

# POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



**Cogito**<sup>TM</sup>  
Fungicide

**syngenta**<sup>®</sup>

**ACTIVE CONSTITUENTS:** 250 g/L PROPICONAZOLE  
250 g/L TEBUCONAZOLE

**GROUP 3 FUNGICIDE**

For the control of fungal diseases of cereals, peanuts and ryegrass

**Syngenta Australia Pty Ltd**

Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113

**In a transport emergency dial 000, Police or Fire Brigade**

**For specialist advice in an emergency only, call 1800 033 111 (24 hours)**

**APVMA Approval No.: 66677/54176**

TM

## DIRECTIONS FOR USE

### Restrains

DO NOT apply by spray equipment carried on the back of the user

DO NOT apply if rain is expected within 48 hours to avoid runoff

**Cereals:** DO NOT apply more than 2 applications of COGITO (maximum of 500 mL/ha) in any one season on the same paddock. Applications of COGITO should be alternated with a fungicide containing a different mode of action.

Crop	Disease	State	Rate Per hectare	WHP	Critical Comments
Barley	Powdery Mildew <i>Blumeria graminis</i> f.sp. <i>hordei</i>	All States	125 to 250 mL	Harvest 5 weeks Grazing 14 days	Spray at the first sign of the disease, generally during the tillering stage. A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves. <b>Powdery Mildew:</b> Higher rates provide longer protection.
	Barley Scald <i>Rhynchosporium secalis</i>		250 mL		
	Net Blotch - Spot form <i>Pyrenophora teres</i> f <i>maculata</i> Net form <i>Pyrenophora teres</i> f <i>teres</i>		125 to 250 mL		
	Barley Leaf Rust <i>Puccinia hordei</i>				
Oats	Stem Rust <i>Puccinia graminis</i> f. sp <i>avenae</i>	All States	250 mL	Harvest 5 weeks Grazing 14 days	Apply at the first sign of disease and before there is an average of over 2 pustules per tiller. Ensure thorough coverage of stems and leaves.
	Crown Rust <i>Puccinia coronata</i> f. sp <i>avenae</i>		125 to 250 mL		Apply after flag leaf is fully emerged or Z39 and before disease levels reach 1% of flag leaf area. Consider control if disease is greater than 5 to 10% on any lower leaf layer. Use higher rates under high infection pressure or when longer residual protection is required. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.

Crop	Disease	State	Rate Per hectare	WHP	Critical Comments
Oats	Suppression of Septoria Leaf Blotch <i>Leptosphaeria avenaria</i>	All States	125 to 250 mL	Harvest 5 weeks Grazing 14 days	Apply after flag leaf is fully emerged or Z39 if infection averages 10% on the flag-2 leaf. The high rate of application gives a longer period of protection than the lower rates. Use higher rates on high yield potential crops when conditions favour severe disease development during flowering. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
Peanuts	Early Leaf Spot <i>Cercospora arachidicola</i>	Sth Qld, NSW, WA only	200 to 300 mL	Harvest 3 weeks Grazing 3 weeks	<b>This use is subject to a DMI anti-resistance strategy.</b> Spray when disease symptoms are first observed. Apply at 14 day intervals while weather conditions favour disease. Use rates towards the higher end of the range when wet conditions prevail. Use a fungicide from a different activity group (non-DMI) after 3 consecutive sprays of a DMI fungicide (eg COGITO). Apply a maximum of 5 DMI fungicide applications per season. The leaves of peanuts sprayed may become darker green in colour and modified in shape. These effects will not adversely affect yield at recommended rates.
	Late Leaf Spot <i>Cercosporidium personatum</i>				
	Rust <i>Puccinia arachidis</i>	Sth Qld only	300 mL		
Perennial Ryegrass	Stem Rust <i>Puccinia graminis</i>	All States	250 mL	Grazing 4 weeks	Monitor crops closely and spray at the first sign of disease. Continuing disease pressure or re-infection may require a further application 3-4 weeks later. Apply in at least 100 L of water/ha. Ensure thorough coverage and use higher water volumes in dense or advanced crops.
Wheat	Stripe Rust <i>Puccinia striiformis</i>	All States	125 to 250 mL	Harvest 5 weeks Grazing 14 days	Spray between jointing and end of flowering when 10 to 20% of leaves are infected. A repeat spray 21 to 28 days later may be required. Use higher rate under high infection pressure or where longer residual protection is required.
	Powdery Mildew <i>Blumeria graminis</i>				Spray at the first sign of the disease during the tillering stage. A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves. Higher rates provide longer protection.

