

# THIS IS HOW WE LEAD

With a proven, broad portfolio of crop protection **solutions** for organic and conventional production, Certis Biologicals has the **answers** growers **need** in today's dynamic agricultural environment. Pioneering innovations to **solve** tomorrow's agricultural issues makes Certis Biologicals the **leader** in biopesticides.

200+  
TOTAL EMPLOYEES

### INDUSTRY EXPERIENCE

We take pride in our team of over 200 industry leaders located across the United States, Mexico, and Europe. Our diverse team includes PhDs, MBAs, plant pathologists, entomologists, and agronomists, all dedicated to driving innovation and excellence in sales, marketing, and field development. With their extensive expertise, we are committed to advancing sustainable agricultural practices worldwide.

3  
DEDICATED  
PRODUCTION PLANTS

### MANUFACTURING EXPERTISE

Certis owns and operates two state-of-the-art fermentation production facilities in the United States located in Wasco, CA and Butte, Montana. Through a joint venture, Certis also co-owns and operates a facility in India for plant extraction of neem-based products.

10,000+  
FIELD TRIALS

### PROVEN RESULTS

We collaborate with expert growers, consultants, and agronomists to continuously test and improve the performance of our products. Through 10,000+ field trials with leading research institutions worldwide, our products consistently meet or exceed conventional chemistries' performance, reflecting our commitment to providing reliable tools for today's challenging agricultural needs.

30+  
BIOLOGICAL  
PRODUCTS

### LEADING CERTIFICATIONS

Our product portfolio provides a comprehensive range of solutions tailored for both conventional and organic growers. These products have undergone rigorous evaluation by accredited third-party certifiers, ensuring compliance with the National List requirements for use in agricultural crop production.

LEARN MORE AT  
CERTISBIO.COM

### LEADING BIOPESTICIDES

Since 2001, Certis has been at the forefront of advancing agricultural practices with innovative biological solutions, driven by a commitment to delivering effective results. Explore the benefits of biopesticides and how they are transforming modern farming practices.



