

# ARBICO *organics*<sup>®</sup>

NATURAL & ORGANIC IPM SOLUTIONS

FALL/WINTER 2023



## Cultivate Your Best



Predatory Insects



Biorational Insecticides



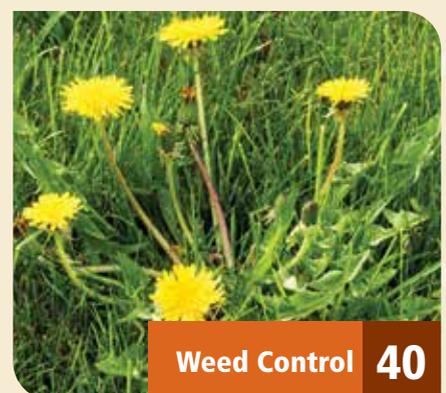
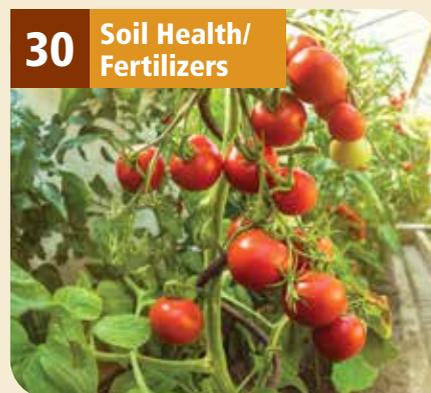
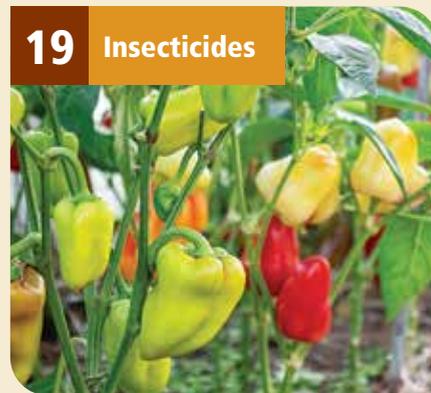
Amendments & Fertilizers



Weed & Disease Control



# Contents



**HOW TO CONTACT US:**  
**800-827-2847**  
www.arbico-organics.com  
customercare@arbico.com  
OFFICE & STORE HOURS:  
Monday - Friday: 8:00AM - 4:30PM  
(Arizona Time)

*Providing over  
forty years of  
environmental  
stewardship and  
service to our  
customers.*

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## Assassin Bug - *Zelus renardii*



These Voracious Ambush Predators Will Stay In Your Crops & Devour A Wide Variety Of Pest Insects!

**TARGET:** Leafhoppers, aphids, early instar caterpillars, flies, mites in conjunction with mite predators, and most other pests.



**DESCRIPTION:** These hardworking ambush predators are an excellent addition to any growing area, large or small. Feasting on a variety of pests, assassin bugs stay put in order to knock out an infestation. With an approximate two-month lifespan, these generalist predators will live, eat and reproduce in the area of release. *Zelus* start eating immediately after hatching, and by the second instar they produce a resin on their legs, which turns them into a walking sticky trap. Once captured, their prey is pierced with their rostrum and a digestive enzyme is injected into the prey and the insect is quickly killed. This method of predation allows for *Zelus* to take out prey much larger than themselves. These generalist predators are voracious and can be used efficiently in gardens, fields, orchards and greenhouses.

**SUGGESTED USE (Depending upon level of infestation):** Use 500 eggs in a 2,000-3,000 sq. ft. area every 2-3 weeks. Release preventively or at the first sign of an infestation. For heavy infestations, release 500-1,000 eggs weekly in no more than 2,000 square feet. Release 5-10 thousand eggs biweekly per acre. Shipped as eggs, assassin bugs will typically hatch in under a week.

**Temperature:** 55-110°F **Relative Humidity:** 10-75%

<b>1000105</b>	≈250 Eggs	<b>\$25.00</b>
<b>1000106</b>	≈500 Eggs	<b>\$40.00</b>
<b>1000107</b>	≈1,000 Eggs	<b>\$65.00</b>

Larger sizes available.

\*FREE SHIPPING in the contiguous 48 states. Ships Monday - Thursday via 2nd Day.

## Minute Pirate Bug - *Orius insidiosus*

Excellent General Predator In Field Crops & Greenhouses.

**TARGET:** Thrips, whiteflies, spider mites, aphids, psyllids, small caterpillars, insect eggs and others.

**DESCRIPTION:** Minute Pirate Bugs (*Orius spp.*) also known as flower bugs, are one of the most common general predators in field crops. Their diet consists of a variety of small pests. They are also known to attack adult thrips.



**SUGGESTED USE (Depending upon level of infestation):** Sold as adults. For maintenance, release 1 to 2 *Orius* per plant in greenhouses or 1 to 4 *Orius* per plant in hot spot areas outdoors. When treating a serious whitefly, aphid, thrips or other pest infestation, we recommend releasing up to 500 *Orius* per 250 sq. ft. area. For field crops, we recommend releasing between 100 and 2,000 *Orius* per acre, depending on the level of infestation.

**Temperature:** 64-82°F **Relative Humidity:** Moderate ≈60%

<b>1117001</b>	≈500 Count	<b>\$53.00</b>
<b>1117003</b>	≈1,000 Count	<b>\$88.00</b>
<b>1117004</b>	≈2,000 Count	<b>\$154.00</b>

**Overnight Shipping Required**

## Green Lacewing - *Chrysoperla spp.*

Referred To As "Aphid-Lions," These Generalists Have Amazing Dispersal Abilities!

**TARGET:** Aphids, mealybugs, spider mites, leafhopper nymphs, moth eggs, scale thrips, whiteflies and more.

**DESCRIPTION:** Green lacewing are available in all three life stages: egg, larva and adult. Green lacewing larvae paralyze their prey with venom and then draw out the body fluids of the pest into their large hollow jaws. Each lacewing larva will devour 200 or more pests or pest eggs a week during their two to three week developmental period.



**Temperature:** Minimum: 60°F Best: 75-90°F **Relative Humidity:** 30-50%

**Release Rate:** Every 7-10 days

### GREEN LACEWING EGGS:\*

<b>1110011</b>	≈5,000 Eggs	<b>\$27.00</b>
<b>1110016</b>	≈10,000 Eggs	<b>\$37.80</b>
<b>1110012</b>	≈25,000 Eggs	<b>\$75.00</b>
<b>1110013</b>	≈50,000 Eggs	<b>\$123.75</b>
<b>1110100</b>	≈5,000 Eggs on Cards	<b>\$30.00</b>
<b>1110102</b>	≈10,000 Eggs on Cards	<b>\$45.00</b>
<b>1110105</b>	≈25,000 Eggs on Cards	<b>\$90.00</b>

### GREEN LACEWING LARVAE:

<b>1110005</b>	≈400 Larvae in Hex Frame	<b>\$27.00</b>
<b>1110010</b>	≈1,000 Larvae in Bottle	<b>\$26.00</b>
<b>1110030</b>	≈5,000 Larvae in 5 Liter Bag	<b>\$105.00</b>
<b>1110032</b>	≈10,000 Larvae in Bucket	<b>\$180.00</b>

### GREEN LACEWING ADULTS:

<b>1110006</b>	≈100 Adults	<b>\$50.00</b>
<b>1110004</b>	≈250 Adults	<b>\$90.00</b>
<b>1110007</b>	≈500 Adults	<b>\$160.00</b>
<b>1110019</b>	≈1,000 Adults	<b>\$180.00</b>

**SUGGESTED USE (Depending upon level of infestation):**

Eggs	Larvae
Gardens & Greenhouses	Gardens & Greenhouses
≈1k-2k Eggs/1,000 sq. ft.	≈2-4/sq. ft.
Farms	Farms
≈2,000-40,000/Acre	≈1,000-2,000/Acre
Adults	
Gardens & Greenhouses	Farms
≈1-3/sq. ft., 100/Tree	≈200-500/Acre

**Weekly Programs and Discounts Available**  
**Larvae & Adults Require OVERNIGHT Shipping**

\*FREE SHIPPING in the contiguous 48 United States. Quantities of 1,000-25,000 eggs ship via USPS Priority only. Quantities of 50,000-250,000 ship via FedEx 2nd Day Air only. Expedited shipping available for an additional fee.

FREE SHIPPING does not apply to Green Lacewing Adults, Green Lacewing Larval Frames and Green Lacewing Larvae.

## Aphid Predator - *Aphidoletes aphidimyza*

**This Aphid Predator Attacks & Feeds On Over 60 Different Species Of Aphids.**

**TARGET:** Over 60 different aphids, including green peach aphids (*Myzus persicae*) and hemlock woolly adelgid (*Adelges tsugae*).

**DESCRIPTION:** Predacious to aphids, these insects will inject a paralyzing toxin into pest's legs and feed on aphid body contents, causing eventual death.

**SUGGESTED USE** (Depending upon level of infestation): Apply to existing infestations weekly, until pests subside. Use ≈1-3/10 sq. ft., ≈2-3/10 sq. ft. or ≈4,500/acre.

**Temperature:** Warm 64-77°F      **Relative Humidity:** Moderate ≈70%

<b>1101001</b>	≈1,000 Pupae	<b>\$60.00</b>
<b>1101002</b>	≈1,000 Pupae in 4 x 250 Blister Packs	<b>\$65.00</b>
<b>1101004</b>	≈2,000 Pupae	<b>\$90.00</b>
<b>1101005</b>	≈10,000 Pupae	<b>\$250.00</b>

**Overnight Shipping Required**



*Aphidoletes aphidimyza*

## Aphid Parasite - *Aphidius colemani*

**Exceptional In Greenhouses Producing Vegetables & Ornamentals.**

**TARGET:** Aphids, especially melon and cotton aphids (*Aphis gossypii*).

**DESCRIPTION:** These tiny (1/8") parasitic wasps specifically target aphids to provide food and a place to oviposit. The adults respond to alarm signals from plants to locate the aphids and, once there, they feast on the honeydew produced by the aphids. The females will then lay their eggs inside aphid nymphs. The larvae will hatch and devour the aphid from inside, turning it into a mummy. The parasites are shipped to you in this stage; simply place them where the infestation is. Once mature, the adult wasp will chew its way out of the mummy and begin hunting aphids.

