

# CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



FOUR SEASONS AGRIBUSINESS

# PROTEB 420 SC

## FOLIAR FUNGICIDE

### ACTIVE CONSTITUENTS:

210 g/L PROTHIOCONAZOLE

210 g/L TEBUCONAZOLE

GROUP

**3**

FUNGICIDE

For the control of various diseases in wheat, barley, oats, triticale, canola and pyrethrum as specified in the DIRECTIONS FOR USE table.

IMPORTANT: READ THIS BOOKLET BEFORE USING THIS PRODUCT



FOUR SEASONS  
AGRIBUSINESS

# DIRECTIONS FOR USE

## RESTRAINTS

### CEREALS AND CANOLA

A maximum of two applications may be made per cereal or canola crop.

### PYRETHRUM

A maximum of one application may be made per pyrethrum crop.

**DO NOT** apply if heavy rain has been forecasted within 48 hours.

**DO NOT** apply to waterlogged soil.

**DO NOT** irrigate past the point of runoff for 48 hours after application.

## SPRAY DRIFT RESTRAINTS

**DO NOT** apply by aircraft to pyrethrum crops.

**DO NOT** apply with spray droplets smaller than a **MEDIUM** spray droplet category as defined by the ASAE S572 Standard. Users **MUST ONLY USE** nozzles classified as suitable for delivering a **MEDIUM** spray droplet category according to the nozzle manufacturer's specifications.

**DO NOT** apply when wind speed is less than 3 or more than 20 km/h as measured at the application site.

**DO NOT** apply during surface temperature inversion conditions at the application site.

Users of this product **MUST make an accurate written record** of the details of each spray application within 24 hours following application and **KEEP** this record for a minimum of 2 years. The spray application details that must be recorded are:

1. date and start and finish times of application;
2. location address and paddock/s sprayed;
3. full name of this product;
4. amount used per hectare and number of hectares applied to;
5. crop/situation and weed/pest;
6. wind speed and direction during application;
7. air temperature;
8. nozzle brand, model and type and spray system pressure measured during application;
9. name and address of person applying this product. (Additional record details may be required by the State or Territory where this product is used.)

## MANDATORY NO-SPRAY ZONE

**DO NOT** apply if there are aquatic and wetland areas, including aquacultural ponds, surface streams and rivers downwind from the application area and within the **mandatory no-spray zones** shown in Tables A, B and C below.

### Cereals

Table A - No-Spray Zones for Protection of the Aquatic Environment	
<b>FOR AERIAL APPLICATION</b>	
Wind Speed Range at Time of Application	Downwind Mandatory No-Spray Zone
	<b>Fixed-Wing</b>
From 3 to 20 kilometres per hour	80 metres
	<b>Helicopter</b>
From 3 to 20 kilometres per hour	60 metres
<b>FOR GROUND APPLICATION</b>	
From 3 to 20 kilometres per hour	10 metres

## Canola

Table B - No-Spray Zones for Protection of the Aquatic Environment	
FOR AERIAL APPLICATION	
Wind Speed Range at Time of Application	Downwind Mandatory No-Spray Zone
	<b>Fixed-Wing</b>
From 3 to 20 kilometres per hour	180 metres
	<b>Helicopter</b>
From 3 to 20 kilometres per hour	120 metres
FOR GROUND APPLICATION	
From 3 to 20 kilometres per hour	5 metres

## Pyrethrum

Table C - No-Spray Zones for Protection of the Aquatic Environment	
FOR GROUND APPLICATION	
Wind Speed Range at Time of Application	Downwind Mandatory No-Spray Zone
From 3 to 20 kilometres per hour	10 metres

CROP	STATE	DISEASE	RATE	CRITICAL COMMENTS
Barley	All States	Net form net blotch ( <i>Pyrenophora teres</i> f. <i>teres</i> )	150 to 300 mL/ha	Monitor crops from mid tillering. On susceptible varieties apply at the first sign of disease development. Monitor and reapply within 14 to 21 days if conditions favour disease development.
		Spot form net blotch ( <i>Pyrenophora teres</i> f. <i>maculata</i> )		Use the higher rates (up to 300 mL/ha) where conditions favour severe disease. Where lower rates are used apply with a suitable adjuvant (refer to <b>Use of Adjuvant</b> ).
		Powdery mildew ( <i>Blumeria graminis</i> f.sp. <i>hordei</i> )		Monitor crops from mid tillering. Use the higher rate in higher yielding crops where conditions favour disease development or susceptible varieties are grown.
		Leaf scald ( <i>Rhynchosporium secalis</i> )		Monitor crops from mid tillering (earlier if no effective seed treatment has been applied). On susceptible varieties apply at the first sign of disease development. Monitor and reapply within 14 to 21 days if conditions favour disease development. Use the higher rates (up to 300 mL/ha) where conditions favour severe disease. Where lower rates are used apply with a suitable adjuvant (refer to <b>Use of Adjuvant</b> ).
		Leaf rust ( <i>Puccinia hordei</i> )		Monitor crops from late tillering. Apply at the first sign of disease development. Monitor and reapply within 14 to 21 days if conditions favour disease development. Use the higher rates (up to 300 mL/ha) where conditions favour severe disease, or disease is established in the lower canopy. Where lower rates are used apply with a suitable adjuvant (refer to <b>Use of Adjuvant</b> ).

