

# Crop guide for tomatoes, capsicums and chillies

Serenade Opti is a biofungicide registered for suppression of bacterial spot (Xanthomonas spp.) in tomatoes, capsicums and chillies.

The key features of Serenade Opti are:

No withholding period.

Highly compatible with many commonly used products in growers' spray programs.

As a Group 44 fungicide, Serenade Opti supports resistance management through a new mode of action.

There are no restrictions on the number of applications of Serenade Opti.

Soft on most beneficial species when used as directed.

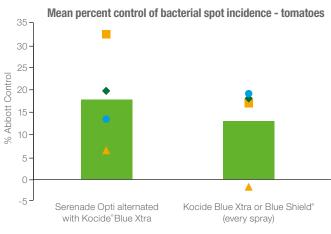
OMRI (USA organic) certified.

# Serenade<sup>®</sup> Opti, scientifically proven, naturally effective.

### What is Serenade Opti?

Serenade Opti contains the unique properties of the pure Bayer Crop Science QST713 strain of *Bacillus amyloliquifaciens* bacteria and is a formulated combination of spores and fungicidally active compounds produced by the spores. QST713 is a naturally occurring strain of *Bacillus amyloliquifaciens* (subtilis) discovered in an orchard soil sample. This strain has been chosen for its overall superior performance after testing of over 20,000 strains of bacteria. *Bacillus amyloliquifaciens* strain QST713 and the Serenade Opti formulation have been extensively studied in many agricultural situations over many seasons.

The Serenade Opti wettable powder formulation has been developed for foliar application.



- Average
- QB22 2014
- ▲ QF06 2015
- ◆ QF01\_2017
- QC06\_2015

Average of 15 assessments in total Average of 8 applications prior to each assessment

### Best practice use of Serenade Opti in tomatoes, capsicums and chillies:

- Effective suppression Serenade Opti will provide suppression of bacterial spot when applied in conditions of low to
  moderate disease pressure. Under high disease pressure it is recommended that Serenade Opti is applied in
  combination with another effective registered bactericide to optimise efficacy. Reduce background levels of disease by
  removing severely infected plant debris and fruit.
- Applications should begin after emergence or transplant.
- Stand-alone rate 200 g/100 L or 2 kg/ha. No adjuvants are required.
- Alternation rate Apply in alternation with registered copper bactericides to reduce reliance on this active ingredient.
   Apply at a rate of 150 g/100 L or 1.5 kg/ha.
- Highly compatible Serenade Opti is compatible with most copper based fungicides/bactericides and a range of
  synthetic products, so it can be used as an effective tank mix partner as part of a disease management program.
- **Regular application** Apply as part of a successful preventative program. Application intervals should be between 3 and 7 days.
- Maximise coverage Apply as a preventative, non-systemic product; ensure thorough coverage of all foliage and fruit.

For more technical information on Serenade Opti and the use of Serenade Opti in grapes or strawberries, refer to the additional Crop Guides at crop.bayer.com.au/serenadeopti

DIRECTIONS FOR USE*		
CROP	DISEASE	RATE
Tomatoes, capsicums, chillies (field and protected cropping systems)	Bacterial spot (Xanthomonas spp.) (suppression only)	150 to 200 g/100 L water or 1.5 to 2.0 kg/ha

# **CRITICAL COMMENTS**

Begin applications soon after emergence or transplant as part of a preventative bacterial spot program. Rotate applications of Serenade Opti with other registered bactericides and repeat every 3 to 7 days. These applications will help reduce the spread of bacterial spot, but will not control existing infections. Serenade Opti should be applied preventatively before disease symptoms are visible.

Use the shortest interval and highest rate when conditions are very favourable for infection i.e. during wet weather, high inoculum levels and/or physical damage e.g. through pruning or harvesting.

Use the lowest rate when used in rotation with protectant fungicides e.g. copper based fungicides. Continue applications of 3-7 days following a protectant fungicide if conditions are conducive to disease development.

Apply as a high volume spray at a water volume appropriate to the crop stage to ensure good coverage of all foliage, flowers and fruit. Concentrate spraying is not recommended.

# Witholding periods (WHP)

Capsicums, chillies, tomatoes: NOT REQUIRED WHEN USED AS DIRECTED.

### Want more information?

For more information on getting the best out of Serenade Opti, visit **crop.bayer.com.au/serenadeopti** or talk to your local Bayer representative.

\* Please refer to the Serenade Opti product label for the Restraints associated with the use of Serenade Opti. Always refer to the product label before use.

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Always consult the product label for detailed information. The information and recommendations set out in this brochure are based on tests and data believed to be reliable at the time of publication. Results may vary, as the use and application of the products is beyond our control and may be subject to climatic, geographical or biological variables, and/or developed resistance. Any product referred to in this brochure must be used strictly as directed, and in accordance with all instructions appearing on the label for that product and in other applicable 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.

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