**SUGGESTED USE** (Depending upon level of infestation): Apply to existing infestations weekly, until pests subside. Use ≈1-8/1 sq. yd. or ≈500-3,000/acre.

**Temperature:** 70-77°F      **Relative Humidity:** High ≈80%

<b>1101302</b>	≈500 Mummies	<b>\$43.00</b>
<b>1101301</b>	≈1,000 Mummies	<b>\$54.00</b>
<b>1101300</b>	≈1,000 Mummies in 10 x 100 Blister Packs	<b>\$56.00</b>
<b>1101303</b>	≈5,000 Mummies	<b>\$189.00</b>
<b>1101305</b>	≈5,000 Mummies in 50 x 100 Blister Packs	<b>\$195.00</b>
<b>1101304</b>	≈10,000 Mummies (2 x 5,000)	<b>\$340.00</b>

**Overnight Shipping Required**



*Aphidius colemani*

## Aphid Parasite - *Aphelinus abdominalis*

**These Ravenous Predators Will Eat & Parasitize Aphid Nymphs!**

**TARGET:** Aphids, including potato (*Macrosiphum euphorbiae*), foxglove (*Aulacorthum solani*), green peach (*Myzus persicae*), California laurel (*Euthoracaphis umbellulariae*), cotton (*Aphis gossypii*), melon (*Aphis gossypii*), bird cherry-oat (*Rhopalosiphum padi*), cereal (*Sitobian avenae*), and alfalfa aphids (*Acyrtosiphon pisum*).

**DESCRIPTION:** Not great fliers, these parasitic wasps nevertheless can hunt down and destroy large numbers of aphids. These predators will not only lay their eggs in aphid nymphs, they will eat those that they don't parasitize. This secondary method of killing has a powerful effect on the aphid population and provides females with additional protein to develop more eggs. As the larvae matures inside the nymph, they feed on it, turning it into a mummy. The parasites are shipped in this stage; simply place them where the infestation is. The mature adult will chew a hole in the back of the mummy and emerge. This species is better able to handle high temperatures than the *Aphidius* species.

**SUGGESTED USE** (Depending upon level of infestation): Apply before the onset of infestation. Use ≈250/5,000 sq. ft. or ≈1,000-4,000/acre.

**Temperature:** 70-77°F      **Relative Humidity:** Low-High ≈60-80%

<b>1101101</b>	≈250 Mummies	<b>\$83.00</b>
<b>1101103</b>	≈1,000 Mummies	<b>\$235.00</b>

**Overnight Shipping Required**



*Aphelinus abdominalis*

## Aphid Parasite - *Aphidius ervi*

**This Non-Stinging Parasitic Wasp Attacks Larger Aphid Species.**

*Image Citation: Alex Wild*

**TARGET:** Aphids, especially potato (*Macrosiphum euphorbiae*), glasshouse potato (*Aulacorthum solani*), green peach (*Myzus persicae*), foxglove (*Aulacorthum solani*) and pea aphids (*Acyrtosiphon pisum*). Also attacks greenbug/wheat (*Shizaphis graminum*), yellow rose (*Rhodobium orientis*), English grain (*Sitobion avenae*) and other aphids.

**DESCRIPTION:** These mini-wasps (1/8") are vigorous fliers and will aggressively seek out aphid populations, no matter how small. Once they find the aphids, they feed on the honeydew produced by the aphids and lay their eggs inside the aphid nymphs. As the larvae feed on the nymphs from the inside, the nymph turns into a mummy. The parasites are shipped to you this stage; simply place them where the infestation is. Once mature, the adult wasp will chew its way out of the mummy and begin its own search for aphids.

**SUGGESTED USE** (Depending upon level of infestation): Apply to existing infestations weekly, until pests subside. Use ≈1-3/10 sq. ft. or 1-8/sq. yd.

**Temperature:** 64-75°F      **Relative Humidity:** Moderate ≈70%

<b>1001001</b>	≈250 Mummies	<b>\$65.00</b>
<b>1001002</b>	≈500 Mummies	<b>\$100.00</b>
<b>1001003</b>	≈1,000 Mummies	<b>\$150.00</b>
<b>1001004</b>	≈1,000 Mummies in 10 x 100 Blister Packs	<b>\$155.00</b>
<b>1001005</b>	≈5,000 Mummies	<b>\$550.00</b>

**Overnight Shipping Required**



*Aphidius ervi*



## Integrated Pest Management of Whiteflies

1. Carefully inspect new plants before transplanting.
2. Dip foliage and root ball in soapy water, or hydrogen peroxide solution, to clean and kill any existing whitefly eggs, nymphs or adults.
3. Monitor pest thresholds with yellow sticky traps or ribbons.
4. Release Green Lacewing preventatively before infestation becomes severe.
5. Consider specialist parasites and predators for targeted whitefly infestations.
6. For quick knockdown control, consider sprays with a low environmental impact such as *Beauveria bassiana* products (see page 22) or Neem based sprays.
7. Clean tools and equipment as well as greenhouse structures between growing seasons. Shop Cleaning & Sanitizing online at [www.arbico-organics.com](http://www.arbico-organics.com)

## Whitefly Parasite - *Eretmocerus eremicus*

**Better Adapted To Higher Temperatures, Including Temperatures That Fluctuate Day & Night! Good For Desert Climates.**



**TARGET:** Greenhouse whiteflies (*Trialeurodes vaporarum*), sweet potato whiteflies (*Bemisia tabaci*), silverleaf whiteflies (*Bemisia argentifolii*), and banded-winged whiteflies (*T. abutiloneus*) and others.

**DESCRIPTION:** The whitefly parasite (parasitoid) is a tiny wasp that host feeds and parasitizes the scale (nymphs) of whiteflies. The time from egg laying to adult emergence is approximately 22 days. Can be used with Green Lacewings.

**SUGGESTED USE** (Depending upon level of infestation): For prevention: use 1,000/10,000 sq. ft. Light infestations: 1,000/1,000 sq. ft. Heavy infestations: use 5,000/1,000 sq. ft. Hang squares with parasitized pupae on plant foliage at first sign of infestation. Order weekly for approximately 2-6 weeks until control is achieved. Call to set up your customized weekly program.

**Temperature:** Moderate 62-82°F      **Relative Humidity:** Minimum 40%

**1000703**                      ≈5,000 in 20 x 250 Blister Packs                      **\$94.95**

**Overnight Shipping Required**

## Whitefly Parasite - *Encarsia formosa*



**Save Your Plants From The Ravages Of Destructive Whiteflies! Good For Greenhouses.**

**TARGET:** Greenhouse whiteflies (*Trialeurodes vaporarum*), sweet potato whiteflies (*Bemisia tabaci*) and approximately 15 other species of whitefly.



**DESCRIPTION:** The whitefly parasite (parasitoid) is a tiny wasp that host feeds and parasitizes the scale (nymphs) of whiteflies. The time from egg laying to adult emergence is approx. 25 days. Can also be used with Green Lacewings.

**SUGGESTED USE** (Depending upon level of infestation): **For prevention:** Use 500-1,000/15,000 sq. ft. **Light infestations:** (less than 1 adult whitefly per 50-100 plants) Use 1,000-2,000/5,000-10,000 sq. ft. for minimum of 3 weeks or until control is achieved. **Heavy infestations:** Use 3,000/3,500 sq. ft. for a minimum of 3 weeks or until control is achieved. Hang squares with parasitized pupae on plant foliage at first sign of infestation. Order weekly for approximately 2-6 weeks until control is achieved. Please call to set up your customized weekly program.

**Temperature:** Moderate 76-85°F      **Relative Humidity:** Moderate ≈50-70%

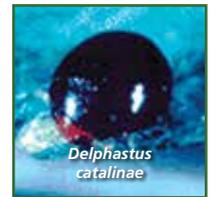
<b>1132001</b>	≈1,000 Count	<b>\$32.50</b>
<b>1132002</b>	≈3,000 Count	<b>\$46.00</b>
<b>1132003</b>	≈5,000 Count	<b>\$60.00</b>

**2nd Day Shipping Required**

\*FREE SHIPPING in the contiguous 48 states. Ships via 2nd Day Only. Ships only on Monday, Tuesday and Wednesday.

## Whitefly Predator - *Delphastus catalinae*

**These Tiny Brown Beetles Consume Several Hundred Pests Daily!**



**TARGET:** Aphids, scale, thrips, and especially greenhouse and outdoor sweet potato whiteflies and other soft-bodied insect pests.

**DESCRIPTION:** Females lay ≈3-4 eggs daily and adults live for approximately one month. Adult beetles capture prey with their mandibles, inject paralyzing venom & feed on pest body fluids. Shipped as adults, they should be used at the first signs of infestation.

**SUGGESTED USE** (Depending upon level of infestation): Upon arrival, release at sundown. May be stored at temperatures between 50-60°F for 1-2 days. Can be combined with other whitefly parasites.

**Temperature:** Moderate 65-90°F      **Relative Humidity:** High ≈70% & Higher

<b>1126001</b>	≈100 Count	<b>\$50.00</b>
<b>1126003</b>	≈200 Count	<b>\$90.00</b>
<b>1126002</b>	≈1,000 Count	<b>\$190.00</b>

**Overnight Shipping Required**

**If You're Unsure Which Beneficial Insect Or Predator Is Right For Your Conditions, Call One Of Our Specialists At 1-800-827-2847.**



## Integrated Pest Management of Fungus Gnats

1. Monitor and trap with yellow sticky traps to assess the severity of infestation.
2. Control soil moisture by providing proper drainage, avoiding standing water and allowing media to dry between waterings.
3. Circulate air and prune plants to ensure adequate air flow.
4. Prevent and treat infestations with *Bacillus thuringiensis israelensis* (see page 26).
5. Apply NemAttack *Steinernema feltiae* Beneficial Nematodes to parasitize fungus gnat larvae as well as thrips.
6. Rove beetles (*Dalotia coriaria*) are excellent predators that can establish in growing environments and control multiple soil dwelling pests.
7. Spray *Beauveria bassiana* to the foliage or drench growing media, where permitted.

