

BIOFUNGICIDE



Disease Control USING BIO WITH BITE.™



Regalia® Biofungicide

Effective & Powerful Disease Control.

Regalia is an advanced biofungicide that triggers a plant's natural defenses to protect against a variety of fungal and bacterial diseases. It also boosts root vigor, delays the development of resistance and provides an alternative to the potential for chemical residues in produce.

EFFECTIVE AGAINST:

- ✓ Powdery Mildew
- ✓ Early Blight
- ✓ Shot Hole
- ✓ *Rhizoctonia*
- ✓ Brown Rot
- ✓ And many more...



CAN BE USED IN ORGANIC PRODUCTION

REGALIA CONTROLS DISEASES AND IMPROVES YIELD

- One powerful product controls both soilborne and foliar diseases
- Simplified exportation: no chemical residues or testing required
- Approved for greenhouse use & aerial applications
- Novel mode of action for resistance management (FRAC P5)
- Application flexibility with foliar, aerial, chemigation, soil applied
- Rainfast in 1 hour



IN TRIALS

Regalia has consistently proven its effectiveness in plant disease control programs.

REGALIA-TREATED STRAWBERRIES 69% HEALTHIER

Program with Regalia

Bacillus subtilis Product

Streptomyces lydicus Product

Phytophthora Inoculation

0 ————— 13
Number of diseased plants

UNTREATED PEPPERS



PROGRAM WITH REGALIA





REGALIA SWITCHES ON A PLANT'S NATURAL DEFENSE

When treated with Regalia, a plant's natural defense systems are activated to protect against attacking diseases. Research shows that plants treated with Regalia produce and accumulate elevated levels of specialized proteins and other compounds known to inhibit fungal and bacterial diseases. Regalia induces a plant to produce phytoalexins, cell strengtheners, antioxidants, phenolics and PR proteins, which are all known inhibitors of plant pathogens. Regalia provides synergistic properties between a plant's natural ability to protect itself and the effectiveness of antifungal and antibacterial protection.



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

PROVEN PERFORMANCE

University and third-party research trials have shown that soil application of Regalia controls root diseases and improves root growth in many specialty crops, demonstrating the effectiveness of this innovative product.

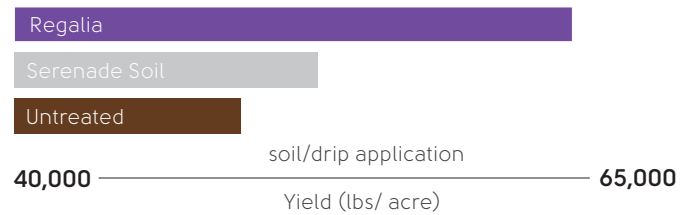
CONTROLS SOILBORNE AND FOLIAR DISEASES

Regalia is a versatile product solution for disease control from planting to harvest. Recommended initially as a foliar application, Regalia is also labeled for use as an effective soil treatment. This comprehensive product is a unique solution for modern field and greenhouse pest management programs. Used alone or in combination with other pesticides, Regalia delivers effective control against major fungal and bacterial pathogens without compromise.

FUSARIUM CONTROL ON TOMATOES

FUSARIUM OXYSPORUM

PACIFIC AG RESEARCH, COALINGA, CA



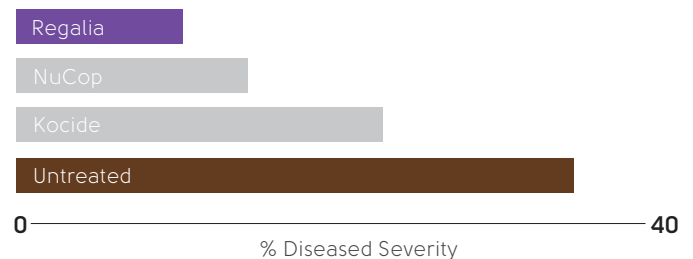
MAXIMIZES PLANT HEALTH FOR IMPROVED YIELD AND QUALITY

Regalia is a powerful and effective biofungicide for soil and foliar applications. Using a novel extract of *Reynoutria sachalinensis*, Regalia induces a plant's natural defenses to fight major economic diseases, particularly those that hit plants early in their development. It is a proven, reliable tool for keeping plants healthy; keeping plants healthy right from the start can lead directly to improvements in yield and quality.

