION – PEANUTS**

Apply no more than 3 consecutive sprays of DMI fungicide (eg APPARENT Whirlwind 430 Fungicide) before switching to a non-DMI fungicide. Apply no more than 5 DMI sprays per season.

# **MIXING**

Prior to pouring, shake container vigorously, then add the required quantity of APPARENT Whirlwind 430 Fungicide to water in the spray vat while stirring or with agitators in motion. Add the required amount of Agridex† (peanuts, beans) or water miscible oil (bananas) and mix thoroughly.

# **APPLICATION**

Aircraft should fly as low as possible under the prevailing conditions to minimise drift.