## Rove Beetle - *Dalotia coriaria* (= *Atheta coriaria*)

### For Indoor Control Of Soil Dwelling Pests!

**TARGET:** Fungus gnats (sclerid flies), thrips and shore flies.

**DESCRIPTION:** "Rove beetles" will feed on small soil-dwelling pest larvae and eggs. Adults are a brown-black color, 3-4 mm long and winged. They are predacious in all stages and develop from egg to adult in about 21 days; passing through three larval instars prior to pupation and adulthood. Adults consume about 150 pest fungus gnat eggs per day. Compatible with *Stratiolaelaps scimitus* (= *Hypoaspis miles*). Winged adults have high dispersal and colonization rates and are not recommended for outdoor use.



**SUGGESTED USE** (Depending upon level of infestation): Use season-long, in covered crops such as ornamentals, cucumbers, strawberries and mushrooms. Apply directly to growing medium surface. Apply approx. 1-5 predators per sq. ft. For high infestation, increase application rate and consider pairing with another suitable predator or parasite like *S. scimitus*, beneficial nematodes, or specific mite predators.

**Temperature:** Moderate 55-80°F **Relative Humidity:** 50-80%

1101330	≈500 Adults	\$54.00
1101331	≈1,000 Adults	\$78.00
1101332	≈3,000 Adults	\$170.00
1101334	≈5,000 Adults	\$250.00

**Overnight Shipping Required**

## Fungus Gnat Predator - *Stratiolaelaps scimitus* (= *Hypoaspis miles*)

### Stop Destructive Fungus Gnats & Thrips In Their Developing Soil Stages.

**TARGET:** Fungus gnats, western flower thrips, springtails, mold mites, spider mites, cactus root mealybugs, strawberry root weevils and black vine root weevils.



**DESCRIPTION:** This tiny brown mite naturally inhabits the top layer of soil where larvae and pupae dwell. Female predatory mites lay their eggs in soil and the nymphs and adults feed on pests.

**SUGGESTED USE** (Depending upon level of infestation): ≈5,000-10,000 mites treat approximately 1,000 sq. ft. Release ≈25,000-50,000/acre depending on level of infestation. Apply weekly until infestation subsides. Weekly release programs available. Please Call. Trap adult infestations using Blue Sticky Traps. Reinforce with applications of beneficial nematodes.

**Temperature:** Moderate 60-74°F **Soil Conditions:** Moist soil. Not too damp.

1154000	≈12,500 Count	\$21.00
1154002	≈25,000 Count	\$30.00
1154005	≈50,000 (2 x 25,000)	\$50.00
1154010	≈125,000 in 5 Liter Bag	\$130.00

**Overnight Shipping Required**

## Control Fungus Gnat Larvae Using *Bacillus thuringiensis israelensis*

Include applications of Bti in your fungus gnat IPM plan. Bti works to control larvae, the stage fungus gnats are most damaging to plant roots.

It can be used in conjunction with Beneficial Nematodes and Fungus Gnat predators as part of an IPM plan. **For additional fungus gnat control solutions, see page 26.**



## NemAttack™ Sf Beneficial Nematodes

Sf Beneficial Nematodes interrupt thrips reproduction and reduce local populations leading to fewer adults and less resulting damage. Use in conjunction with predatory insects as part of an integrated pest management program. Apply with a watering can, hose end sprayer or backpack sprayer. **See pages 13-15 for more information.**



## Thrips Predator - *Amblyseius cucumeris*

These Beneficial Mites Consume Vast Quantities Of Thrips.

**TARGET:** Prefers greenhouse and western flower thrips. They will also eat spider mites, russet mites and pollen.

**DESCRIPTION:** Tan colored adult females lay about 35 small white eggs throughout their lifespan of about 30 days. During the 7-10 day nymph stage, predation begins. Adults will consume about 1 pest a day. Predators are shipped as adults.

**SUGGESTED USE (Depending upon level of infestation):** For best results, apply before onset of thrips infestation. For prevention, use at a rate of 10-20 mites per sq. ft. at weekly intervals. Use continuous release sachets at 1 per 3 sq. ft. for 3-6 weeks. Spot treat with 10-40 mites per sq. ft. weekly until infestation subsides. Monitor with blue sticky traps (see page 16).

**Temperature:** Moderate 66-80°F **Relative Humidity:** Moderate 65-72%



## Thrips & Whitefly Predator - *Amblyseius swirskii*

For Use On A Variety Of Pest Mites, Thrips & Whiteflies.

**TARGET:** Western flower thrips, onion thrips, broad mites, hemp russet mites, glasshouse whiteflies, tobacco whiteflies or silverleaf whiteflies.

**DESCRIPTION:** These predacious mites feed on various pest insects in their developing adult stages, pollen and mold. They may consume about 10 thrips or whitefly larvae a day and up to about 20 whitefly eggs per day. They will not undergo diapause, and can be used in protected crops in cooler growing areas.

**SUGGESTED USE (Depending upon level of infestation):** Introduce before the onset of infestation, when temperatures are no lower than 60°F. Apply at a rate of 10 mites per sq. ft. every other week as needed, or apply continuous release sachets every 2-4 weeks. Use 1 sachet per plant, or 1 per 3 plants if canopy is touching. Use sachets on sticks during propagation or where canopy cannot support hooks. Not recommended for use on infestations in tomato crops.

**Temperature:** Moderate 77-85°F

**Relative Humidity:** 70%

### BULK SIZES:

1101312	≈25,000 in Tube	<b>\$68.00</b>
1101319	≈50,000 in Tube	<b>\$120.00</b>
1101311	≈125,000 in 5 Liter Bag	<b>\$240.00</b>
1101309	≈200,000 Bulk	<b>\$340.00</b>

### CONTROLLED RELEASE:

1101317	≈50,000 in 200 Mini Sachets w/Hooks	<b>\$140.00</b>
1101308	≈62,500 in 250 Mini Sachets w/Hooks	<b>\$170.00</b>
1101318	≈62,500 in 500 Mini Sachets on Sticks	<b>\$245.00</b>
1101306	≈125,000 in 500 Mini Sachets w/Hooks	<b>\$250.00</b>
1101316	≈125,000 in 1,000 Mini Sachets w/Hooks	<b>\$365.00</b>
1101314	≈125,250 in 6 x 328 ft. Strips of Sachets	<b>\$500.00</b>
1101315	≈250,000 in 1,000 Mini Sachets w/Hooks	<b>\$480.00</b>

**Overnight Shipping Required**



### BULK SIZES:

1152230	≈20,000 in Bran only	<b>\$22.00</b>
1152231	≈20,000 in Vermiculite only	<b>\$22.00</b>
1152207	≈25,000 in Bran/Vermiculite Mix	<b>\$30.00</b>
1152233	≈50,000 in Bran only	<b>\$47.00</b>
1152224	≈50,000 in Vermiculite only	<b>\$47.00</b>
1152204	≈50,000 in Bran/Vermiculite Mix	<b>\$45.00</b>
1152205	≈100,000 in Bran only	<b>\$60.00</b>
1152234	≈100,000 in Vermiculite only	<b>\$60.00</b>
1152235	≈250,000 in Bran only	<b>\$120.00</b>
1152223	≈250,000 in Vermiculite only	<b>\$120.00</b>
1152206	≈250,000 in Bran/Vermiculite Mix	<b>\$115.00</b>
1152209	≈500,000 in Bran/Vermiculite Mix	<b>\$200.00</b>

### CONTROLLED RELEASE W/HOOKS:

1152215	≈25,000 in 100 Mini sachets w/Hooks	<b>\$25.00</b>
1152219	≈125,000 in 500 Mini Sachets w/Hooks	<b>\$68.75</b>
1152201	≈200,000 in 200 Sachets w/Hooks	<b>\$90.00</b>
1152221	≈200,000 in 400 Mini Sachets w/Hooks	<b>\$80.00</b>
1152222	≈250,000 in 1,000 Sachets w/Hooks	<b>\$135.00</b>
1152228	≈500,000 in 500 Mini Sachets w/Hooks	<b>\$185.00</b>

### CONTROLLED RELEASE ON STICKS:

1152216	≈25,000 in 100 Mini Sachets on Sticks	<b>\$25.00</b>
1152225	≈125,000 in 500 Mini Sachets on Sticks	<b>\$105.00</b>
1152226	≈250,000 in 1,000 Mini Sachets on Sticks	<b>\$150.00</b>
1152227	≈500,000 in 2,000 Mini Sachets on Sticks	<b>\$280.00</b>

### CONTROLLED RELEASE-SPECIALTY:

1152203	≈300,000 in 300 GEMINI Sachets	<b>\$115.00</b>
1152220	≈1,600,000 in 6 x 525 ft. Strips of Sachets	<b>\$600.00</b>

**Overnight Shipping Required**

## Mite Predator - *Amblyseius andersoni*

**Great For Pre-Emergent Control Of Pest Mite Infestations!**

**TARGET:** Various pest mites including broad mites, cyclamen mites, two-spotted spider mites, red spider mites, tomato russet mites and rust mites.

**DESCRIPTION:** This predatory mite is less than 1mm long and light brown. Adult females lay about 35 eggs in a lifetime, arranging eggs onto leaf hairs. This predatory mite feeds on all stages of pest mites, thrips, pollen and honeydew.

**SUGGESTED USE (Depending upon level of infestation):** For best results, apply as a preventative treatment of mite infestations. Sachets allow for controlled release of mites over 4-6 weeks. Apply at a rate of 1-2 mites per sq. ft. or 1 sachet per plant. Place sachets within plant canopy. Use sachets on sticks at 1 per propagation tray or where canopy cannot hold sachet on hook. Replace sachets every four weeks for continued control.

