

Mycorrhizal Applications

Biorational Portfolio

Benefits of Biorationals:

- Many Biorational Products are OMRI Listed
- Consistent with Evolving Consumer Preferences
- Conform to Environmental Stewardship
- Shorter Restricted-Entry Intervals (REI)
- Shorter Preharvest Intervals (PHI)
- Reduced Risk of Phytotoxicity
- Reduced Risk of Pesticide Resistance
- Can be Applied More Frequently
- Reduced Health Risks to Plant Professionals
- Key Components to IPM Protocols



What is Biorational Technology?

The term "Biorational" describes a broad range of products that have a reduced environmental impact for agriculture, horticulture, forestry, plant health, and other industries. These products are typically biologically-derived or, if synthetic, structurally similar and functionally identical to a biologically occurring material. Biorationals include botanical insecticides, microbial pesticides, plant growth regulators (PGRs), essential oils, minerals, and insect growth regulators. These products give growers the ability to treat pests and maximize plant performance with products that are safer than hard chemistry and have few environmental side effects.



Our Biorational Portfolio:



866-476-7800

Change Your World

www.mycorrhizae.com

MGK[®]

Insect Control Solutions



PROFESSIONAL INSECTICIDES:

Azera[®] Pro

- Powerful botanical insecticide for professional use.
- Effectively kills 200+ insect species including aphids, thrips, whiteflies, fungus gnats, mites, and more.
- 1.4% Pyrethrins, 1.2% Azadirachtin (plant-derived)
- OMRI Listed for organic production
- Sold in Quart or Gallon Bottles



PyGanic[®] Specialty

- Powerful botanical insecticide for professional use.
- Effectively kills 100+ insect species including aphids, thrips, whiteflies, fungus gnats, mites, and more.
- 5% Pyrethrins (plant-derived)
- OMRI Listed for organic production
- Sold in Quart or Gallon Bottles



EverGreen[®] Pro 60-6

- Powerful botanical insecticide for professional use.
- Effectively kills 100+ insect species including aphids, thrips, whiteflies, fungus gnats, mites, wasps, yellowjackets, fire ants, and more.
- 6% Pyrethrins (plant-derived), 60% PBO Synergist
- Sold in Quart or Gallon Bottles



RETAIL/GARDEN INSECTICIDES:

Azera[®] Gardening

- Powerful botanical insecticide for home gardens.
- Kills a broad spectrum of insects including ants, aphids, stink bugs, caterpillars, moths, and more.
- 1.4% Pyrethrins, 1.2% Azadirachtin (plant-derived)
- OMRI Listed for organic gardening
- Sold in 8 oz or Quart Bottles



PyGanic[®] Gardening

- Powerful botanical insecticide for home gardens.
- Kills a broad spectrum of insects including ants, aphids, stink bugs, caterpillars, moths, and more.
- 1.4% Pyrethrins (plant-derived)
- OMRI Listed for organic gardening
- Sold in 8 oz, Quart, or Gallon Bottles



Actinovate®

BIOLOGICAL FUNGICIDE

Manufactured by Novozymes



Actinovate® SP

- Powerful professional biological fungicide.
- Based on beneficial bacteria *Streptomyces lydicus* WYEC 108
- Effectively prevents and controls many common foliar and soil-borne fungal pathogens, including powdery mildew, *Botrytis*, *Pythium*, *Rhizoctonia*, *Fusarium*, *Phytophthora*, *Verticillium*, and many more.
- OMRI Listed – 1 Year Shelf Life – Sold in 18 oz. Bags



Actinovate® Lawn & Garden

- Powerful retail biological fungicide for home & landscape
- Based on beneficial bacteria *Streptomyces lydicus* WYEC 108
- Effectively prevents and controls many common foliar and soil-borne fungal pathogens, including powdery mildew, *Botrytis*, *Pythium*, *Rhizoctonia*, *Fusarium*, *Phytophthora*, *Verticillium*, and many more.
- Labeled for retail sales (has UPC code)
- OMRI Listed – 1 Year Shelf Life – Sold in 18 oz. Bags