CROP	STATE	DISEASE	RATE	CRITICAL COMMENTS
Oats	All States	Stem rust ( <i>Puccinia graminis</i> f.sp. <i>avenae</i> )	300 mL/ha + adjuvant (refer to <b>Use of Adjuvant</b> )	Monitor crops from early stem elongation, and on susceptible varieties apply at the first sign of infection. Refer to <b>General Instructions – Disease control in Oats</b> , for potential risks associated with application to oats.
		Leaf rust ( <i>Puccinia coronata</i> f.sp. <i>avenae</i> )		Monitor crops from early stem elongation, and on susceptible varieties apply at the first sign of infection. Refer to <b>General Instructions – Disease control in Oats</b> , for potential risks associated with application to oats.
		Septoria blotch ( <i>Phaeosphaeria avenaria</i> )	150 to 300 mL/ha	Monitor crops from early tillering and on susceptible varieties apply at the first sign of infection. Use the higher rate (up to 300 mL/ha) in higher yielding crops where conditions favour disease development or susceptible varieties are grown. Continue to monitor crops after application. Reapplication may be required if conditions favour disease development. Where lower rates are used, apply with a suitable adjuvant (refer to <b>Use of Adjuvant</b> ). Refer to <b>General Instructions – Disease control in Oats</b> , for potential risks associated with application to oats.
Wheat		Stripe rust ( <i>Puccinia striiformis</i> )	150 mL/ha to 300 mL/ha + adjuvant (refer to <b>Use of Adjuvant</b> )	Monitor crops from early stem elongation, and on susceptible varieties apply at the first sign of infection.
		Stem rust ( <i>Puccinia striiformis</i> )		Use the higher rate (up to 300 mL/ha) in higher yielding crops where conditions favour disease development or susceptible varieties are grown.
		Leaf rust ( <i>Puccinia recondita</i> f.sp. <i>tritici</i> , <i>Puccinia triticina</i> )		Continue to monitor crops after application, reapplication may be required if conditions favour disease development and initial application is made before the flag leaf has emerged.
		Fusarium head blight/head scab ( <i>Fusarium graminearum</i> )		Apply as a preventative spray at the first sign of flowering. Spray equipment must be set up to achieve good coverage of wheat heads. Use the higher rate (up to 300 mL/ha) in higher yielding crops where conditions favour disease development or susceptible varieties are grown.
		Yellow leaf spot ( <i>Pyrenophora tritici-repentis</i> )	150 to 300 mL/ha	Monitor crops from late tillering and spray before disease has infected any of the top three leaves of the crop. Aim to protect the three top leaves of the plant from disease.
		Septoria nodorum - glume blotch ( <i>Phaeosphaeria nodorum</i> )		Monitor crops from late tillering. Aim to protect the three top leaves of the plant from disease. Where lower rates are used apply with a suitable adjuvant (refer to <b>Use of Adjuvant</b> ).
		Powdery mildew ( <i>Blumeria gramiis</i> f.sp. <i>tritici</i> )		Monitor crops from mid tillering. Apply at the first sign of disease development. Monitor and reapply within 14 to 21 days if conditions favour disease development. Use the higher rates (up to 300 mL/ha) where conditions favour severe disease, or disease is established in the lower canopy. Where lower rates are used apply with a suitable adjuvant (refer to <b>Use of Adjuvant</b> ).