**Temperature:** Moderate 42-100°F **Relative Humidity:** High if in higher temps.

**BULK SIZES:**

<b>1101324</b>	≈25,000 in Tube	<b>\$140.00</b>
<b>1101327</b>	≈50,000 in 1 Liter Bottle	<b>\$165.00</b>
<b>1101321</b>	≈125,000 in 5 Liter Bag	<b>\$375.00</b>

**CONTROLLED RELEASE:**

<b>1101323</b>	≈25,000 in 200 Mini Sachets w/Hooks	<b>\$160.00</b>
<b>1101350</b>	≈25,000 in 200 Mini Sachets on Sticks	<b>\$175.00</b>
<b>1101325</b>	≈62,500 in 250 Sachets w/Hooks	<b>\$225.00</b>
<b>1101355</b>	≈125,000 in 1,000 Mini Sachets on Sticks	<b>\$720.00</b>
<b>1101322</b>	≈125,250 in 6 x 328 ft. Strips of Sachets	<b>\$670.00</b>

**Overnight Shipping Required**



*Amblyseius andersoni*

## Spider Mite Destroyer - *Feltiella acarisuga*

**We Recommend This Predator When Spider Mite Infestations Are Widespread.**

**TARGET:** Two spotted spider mites, carmine spider mites, European red mites; various mites.

**DESCRIPTION:** The larvae of this tiny gall-midge feeds on two-spotted spider mites and various other species of spider mites. Recommended to be used with *P. persimilis* when spider mite infestations are severe to rapidly knock back the pest mites. *Feltiella* works best on plants that have hairy stems. Adults do not prey on spider mites, but search for colonies and deposit eggs next to them. Eggs hatch in 2 days and larvae feed on all stages of spider mites for 4-6 days. The entire life cycle is about 15 days.

**SUGGESTED USE (Depending upon level of infestation):** For light infestations, introduce <1/1,000 sq. ft. or 500/acre every 7 days, for at least 3 weeks. For heavy infestations, introduce 2-3/1,000 sq. ft. or 1,000/acre every 7 days, for at least 3 weeks.

**Temperature:** Moderate 60-77°F **Relative Humidity:** High 50-90%

<b>1155701</b>	≈250 Count	<b>\$144.00</b>
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**Overnight Shipping Required**



*Feltiella acarisuga*

## Mite Predator - *Neoseiulus (=Amblyseius) californicus*

**Good For Areas Where Temperatures Fluctuate Greatly Such As Deserts.**

**TARGET:** Various spider mites, cyclamen mites, broad mites and russet mites.

**DESCRIPTION:** This tiny, ivory, pear-shaped predatory mite feeds on a variety of pests on crops including: cucumbers, tomatoes, strawberries, tropical foliage plants, and greenhouse roses. Although adults consume prey at a relatively slow rate of about one egg per day, they can survive longer under starvation conditions. During their lifetime of about 20 days, females will lay approx. 1-3 eggs per day. Eggs hatch within a few days and adulthood is reached in about 4-12 days.

**SUGGESTED USE (Depending upon level of infestation):** Use ≈1,000 per 4,500 sq. ft. in greenhouses to treat for broad mite. Use ≈10,000 per acre to treat for cyclamen mites on strawberries. Use weekly until infestation subsides.

**Temperature:** Warm 50-105°F **Relative Humidity:** 40-80%

**BULK SIZES:**

<b>1151213</b>	≈2,000 Count	<b>\$43.00</b>
<b>1151209</b>	≈5,000 Count	<b>\$65.50</b>
<b>1151210</b>	≈10,000 Count (2 x 5,000)	<b>\$106.00</b>
<b>1151212</b>	≈25,000 Count	<b>\$128.00</b>

**CONTROLLED RELEASE W/HOOKS:**

<b>1151216</b>	≈10,000 - 100 Sachets w/Hooks	<b>\$80.00</b>
<b>1151271</b>	≈25,000 - 100 Sachets w/Hooks	<b>\$85.00</b>
<b>1151215</b>	≈25,000 - 200 Sachets w/Hooks	<b>\$175.00</b>
<b>1151217</b>	≈50,000 - 500 Sachets w/Hooks	<b>\$270.00</b>
<b>1151276</b>	≈62,500 - 250 Sachets w/Hooks	<b>\$135.00</b>
<b>1151277</b>	≈125,000 - 500 Sachets w/Hooks	<b>\$250.00</b>
<b>1151278</b>	≈125,000 - 1,000 Sachets w/Hooks	<b>\$750.00</b>
<b>1151279</b>	≈250,000 - 500 Sachets w/Hooks	<b>\$350.00</b>

**CONTROLLED RELEASE ON STICKS:**

<b>1151295</b>	≈25,000 - 200 Sachets on Sticks	<b>\$190.00</b>
<b>1151296</b>	≈125,000 - 1,000 Sachets on Sticks	<b>\$720.00</b>

**CONTROLLED RELEASE-SPECIALTY:**

<b>1151292</b>	≈25,000 - 100 Gemini Sachets	<b>\$190.00</b>
<b>1151290</b>	≈125,000 - Bugline - 6 x 328 ft. Sachet Strips	<b>\$625.00</b>

**Overnight Shipping Required**



*Neoseiulus (=Amblyseius) californicus*

### Sachets

Sachets are available as Hooks, Sticks, Gemini and Bugline. Find the option that works right for your needs.



## Mite Predator - *Neoseiulus (=Amblyseius) fallacis*

**An Excellent Mite Predator For Control Of Many Different Types Of Mites.**

*Image Citation: Photo by Dr. Art Agnello, Cornell University*

**TARGET:** Two spotted spider mites, broad mites, cyclamen mites, hemp russet mites; various mites.

**DESCRIPTION:** This predatory mite effectively suppresses cyclamen mites in strawberry fields, broad mites in greenhouse crops, European red mites and two-spotted spider mites in orchards, spider mites on roses and vegetable crops in greenhouses and general mite problems on mint and hops in northern climates. Eggs and nymphs are difficult to see as they are small and almost transparent. Adults are pear-shaped and ivory until feeding, when they take on the red or brown coloration of their prey. Adult females consume around 2-16 pest mites per day and lay ≈20-60 eggs during a 14-60 day life-cycle. The transition from egg to adult stage takes about 7-9 days.

**SUGGESTED USE** (Depending upon level of infestation): Good for cold climates! Use preventatively; over-winters and sustains on pollen. Release at the start and end of the season. Use ≈1,000 per 4,500 sq. ft. or 10,000 per acre.

**Temperature:** Moderate 50-80°F **Relative Humidity:** Minimum 50%

<b>1151400</b>	≈500 Count	<b>\$38.00</b>
<b>1151401</b>	≈1,000 Count	<b>\$52.00</b>
<b>1151402</b>	≈2,000 Count	<b>\$98.00</b>
<b>1151404</b>	≈10,000 count	<b>\$240.00</b>

**Overnight Shipping Required**



## Spider Mite Destroyer - *Stethorus punctillum*

**Predatory In Both Larval & Adult Stages. Consumes All Life Stages Of Spider Mites.**

**TARGET:** Two spotted spider mites, European red mites, spruce spider mites, southern red mites; various mites.

**DESCRIPTION:** Using smell, this tiny ladybug is an effective locator and as an adult will consume more than 40 mites per day. Females lay up to 15 eggs per day. Development to the adult stage takes around 18 days at a temperature of 70°F and the total lifespan of the predator is about 9 weeks. They are known to survive temperatures over 100°F in field crops.

**SUGGESTED USE** (Depending upon level of infestation): Use 100 adults per 300 sq. ft. of infested area. Release adult beetles into mite infested areas and look for signs of reproduction (larvae, pupae, and adults) after four weeks. This predator is more mobile than spider-mite predators (predatory mites) but takes longer to establish, so releases of spider-mite predators should also be made into mite infested areas.

**Temperature:** Moderate 73-77°F **Relative Humidity:** High 60%

<b>1113301</b>	≈100 Count	<b>\$98.00</b>
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**Subject to seasonal availability.**

**Overnight Shipping Required**



## Mite Predator - *Phytoseiulus persimilis*

**The Mite Predator With The Highest Consumption & Dispersal Rate.**

*Image Citation: All rights reserved to BioBee Sde Elyahu Ltd.*

**TARGET:** Two spotted spider mites and various other mites.

**DESCRIPTION:** These predatory mites have high consumption rates, feeding on approx. 5-20 pests and pest eggs per day! Females will lay about 60 eggs throughout their 50-day lifespan. They will not enter a diapause stage in enclosed or greenhouse settings; making them active year round. Adults will begin feeding as soon as they are applied.

**P. persimilis PLUS** is reared in an innovative way to include mobile mites (adults and juveniles) as well as eggs. *P. persimilis* PLUS arrives pale and changes to orange/red after predation begins. Adults begin feeding upon dispersal. Eggs can mature in about a week (at temps between 70-80°F). The variety of life stages allow for both immediate and ongoing control as the mites mature.

### **P. persimilis PLUS Sachets**

PLUS Controlled Release sachet mites emerge between 8 -12 days after application. Best for preventative use. PLUS RAPID Release sachets are used for hot spot treatment with emergence around 3-5 days.

**SUGGESTED USE** (Depending upon level of infestation):

Level/Type	Bulk	Sachets
<b>Low Infestation</b>	1-3 Mites per sq.ft.	1 Controlled Release Sachet per 50 sq.ft.
<b>Moderate Infestation/ Speckling</b>	5+ Mites per sq.ft.	1 Rapid Release Sachet per 20 sq.ft.
<b>Webbing/Outbreak</b>	10+ Mites per sq.ft. after knockdown/cleaning	1 Rapid Release Sachet per 10 sq.ft.
<b>Outdoor Crops</b>	20,000 - 200,000 Mites per acre depending on infestation level	
<b>Clones</b>		1 Sachet per plant

**Temperature:** Moderate: 68-90°F **Relative Humidity:** High: 60-90%

### **P. PERSIMILIS PLUS BULK SIZES:**

<b>1151250</b>	PLUS ≈2000 Bottle	<b>\$23.00</b>
<b>1151251</b>	PLUS ≈4000 Bottle	<b>\$40.00</b>
<b>1151252</b>	PLUS ≈10,000 Bottle	<b>\$85.00</b>
<b>1151253</b>	PLUS ≈20,000 Bottle	<b>\$120.00</b>

### **P. PERSIMILIS PLUS CONTROLLED RELEASE:**

<b>1151235</b>	PLUS ≈5,000 in 50 sachets w/hooks	<b>\$50.00</b>
<b>1151236</b>	PLUS ≈10,000 in 100 sachets w/hooks	<b>\$95.00</b>
<b>1151230</b>	PLUS ≈25,000 in 250 sachets w/hooks	<b>\$225.00</b>
<b>1151231</b>	PLUS ≈50,000 in 500 sachets w/hooks	<b>\$387.50</b>

### **P. PERSIMILIS PLUS RAPID RELEASE:**

<b>1151245</b>	PLUS RAPID ≈5,000 in 50 sachets w/hooks	<b>\$50.00</b>
<b>1151246</b>	PLUS RAPID ≈10,000 in 100 sachets w/hooks	<b>\$95.00</b>
<b>1151240</b>	PLUS RAPID ≈25,000 in 250 sachets w/hooks	<b>\$225.00</b>
<b>1151241</b>	PLUS RAPID ≈50,000 in 500 sachets w/hooks	<b>\$387.50</b>

**Overnight Shipping Required**



# MEALYBUG/SCALE CONTROL

## Mealybug Parasitoid - *Anagyrus spp.*

**Stop Destructive Mealybugs With This Beneficial Parasitoid.**

*Image Citation: All rights reserved to BioBee Sde Elyahu Ltd.*

**TARGET:** Citrus mealybugs, grape mealybugs, vine mealybugs, cypress mealybugs, obscure mealybugs, longtail mealybugs and most *Planococcus* and *Pseudococcus spp.*



**DESCRIPTION:** These solitary parasitoid wasps of mealybugs are shipped as mummies, hatch within five days of arrival and immediately begin to oviposit. Once the egg is laid inside the mealybug, the larva develops and consumes the mealybug. One female will parasitize nearly 50 mealybugs.

