



Defend Your CropsUSING BIO WITH BITE.®



Marrone's award-winning biopesticides control insects, mites, nematodes, and disease, safely, sustainably, and with great return on investment. Safe for workers, consumers, and the environment, our biopesticides can be sprayed up until harvest. We have pioneered techniques to provide uniquely powerful crop protection and to help stop pest resistance.

PROTECT FRUITING VEGETABLES FROM:



Powdery Mildew



Thrips



Bacterial Spots



Mites



Bacterial Specks



And many more...













((GRANDEVO)

Grandevo® Bioinsecticide suppresses or controls early insect populations, protecting your crops and helping to prolong the lifespan of other pesticides.

BENEFITS:

- Broad spectrum protection against sucking and chewing insects
- Easy on pollinators and beneficial insects
- Multiple modes of action
 - Repellency
 - Ingestion
- No effect on pollination and fruit set

BASIC USE INSTRUCTIONS:

Tank Mix Program: apply 1-2 lbs/acre when tank-mixing Rotational Program: apply 2-3 lbs/acre when alternating

KEY TARGET PESTS:

Thrips

- Mites
- Whiteflies
- Aphids

84% WHITEFLY REDUCTION WITH GRANDEVO IN YOUR PROGRAM



Alternative Rotational Program

Untreated

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Adult Sweet Potato Whitefly per Tomato Leaf



We've seen great, great, great results out of Grandevo. We've used it for the past three years. It's my number one product on thrips.

-CHRIS FALTER, MATHIS FARM

Biological solutions present a whole new frontier for traditional growers. They prevent the same problems but in a way that is softer on the planet, the environment, farmworkers, and the watershed.

-DAVID KNAUS, APICAL CROP SCIENCE



Use Regalia® Biofungicide early for disease prevention, overall plant health/yield, and through the season for continued disease control. Great resistance management tool in IPM programs.

BENEFITS:

- Prevents disease by boosting plant self-defense.
- Better yield and harvest quality for conventional and organic fruiting vegetables
- Late residue management from MRL exemption
- Unique FRAC P5 Classification

BASIC USE INSTRUCTIONS:

Apply Regalia preventatively before disease gains a foothold. Use Regalia early for disease prevention and overall plant health, and late for residue management. Tank Mix Program: 1 qt per acre, 10-14 day intervals Rotational Program: 2 qt per acre of Regalia alternating with another fungicide, 7-10 day intervals

KEY TARGET PESTS:

- Powdery Mildew
- Bacterial Speck
- Bacterial Spots
- Early Blight

68% MORE TOMATOES WITH REGALIA THAN WITH ALTERNATIVE

Regalia + 6 oz Azoxystrobn

Pyraclostrobin, chlorothalonil, 15-0-16

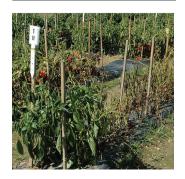
Pyraclostrobin, chlorothalonil

Untreated

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Marketable Processing Tomatoes (tons per acre)

UNTREATED PEPPERS



PROGRAM WITH REGALIA

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(6HAVEN®

Haven® Sun Protectant contributes to a cooler canopy, reducing plant tissue temperatures and blocking harmful solar radiations.

BENEFITS:

- Leaves no visible residue on the fruit making harvest and processing easier
- Increases yield by improving drought and heat stress tolerance
- Lowers internal leaf canopy temperatures
- Blocks harmful radiation like UV-B that harms plant tissue and growth

BASIC USE INSTRUCTIONS:

Applications should begin at early fruit set. Apply at rates of 0.6% to 0.9% v/v in 50-100 gal solution per acre, 2-4 times at 7-14 day interval

SURROUND® TREATMENT LEAVES VISIBLE RESIDUE



HAVEN® TREATMENT LEAVES NO VISIBLE RESIDUE





We get good results out of biological pesticides. If they're working, we keep using them. They're a lot safer to use and less harmful to the environment and humans. Everything is a plus when using them. New technology is a key aspect to farming and if you don't learn about new products, you are going to fall behind.