VALENT BIOSCIENCES®

Plant Growth Regulators

ProGibb® LV Plus T&O

- Powerful professional PGR
- Contains 6.4% Gibberellic Acid (GA3)
- Double the active ingredient of previous version
- Promotes plant growth, stem elongation, flower set, reduces crop time, increases seed germination, etc.
- OMRI Listed – Sold in Quart Bottles



CytoFlor™

- Powerful professional PGR
- Contains 1.9% 6-benzyladenine (6-BA)
- Promotes flowering, increases lateral or basal branching, and leads to more compact plants.
- Superior absorption over competitor 6-BA products.
- Sold in Quart Bottles

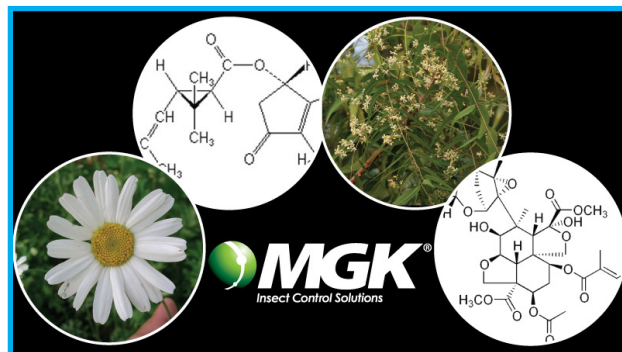


Biorational Technology

MGK® Botanical Insecticides

Since its foundation in 1902, MGK is the worldwide leader in the research, development, production, and commercialization of best-in-class plant-derived botanical insecticide products.

- Easy-to-use, non-phytotoxic formulations.
- Multiple modes of action and short residual persistence.
- Less risk of pest resistance due to the complexity and lack of uniformity in botanically-derived compounds.
- **PyGanic®** and **Azera®** are OMRI-Listed for organic use.
- Lower persistence than synthetic alternatives, reduced runoff into ground water, short re-entry and pre-harvest intervals, and can be a great addition to an Integrated Pest Management program (when used appropriately).
- **PyGanic®** utilizes pyrethrins from chrysanthemums and offer a botanical alternative to synthetic insecticides.
- **Azera®** products combine the power of pyrethrins with azadirachtin to increase effectivity and target insects.
- **EverGreen® Pro** utilizes botanical pyrethrins in combination with a PBO synergist to maximize effectiveness.



Actinovate® Biological Fungicide

Actinovate® offers professional growers and home gardeners a powerful and versatile OMRI Listed tool to control fungal pathogens.

- The active ingredient is *Streptomyces lydicus* WYEC 108.
- **Actinovate®** is water soluble and can be applied as a foliar spray or a growing media drench to suppress or control of a broad range of soil-borne and foliar diseases across multiple crops.
- The active ingredient in **Actinovate®** is a microbe that colonizes the root system and foliage of the plant and protects it from harmful bacteria and fungi.
- Plants treated with **Actinovate®** as a soil drench will become hardier, more vigorous and will have a robust and protected root system.
- **Actinovate®** Utilizes multiple modes of action, reducing the risk of pesticide resistance.
- **Actinovate®** is a great addition to any IPM program, and can be used safely* and effectively alongside other biorational, traditional, and microbial plant support products. *please inquire about any potential compatibility concerns



Valent BioSciences PGRs

Valent BioSciences is the worldwide leader in the research, development and commercialization of best-in-class PGR products.

- **ProGibb®**, an OMRI Listed Gibberellic Acid (GA3) product, is commonly used to break flower dormancy, inhibit flower bud initiation during vegetative growth, increase flower number, increase bloom size, promote stem elongation, and more. The new ProGibb LV Plus product contains twice the concentration of active ingredients compared with previous T&O formulations.
- **CytoFlor™**, a 6-Benzyladenine (6-BA) product, is commonly used to promote flowering in ornamental crops and increase lateral and basal branching. Additionally, applications of 6-BA are known to reduce the overall height of specific plants resulting in more compact and marketable plants. Formulated for improved absorption versus competitor 6-BA products.



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