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## INSECTICIDES

### BT BIOLARVICIDES

Agree®  
A\*  
Bt aizawai strain GC-91

CryMax®  
CM  
Bt kurstaki strain EG7841

Deliver®  
De\*  
Bt kurstaki

Javelin®  
J\*  
Bt kurstaki

BoteGHA®  
BG\*  
Beauveria bassiana strain GHA

PFR-97™  
PFR\*  
Isaria fumosorosea Apopka strain 97

### INSECTICIDAL VIRUSES

CYD-X®  
CX\*  
Cydia pomonella

Gemstar®  
G\*  
Helicoverpa zea

Madex®  
Ma\*  
Cydia pomonella

### INSECTICIDAL SOAP

DES-X®  
DX\*  
Potassium salts of fatty acids

### INSECTICIDAL & MOLLUSCICIDAL BAITS

Bug-N-Sluggo®  
BnS\*  
Spinosad and iron phosphate

Seduce®  
Se\*  
Spinosad

Sluggo®  
SI\*  
Iron phosphate

### INSECT GROWTH REGULATOR

Neemix®  
Nx\*  
Azadirachtin

### BIONUTRIENTS

AgSil® 16H  
AS<sup>16</sup>  
Potassium silicate

AgSil® 21  
AS<sup>21</sup>  
Potassium silicate

AgSil® 25  
AS<sup>25</sup>  
Potassium silicate

### NEMATOCIDE

NemaClean®  
NC\*  
Purpureocillium lilacinum PL11

### HERBICIDES

Homeplate®  
Hp\*  
Non-selective herbicide

### BIOLOGICAL PLANT ACTIVATOR

LifeGard®  
LG\*  
Bacillus mycoides isolate J

## FUNGICIDES / BACTERICIDES

### BIOFUNGICIDES

Double Nickel®  
DN\*  
Bacillus amyloliquefaciens strain D747

OSO®  
O\*  
Polyoxin D zinc salt

SoilGard®  
SG\*  
Gliocladium virens strain GL-21

Howler EVO®  
HE\*  
Pseudomonas chlororaphis AFS009

Theia®  
Th\*  
Bacillus subtilis AFS032321

Convergence®  
Co\*  
Bacillus amyloliquefaciens

### BACTERIOPHAGES

AgriPhage Citrus Canker™  
AP<sup>CC</sup>  
Bacteriophage

AgriPhage FireBlight™  
AP<sup>FB</sup>  
Bacteriophage

Cueva®  
Cu\*  
Copper octanoate

Kocide® 2000-0  
K2\*  
Copper hydroxide

Kocide® 3000-0  
K3\*  
Copper hydroxide

### MITICIDES

Trilogy®  
Tr\*  
Clarified hydrophobic extract of neem oil

Sil-MATRIX®  
SM\*  
Potassium silicate





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LEADING BIOLOGICALS



	Active Ingredient	Pest Controlled	OMRI Listed	NOP Approved	Residue Exempt	REI	PHI	Application Interval¹
BIOLOGICAL PLANT ACTIVATOR								
LifeGard® WG	Bacillus mycoides isolate J	Bacterial disorders, Cercospora blight, downy mildew, early blight, fire blight, late blight, PVY potato virus Y (seed potatoes), white mold	✓	✓	✓	4 hrs.	0	7-10 days
INSECTICIDES								
Bt Biolarvicides								
Agree® WG	Bt aizawai strain GC-91	Lepidoptera (caterpillar) pests	✓	✓	✓	4 hrs.	0	3-14 days
Crymax®	Bt kurstaki strain EG7841	Lepidoptera (caterpillar) pests	—	—	✓	4 hrs.	0	3-14 days
Deliver®	Bt kurstaki strain SA-12	Lepidoptera (caterpillar) pests	✓	✓	✓	4 hrs.	0	3-14 days
Javelin® WG	Bt kurstaki strain SA-11	Lepidoptera (caterpillar) pests	✓	✓	✓	4 hrs.	0	3-14 days
Bioinsecticides								
BoteGHA® ES	Beauveria bassiana strain GHA	Aphids, leafhoppers, mealybugs, psyllids, thrips, whiteflies	✓	✓	✓	4 hrs.	0	5-10 days
PFR-97® 20% WDG	Isaria fumosorosea Apopka strain 97	Aphids, mites, phorid flies, psyllids, root aphids, thrips, whiteflies	✓	✓	✓	4 hrs.	0	7-10 days
Insect Growth Regulator								
Neemix® 4.5	Azadirachtin	Aphids, leafminers, whiteflies	✓	✓	✓	4 hrs.	0	7-21 days
Insecticidal Viruses								
CYD-X® and CYD-X® HP	Cydia pomonella GV	Codling moth larvae	✓	✓	✓	4 hrs.	0	7-14 days
Gemstar® LC	Helicoverpa zea NPV	Bollworm, budworm, corn earworm larvae, earworm, tomato fruitworm	✓	✓	✓	4 hrs.	0	7-14 days
Madex® HP and Madex® XLV	Cydia pomonella CpGV V-22 and V-45	Codling moth, Oriental fruit moth larvae	✓	✓	✓	4 hrs.	0	7-14 days
Insecticidal Soaps and Oils								
DES-X®	Potassium salts of fatty acids	Aphids, powdery mildew, whiteflies	✓	✓	✓	12 hrs.	0	7-21 days
Trilogy®	Clarified hydrophobic extract of neem oil	Aphids,, mites, thrips, whiteflies	✓	✓	✓	4 hrs.	0	7-21 days
