



Defend Your CropsUSING **BIO WITH BITE**.®



With data from over 1500 trials, Marrone Bio develops biological pesticides that are safe for workers, consumers, and the environment. We have pioneered techniques to provide uniquely powerful crop protection. From field to greenhouse, our award-winning biopesticides control insects, mites and disease, safely and sustainably, with great return on investment.

PROTECT LEAFY GREENS FROM:



Powdery Mildew



Sclerotinia



Mites



Thrips



Loopers



And many more...

















Control diseases longer with extended action. Unique and multiple modes of action for superior performance provide broad spectrum disease control on challenging diseases such as Downy Mildew, *Botrytis, Fusarium* and more.

BENEFITS:

- MRL-exempt: No residue to worry about
- Flexible labor scheduling: 0-Day PHI and 4 hour REI
- Tank-mixing flexibility
- Minimal PPE

BASIC USE INSTRUCTIONS:

Foliar (Aerial or Ground), Chemigation, Soil Treatment, Backpack/Hand Sprayer.

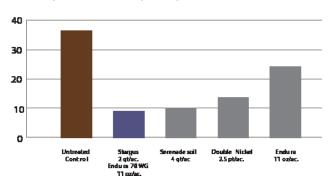
Re-apply 2-4 times at 7-10 day intervals for extended efficacy throughout the season. Multiple MOA make it great to return to the performances of pre-resistant times.

KEY TARGET PESTS:

- Downy Mildew
- Botrytis
- White Mold
- Fusarium
- Gray Mold

WHITE MOLD ON LETTUCE

Stargus[®] outperformed Endura[®] applied alone. Stargus rotation performed comparably to Endura rotation.



STARGUS OUTPERFORMED THE COMPETITION





Better plant health for early onset of disease, and through the season for continued disease control. Great resistance management tool in IPM programs.

BENEFITS:

- Better yield and harvest quality for conventional and organic leafy greens
- Apply early for disease control and late for residue management
- Stimulates plant immunity and prevents disease
- Unique FRAC P5 Classification

BASIC USE INSTRUCTIONS:

Apply Regalia preventatively before disease gains a foothold. Use Regalia early and through the season for plant health, and even late in the season to avoid potential residue issues.

<u>Tank Mix Program:</u> 1 qt per acre of Regalia mixed with another fungicide, 10-14 day intervals

<u>Rotational Program:</u> 2 qt per acre of Regalia alternating with another fungicide, 7-10 day intervals

KEY TARGET PESTS:

- Powdery Mildew
- Sclerotinia Head and Leaf Drop



We've had some really strong infections. With Regalia, we can see where we have actually stopped the spread of black rot, which is pretty much impossible.

-TONY PIEDMONTE



PLANT HEALTH AND YIELD IMPROVEMENTS WHEN REGALIA IS PART OF THE PROGRAM.





WVENERATE°

Broad-spectrum in-season insecticide. 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
- Multiple modes of action
 - Exoskeleton degradation
 - Ingestion
 - Molting interference
- Non-toxic to fish, birds, and most beneficial insects, including honey bees
- Flexibility of application with activity against adults and nymphs

BASIC USE INSTRUCTIONS:

Apply 1-4 quarts per acre on a 7-day interval.
Under heavy populations, Venerate can be rotated with other insecticides/miticides and can be tank mixed with contact or systemic insecticides/miticides.
No limit on number of applications per season.
No spray buffer needed.

KEY TARGET PESTS:

- Aphids
- Armyworms
- Thrips

- Whiteflies
- Cabbage Loopers
- Mites



Towards the end of our season on our conventional side, the two-spots 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



Bioinsecticide used to supress or control early insect populations, protecting your crops and yields while 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
 - Reproduction Disruption
- Tolerance exempt never worry about MRL's
- Quickly get back in the field: 0 day PHI, 4 hour REI

BASIC USE INSTRUCTIONS:

<u>Tank Mix Program:</u> Apply 1-2 lbs/acre when tankmixing with other insecticides <u>Rotational Program:</u> Apply 2-3 lbs/acre when alternating with other insecticides

KEY TARGET PESTS:

Aphids

• Thrips

Whiteflies

• Cutworms

Mites

Loopers

GRANDEVO CONTROLS 75% MORE THRIPS THAN ALTERNATIVES

Untreated

Spinosad, Spirotetramat, Lambda-cyhalothrin

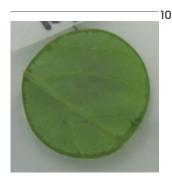
Grandevo Program

Control of Western Flower Thirps (%) on Lettuce

WATER CONTROL



PROGRAM WITH GRANDEVO



***MAJESTENE

Controls or suppresses crop damaging nematodes to improve root health and increase yields.

BENEFITS:

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

BASIC USE INSTRUCTIONS:

Apply Majestene as part of an irrigation event.

At Planting: apply 2 gallons per acre in furrow.

Sprinkler irrigation: apply 2.6- 4 gallons per acre at 21-day interval.

KEY TARGET PESTS:

- Lesion Nematode
- Root Knot Nematode

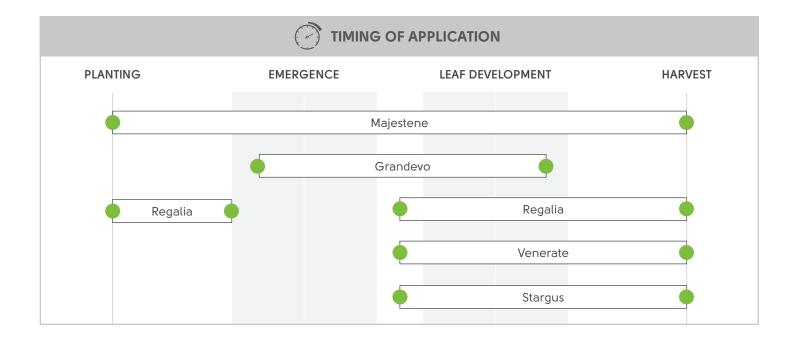


We get good results out of biological pesticides. If they're working, we keep using them. They're a lot safer to use and less harmful to the environment and humans. Everything is a plus when using them. New technology is a key aspect to farming and if you don't learn about new products, you are going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

-CHRIS FALTER, MATHIS FARMS









"A WHOLE NEW FRONTIER FOR TRADITIONAL GROWERS"

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

- DAVID KNAUS, APICAL CROP SCIENCE



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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