

NEW YORK STATE INTEGRATED PEST MANAGEMENT

Biopesticide Profile

Serifel

Active ingredient

Bacillus amyloliquefaciens strain MBI 600
(live bacterial endospores)

This information is not meant to be a substitute for reading the label. Always read and follow all pesticide labels. Ensure the pesticide is currently registered in your state.

PRODUCT

Formulations: Serifel

Pests: Plant diseases

FRAC Code (Fungicide Resistance Action Committee): BM 02 (formerly 44)

Mode of Action (see next page): Poison; Keep out; Turn on resistance; Grow strong plants

APPLICATION

Where to apply: Agricultural; Foliage, soil

When to start applying: 4 days before expected disease onset in cool weather (50's °F); 1 day in warm weather (70's °F)

How to apply: Do not allow mixture to sit overnight; agitate continuously during application; if possible, apply in the morning; use nozzle screen filters > 50-mesh; use with spreader

Tank mix & application compatibility: Do not tank mix with metalaxyl/mefenoxam, ethylene bisdithiocarbamates (e.g., mancozeb), or chlorothalonil

ENVIRONMENT

Temperature tolerance in field: 50-120 °F

Rainfastness: Within 3 hrs

UV tolerance: Up to 7 days; prefers low UV exposure

STORAGE

How to store: Cool dry place (room temperature)

Shelf life: 3 years if unopened and stored correctly

RISK

Signal word: Caution

REI (Restricted-entry interval): Was 4 hrs, will be changing to 12 hrs on product produced in 2023; follow REI on the label

PHI (Pre-harvest interval): 0 days

Impacts on beneficial insects: No known toxicity concerns for bees or other tested beneficial insects (ladybug, lacewing, predatory mite)

**Cornell
Cooperative
Extension**

IPM New York State
Integrated Pest Management
Program

About biopesticides

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USING BIOPESTICIDES

- Apply preventatively.
- Use as part of an IPM strategy, including cultural management practices, other pesticides, etc.
- Mix only what you need; don't leave in spray tank overnight.
- Don't expose to excessive heat in storage.
- When tank mixing, follow label instructions for all products. Check with company rep or distributor if you have questions. Do a "jar test" to determine physical compatibility if you want to mix two products for which you cannot find information on their compatibility.
- Proper cleaning of spray tanks after any pesticide application is always important. Pay special attention to tank cleaning when a biopesticide is applied after another incompatible product.

HOW BIOPESTICIDES WORK

Modes of action (MOAs)



Eat	Live microbe grows on/in pest	 	
Poison	Biopesticide (or its products) kills the pest directly	 	
Keep out	Live microbe grows on plant, leaving no room for pests		
Turn on resistance	Turns on the plant's defenses before pest attacks		
Grow strong plants	Makes plant stronger, healthier, more resilient		
Repel	Pest avoids plants treated with biopesticide		
Stop feeding	Stops pest from feeding; pest eventually starves		
Stop growth	Stops pest from growing or molting; pest eventually dies		
Stop reproduction	Hampers pests' ability to find a mate, lay eggs		

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LEARN MORE

Efficacy of biopesticides

go.nysipm.org/biopesticide-efficacy

Biocontrol Bytes blog

blogs.cornell.edu/biocontrolbytes/

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