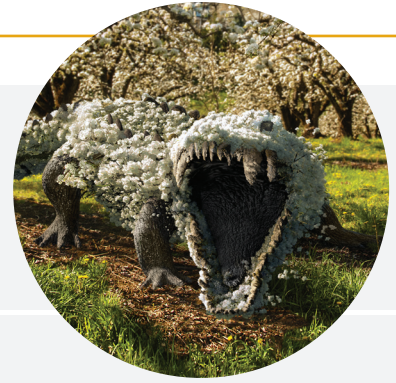




Insect Program USING BIO WITH BITE.™



Grandevo® Bioinsecticide An Advanced Microbial Pesticide

A next-generation bioinsecticide, Grandevo offers growers a new dimension of pesticide activity. Delivering long-lasting, cross-spectrum control, Grandevo is strengthening the performance, reliability and consistency of pest management programs.

EFFECTIVE AGAINST:

- ✓ Mites
- ✓ Whitefly
- ✓ Mealybug
- ✓ Spotted Wing Drosophila
- ✓ Leafhoppers
- ✓ Thrips and more...



CAN BE USED IN ORGANIC PRODUCTION

THE NEW BACKBONE OF YOUR INSECTICIDE/MITICIDE PROGRAM

- Cross-spectrum protection against chewing and sucking insects and mites
- No acute toxicity to adult honey bees, easy on pollinators and beneficial insects
- Approved for field and greenhouse applications
- Quality control tested to ensure no human microbial pathogens
- Multiple modes of action: repellency, ingestion, reproduction disruption
- Tolerance exempt

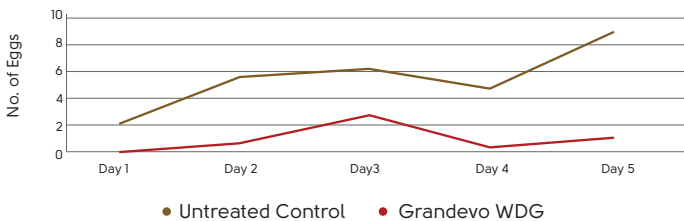


In Trials

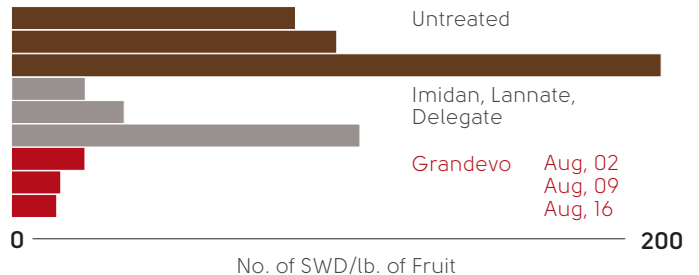
In university trials, Grandevo Bioinsecticide has shown to be effective in controlling Spotted Wing Drosophila, with the added benefit of delaying insecticide resistance.



OVIPOSITION AFTER FEEDING



BLUEBERRY



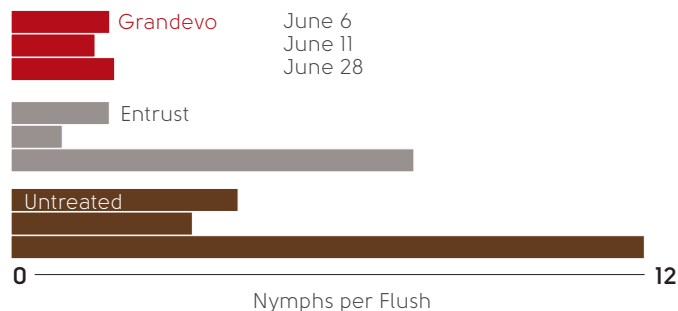


THE NEXT GENERATION OF BIOINSECTICIDES

Grandevo offers complex modes of action to manage a cross spectrum of chewing and sucking insects and mites on a wide range of crops. It provides a unique combination of long-lasting performance and operational flexibility, it carries no bee restrictions, is easy on beneficials, and is exempt from residue tolerances. Grandevo provides growers with an effective and reliable insecticide/miticide that is highly compatible with both integrated pest management (IPM) and insect resistance management (IRM) programs.

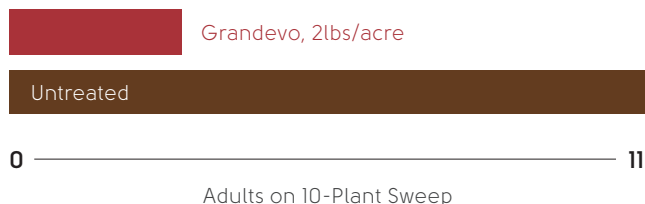
ASIAN CITRUS PSYLLID

P. STANSLY, UNIVERSITY OF FLORIDA, IMMOKALEE, FL



“*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

Over 70% Leafhopper Reduction with Grandevo



The compounds are produced in bacterial cells during the manufacturing process. The result is a potent biopesticide that is highly active against labeled insects and mites, and controls pests through novel combinations of oral toxicity, repellency, reduced oviposition and reduced fecundity (i.e., ability of the pest to reproduce). Grandevo has also been shown to maintain populations of most beneficials and introduced biological controls.

