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READ SAFETY DIRECTIONS BEFORE OPENING OR USING

**Scala<sup>®</sup> 600 SC**

FUNGICIDE

ACTIVE CONSTITUENT: 600 g/L PYRIMETHANIL

GROUP 9 FUNGICIDE

For the control of yellow Sigatoka, leaf speckle and cordana leaf spot in bananas and botrytis (*Botrytis cinerea*) including fungal strains resistant to dicarboximides and benzimidazoles, in grapevines, strawberries and tolerant ornamental species as specified in the DIRECTIONS FOR USE table

## DIRECTIONS FOR USE

## RESTRAINTS

**Bananas**

**DO NOT** mix this product with any type of spray additive with the exception of high quality water miscible crop oil.

**Ornamentals**

**DO NOT** apply to ornamentals without prior tolerance testing of each species/variety (refer to Critical Comments).

**DO NOT** apply to ornamentals grown in poorly ventilated glasshouses or plastic tunnel houses.

CROP	DISEASE	RATE	CRITICAL COMMENTS
Bananas (Qld, NSW, WA, NT only)	Yellow Sigatoka ( <i>Mycosphaerella musicola</i> ), leaf speckle ( <i>Mycosphaerella musae</i> ), cordana leaf spot ( <i>Cordana musae</i> )	660 mL/ha plus a high quality (narrow range) water miscible mineral crop oil at 2 to 5 L/ha	<p>Scala should be applied as part of a regular program of fungicide sprays, alternating with fungicides from different chemical groups.</p> <p>For optimum disease control maintain thorough de-leaving practices to reduce disease inoculum. Old leaves and leaves with advanced lesions, or infected parts of the leaf, should be removed regularly and prior to the application of Scala.</p> <p>Intervals between fungicide applications generally should be 14-21 days, but should be modified for locality, disease conditions, and leaf emergence or growth rates.</p> <p>Scala should only be applied with a high quality water miscible mineral crop oil (applied at 2 to 5 L/ha) and diluted with sufficient water to ensure thorough coverage of all leaf surfaces (minimum 30 L/ha spray volume when applied by air).</p> <p>Choose an oil rate based upon disease pressure i.e. use a lower oil rate under low disease pressure, and higher oil rate under high disease pressure.</p> <p>The surface of recently emerged fruit is particularly prone to marking damage from spray applications under certain circumstances, including high temperatures,</p>



## Scala 600 SC

CROP	DISEASE	RATE	CRITICAL COMMENTS
Bananas <i>Continued</i>			<p>strong direct sunlight and rapid fruit growth. To minimise the risk of fruit marking, it is recommended that all emerged bunches be bagged prior to spraying under such circumstances.</p> <p><b>Note:</b> This use is subject to a CropLife resistance management strategy, which limits the total number and the number of consecutive applications of Group 9 fungicides. Refer to <a href="http://www.croplife.org.au">www.croplife.org.au</a> for more information.</p>
Grapevines	Botrytis (grey mould, <i>Botrytis cinerea</i> )	<p><b>Dilute Spraying</b> 125 mL/100 L water (maximum 1.25 L Scala/ha)</p> <p><b>Concentrate spraying</b> <u>Flowering*</u> 1.0 to 1.25 L/ha</p> <p><u>Post-flowering</u> 1.25 L/ha</p> <p>Refer to the Application section in GENERAL INSTRUCTIONS</p>	<p>Applications should be made at the critical timings for botrytis control.</p> <p><b>Note:</b> This use is subject to a CropLife Australia Resistance Management Strategy. Refer to <a href="http://www.croplife.org.au">www.croplife.org.au</a> for more information.</p> <p>Apply by dilute or concentrate spraying equipment. Use a sufficient amount of water and/or adequate equipment to ensure penetration of the canopy and coverage of the flowers or bunches. May be used with a non-ionic wetting agent.</p> <p>* For concentrate spraying at flowering use the high rate on dense canopies or when conditions favour disease.</p>
Ornamentals (subject to a tolerance test)	Botrytis (grey mould, <i>Botrytis cinerea</i> )	125 mL/ 100 L water	<p><b>IMPORTANT – Scala may damage flowers and foliage of some species/varieties of ornamentals under certain conditions, particularly where application occurs in enclosed areas with poor ventilation and high humidity.</b></p> <ol style="list-style-type: none"> <li>1. A test should be conducted on a small number of plants to demonstrate tolerance, prior to large scale use. Plant growth stage and environmental conditions should be similar for the test and any subsequent large scale use (see point 2 below).</li> <li>2. Apply only to field-grown ornamentals or to plants grown in <b>well-ventilated</b> plastic tunnel houses or glass houses.</li> </ol> <p>Apply Scala when conditions favour disease development and repeat at 7 to 10 day intervals alternating with a fungicide of a different chemical group. Use the shorter interval when disease pressure is high.</p> <p><b>Note:</b> This use is subject to a CropLife Australia Resistance Management Strategy, which governs the <b>maximum number of applications</b> per season. Refer to <a href="http://www.croplife.org.au">www.croplife.org.au</a> for more information.</p> <p>Apply Scala to the point of ‘run-off’ ensuring adequate penetration of the plant canopy and coverage of the leaves and flowers.</p> <p>A non-ionic wetting agent is not generally required with Scala, but may be used provided it is included with Scala in a tolerance test (refer point 1 above).</p>