**SUGGESTED USE (Depending upon level of infestation):** Release 1 wasp per 5 sq. ft. every two weeks and or field application use about a minimum of 2,000 mummies/acre monthly. Keep at room temperature to ensure emergence. Remove bottle top, place near infested areas and let wasps emerge on their own. DO NOT use near ants as they will inhibit wasp parasitism & reproduction.

**Temperature:** Moderate 65-93°F **Relative Humidity:** Moderate ≈40-60%

<b>1132060</b>	≈100 Mummies	<b>\$75.00</b>
<b>1132061</b>	≈200 Mummies	<b>\$80.00</b>
<b>1132072</b>	≈500 Mummies	<b>\$185.00</b>

Currently only available for sale within the state of CA.

**Overnight Shipping Required**

## Mealybug Destroyer - *Cryptolaemus montrouzieri*

**These Tiny Ladybird Beetles Devour Pest Mealybugs In Both The Larval & Adult Stages.**

*Image Citation: Nijel Cruz*

**TARGET:** Mealybugs, aphids, mites, thrips, whiteflies, and other soft-bodied insect pests.



**DESCRIPTION:** *Cryptolaemus* is a small dark brown ladybug with an orange head and tail (*elytra*). The larvae are up to 13 mm long and are white with a wax-like covering. The pupae are found around stems, the underside of leaves, greenhouse structures and other sheltered areas. Shipped as adults and most effective in severe infestations.

**SUGGESTED USE (Depending upon level of infestation):** 250-1,000/acre every 2 weeks, 2-3 releases. Use indoors and outdoors. Weekly release programs available. Please call.

**Temperature:** Low-High 64-81°F **Relative Humidity:** Moderate ≈70-80%

<b>1114702</b>	≈100 Adults	<b>\$77.00</b>
<b>1114703</b>	≈250 Adults	<b>\$110.00</b>
<b>1114704</b>	≈500 Adults	<b>\$210.00</b>
<b>1114705</b>	≈1,000 Adults (2 x 500)	<b>\$400.00</b>
<b>1114710</b>	≈5,000 Adults (10 x 500)	<b>\$1,200.00</b>

**Overnight Shipping Required**

## Red Scale Parasite - *Aphytis melinus*

**Use These Parasitic Wasps On A Variety Of Armored Scale Pests!**



**TARGET:** California red scales, citrus red scales, oleander scales, San Jose scales, ivy scales, yellow scales and other armored scale varieties.

**DESCRIPTION:** Shipped as adults. Females lay their eggs in host scale. Larvae hatch inside host bodies and consume and kill scale. One adult will kill about 30 scale insects in one generation. Adult parasites live approximately 26 days.

**SUGGESTED USE (Depending upon level of infestation):** Release about 1-2 wasps per sq. ft. or about 5,000/acre. Release weekly and 1-3 applications are usually required depending upon infestation.

**Temperature:** Moderate 76-85°F **Relative Humidity:** Moderate ≈40-50%

<b>1122001</b>	≈10,000 Adults	<b>\$75.00</b>
<b>1122002</b>	≈25,000 Adults	<b>\$80.00</b>
<b>1122003</b>	≈50,000 Adults	<b>\$120.00</b>

**Overnight Shipping Required**

### Portable, Convenient & Provides On the Spot Detection!



**Active Eye 60X Clip-On Phone Microscope**  
2000200 **\$9.49**

**Active Eye Microscope 100X**  
2000205 **\$19.95**



## Moth Egg Parasites - *Trichogramma spp.*



### Prevent Caterpillar Damage On Crops!

**TARGET:** The egg stages of more than 200 *Lepidopteran* pests including: codling moths, borers, loopers, webworms, cutworms, bollworms, tomato hornworms and corn earworms.



**DESCRIPTION:** *Trichogramma spp.* lay their eggs in the pest eggs, killing them. Adults emerge 2-3 days after release. They live 7-75 days depending on temperature and moisture. *Trichogramma* are shipped in the parasitized host egg.

**Trichogramma Hanging Tabs/Cards:** Cards and tabs are the fastest way to introduce *Trichogramma* into the growing area. Eggs arrive on hanging cards for easy and targeted application in the plant canopy.

**Trichogramma Hanging Dispensers:** Dispensers are uniquely designed for early introduction and preventative use before high pest pressure. They are designed to have 4 waves of releases over approx. 180 days for continuous control. This format is more resistant to predator damage and is more weather resistant.

**Trichogramma Capsules:** Capsules also provide 4 waves of *Trichogramma* releases and are best used preventatively. They are designed for use by automation (drone, tractor), but also great for hard-to-reach areas. These sturdy capsules have precision release holes for exit over approx. 180 days.



**SUGGESTED USE** (Depending upon level of infestation): Use ≈1 tab/3,000 sq. ft. Release at first flight of moths and every 7-10 days thereafter until infestation subsides. Place cards/tabs where moths are seen. DISPENSERS/ CAPSULES: 50,000-200,000/acre. Use preventatively where historically pests have been seen, or as early in the pest lifecycle as possible (eggs must be present).

**Temperature:** Minimum 50°F      **Relative Humidity:** Moderate

### *Trichogramma brassicae*

For low lying crops, cole crops; cabbage loopers and European Corn Borer.

#### CARDS:

<b>1131910</b>	≈10,000 (3 Tabs)	<b>\$18.50</b>
<b>1131903</b>	≈20,000 (6 Tabs)	<b>\$20.00</b>
<b>1131911</b>	≈100,000 - 1 Card (30 Tabs)	<b>\$40.00</b>

#### BULK EGGS:

<b>1131950</b>	≈100,000	<b>\$32.00</b>
<b>1131955</b>	≈1,000,000	<b>\$225.00</b>

#### CONTROLLED RELEASE - DISPENSERS:

<b>1131963</b>	≈62,500 - 25 Dispensers	<b>\$43.75</b>
<b>1131965</b>	≈125,000 - 50 Dispensers	<b>\$62.50</b>

#### CONTROLLED RELEASE - CAPSULES:

<b>1131971</b>	≈67,500 - 25 Capsules	<b>\$47.25</b>
<b>1131972</b>	≈135,000 - 50 Capsules	<b>\$67.50</b>
<b>1131975</b>	≈270,000 - 100 Capsules	<b>\$108.00</b>

### *Trichogramma minutum*

East of the Rockies; budworms, leafrollers and codling moths.

#### CARDS:

<b>1129001</b>	≈10,000 (3 Tabs)	<b>\$18.50</b>
<b>1129003</b>	≈20,000 (6 Tabs)	<b>\$20.00</b>
<b>1129010</b>	≈100,000 - 1 Card (30 Tabs)	<b>\$40.00</b>

#### BULK EGGS:

<b>1129050</b>	≈100,000	<b>\$32.00</b>
<b>1129051</b>	≈200,000 (2 x 100k)	<b>\$60.00</b>
<b>1129052</b>	≈500,000 (5 x 100k)	<b>\$150.00</b>
<b>1129055</b>	≈1,000,000	<b>\$225.00</b>

### *Trichogramma platneri*

West of the Rockies, orchards and tall crops.

#### CARDS:

<b>1130001</b>	≈10,000 (3 Tabs)	<b>\$18.50</b>
<b>1130003</b>	≈20,000 (6 Tabs)	<b>\$20.00</b>
<b>1130030</b>	≈100,000 - 1 Card (30 Tabs)	<b>\$40.00</b>

#### BULK EGGS:

<b>1130050</b>	≈100,000	<b>\$32.00</b>
<b>1130051</b>	≈200,000 (2 x 100k)	<b>\$60.00</b>
<b>1130052</b>	≈500,000 (5 x 100k)	<b>\$150.00</b>
<b>1130055</b>	≈1,000,000 (10 x 100k)	<b>\$225.00</b>

### *Trichogramma pretiosum*

General predator.

#### BULK:

<b>1131055</b>	≈1,000,000	<b>\$225.00</b>
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#### CONTROLLED RELEASE - DISPENSERS:

<b>1131062</b>	≈62,500 - 25 Dispensers	<b>\$43.75</b>
<b>1131065</b>	≈125,000 - 50 Dispensers	<b>\$75.00</b>

#### CONTROLLED RELEASE - CAPSULES:

<b>1131070</b>	≈67,500 - 30 Capsules	<b>\$37.50</b>
<b>1131071</b>	≈135,000 - 60 Capsules	<b>\$60.00</b>
<b>1131075</b>	≈270,000 - 90 Capsules	<b>\$67.50</b>

### Mix - *brassicae, minutum, planteri*

For multiple pests and crops.

#### CARDS:

<b>1130201</b>	≈10,000 (3 Tabs)	<b>\$20.00</b>
<b>1130202</b>	≈20,000 (6 Tabs)	<b>\$25.00</b>
<b>1130210</b>	≈100,000 - 1 Card (30 Tabs)	<b>\$36.00</b>

### *Trichogramma ostriniae*

Primarily for European Corn Borer.