Insecticidal and Molluscicidal Baits								
Bug-N-Sluggo®	Spinosad, iron phosphate	Ants, cutworms, earwigs, pillbugs, slugs, snails, sowbugs	✓	✓	—	4 hrs.	Varies	14-28 days
Seduce®	Spinosad	Ant, cutworm, earwig	✓	✓	✓	4 hrs.	Varies	14-28 days
Sluggo® (Eastern U.S. only)	Iron phosphate	Slugs, snails	✓	✓	✓	0 hrs.	0	14-28 days
FUNGICIDES and/or BACTERICIDES								
Biofungicides								
Convergence®	Bacillus amyloliquefaciens strain D747	Botrytis, damping off, leaf spot, powdery mildew, rust, tar spot, white mold	✓	✓	✓	4 hrs.	0	n/a
Double Nickel 55®WG	Bacillus amyloliquefaciens strain D747	Alternaria, bacterial diseases, foliar diseases, powdery mildew	✓	✓	✓	4 hrs.	0	7-10 days
Double Nickel® LC	Bacillus amyloliquefaciens strain D747	Alternaria, bacterial diseases, Fusarium, powdery mildew, Rhizoctonia	✓	✓	✓	4 hrs.	0	7-10 days
Howler EVO®	Pseudomonas chlororaphis strain AFS009	Botrytis, Fusarium, Monilinia, Neopestaloptiosis, Rhizoctonia, scab, shot hole	✓	✓	✓	4 hrs.	0	5-14 days
OSO® 5% SC	Polyoxin D zinc salt	Anthracnose, Botrytis, fruit rots, flyspeck, powdery mildew, sooty blotch	✓	✓	✓	4 hrs.	0	7-14 days
SoilGard®	Gliocladium virens GL-21	Damping off and other soil-borne diseases	✓	✓	✓	4 hrs.	0	7-28 days
Theia®	Bacillus subtilis strain AFS032321	Bacterial diseases, downy mildew, Phytophthora, Pythium	✓	✓	✓	4 hrs.	0	2-10 days
Trilogy®	Clarified hydrophobic extract of neem oil	Black spot, powdery mildew, rust	✓	✓	✓	4 hrs.	0	7-10 days
Biochemicals								
Cueva®	Copper octanoate	Bacterial disorders, downy mildew, powdery mildew	✓	✓	✓	4 hrs.	0	7-10 days
Kocide® 2000-0	Copper hydroxide	Bacterial disorders, fire blight	✓	✓	✓	48 hrs.	0³	7-10 days
Kocide® 3000-0	Copper hydroxide	Bacterial disorders, fire blight	✓	✓	✓	48 hrs.	0³	7-10 days
Kocide® 50DF	Copper hydroxide	Bacterial disorders, fire blight	✓	✓	✓	48 hrs.	0³	7-10 days
Sil-MATRIX® LC	Potassium silicate	Aphids, Botrytis, mites, powdery mildew	✓	✓	✓	48 hrs.	0	7-10 days
Bacteriophages								
AgriPhage™ Citrus Canker	Bacteriophage	Citrus canker	—	✓	✓	4 hrs.	0	7-10 days
AgriPhage™ Fireblight	Bacteriophage	Fire blight	—	✓	✓	48 hrs.	0³	7-10 days
MITICIDES (Acaricides)								
PFR-97™ 20% WDG	Isaria fumosorosea Apopka strain 97	Lepidoptera (caterpillar) pests	✓	✓	✓	4 hrs.	0	7-10 days
Trilogy®	Clarified hydrophobic extract of neem oil	Broad mites, rust mites, spider mites	✓	✓	✓	4 hrs.	0	7-21 days
Sil-MATRIX® LC	Potassium silicate	Aphids, Botrytis, mites, powdery mildew	✓	✓	✓	4 hrs.	0	7-10 days
NEMATOCIDES								
NemaClean™	Purpureocillium lilacinum strain PL11	Plant parasitic nematodes (burrowing, citrus nematodes, false root knot, root knot, root lesion, sting nematodes)	✓	✓	✓	12 hrs.	0	4-10 days
HERBICIDES								
Homeplate®	Fatty acid (caprylic and capric acid blend)	Algae and moss, broadleaf weeds, grasses	✓²	✓	n/a	24 hrs.	0	n/a
SILICON AND POTASSIUM BIONUTRIENT SOURCE								
AgSil® 16H	Potassium silicate	Drought, metal toxicity management, salinity, stress	—	—	✓	n/a	n/a	n/a
AgSil® 21	Potassium silicate	Drought, metal toxicity management, salinity, stress	—	—	✓	n/a	n/a	n/a
AgSil® 25	Potassium silicate	Drought, metal toxicity management, salinity, stress	—	—	✓	n/a	n/a	n/a



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<sup>1</sup>These intervals are for general information purposes. Actual use patterns may vary according to pest pressure, crop growth stage, and other circumstances. All applications must be consistent with label use instructions.

<sup>2</sup>OMRI listed with conditions.

<sup>3</sup>PHI is 0 unless otherwise noted on product label.

Always read and carefully follow label instructions.