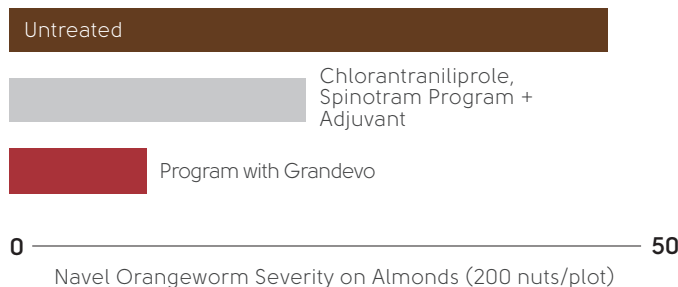
THE ROLE OF GRANDEVO IN MODERN PEST MANAGEMENT

Grandevo is paving the way for new, innovative uses of advanced microbial insecticides in modern field and greenhouse pest management programs. Used alone or in combination with other pesticides, Grandevo offers exceptional control of labeled pests along with operational flexibility—making it ideal for use as the foundation or platform component for highly effective IPM and IRM programs.

NATURALLY DERIVED FROM A NEWLY DISCOVERED BACTERIUM

Grandevo is powered by multiple compounds with highly effective insecticidal properties, giving rise to complex modes of action.

71% REDUCTION IN NAVEL ORANGEWORMS WITH GRANDEVO



MORE DATA, CROP BULLETINS,
LABELS AND SAFETY DATA SHEETS



VISIT
MARRONEBIO.COM

RELIABLE PERFORMANCE

Grandevo’s performance profile—including unique and complex modes of action and cross-spectrum control, offers growers a fresh opportunity to develop a wide range of highly effective and efficient integrated pest management solutions that optimize yield and quality. Its broad application window and pest spectrum, enable Grandevo to be added into an existing pest control program or to act as the foundation product on which to build a program.

“*I’ve been really happy with Grandevo particularly with a thrip outbreak we had. We grow everything to LIVE Sustainability. It’s nice to choose the softer option, and that’s time and time again been Grandevo when we’ve needed it for different predators.* –LAUREN EISOLD-SMITH, ATLAS VINEYARD MANAGEMENT

PRODUCTION FLEXIBILITY

Organic and conventional growers have the flexibility to use the same product with the unsurpassed benefits that Grandevo offers as a biological pesticide. Grandevo is recognized as fully compliant for use on organic crops by the National Organic Program (NOP) and is certified by the Organic Materials Review Institute (OMRI).

RESISTANCE MANAGEMENT

Grandevo is an ideal addition to resistance management programs as its complex modes of action greatly reduce the ability of insects to develop resistance. Using Grandevo in a program—as a tank mix partner or in rotation—with pesticides that are susceptible to insect resistance will extend their life as useful pest control agents..

OPERATIONAL FLEXIBILITY

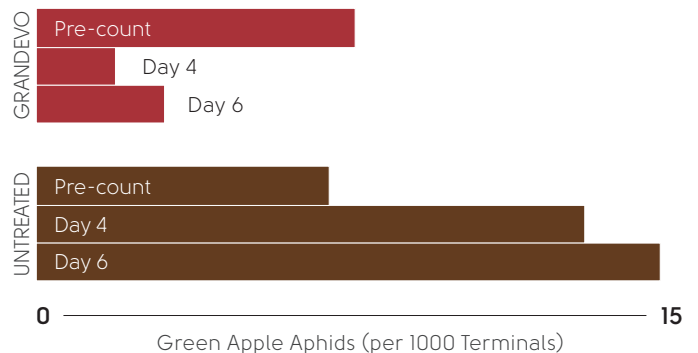
Grandevo sets a new standard for pesticides that provide the greatest degree of operational flexibility. Grandevo carries a re-entry interval (REI) of only four hours, so farming operations can resume quickly. With a zero-day preharvest interval (PHI), growers can now protect crops right up to the day of harvest—preserving color, maturity and crop quality. In addition, Grandevo is exempt from maximum residue levels (MRL) on domestic and exported food crops. The product is approved for use in field and greenhouse applications and can be applied by air, ground or chemigation. Spray applications are allowed without a buffer zone.



GRANDEVO REDUCES APHIDS BY 80%



*Grandevo applied at 2 lbs per acre



CHECK OUT GROWER VIDEOS
marronebio.com/videos



GRANDEVO HIGHLIGHTS

- Improves Insect Resistance Management
- 4-Hour REI & 0-Day PHI
- No Spray Buffer Zone
- Broad tank mix compatibility
- Tolerance Exempt - No MRLs
- Can be applied multiple times



CAN BE USED IN ORGANIC PRODUCTION

BASIC USE INSTRUCTIONS

As tank mix partner 2 lbs. per acre
Used alone or in rotation with other approved insecticides 3 lbs. per acre



2-4
TBSP/GAL

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS

Sustainable & Effective Integrated Pest Management that increases your return on investment.

At Marrone Bio Innovations (MBI), we create products from microorganisms isolated from samples collected from unique niches and habitats such as flowers, insects, soil and composts. Our proprietary technology enables us to isolate and screen naturally occurring microorganisms and plant extracts in a highly efficient manner and to identify those that may have novel, effective and safe pest management or plant health promoting characteristics.



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