#### BULK EGGS:

<b>1130155</b>	≈1,000,000	<b>\$225.00</b>
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FREE SHIPPING in the contiguous 48 states. Ships Monday - Thursday via 2nd Day. Please allow for a minimum of 24 hours to process orders. Orders received after 8:00 AM on Thursday will ship the following Monday. Upgraded Overnight shipping will incur a \$10 upcharge. DISPENSERS/CAPSULES: May require 1 week lead time. See website for more information.

# NemAttack™ Beads

## Encapsulated Beneficial Nematodes



**NEW!**

**Convenient application for control of common plant pests in the soil developing stage.**

**No Refrigeration Required • No Mixing Required**



Available as *Steinernema feltiae* and *Steinernema carpocapsae*



### Apply To Soil For Control Of Target Pests:

- Borers
- Fungus Gnats
- Thrips
- Caterpillars
- Flea Beetles
- Weevils & More!



Beneficial Nematodes are live, microscopic organisms (non-segmented roundworms) that occur naturally in soil throughout the world. They are parasitic to insect pests that typically have a developing (larval or pupal) stage of life in the soil.

ARBICO Organics is proud to offer a large selection of Beneficial Nematodes to suit any grower's needs.

**See pages 13-15 for more information.**





## How Do Beneficial Nematodes Work?

Beneficial Nematodes are applied to soil where they locate pests, enter through orifices or body walls and infect pests with toxic bacteria. Once inside, it is not the nematode that actually kills the pest, but bacteria inside the nematode.



The bacteria kills pests within 24 to 48 hours. Beneficial Nematodes then feed on bacteria and host insect tissue. Adult stages of Beneficial Nematodes produce hundreds of thousands of new juveniles.

New infective juveniles emerge loaded with "pest killer" bacteria and begin their search for a new host. As long as their is a suitable host, the Beneficial Nematodes will continue to parasitize. Beneficial nematodes can be used around and will not harm mammals, aquatic life, birds, reptiles or amphibians.

## What Are Beneficial Nematodes?

Beneficial Nematodes are live, microscopic organisms (non-segmented roundworms) that occur naturally in soil throughout the world.

They are parasitic to insect pests that typically have a developing (larval or pupal) stage of life in the soil; however, they have been known to also parasitize above ground stages of adults, nymphs and larvae.

## NemAttack Beads Encapsulated Beneficial Nematodes



■ = NemAttack *Steinernema feltiae* (Sf)

● = NemAttack *Steinernema carpocapsae* (Sc)



SINGLE SPECIES		
SKU	Size	Price
■ NemAttack Beads <i>Steinernema feltiae</i>		
5001005	≈5 million	\$36.00
5001010	≈10 million	\$42.95
5001020	≈20 million	\$57.20
5001040	≈40 million	\$86.00
● NemAttack Beads <i>Steinernema carpocapsae</i>		
5002005	≈5 million	\$36.00
5002010	≈10 million	\$42.95
5002020	≈20 million	\$57.20
5002040	≈40 million	\$86.00

Application rates vary based on pest, infestation levels and environment. See online for coverage recommendations, or call **800-827-2847**.

Free shipping in the contiguous 48 United States. 2nd day shipping required for the 5 million - 50 million sizes. Expedited shipping available for an additional fee. The 250 million & 500 million sizes require next day shipping during summer months, 2-day shipping otherwise. Orders ship Monday - Thursday; excluding holidays.

## Apply To Soil For Control Of Target Pests:

- Beetle Grubs
- Flies
- Fungus Gnats
- Rootworms
- Thrips
- Weevils
- Leafminers
- Worms
- And more!

## How Do I Choose the Right Beneficial Nematodes?

Use the Selection Chart on the next page to choose the proper species by pest(s). If you are unsure which nematode to use or your target pest is not listed, please call and one of our bio-control specialists can assist. Remember Beneficial Nematodes control soil-dwelling life stages.

## When & How Often Should Beneficial Nematodes Be Applied?

Use beneficial nematodes whenever larvae or grubs are present. As pest larvae feed on plant roots beneath the soil surface, severe damage can be done before you realize you have a pest dilemma. If adult insects are present, their eggs, nymphs, larvae and pupa will soon be developing.

**FOR TREATMENT:** Apply nematodes every 7-10 days until pest infestation subsides.

**FOR PREVENTION:** Apply at least 2-4 times per year in the spring, summer, fall and winter as needed.

Nematodes should be applied when *soil* temperatures are 42° - 95° F.

## When Will I See Results?

Beneficial Nematodes are considered to be one of the most lethal parasites known to kill plant pests. Depending upon the pest(s) you are treating and the method of application, it can take from 2-30 days for you to see results.

It is important to remember that Beneficial Nematodes disintegrate pests from the inside out. You will not see dead insect bodies as you would with a chemical knockdown. Instead you will notice less of the pest(s) over time.

Like all insects and organisms, some nematodes will survive the winter in a dormant state; however, we recommend re-applying at least 2-4 times on an annual basis to ensure that your pests do not get out of hand again.

# BENEFICIAL NEMATODES

## NemaSeek™ *Heterorhabditis bacteriophora* (Hb) Beneficial Nematodes

NemaSeek *H. bacteriophora* actively seek out larval pests and is most effective against sedentary pests, such as queen ants, asparagus beetles, bagworms, banana moths, banana weevils, berry root weevils, bill bugs, borers, carrot weevils, chafers, fleas, grubs and more!



## NemaSeek™ *Heterorhabditis indica* (Hi) Beneficial Nematodes

NemaSeek *H. indica* actively seek out larval pests and has been shown to be effective against small hive beetle, fungus gnats, root weevil, western flower thrips and select grubs.



## NemAttack™ *Steinernema feltiae* (Sf) Beneficial Nematodes

NemAttack *S. feltiae* nematodes are known to wait for passing pests, such as cabbage maggot, humpbacked flies, onion maggots, pill worm, raspberry crown borer, root maggots, scarids, shore flies, thrips and more!



## NemAttack™ *Steinernema riobrave* (Sr) Beneficial Nematodes

These nematodes are known to wait for passing pests. NemAttack *S. riobrave* is most effective against grubs of various beetles, citrus weevil and other weevil grubs, small hive beetle and more.



## NemAttack™ *Steinernema carpocapsae* (Sc) Beneficial Nematodes

These nematodes are known to wait for passing pests. NemAttack *S. carpocapsae* is most effective against mobile pests such as fleas, cutworm, fly larvae, termites and more!



## NemaSeek™ *Steinernema kraussei* (Sk) Beneficial Nematodes

NemaSeek actively seek out larval pests in the soil. *S. kraussei* has been shown to be effective at cooler soil temperatures (37-86°F) against the developing stage of weevils (especially black vine weevils) and sawflies.



### NEMATODE SELECTION CHART – Choose Variety By Pest

Pest	Variety	Pest	Variety	Pest	Variety	Pest	Variety
Ants (Queen)	▲	Colorado Potato Beetle	▲	Greater Wax Moth	★	Root Weevils	▲ ●
Armyworm	● ★	Corn Earworm	● ■ ★	Grubs	▲ ●	Scarabs	▲
Artichoke Plume Moth	●	Corn Rootworm	▲	Humpbacked Flies	■	Scarids	■
Asparagus Beetle	▲	Cotton Bollworm	●	Indian Meal Moth	★	Shore Flies	■
Bagworm	▲	Cranberry Girdler	●	Iris Borer	▲	Small Hive Beetle	★ ●
Banana Moth	▲	Cranberry Root Weevil	▲	Japanese Beetle	▲ ★	Sod Webworm	●
Banana Weevil	▲	Crane Flies	■	Large Pine Weevil	●	Strawberry Root Weevil	● ■ ★
Beet Armyworm	● ■	Cucumber Beetle	● ■ ▲	Leafminers	● ■	Sugarcane Stalk Borer	▲
Berry Root Weevil	▲	Cutworm	●	May/June Beetles	▲ ★	Sweet Potato Weevil	■ ▲
Billbug	▲	Diaprepes Root Weevils	★	Mint Flea Beetle	●	Termites (Subterranean)	■ ★
Black Cutworm	● ■ ★	Fall Armyworm	●	Mint Root Borer	●	Thrips	■
Black Vine Weevil	● ▲ ★ ◆	Flea Beetle	▲	Mole Crickets	● ★	Ticks	■ ▲
Bluegrass Weevil	●	Flea (Larvae, Pupae)	●	Navel Orangeworm	●	Tobacco Budworm	●
Cabbage Maggot	■	Flea (Adult)	▲	Onion Maggot	■	Tobacco Cutworm	■
Carrot Weevils	▲	Fly Larvae	●	Pink Bollworm	★	Vine Borers	▲
Caterpillars	●	Fruit Flies	● ■	Plum Curculio	★	Webworm	●
Chafers (European, masked)	▲ ★	Fungus Gnats	■ ▲ ●	Raspberry Crown Borer	■	Western Flower Thrips	■ ●
Citrus Root Weevil	▲ ★	Gall Midges	▲	Red Flower Beetle	★	Wireworm	●
Codling Moth	● ■	Grape Root Borers	▲	Root Maggots	■	Wood Borers	●



## Beneficial Nematodes

- ▲ = NemaSeek™ *Heterorhabditis bacteriophora* (Hb)
- = NemAttack™ *Steinernema feltiae* (Sf)
- = NemAttack™ *Steinernema carpocapsae* (Sc)

- ★ = NemAttack™ *Steinernema riobrave* (R)
- ◆ = NemaSeek™ *Steinernema kraussei* (Sk)
- = NemaSeek™ *Heterorhabditis indica* (Hi)