BACTERIAL SPOT ON TOMATOES

XANTHOMONAS PERFORANS

P. ROBERTS, R. SYTSMA, UNIV. FL., IMMOKALEE, FL, 2011



**MORE DATA, CROP BULLETINS,
LABELS AND SAFETY DATA SHEETS**



**VISIT
MARRONEBIO.COM**

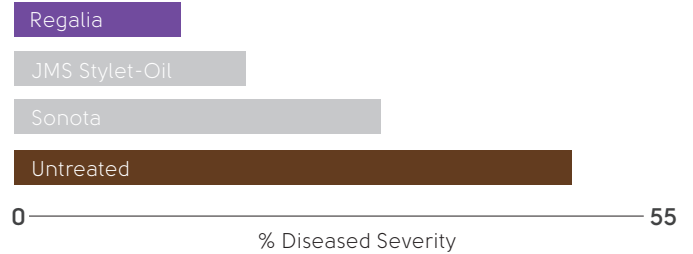
A PARTNER IN EFFECTIVE RESISTANCE MANAGEMENT

Regalia’s unique and complex mode of action, referred to as Induced Systemic Resistance (ISR), makes it very difficult for diseases to develop resistance. In 2012, the Fungicide Resistance Action Committee (FRAC) designated Regalia’s active ingredient, *Reynoutria sachalinensis*, as P5, a code within the “host plant defense induction” grouping. When used as a tank mix partner or in rotation with other pesticides that are susceptible to resistance, Regalia helps extend the life of those pesticides as useful pest control agents.

POWDERY MILDEW ON CHARDONNAY GRAPES

ERYSIPHE NECATOR

PACIFIC AG RESEARCH, ARROYO GRANDE, CA



Whatever we’ve done here for the last 6 or 7 years has worked and Regalia is the thing we’ve based it on... I appreciate being able to apply a chemical or fertilizer that’s helping my production but isn’t hurting me.

—HARLEY SOLTES, BOW HILL BLUEBERRIES

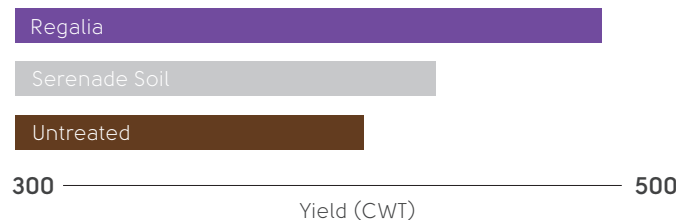
MAXIMUM BACTERIAL AND FUNGAL DISEASE CONTROL

Regalia provides proven control of a broad spectrum of important fungal and bacterial diseases, including powdery mildew, downy mildew, botrytis gray mold, early blight, late blight, citrus canker, brown rot, bacterial leaf spot, *rhizoctonia*, target spot, gummy stem blight, walnut blight and others.

RHIZOCTONIA ON POTATO

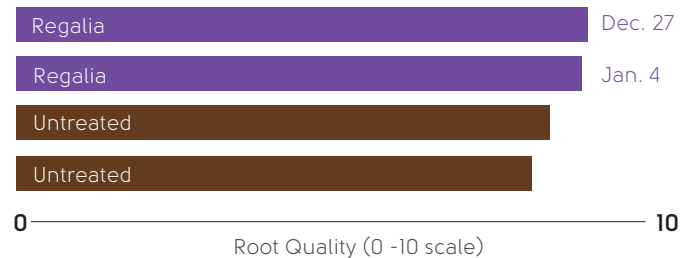
RHIZOCTONIA SPP.

M. HUBBARD, KOOTENAI VALLEY FARM & RESEARCH, BONNERS FERRY, ID



STRAWBERRY ROOT QUALITY

FLORIDA AG RESEARCH, DOWER, FL.



UNTREATED

REGALIA DIP



CHECK OUT GROWER VIDEOS
marronebio.com/videos



REGALIA HIGHLIGHTS

- Powerful product controls both soilborne and foliar diseases
- Active against both bacterial and fungal diseases
- Novel mode of action for resistance management (FRAC P5)
- Tolerance exempt
- Reentry interval (REI) of 4 hours
- Preharvest interval (PHI) of zero days
- Rainfast in 1 hour
- Approved for greenhouse use and aerial applications
- For use in conventional, sustainable and organic production



CAN BE USED IN ORGANIC PRODUCTION

BASIC USE INSTRUCTIONS

Downy Mildew 2-4 quarts/acre (foliar)
White mold 2-4 quarts/acre (foliar)
Fusarium 3-4 quarts/acre (soil)



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

