

# Serifel®

Biofungicide

## Protection above and below ground with Serifel® Biofungicide

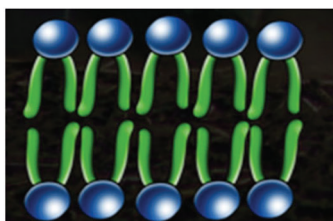
### Benefits of Serifel Biofungicide

- Greater CFU count than competitors
- Tankmix compatible with conventional products
- Rainfast within 3 hours
- Proven resistance management
- Low use rate

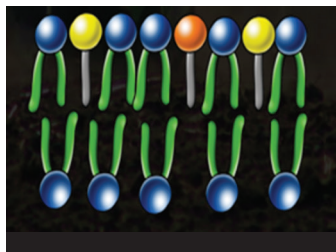
### Serifel Biofungicide Mode of Action: Membrane Integrity Disruptor (FRAC Grp 44)



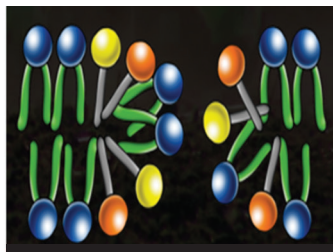
Metabolites



Healthy pathogen membrane

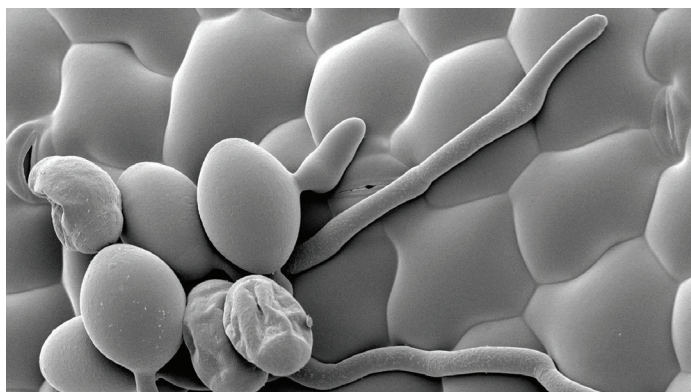


Metabolites insert into pathogen membrane

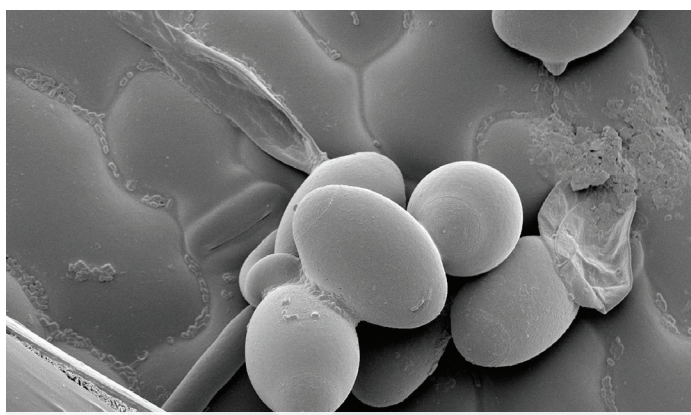


Pathogen membrane disrupted

### Serifel Biofungicide at Work



Healthy powdery mildew hyphae



Collapsed hyphae from Serifel biofungicide metabolites



**BASF**

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Technical Information Bulletin



# Protect Your Crop From the Ground Up

## Fusarium



Untreated



Serifel® Biofungicide 8 oz

## Rhizoctonia



Untreated



Serifel Biofungicide 8 oz

## Phytophthora



Untreated



Serifel Biofungicide 8 oz

## Pythium



Untreated

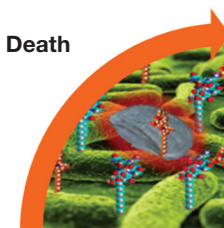


Serifel Biofungicide 8 oz

BASF sponsored trials. 2017 GLC Consulting, LLC. Quitman, GA. Pathogen inoculations by drip or drench applications.

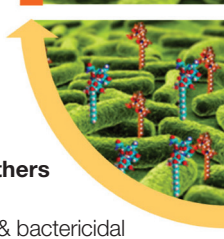
## Why Serifel Provides Consistency\*

**Pathogen Death**  
50-120°F

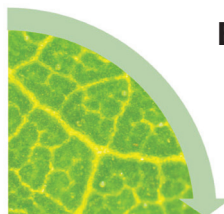


**Iturin & others**

70-90°F  
Fungicidal & bactericidal



**Bacillus**



**Surfactin**

50-70°F  
Growth, motility & SAR



## Best Use Recommendations

- Use Rate: 4-16 oz/ac
- Below Ground: 8-16 oz/ac
- Above Ground: 4-8 oz/ac
- PHI: 0 days
- REI: 4 hours
- Signal Word: Caution
- MOA: 44
- Rotation Restriction: None
- Adjuvant: Spreader



To learn more about crop protection products from BASF, visit [www.agproducts.basf.us](http://www.agproducts.basf.us)

\*Adapted from: Monteiro Fernando, Pereira & Vasconcelos de Medeiros Flavio, Henrique & Marc, Ongena & Franzil, Laurent & de Souza Paulo, Estevao & de Souza Jorge, Teodoro. (2016). Effect of temperature, pH and substrate composition on production of lipopeptides by *Bacillus amyloliquefaciens* 629. African Journal of Microbiology Research.10.1506-1512. 10.5897/AJMR2016.8222.

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Biofungicide