SINGLE SPECIES		
SKU	Size	Price
▲ NemaSeek <i>Heterorhabditis bacteriophora</i>		
1220300	≈5 million	\$36.00
1220301	≈10 million	\$42.95
1220302	≈50 million	\$72.00
1221703	≈250 million	\$198.00
1221706	≈500 million	\$270.00
■ NemAttack <i>Steinernema feltiae</i>		
1220309	≈5 million	\$36.00
1220310	≈10 million	\$42.95
1220311	≈50 million	\$72.00
1221701	≈250 million	\$198.00
1221704	≈500 million	\$270.00
● NemAttack <i>Steinernema carpocapsae</i>		
1220319	≈5 million	\$36.00
1220320	≈10 million	\$42.95
1220321	≈50 million	\$72.00
1221702	≈250 million	\$198.00
1221705	≈500 million	\$270.00
★ NemAttack <i>Steinernema riobrave</i>		
1220410	≈5 million	\$36.00
◆ NemaSeek <i>Steinernema kraussei</i>		
1220420	≈5 million	\$36.00
1220421	≈10 million	\$42.95
1220422	≈50 million	\$72.00
1220423	≈250 million	\$198.00
1220424	≈500 million	\$270.00
● NemaSeek <i>Heterorhabditis indica</i>		
1220200	≈5 million	\$36.00

COMBO PACKS		
SKU	Size	Price
▲● NemaSeek Hb & NemAttack Sc		
1220331	≈10 mil. per species	\$60.00
1220332	≈50 mil. per species	\$125.00
1221699	≈250 mil. per species	\$340.00
1220335	≈500 mil. per species	\$500.00
▲■ NemaSeek Hb & NemAttack Sf		
1220333	≈10 mil. per species	\$60.00
1220334	≈50 mil. per species	\$125.00
1221700	≈250 mil. per species	\$340.00
1220336	≈500 mil. per species	\$500.00
■● NemAttack Sf & NemAttack Sc		
1220340	≈10 mil. per species	\$60.00
1220341	≈50 mil. per species	\$125.00
1220342	≈250 mil. per species	\$340.00
1220343	≈500 mil. per species	\$500.00

TRIPLE THREAT COMBO		
SKU	Size	Price
▲■● NemaSeek Hb, NemAttack Sf & NemAttack Sc		
1220328	≈5 mil. per species	\$61.00
1220330	≈10 mil. per species	\$80.00
1220329	≈50 mil. per species	\$142.00
1220327	≈250 mil. per species	\$405.00
1220326	≈500 mil. per species	\$700.00

### SIZE & COVERAGE CHART

QUANTITY	COVERAGE
≈5 mil. nematodes	Treats ≈1,600 sq. ft.
≈10 mil. nematodes	Treats ≈3,200 sq. ft.
≈50 mil. nematodes	Treats ≈1 acre
≈250 mil. nematodes	Treats ≈5 acres
≈500 mil. nematodes	Treats ≈10 acres

Application rates vary based on pest, infestation levels and environment. For specific coverage recommendations, please call **800-827-2847**.



- ▲ = NemaSeek™ *Heterorhabditis bacteriophora* (Hb)
- = NemAttack™ *Steinernema feltiae* (Sf)
- = NemAttack™ *Steinernema carpocapsae* (Sc)

## OMRI Listed Beneficial Nematodes



OMRI LISTED SINGLE SPECIES		
SKU	Size	Price
▲ NemaSeek Pro Hb Beneficial Nematodes		
4004010	≈10 million	\$52.00
4004050	≈50 million	\$90.00
4004250	≈250 million	\$250.00
4004500	≈500 million	\$325.00
■ NemAttack Pro Sf Beneficial Nematodes		
4006010	≈10 million	\$52.00
4006050	≈50 million	\$90.00
4006250	≈250 million	\$250.00
4006500	≈500 million	\$325.00

OMRI LISTED SINGLE SPECIES		
SKU	Size	Price
● NemAttack Pro Sc Beneficial Nematodes		
4005010	≈10 million	\$52.00
4005050	≈50 million	\$90.00
4005250	≈250 million	\$250.00
4005500	≈500 million	\$325.00

TRIPLE COMBO		
SKU	Size	Price
▲■● NemaSeek Pro Hb Beneficial Nematodes, NemAttack Pro Sf Beneficial Nematodes & NemAttack Pro Sc Beneficial Nematodes		
4007010	≈10 mil. per species	\$125.00
4007050	≈50 mil. per species	\$225.00
4007250	≈250 mil. per species	\$630.00
4007500	≈500 mil. per species	\$880.00

Free shipping in the contiguous 48 United States. 2nd day shipping required for the 5 million - 50 million sizes. Expedited shipping available for an additional fee. The 250 million & 500 million sizes require next day shipping during summer months, 2-day shipping otherwise. Orders ship Monday - Thursday; excluding holidays.

# PEST INSECT TRAPS



## ARBICO Organics® Yellow Insect Traps

### Monitoring + Trapping = Effective Pest Control

**TARGET:** Use against aphids, bean beetles, California laurel aphids, flea beetles, fungus gnats, greenhouse whiteflies, leafminers, psyllids, shore flies, silverleaf whiteflies, sweet potato whiteflies and more.

**DESCRIPTION:** ARBICO Organics Yellow Insect Traps are 5" x 7" gridded, 2-sided adhesive traps for a wide range of crawling and flying insect pests. Insects are drawn in by the bright color and are caught on the glue. Once they are trapped, the gridded surface makes it easy to count just how many have landed. Having the insects immobilized on the trap also makes it easy to identify them. There is a very low risk to beneficials, but some may become caught by accident.

**SUGGESTED USE:** For use indoors and outdoors to trap and monitor insect pests. Traps may be hung virtually anywhere, placed on the ground or anchored to a stake (not included). If hung, traps should be slightly above the plant canopy. Avoid hanging too close to sprinklers.

- For trapping in the greenhouse or garden, use roughly one trap per 10-25 square feet.
- For monitoring, use roughly 4-6 traps per acre.

1254501	ARBICO Organics Yellow Insect Traps - 5 Pack	\$4.99
1254502	ARBICO Organics Yellow Insect Traps - 10 Pack	\$8.90
1254503	ARBICO Organics Yellow Insect Traps - 25 Pack	\$19.75
1254504	ARBICO Organics Yellow Insect Traps - 50 Pack	\$37.50
1254510	ARBICO Organics Yellow Insect Traps - 100 Pack	\$70.00



## Sticky Traps

### Monitor & Trap For Best Pest Identification!

**DESCRIPTION:** These 4" x 7" traps reverse fold to capture insect pests on both sides and include a twist tie and punched hole for easy hanging. All natural and weatherproof.

#### Aphid/Whitefly Yellow Sticky Traps:

**TARGET:** Whiteflies, aphids, leafhoppers, fungus gnats, spittlebugs, flies and more.

#### Thrips/Leafminer Blue Sticky Traps:

**TARGET:** Thrips, leafminers.

**SUGGESTED USE:** Greenhouses, orchards, row crops, barns and more. Hang or attach to stake approximately every 7 ft. at the end of each row or per tree. Use more for trapping.

1254001	Package of 5 Yellow Traps	\$4.49
1254101	Package of 5 Blue Traps	\$5.50



## Enoz® BioCare® Gnat Stix

### A Low-Tech But Supremely Effective Method For Fungus Gnat Control.

**TARGET:** Fungus gnats, aphids, mites, plant lice & more!

**DESCRIPTION:** Effective for even the worst infestations of fungus gnats. Use one Gnat Stix for each infested plant in adjacent rooms or hallways.

**SUGGESTED USE:** Peel release paper on yellow sticky sheet. Slide stick through the holes in the sticky sheet. Use one sticky strip on each stick. Place in the soil of plants. Avoid leaves coming in contact with sticky paper.

1280501	Gnat Stix - 12 Per Pack	\$5.99
1280502	Gnat Stix - 12 Per Pack - Bundle of 2	\$11.38
1280503	Gnat Stix - 12 Per Pack - Bundle of 4	\$21.56



## Stiky™ Strips Yellow Insect Traps

### These Basic Traps Come With A Handy Wire Hanger.

**TARGET:** Whiteflies, aphids, fungus gnats, leafminers, thrips, and more.

**DESCRIPTION:** This non-gridded yellow sticky trap is versatile enough to use virtually anywhere you are growing. Many insects find this particular yellow hue irresistible and, with glue on both sides, these traps will grab them coming and going. The adhesive is UV resistant, which keeps it from drying out.

**SUGGESTED USE:** For use in homes, gardens, greenhouses, nurseries and fields. Included wire hangers can also be used as plant stakes.

1254301	Stiky Strips Yellow Sticky Traps - 9 Pack	\$5.49
1254302	Stiky Strips Yellow Sticky Traps - (5) 9 Packs	\$25.00
1254303	Stiky Strips Yellow Sticky Traps - (10) 9 Packs	\$45.00



## Yellow Sticky™ Tape

**Longer Length Tape To Cover Even More Area.**

**TARGET:** Whiteflies, aphids, leafhoppers, fungus gnats, froghoppers (spittlebugs), flies and more.

**DESCRIPTION:** When you have an insect population in a large area that you need to monitor and trap, this sticky tape is the choice for you. It will work well against aphids, thrips, flies, gnats and many others. Pre-coated with adhesive on both sides, this yellow tape is 530' long and comes in 4 convenient widths (2", 6", 10" & 12"), making it perfect for a variety of locations. You'll also find that the extra thick cardboard flanges and heavy duty plastic plugs make these rolls easy to work with and the product easy to dispense. You can loop these along the perimeter of fields, inside greenhouses, barns, corrals, stalls or any other area where you need insect control. Any unwanted pests or other residue can be removed with vegetable oil or CitraSolv® (available online).

**SUGGESTED USE:** Loop along the perimeter of fields, inside greenhouses, barns, corrals, stalls or any other area where you need insect control.

<b>1259610</b>	Yellow Sticky Tape - 2" wide x 530' long	<b>\$50.00</b>
<b>1259611</b>	Yellow Sticky Tape - 6" wide x 530' long	<b>\$100.00</b>
<b>1259612</b>	Yellow Sticky Tape - 10" wide x 530' long	<b>\$150.00</b>
<b>1259613</b>	Yellow Sticky Tape - 12" wide x 530' long	<b>\$200.00</b>

\*Larger quantities available.



## Blue & Yellow Sticky Ribbon Rolls

**Blue Is For Thrips & Leafminers, Yellow Is For Aphids & Whiteflies.**

**TARGET:** Western Flower Thrips, Bean Thrips, Spinach Leafminers, California Laurel Aphid, Greenhouse Whitefly, Mexican Bean Beetle and more.

