

LIFEGARD[®]

**BIOLOGICAL PLANT
ACTIVATOR**

ACTIVATE THE NATURAL DEFENSES IN YOUR CROPS!

The first in a new class of biological disease control solutions used to manage foliar diseases in fruit and vegetable cropping systems. For more information visit Lifegardbpa.com



PRODUCT HIGHLIGHTS

“Switches on” the plant’s built-in immune defenses by eliciting an IR response in plants to help fight against bacterial, viral and fungal diseases

Easy to use formulation that can alternate or mix with a broad list of fungicides and bactericides

Improves crop quality without compromising yield with over 20 years of trials showing no phytotoxicity

Low risk of developing resistance, the first fungicide in its class (FRAC P6)

A residue exempt material with a 4 hour REI and a 0 day PHI



Always carefully read and follow label instructions.



1.800.250.5024

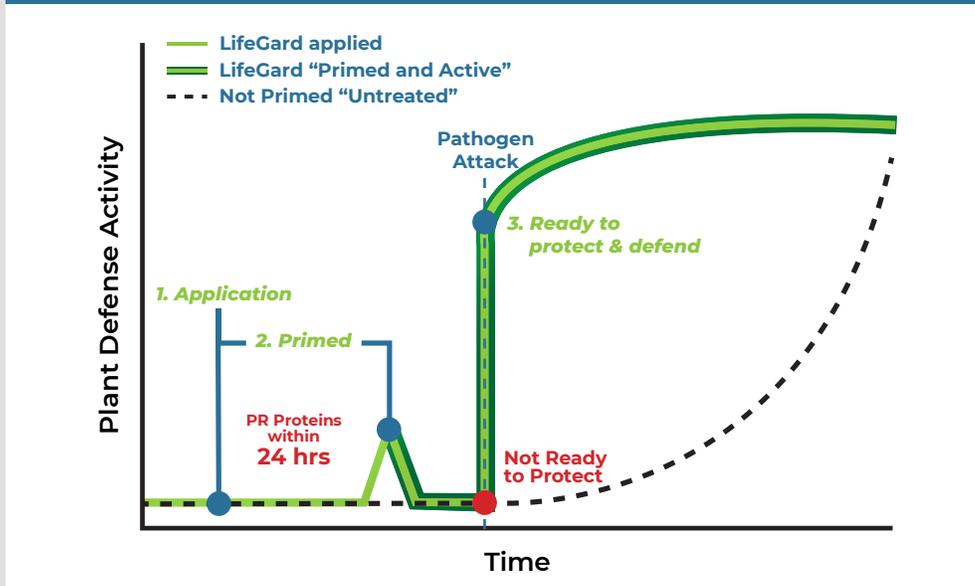
www.CertisBio.com

HOW IT WORKS

The active ingredient of LifeGard® WG is a naturally occurring bacterium *Bacillus mycoides* isolate J (BmJ). Instead of the traditional approach of attacking disease directly, the naturally occurring ingenious mode of action triggers the plant's built-in immune system. When triggered by application, plants "switch on" resistance genes, causing a cascade of plant metabolic responses that limit infection and disease development. LifeGard's activation of a plant's immune response is known as induced resistance, or IR. It is a highly effective mode of action for limiting infection and the development of bacterial and fungal diseases.



<p>1. APPLICATION </p> <p>LifeGard is applied early, ideally the first spray of your disease management program as a preventative application before disease occurs.</p>	<p>2. ACTIVATION </p> <p>BmJ bacterium lands on the plants, induction or "activation" initiates. LifeGard spores trigger the SAR process by directly activating the NPR1 proteins within 3 hrs. PR proteins spread throughout the plant within 24 hrs.</p>	<p>3. DEFENSE & ATTACK </p> <p>The plant responds with a cascade of metabolites that resist infection and the development of disease. Once the plant's natural immune response activates, it remains primed and resistant to disease for up to 18 days.</p>
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TANK MIXING	TIMING
<p>LifeGard WG is a wettable granular (WG) formulation that must be mixed with water and applied as a foliar spray. Mix the specified amount of LifeGard WG in clean water with sufficient agitation to maintain a uniform suspension in the spray or mixing tank.</p>	<p>LifeGard WG should be applied preventively, before disease is observed in the field. Initial triggering of plant defense response occurs within minutes of application, but 3 – 5 days are required to attain maximum level of protection, which lasts up to 18 days after application.</p>

Benefits by the numbers

 <p>APPLY RIGHT UP UNTIL HARVEST</p>	 <p>DEFENSE SIGNAL DETECTABLE</p>	 <p>RE-ENTRY INTERVAL</p>	 <p>DEFENSE PROTEINS DETECTABLE</p>	 <p>LENGTH OF PRIMED STATE</p>	 <p>NO PHYTOTOXICITY IN FIELD TRIALS</p>
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RECOMMENDED RATES	PHI/REI
4.5oz/100 Gallons	4 hour REI; 0 Day PHI

ACTIVE INGREDIENT

Bacillus mycoides isolate J or BmJ
(naturally occurring bacterium)

DISEASES CONTROLLED

- Fire Blight
- Early Blight
- Late Blight
- White Mold
- Cercospora
- Downy Mildew
- Powdery Mildew
- Citrus Canker

MAIN CROPS

- | | |
|---------------------|-------------|
| Almonds | Blueberries |
| Carrots | Citrus |
| Cole Crops | Cucurbits |
| Fruiting Vegetables | Grapes |
| Leafy Vegetables | Legumes |
| Pome Fruit | Potatoes |
| Sugar Beets | Table Beets |



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