CROP	STATE	DISEASE	RATE	CRITICAL COMMENTS
Triticale	All States	Stripe rust ( <i>Puccinia striiformis</i> )	150 mL/ha to 300 mL/ha + adjuvant	Monitor crops from early stem elongation, and on susceptible varieties apply at the first sign of infection. Use the higher rate (up to 300 mL/ha) in higher yielding crops where conditions favour disease development or susceptible varieties are grown. Continue to monitor crops after application. Reapplication may be required if conditions favour disease development and initial application is made before the flag leaf has emerged.
Canola		Blackleg ( <i>Leptosphaeria maculans</i> )	375 to 450 mL/ha	Apply at the 4 to 6 leaf crop stage of blackleg susceptible varieties (blackleg ratings of MS or lower) or in situations of high blackleg risk (refer to <b>General Instructions - Disease control in Canola</b> ). Will reduce lodging and stem canker from blackleg. A follow up application may be required at green bud stage in high disease risk situations or where an effective blackleg seed treatment has not been used.
		Sclerotinia stem rot ( <i>Sclerotinia sclerotiorum</i> )		Apply Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide between 20 and 50% (full bloom) flowering. For best results apply as a preventative application at 20-30% flowering prior to significant disease expression (refer to <b>General Instructions - Disease control in Canola</b> ). Good coverage throughout the entire canopy is essential. Using a water rate at the higher end of the range (i.e. 100 L/ha for ground application and 30 L/ha for aerial application) will improve spray coverage. Apply the higher rate (450 mL/ha) under high disease pressure.
Pyrethrum	Vic, Tas only	Ray blight ( <i>Phoma ligulicola</i> ) and sclerotinia crown rot ( <i>Sclerotinia minor</i> and <i>S. sclerotiorum</i> )	1.0 L/ha	Apply as part of a preventative spray program at flowering. Apply in rotation with other control measures, under direction of pyrethrum advisers. The addition of an adjuvant is not required in pyrethrum.

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

**A MANDATORY NO-SPRAY ZONE IS REQUIRED FOR PROTECTION OF THE ENVIRONMENT. REFER TO RESTRAINTS.**

#### WITHHOLDING PERIODS

**Canola: Harvest - NOT REQUIRED WHEN USED AS DIRECTED**

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

**Cereals: Harvest - DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION**

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

**Pyrethrum: Harvest and Grazing - NOT REQUIRED WHEN USED AS DIRECTED**

# GENERAL INSTRUCTIONS

## Foliar diseases on cereal crops

Monitor the crop regularly for symptoms of disease. Generally spray at the first sign of disease, although this will depend on factors such as expected weather conditions and the particular crop variety resistance. Refer to Directions for Use for particular disease recommendations. Up to two sprays of Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide may be applied per season to the crop. Ensure good coverage of all susceptible plant parts.

## Disease control in oats

Caution: Application of tebuconazole (present in Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide) to some varieties of oats may result in early senescing and bronzing of leaves.

Varieties most at risk may also exhibit this trait under various stress conditions not related to fungicide sprays.

Mitika variety of oats has been identified as being susceptible to this condition when tebuconazole is applied, although other varieties may also be susceptible.

The potential disease control to be achieved by using Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide in Mitika oats should be weighed against the risk of crop damage.

For further information on oat tolerance contact Four Seasons Agribusiness Pty Ltd.

## Disease control in canola

### Blackleg

Higher blackleg risk can be expected in higher rainfall districts (above 500 mm annual rainfall), where crops are grown within 500 m of a previous year's stubble and in later sown crops (May to August). Other factors will also increase the risk of blackleg infection, including the intensity of canola cropping in a district, rainfall before sowing and the frequency of growing the same canola cultivar. Consult industry guidelines for more detailed assessment of blackleg risk in specific situations. Up to two sprays of Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide may be applied per season to the crop.

### Sclerotinia

Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide is most effective when application is made prior to conditions conducive to sclerotinia infection. Infection and disease development are most conducive in warmer winter or spring conditions with extended periods of leaf wetness due to rainfall, dew and high humidity.

Sclerotinia is most likely to develop where day temperatures are warmer coinciding with a saturated soil profile and rainfall events. Refer also to industry guidelines for advice on conditions under which sclerotinia are most likely to develop.

Control of sclerotinia stem rot is more effective in crops which have a uniform flowering. Uneven flowering (e.g. caused by staggered germinations) makes optimum spray timing difficult and two sprays may be required in these crops.

Generally a single application of Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide at 20 to 30% flowering will control sclerotinia in crops with a short flowering interval. Crops with an extended flowering period may require a second application prior to 50% flowering (full-bloom) to adequately control sclerotinia if conditions late in the season are conducive to development of disease.

Length of protection may be reduced in bulky crops where coverage is difficult and where there is growth dilution of the fungicide. For optimum protection, application should be directed to obtain coverage on petals, leaves and stems.

## Disease control in pyrethrum

Apply only as instructed by the pyrethrum adviser.

## Mixing

Prior to pouring, shake container vigorously, then add the required quantity of Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide to water in the spray vat with agitators in motion. Add the required amount of adjuvant if necessary and mix thoroughly.

## Application

### Ground:

**Wheat, barley, oats and triticale:** Apply product using a spray volume of 70 – 100 L/ha and a MEDIUM spray quality as defined by the ASABE S572 Standard.

**Canola:** Apply product using a spray volume of 60 – 100 L/ha and a MEDIUM spray quality as defined by the ASABE S572 Standard.

**Pyrethrum:** Apply product using a spray volume of 250 L/ha or above and a MEDIUM spray quality as defined by the ASABE S572 Standard.