Crop	Disease	State	Rate Per hectare	WHP	Critical Comments
Wheat	Stem Rust <i>Puccinia graminis</i>	All States	125 to 250 mL	Harvest 5 weeks Grazing 14 days	Apply at the first sign of disease and before there are more than 2 pustules per tiller. Ensure thorough coverage of stems and leaves.
	Septoria Tritici Blotch <i>Mycosphaerella graminicola</i>				Apply once between 70% flag leaf emergence and early flowering. Use the higher rate under high infection pressure or where longer residual protection is required.
	Leaf Rust <i>Puccinia recondita f.sp. tritici</i> ; <i>Puccinia triticina</i>				Apply after flag leaf is 70% emerged and before disease levels reach 1% of flag leaf area. Consider control if disease is greater than 5 to 10% on any lower leaf layer. Use higher rates under high infection pressure or when longer residual protection is required. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
	Septoria Nodorum Blotch <i>Phaeosphaeria nodorum</i>				Apply after flag leaves are around 70% emerged if infection averages 10% on the flag-2 leaf. The high rate of application gives a longer period of protection than the lower rates. Use higher rates on high yield potential crops when conditions favour severe disease development during flowering. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
	Yellow Spot <i>Pyrenophora tritici-repentis</i>				Apply once between 70% flag leaf emergence and early flowering. Use the higher rate under high infection pressure or where longer residual protection is required. Apply after 70% flag leaf emergence and before disease levels reach 5% on flag leaf. Higher rates give longer residual protection and often better economic returns.

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

### WITHHOLDING PERIODS

**Barley, Oats, Wheat:**

**Forage and fodder of Barley, Oats, Wheat:**

**Peanuts:**

**Perennial Ryegrass:**

**DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION**

**DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION**

**DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 3 WEEKS AFTER APPLICATION.**

**DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION**

## GENERAL INSTRUCTIONS

### Spray timings for stripe rust control

Obtain advisory literature from Department of Agriculture for classification of resistant and susceptible varieties. 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.

### Mixing

COGITO Fungicide is an emulsifiable concentrate liquid that mixes readily with water. Fill the spray tank to one quarter full. Add the required amount of COGITO and continue adding water to make up to the final spray volume. Agitate while mixing and spraying.

When tank mixing, wettable powder or water dispersible granule formulations should be added to the tank first followed by suspension concentrates (flowables), water soluble salts then COGITO or other emulsifiable concentrate formulations. Maintain thorough agitation during mixing and application. Agitate tank mixes vigorously if allowed to stand. Note: Tank mix spray solutions should NOT be left standing in the vat overnight.

### Application

May be applied by boom spray or aircraft. Ensure complete coverage of all leaves and stem is obtained.

**Boom Application:** As a guide, apply in spray volumes ranging from 50 to 100 L water per hectare. Water volume selection should be based on crop growth stage, vigour, droplet size and pathogen being targeted. High water volumes are likely to maximise control and are recommended for dense crops or when targeting the control of stem rust and powdery mildew. Use a nozzle delivering spray quality in the MEDIUM spray range.

**Aerial application:** As a guide, apply using 20 to 30 L water per hectare using a nozzle delivering a MEDIUM spray quality. Use the lower water volume when applications are made with a cross wind of not less than 5 knots. Use the higher water volume for dense crops or when targeting the control of stem rust and powdery mildew.

### Compatibility

COGITO Fungicide is physically compatible with a wide range of commonly used broadacre crop protection sprays however the biological compatibility of these mixtures may not have been fully tested under all environmental and biological conditions. If tank mixes are to be used observe all directions, precautions and limitations on all products to be used. Refer to your local Syngenta representative for more information relating to the compatibility and crop safety of tank mixtures. As formulations of other manufacturer's products are beyond the control of Syngenta, and the quality of water may vary

### Fungicide Resistance Warning

GROUP	3	FUNGICIDE
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COGITO Fungicide is a member of the DMI group of fungicides. For fungicide resistance management COGITO is a Group 3 fungicide. Some naturally occurring individual fungi resistant to COGITO and other Group 3 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. These resistant fungi will not be controlled by COGITO 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, Syngenta Australia Pty Ltd accepts no liability for any losses that may result from the failure of COGITO to control resistant fungi.

## PRECAUTION

### Re-entry Period

DO NOT enter treated area until 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.

## INTEGRATED PEST MANAGEMENT

COGITO Fungicide may have an adverse effect on non-target beneficial invertebrates where IPM is practised

## **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with the product or used containers.

Highly toxic to earthworms and may have an adverse effect on earthworms where these organisms are important to crop production.

## **PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS**

DO NOT apply under weather conditions, or from spray equipment, that may cause spray drift onto nearby susceptible plants/crops, cropping lands or pastures. 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.

## **STORAGE AND DISPOSAL**

### ***Non-returnable containers***

Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure 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 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.

### ***Returnable containers***

Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

## **SAFETY DIRECTIONS**

**Will irritate eyes. May irritate skin. Avoid contact with eyes and skin. When opening the container and using the product wear:**

- **cotton overalls buttoned to the neck and wrist (or equivalent clothing)**
- **elbow length chemical resistant gloves**
- **goggles**

**If applying by hand wear:**

- **cotton overalls, over normal clothing, buttoned to the neck and wrist**
- **elbow length chemical resistant gloves**
- **goggles.**

**If product in eyes wash it out immediately with water. Wash hands after use. After each day's use wash gloves, goggles and contaminated clothing.**

## **FIRST AID**

**If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126. If swallowed, DO NOT induce vomiting. Give a glass of water. If in eyes, wash out immediately with water.**

## **MATERIAL SAFETY DATA SHEET**

If additional hazard information is required refer to the Material Safety Data Sheet.

## **DISCLAIMER**

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.