CROP	DISEASE	RATE	CRITICAL COMMENTS
Strawberries	Botrytis (grey mould, <i>Botrytis cinerea</i> )	1.25 L/ha	<p>Apply Scala during flowering when conditions favour disease development. Repeat at 7 to 10 day intervals alternating with a fungicide of a different chemical group. Use the shorter application interval when disease pressure is high.</p> <p><b>Note:</b> This use is subject to a CropLife Australia Resistance Management Strategy, which governs the <b>maximum number of applications</b> per season. Refer to <a href="http://www.croplife.org.au">www.croplife.org.au</a> for more information.</p> <p>Use water volumes of 350 to 1000 L/ha depending on equipment and crop stage to ensure adequate penetration of the canopy and coverage of foliage and flowers and/or fruit. May be used with a non-ionic wetting agent.</p>

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

#### WITHHOLDING PERIOD:

**Bananas - NOT REQUIRED WHEN USED AS DIRECTED.**

**Strawberries - DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.**

**Grapes - DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**

#### EXPORT OF TREATED PRODUCE

##### Bananas

Growers should note that MRLs or import tolerances do not exist in all markets for bananas treated with Scala. If you are growing bananas for export, please check with Bayer CropScience Pty Ltd for the latest information on MRLs and import tolerances BEFORE using Scala.

##### Grapevines, ornamentals, strawberries

Growers should note that suitable MRLs or import tolerances may not be established in all markets for fruit treated with Scala 600 SC Fungicide. If you are growing strawberries for export or grapes for export (either fresh, dried or as wine), please check with Bayer CropScience Pty Ltd or the Australian Wine Research Institute (in the case of wine), for the latest information on MRLs and import tolerances BEFORE using Scala.

#### GENERAL INSTRUCTIONS

##### Integrated Pest Management

##### Bananas

Scala is suitable for use in IPM programmes. Scala is harmless to predators in situations where integrated mite control is practised.

##### Crop Oils

##### Bananas

Scala requires the addition of a high quality (narrow range) water miscible mineral crop oil. As formulations of mineral spray oils are beyond the control of Bayer CropScience please refer to Bayer CropScience, your chemical reseller, aerial applicator or the manufacturer of the oil to ensure that it is physically and biologically compatible with Scala before applying.

##### Mixing

##### Bananas

Add the required amount of Scala directly to the spray tank half-filled with water, with agitators in motion, or with constant mechanical agitation. Then add the water miscible mineral crop oil, and the remainder of the water and mix well, under constant agitation. Do not allow the spray mixture to remain in the tank for long periods without agitation.



**Grapevines, ornamentals, strawberries**

Add the required amount of Scala directly to the half-filled spray tank with agitators in motion, or with constant mechanical agitation. Complete filling of spray tank under constant agitation. Do not allow the spray mixture to remain in the tank for long periods without agitation.

**Application**

**Bananas**

Apply at least 30 litre of spray mixture per hectare for aerial application. For ground application, apply in sufficient water volume and with a sprayer set-up to ensure even and thorough coverage of leaf surfaces.

**Grapevines, ornamentals, strawberries**

**Equipment**

NOT to be applied by aircraft.

Grapevines - Scala can be applied using suitable dilute or concentrate ground application equipment. Equipment should produce a spray that ensures penetration of the canopy and coverage of the flowers or bunches.

Ornamentals - Scala can be applied using suitable high volume ground or hand-held application equipment. Equipment should produce a spray that ensures penetration of the canopy and coverage of the foliage and flowers.

Strawberries - Scala can be applied using suitable high or low volume application equipment. Equipment should produce a spray that ensures penetration of the canopy and coverage of the flowers and/or fruit.

**Water Volume**

Grapevines - Refer to Special Instructions for Grapevines.

