

BotaniGard[®] MAXX

Insecticide

BotaniGard MAXX is a novel formulation based on the combination of Natural Pyrethrins and *Beauveria bassiana* strain GHA. They are formulated together in an emulsifiable dispersible oil and represent the latest generation of biorationals for insect control. The interaction between *Beauveria bassiana* strain GHA and natural botanical pyrethrins is synergistic. This combination results in multiple modes of action and pest control results comparable to those obtained when using chemical alternatives. BotaniGard MAXX is a new tool for IPM on a wide variety of insects and spider mites.

BotaniGard MAXX is an excellent rotation partner with BotaniGard. When insect pressure is high, use BotaniGard MAXX for quick knockdown, then follow up with typical BotaniGard use.

BotaniGard MAXX Benefits

- · Can provide quick knockdown and control
- Contains two active ingredients: Natural Pyrethrins, Beauveria bassiana strain GHA
- · Synergistic activity between the active ingredients
- · Multiple modes of action (IRAC Group 3, UN)
- · Results comparable to chemical alternatives
- · Labeled for an extensive list of vegetable and orchard crops
- · Labeled for greenhouse flowers and foliage plants
- Sites include indoor/outdoor nursery, greenhouse, shadehouse, commercial landscape, interiorscape, and pasture
- 0-day PHI and 12-hour REI

BotaniGard MAXX Controls

BotaniGard MAXX provides broad spectrum control, including, but not limited to pests such as:

• Mites

- Leafhoppers
- Whiteflies
- Planthoppers
- Aphids
- Weevils
- Thrips
- Plant bugs
- Psyllids
- Borers
- Mealybugs
- · Leaf-feeding insects
- · Soft scales
- · Scarab and leaf-feeding beetles

Labeled Crops

- Extensive listing of outdoor and greenhouse vegetables, fruit, nuts, herbs, forage and cereal grains
- Broad usage on greenhouse flowers and foliage plants

To find out more about the BioWorks family of products, please contact us at 800-877-9443 or visit www.bioworksinc.com.



Sizes: 1 qt, 1 gal and 2.5 gal



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BotaniGard® MAXX

Applications

BotaniGard MAXX can be used alone or in tank mix combinations and acts by contact. Modes of action include:

- The natural pyrethrins in BotaniGard MAXX induce a toxic effect in insects when they penetrate the cuticle and reach the nervous system. Pyrethrins bind to sodium channels that occur along the length of the nerve cells. This binding to sodium channels obstructs their normal function resulting in hyper excitation of the nerve cell and loss of its function. The shutdown of the insect nervous system leads to death of the insect.
- Beauveria bassiana strain GHA spores infect directly through the outside of the insect's cuticle (the skin). Spores adhering to the host will germinate and produce enzymes that attack and dissolve the cuticle, allowing it to penetrate the skin and grow into the insect's body. As the insect dies, it will change color to pink or brown, and eventually the entire body cavity is filled with fungal mass.

Compatibility

BotaniGard MAXX is physically and biologically compatible with a wide range of insecticides, some fungicides, and spray adjuvants. Contact BioWorks for additional information on specific tank mix product compatibilities.

Rate Recommendations

BotaniGard MAXX is labeled for a wide variety of fruit, nut, and vegetable crops such as:

- · Root and tuber vegetable
- · Leaves of root and tuber vegetable
- Bulb vegetables
- Brassica (cole) leafy vegetables
- · Legume vegetables (succulent or dried)
- Foliage of legume vegetable
- Fruiting vegetables
- · Citrus, pome, or stone fruits
- · Small fruits and berries
- · Tree nuts
- Oriental vegetables
- · Subtropical fruits
- · Herbs and spices
- · Forage, fodder and straw of cereal grains
- Grasses for seed, forage, fodder and hay
- · Non-grass animal feed
- Additional plants including: artichoke, coffee, hops, mushroom, peanuts, rice, safflowers, sunflower

Rates for particular crops and pests are as follows:		
Crop	BotaniGard MAXX Quantity	Water volume
Vegetables	8 – 64 fl oz	5 – 100 gal/acre
Aerial application	8 – 32 fl oz	5 – 10 gal/acre
Greenhouse fruits, vegetables, flowers, foliage plants	8 – 32 (hydraulic sprayer) fl oz	30 gal/acre
	1 – 2 fl oz (compressed sprayer)	1 gal/1,000 sq ft
	Cold Fogging	0.31 fl oz/1,000 cu ft
Diamondback moth	16 – 32 fl oz	5 - 100¹ gal/acre
Cabbage looper	32 fl oz	5 - 100¹ gal/acre
Imported cabbage worm	16 – 32 fl oz	5 - 100¹ gal/acre

¹Final spray volume can be up to 400 gallons per acre

Begin treatment of crops at the first appearance of the insect pest. BotaniGard MAXX is most effective when used early. If possible, apply in the early morning or evening hours. The reduced UV exposure and lower temperature will increase performance and reduce impact on pollinators.

Please refer to product labels for complete application details. Additional technical information is available from either our website: www.bioworksinc.com, or your BioWorks sales representative. Always read and follow label directions.

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