-CHRIS FALTER, MATHIS FARMS



Venerate® Bioinsecticide is your go-to broadspectrum in-season bioinsecticide. Venerate is an excellent addition to existing IPM and resistance management programs

BENEFITS:

- Broad spectrum protection against sucking and chewing insects, mites and certain weevils
- Non-toxic to fish, birds, and most beneficial insects, including honey bees
- Flexibility of application with activity against adults and nymphs
- Multiple modes of action
 - Exoskeleton degradation
 - Ingestion
 - Molting interference

BASIC USE INSTRUCTIONS:

Apply 1-4 quarts per acre on a 7-day interval. No limit on number of applications per season. No spray buffer needed.

KEY TARGET PESTS:

- Thrips
- Mites
- Whiteflies
- Aphids

70% WHITEFLY REDUCTION ON TOMATOES WITH VENERATE XC

Untreated

Rotational Program*

Program with Venerate XC

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Whitefly Adults per 10 leaves

*Dinotefuran, Flupyradifurone, Spirotretramat, Pymetrozine



Towards the end of our season on our conventional side, mites had gotten so bad. We'd thrown everything else we had at them, so I used Venerate to try to draw back the populations back and finish out the season. Going forward into another season Venerate will be the insecticide I go to for my organic side and it will be part of my conventional program as well.

-JOEL CONNELL, GRIMES FARMS



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MAJESTENE

Majestene® Bionematicide control or suppresses crop damaging nematodes to improve root health and increase fruiting vegetable yields.

BENEFITS:

- Economically sustainable liquid bionematicide
- Can be applied at planting and in-season for wholeseason nematode control/suppression for increased marketable yield
- No plant-back restrictions
- Flexible application: soil drench, in-furrow, or chemigation like drip or sprinkler irrigation

BASIC USE INSTRUCTIONS:

Apply Majestene near the end of an irrigation event. Tank Mix Program: apply at the rate of 4-8 quarts per acre prior to planting, at planting or shortly thereafter, at transplant or shortly thereafter, and inseason.

KEY TARGET PESTS:

• Lesion Nematode

Root Knot Nematode



We applied Majestene through the drip around the middle of the growing cycle. Within 3 to 4 days after applying Majestene, we started to see a change. We could see improvements in the plant with more greening of the vegetation and new roots.

-FIDEL CASTILLO, JR., CASTILLO FARMS



PROGRAM WITH OXAMYL



PROGRAM WITH MAJESTENE





Stargus® Biofungicide offers growers a sustainable mode of action to control downy mildew and a broad range of other fungal and bacterial diseases.

BENEFITS:

- Control diseases to increase marketable yield for top profit on every acre
- Simple IPM option gives peace of mind of sustainable disease management and resistance prevention
- Increases potential value of crop with no residue to worry about at harvest by being MRL-exempt
- Brings most flexible labor scheduling with 0-day PHI and 4 hour REI
- Application flexibility

BASIC USE INSTRUCTIONS:

Apply 2-4 quarts/acre (foliar) in 25-50 gallons of water every 7-10 days.

KEY TARGET PESTS:

- Downy Mildew
- Twig Blight

• Fruit Rot

Botrytis

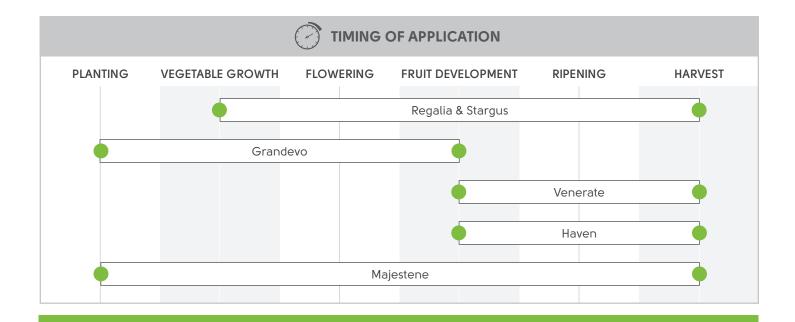




It's important to have relationships with companies like Marrone who look for alternative methods, chemistries and processes for safer products. Their people are experienced and know how best to use their products and on which target insects. Marrone helps us move forward to better meet consumer demand.

-JEFF LEWIS, RIVERVIEW FLOWER FARM





If you haven't tried one of our products, we want to talk to you! Give us a call at (530)750-2800 or visit us at marronebio.com



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