**Aerial:** (not pyrethrum) Apply product using a minimum spray volume of 20 L/ha and a MEDIUM spray quality as defined by the ASABE S572 Standard.

### Compatibility

For information on compatibility please contact Four Seasons Agribusiness Pty Ltd.

### Use of adjuvant

Depending on the disease that is to be treated in the crop, some benefit in efficacy may be gained from addition of an appropriate adjuvant to the spray mixture.

Follow these guides when deciding on the addition of an adjuvant to the tank mixture prior to spraying.

Disease	Addition of adjuvant	
	Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide 150mL/ha	Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide 300 mL/ha
<b>Barley</b>		
Net form net blotch	Yes	Not required
Spot form net blotch	Yes	Not required
Powdery mildew	Not required	Not required
Leaf scald	Yes	Not required
Leaf rust	Yes	Not required
<b>Oats</b>		
Stem rust	N/A	Yes (BS 1000 only)
Leaf rust	N/A	Yes (BS 1000 only)
Septoria blotch	Yes	Not required
<b>Wheat</b>		
Stripe rust	Yes	Yes (BS 1000 only)
Stem rust	Yes	Yes (BS 1000 only)
Leaf rust	Yes	Yes (BS 1000 only)
Yellow leaf spot	Not required	Not required
Septoria nodorum - glume blotch	Yes	Not required
Powdery mildew	Yes	Not required
Fusarium head blight/head scab	Yes	Yes (BS 1000 only)
<b>Triticale</b>		
Stripe rust	Yes	Yes (BS 1000 only)
<b>Canola</b>	Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide 375mL/ha	Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide 450 mL/ha
Blackleg and sclerotinia stem rot	Not required	Not required
<b>Pyrethrum</b>	Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide 1.0 L/ha	
Ray blight	Not required	

**Note:** Adjuvant is not required for use of Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide on canola or pyrethrum.

Suitable Adjuvants	Comments
BS 1000 0.25%	Can be used at all rates of Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide for ground and aerial application.
Hasten 1%	For use with Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide at 150 mL/ha only.
Rocket 1%	Do not use with Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide at rates above 150 mL/ha. Do not use for aerial application.
Kwicken 1%	
D-C-Trate Advance 1%	
D-C-Trate 1% Uptake 0.5%	

### Fungicide Resistance Warning

<b>GROUP</b>	<b>3</b>	<b>FUNGICIDE</b>
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Four Seasons Agribusiness ProTeb 420 SC Foliar 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, Four Seasons Agribusiness Pty Ltd accepts no liability for any losses that result from failure of this product to control resistant fungi.

### EXPORT OF TREATED PRODUCE

Growers should note that MRLs or import tolerances do not exist in all markets for produce treated with Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide. If you are growing produce for export, please check with Four Seasons Agribusiness for the latest information on MRLs and import tolerances before using Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide.

### PRECAUTIONS Re-entry Period

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.

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

Very toxic to aquatic life. DO NOT contaminate streams, rivers, drains or waterways with the chemical or used containers. A spray drift minimisation strategy should be employed at all times. 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.

Integrated pest management – where IPM is practiced: Four Seasons Agribusiness ProTeb 420 SC Foliar Fungicide may have adverse effects on some non-target beneficial insects such as predatory mites.

### 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 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. Do not re-use empty container for any other purpose.



## **SAFETY DIRECTIONS**

May irritate eyes. Avoid contact with eyes. When opening the container, mixing and loading and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), and elbow length chemical resistant gloves. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Wash hands after use. After each day's use wash gloves, and contaminated clothing.

## **FIRST AID**

If poisoning occurs contact a doctor or Poisons Information Centre (Phone Australia: 13 11 26).

## **ADDITIONAL USER SAFETY INFORMATION WARNING**

May cause birth defects.

## **SAFETY DATA SHEET**

For further information, refer to the Safety Data Sheet which is available from the supplier.

## **CONDITIONS OF SALE**

The sale, supply, storage, use and application of this product is beyond the control of the manufacturer, and, subject to this provision, all warranties, conditions, rights and remedies express or implied under common law, statute or otherwise, in relation to the sale, supply, storage, use or application are excluded. Four Seasons Agribusiness Pty Limited and its associated entities shall not accept any liability whatsoever (including consequential loss) or however arising (including negligence) for any damage, injury or death connected with the sale, supply, storage, use or application of this product except for liability which cannot be excluded by statute.

**Suspected of damaging fertility or the unborn child. •May cause damage to organs through prolonged or repeated exposure. •Do not handle until all safety precautions have been read and understood. •Do not breathe spray mist. •IF exposed or concerned: Get medical advice/attention. •Store locked up.**

**IN AN EMERGENCY  
DIAL 000  
POLICE OR FIRE BRIGADE**



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