



Key features of Serenade® Prime in bananas:

No withholding period required*.

Highly compatible with many commonly used products in growers' spray programs. Compatible for use with oil based spray programs (high quality water miscible mineral crop oil at 3.5 – 5 L/ha, under high disease pressure use the high rate of oil).

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

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

Registered for the control of yellow Sigatoka and suppression of leaf speckle.

Derived from precise biological fermentation processes to ensure consistent, high quality product.

Low odour.

* 1 day withholding period required when used with oil.

Serenade® Prime in bananas.

What is Serenade Prime?

Serenade Prime contains the unique properties of the pure Bayer Crop Science QST713 strain of *Bacillus amyloliquefaciens* bacteria and is a formulated combination of spores and fungicidally active compounds produced by the spores. QST713 is a naturally occurring strain of *Bacillus amyloliquefaciens* (previously known as *B. 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 amyloliquefaciens* strain QST713 and the Serenade Prime formulation have been extensively studied in many agricultural situations over many seasons.

Serenade Prime has been registered as a biofungicide approved for the control of yellow Sigatoka (*Mycosphaerella musicola*) and suppression of common leaf speckle (*Mycosphaerella musae*) via broadcast foliar spray as part of a regular fungicide spray program.

Serenade Prime at a glance

What is it?	A suspension concentrate formulation of dormant viable <i>Bacillus amyloliquefaciens</i> strain QST713 spores plus associated biochemicals that prevent disease development and trigger the plant's natural defence mechanisms.
What does it target?	Yellow Sigatoka (<i>Mycosphaerella musicola</i>) Common leaf speckle (<i>Mycosphaerella musae</i>) (Suppression only)
How to apply	Apply Serenade Prime as a broadcast foliar spray in a regular program of fungicide sprays, alternating with fungicides from different mode of action groups. Thorough coverage is critical, as the biochemicals are not systemic. This product is registered for both ground and aerial applications.
Timing	For optimum disease control maintain thorough de-leafing practices, in accordance with industry guidelines, to reduce disease inoculum. Old leaves and leaves with advanced lesions should be removed, or infected parts of the leaf removed, prior to the application of Serenade Prime.
Interval	Intervals between fungicide applications generally should be 14 – 21 days, but should be modified for locality, disease conditions and leaf emergence rates. Use a shorter interval when applied during conditions favourable to disease development (warm and high humidity).
Rate	1.0 L/ha (plus a high quality water miscible mineral crop oil at 3.5 – 5.0 L/ha)**
Rainfast period	4 hours +
UV stability	Generally very stable
Compatibility	Compatible with most pesticides and fertiliser products
Withholding period	Not required when used as directed*

Alternate MOA

Serenade Prime offers a different and unique mode of action. Lipopeptides in Serenade Prime physically disrupt pathogen cell membranes via:

1. Inhibiting spore germination and causing spores destruction,
2. Growing mycelia are lysed and contents are released.

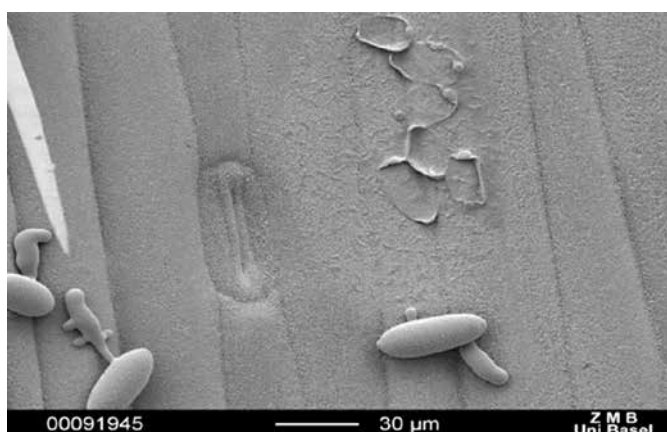
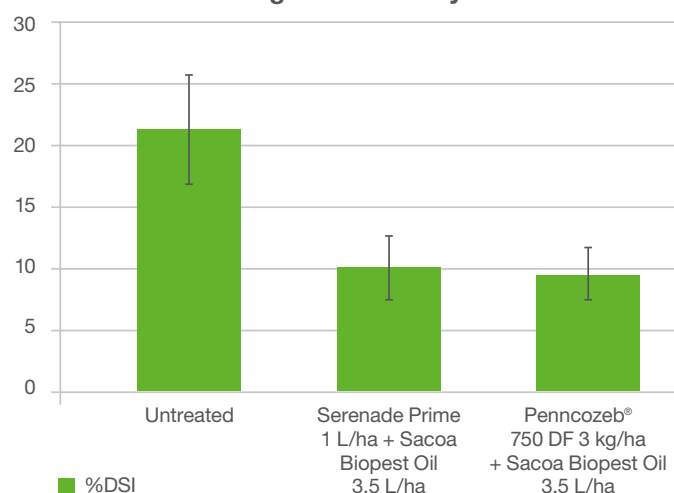


Fig 1: Picture of arrested germ tube from treatment.

Efficacy

Yellow Sigatoka Severity Index



Average comprises of the two final disease severity assessments from four trials after 4-6 back to back sprays at a 14-21 day interval. Trials were completed in the Queensland regions of Innisfail, Garradunga and Pine Creek with associated trial numbers: FD17AUSHB1QE06, FD17AUSHB1QE20, FD14AUSHF2QE50, and FD15AUSHF5QF09.

Summary

1. In a robust banana spray program Serenade Prime provides an alternate mode of action for key foliar diseases.
2. Low odour and Zero WHP make it the Prime decision.
Apply Serenade fungicide to your bananas today.

* 1 day withholding period required when used with oil.

** Refer to the product label for the rate appropriate to disease severity.

Foliar use

How it works

Serenade Prime contains multiple biological compounds which have direct contact activity. These compounds prevent the development of ascospores of *Sigatoka*, resulting in deformation of the germ tube and physical rupture to the cell membrane (Figure 4). These multiple compounds work synergistically to not only create an effective fungicide, but also make it very difficult for diseases to develop resistance.



Figure 4. Impact on development of black *Sigatoka*, 24 hours after inoculation (100X Magnification).

Foliar application

Serenade Prime is a protectant fungicide and should be applied with a high quality mineral crop oil. It should be part of an integrated spray program with systemic fungicides. Application should be made via aerial spray or ground rig application every 14-21 days. Use the shorter interval under conditions more favourable to disease development. There is no withholding period or restriction on the number of applications per season.

Apply Serenade Prime at 1.0 L/ha with a high quality mineral crop oil at 3.5-5.0 L/ha. It has a rainfast period of 4 hours and it is compatible in a tank-mixture between pH 4.5-8.5. Contact Bayer for further information on compatibilities.



Environmental Safety

Serenade Prime spores are subject to natural competition by microflora and physical and chemical degradation. It is of low toxicity to aquatic species tested and it has met (or exceeds) stringent testing and environmental protection guidelines and is safe to use.

**For further details contact your local
Bayer representative.**

Territory Business Managers:

Far North Queensland

Tony Fitzgerald 0418 226 529

Central Queensland

Lore Saupp-Saunders 0400 560 234

Northern New South Wales

Josh Squibb 0427 138 874

Technical Services Agronomist:

North Queensland

Nick Matthews
0428 736 660

www.crop.bayer.com.au

Bayer CropScience Pty Ltd, Level 4, 109 Burwood Rd,
Hawthorn VIC 3122. ABN 87 000 226 022. Technical Enquiries
1800 804 479. crop.bayer.com.au

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. Serenade® is a Registered Trademark of the Bayer group.
© 2025 Bayer Group.