Ornamentals – Apply Scala to the point of ‘run-off’ to ensure adequate penetration of the canopy and coverage of the foliage and flowers.

Strawberries - Use water volumes of 350 to 1000 L/ha depending on equipment and crop stage to ensure adequate penetration of the canopy and coverage of foliage and flowers and/or fruit.

**IMPORTANT** - Apply only to field-grown ornamentals or to plants grown in **well-ventilated** plastic tunnel houses or glass houses. Application in enclosed areas with poor ventilation, and high humidity, may cause phytotoxicity to flowers and foliage of some ornamental species.

**Special instructions for grapevines**

**Dilute spraying**

- ◆ Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- ◆ Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient spray volume to cover the crop to the point of run-off. Avoid excessive run-off.
- ◆ The required spray volume to achieve point of run-off may be determined by applying different test volumes, using different settings on the sprayer, or from industry guidelines or other expert advice.
- ◆ Add the amount of product specified in the Directions for Use table for each 100 L of water. **However, if greater than 1000 L/ha is required to achieve point of run-off, adjust the amount of product added for each 100 L of water to ensure no more than 1.25 L/ha product is applied.** Spray to the point of run-off.
- ◆ The required dilute spray volume to achieve point of run-off will change and the sprayer set up and operation may also need to be changed, as the crop grows.

**Concentrate spraying**

- ◆ Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- ◆ Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen spray volume.
- ◆ **Based on your chosen spray volume per hectare, and the amount of product specified in the Directions for Use table for each hectare, calculate the mixing rate for concentrate spraying.**
- ◆ The chosen spray volume and the sprayer set up and operation may need to be changed as the crop grows.
- ◆ For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

**FUNGICIDE RESISTANCE WARNING****GROUP 9 FUNGICIDE**

Scala 600 SC Fungicide is a member of the anilinopyrimidine group of fungicides. For fungicide resistance management the product is a Group 9 fungicide. Some naturally occurring individual fungi resistant to the product and other Group 9 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 or other Group 9 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, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from failure of this product to control resistant fungi.

**Resistance Management Strategy**

The use of this product in bananas, grapevines, ornamentals and strawberries is subject to a CropLife Resistance Management Strategy. CropLife Australia resistance management strategies restrict the use of sprays containing Group 9 fungicides. Sprays of fungicides from other chemical groups may also be restricted by CropLife Australia resistance management strategies and/or specific product label requirements and these should be considered when planning a fungicide application program. Please refer to the CropLife Australia website ([www.croplife.org.au](http://www.croplife.org.au)) for details of the fungicide resistance management strategy applicable to each crop.

**COMPATIBILITY****Bananas**

DO NOT mix Scala with any additive other than a high quality (narrow range) water miscible mineral crop oil.

**Grapevines, ornamentals, strawberries**

For use on grapevines, Scala is compatible with most commonly used fungicides and insecticides including; *Bacillus thuringiensis*, dimethoate, Bayfidan®, Blue Shield® DF, Lorsban® WP, mancozeb, Mycloss®, Oxydul®, ProGibb®, Ridomil® Plus, Spin® Flo and wettable sulphur. Do not mix Scala with products exhibiting alkaline reaction, including lime sulphur and Bordeaux mixtures. When mixing Scala with Bayfidan, use butyl gloves. Mixtures with products containing phosphorous acid may cause leaf damage.

**PRECAUTIONS****Bananas**

Do not use human flaggers/markers unless they are protected by engineering controls such as enclosed cabs.

**Re-entry period – all crops**

Do not allow entry into treated areas until the spray deposits have dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and a washable hat and chemical resistant gloves. Clothing must be laundered after each day's use.

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

DO NOT apply under weather conditions, or from spraying equipment, which could be expected to cause spray to drift onto adjacent crops, croplands, pasture, livestock or aquatic areas.

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

Toxic to aquatic organisms. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

**STORAGE AND DISPOSAL**

Keep out of reach of children.

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 designation 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 specially 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**

Will irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves. 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 (telephone 13 11 26).

**SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet, which can be obtained from [www.crop.bayer.com.au](http://www.crop.bayer.com.au).

**EXCLUSION OF LIABILITY**

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

Scala®, Bayfidan® and Blue Shield® are Registered Trademarks of the Bayer Group.

APVMA Approval No.: 60445/109454

FOR 24 HOUR SPECIALIST ADVICE IN EMERGENCY ONLY PHONE 1800 033 111
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**GHS STATEMENTS**

<b>Classification not required according to GHS criteria.</b>
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