**DESCRIPTION:** These sticky ribbon rolls are an effective way to trap and monitor insects in large growing areas. Install around the perimeter of your garden or greenhouse and, since they are double-sided, they will trap insects coming and going. They can also be placed along the ground to catch crawling insects. Blue attracts thrips and leafminers and yellow attracts aphids, whiteflies and other soft-bodied insects. Pheromone lures or essential oils can be added to increase catch potential.

**SUGGESTED USE:** For best results, install the trap at the time of planting as a preventative treatment. Rolls can remain in place until the trapping surface is fully covered with insects or debris. It can be wrapped around fenceposts or stakes that are driven into the ground, or it can be attached to greenhouse posts with staples or string.

<b>1254420</b>	Blue Sticky Ribbon Roll - 6" W x 328' L	<b>\$60.00</b>
<b>1253220</b>	Yellow Sticky Ribbon Roll - 6" W x 328' L	<b>\$60.00</b>
<b>1254422</b>	Sticky Ribbon Roll Bundle - 6" W x 328' L (1 of ea.)	<b>\$115.00</b>



## ARBICO Organics® Blue Insect Traps

**Add Blue To Your Pest Control Arsenal & Cover All Your Bases.**

**TARGET:** Thrips, leafminers.

**DESCRIPTION:** ARBICO Organics Blue Pest Traps are 5" x 7" gridded adhesive traps that are the perfect shade of blue to make them irresistible to Thrips and Leafminers. The color lures them in and the sticky surface holds them tight. These traps have adhesive on both sides to grab insects no matter which direction they're coming from. If you are monitoring, the gridded surface and bright color allow for easy identification and counting. When used in conjunction with the ARBICO Organics Yellow Sticky Traps, you will have the right colors to attract most common insect pests. There is a very low risk to beneficials, but some may become caught by accident.

**SUGGESTED USE:** For use indoors and outdoors to trap and monitor insect pests. Traps may be hung virtually anywhere, placed on the ground or anchored to a stake (not included). If hung, traps should be slightly above the plant canopy. Avoid hanging too close to sprinklers.

- For trapping in the greenhouse or garden, use roughly one trap per 10-25 square feet.
- For monitoring, use roughly 4-6 traps per acre.

<b>1254551</b>	ARBICO Organics Blue Insect Traps - 5 Pack	<b>\$4.99</b>
<b>1254552</b>	ARBICO Organics Blue Insect Traps - 10 Pack	<b>\$8.90</b>
<b>1254553</b>	ARBICO Organics Blue Insect Traps - 25 Pack	<b>\$19.75</b>
<b>1254554</b>	ARBICO Organics Blue Insect Traps - 50 Pack	<b>\$37.50</b>
<b>1254560</b>	ARBICO Organics Blue Insect Traps - 100 Pack	<b>\$70.00</b>



## Pest Wizard Blue-Yellow Card Trap

**A Trap With Two Special Colors – To Attract Even More Pests!**

**TARGET:** The blue side will attract aphids and thrips. The yellow side attracts whiteflies, hoppers, beetles, fruit flies, psyllids and more!

**DESCRIPTION:** Blue on one side, yellow on the other. These dual-duty traps will capture an array of pests using specific color wavelengths and MessyLess™ non-toxic adhesive that won't stick to your fingers. Each pack contains 4 rectangular traps, 8 hangers and instructions. Traps are weather resistant and measure 8" x 3.5".

**SUGGESTED USE:** Hang traps on branches in trees and roses. Hang on stakes near vegetable row crops, shrubs and container plants.

- For Monitoring: ≈1 trap/1,000 sq. ft.
- For Trapping: ≈1 trap/20-50 sq. ft.

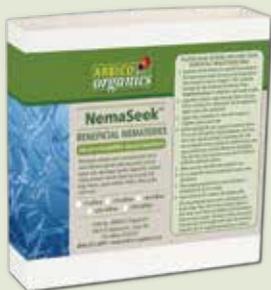
<b>1254201</b>	Blue & Yellow Card Trap - 4 Pack	<b>\$9.99</b>
<b>1254202</b>	Blue & Yellow Card Trap - 10 Pack	<b>\$17.99</b>



## BIOLOGICAL GRUB CONTROL

### NemaSeek™ Hb Beneficial Nematodes

Beneficial Nematodes are one of nature's most powerful weapons available for managing Japanese Beetle infestations. Along with parasitizing the beetles in their larval, underground damaging stages, they also parasitize the larval states of other pest grubs, weevils, fleas, leafminers and more. Apply with a watering can, hose end sprayer or backpack sprayer. **See pages 13-15 for more information.**



## JAPANESE BEETLE CONTROL

### Milky Spore Powder

**Specific, Long Lasting Larval Control.**

**TARGET:** Japanese beetle grubs.

**DESCRIPTION:** Contains *Bacillus popilliae* bacterium, lethal to soil-borne grub stages of Japanese beetles. Grubs that normally feed on roots of grass and vegetables will ingest the bacterium, which will cause death in about 1-3 weeks. As grubs decompose they re-release bacteria spores. The spores can remain in the soil for about ten years, and in some cases up to 20 years. In warmer climates, control can occur in 1-3 years (after one application) and in cooler climates, 3-5 years. Can apply with other fertilizers, will not harm animals and can be applied to food crops. For best results, apply with NemaSeek Hb Beneficial Nematodes (see pages 13-15), which will aid in spreading the bacterium to grubs. Store in a cool dry place to maintain shelf life.



**SUGGESTED USE:** Use All-Purpose Dispenser Tube for easy application (see online). White chalk carries the bacterium, and the resultant treated area should resemble a checkerboard. Water within about 48 hours for about 15-20 minutes to permeate into soil and do not mow or rake until thoroughly soaked. Apply about 1 tsp., every 4 ft., in rows 4 ft. apart. 10 oz. covers ≈2,500 sq. ft., 40 oz. covers ≈1/4 acre, 50 lbs. covers ≈4.5 acres.

- 1216001** Milky Spore Powder - 10 oz. - Covers ≈2,500 sq. ft. **\$32.99**
- 1216040** Milky Spore Powder - 40 oz. - Covers ≈1/4 acre **\$85.99**
- 1216045** Milky Spore Powder - 25 lb. Drum - Covers ≈2.25 acres **\$879.00**
- 1216052** All-Purpose Dispenser Tube **\$14.50**

Cannot be shipped to the following states: CA, OR, WA

If you are unsure if Japanese Beetles have invaded your county, please contact your County Extension Agent to find out.



## GRUB CONTROL

### BioCeres® WP

This Versatile Biopesticide Can Be Used In A Tank Mix Or As A Stand-Alone.

**1332890** BioCeres WP - 1 lb. Bag **\$90.00**  
See page 22 for more information.

### AzaGuard®

This Product Works On A Wide Range Of Ornamental, Forestry, Food & Non-Food Crops.

**1222204** AzaGuard - 32 oz. **\$275.00**  
See online for more information.

### BotaniGard® MAXX

*Beauveria bassiana* & Pyrethrins Make A Powerful Team!

**1341030** BotaniGard Maxx - Quart **\$115.00**  
See online for more information.

## BEETLE CONTROL

### BONIDE® Captain Jack's™ Neem Max

Powerful Cold Pressed Neem Oil In A 4-in-1 Formulation.

**1246610** Captain Jack's Neem Max - 8 oz. Conc. **\$14.99**  
See page 20 for more information.

### PyGanic® Gardening

Rapid Knockdown & Kill For Outdoor Pests In Your Garden.

**1288710** PyGanic Gardening - 8 oz. **\$25.50**  
See page 21 for more information.

### Molt-X®

An excellent spray with multiple modes of insecticidal action.

**1332771** Molt-X - Quart **\$315.00**  
See online for more information.

## MULTI-PURPOSE

### Organic JMS Stylet-Oil®



**Smother Overwintering Insect Pests & Mites With This Food Grade Dormant Oil!**

**TARGET:** Powdery mildew, mites, whiteflies, leafminers and insect transmitted diseases.

**DESCRIPTION:** Use this multi-purpose, year-round fungicide, insecticide and antiviral spray oil in greenhouses, on field crops and on fruit trees. Kills powdery mildew on contact and prevents occurrence for up to 14 days and controls mites, whiteflies and leafminers. Made from paraffinic oil and is colorless, tasteless and odorless. 4-hour re-entry interval; no pre-harvest interval.

**SUGGESTED USE:** For gardens, apply approx. 3 Tbsp./gal. water with a sprayer. For larger areas, apply about 1-2 gal./100 gal. water and use 25-150 gal. of dilute/acre depending on crop, timing and desired treatment. Apply weekly or bi-weekly depending on severity of condition. Begin at the onset of plant growth, fungus emergence, disease and insect infestation. See label online for detailed rates and instructions.

**1274107** Organic JMS Stylet-Oil - Gallon **\$38.50**  
**1274108** Organic JMS Stylet-Oil - 2.5 Gallons **\$60.00**

\*Call for freight quote. Larger sizes available.

**Cannot be shipped to the following states:** DC, IN, KS, KY, LA, MS, MT, PR, SD, TN, UT, WY



### The Amazing Doctor Zymes Eliminator



**Use This Year Round For Pest & Mildew Free Plants.**

**TARGET:** Aphids, thrips, fungus gnats, mites, root aphids and whiteflies. Also eliminates fungus, molds and mildew.

**DESCRIPTION:** This OMRI listed product is made with naturally occurring organic materials and citric acid to produce a multiple action fungicide/miticide. As a miticide, it works by interfering with the pest's ability to breath, fatally breaking down protein and organic materials in eggs and acting as a deterrent. As a fungicide, the citric acid destroys the biomass of the spores and alters the pH to create an environment hostile to growth. Best when used preventatively.

**SUGGESTED USE:** Dilute with warm water. Larger volume applications: 1/2 cup/gal water. For severe infestations: 1/2 cup/gal water every 3rd day. Powdery Mildew/weak solution: .5 oz/31.5 oz water. Soft bodied insects/medium solution: 1-1.5 oz/31 oz water. Infestations/strong solution: 2-2.5 oz/30 oz water. Preventative: seeds/transplants: .5-1 oz/qt water; soil amendment: 1 cup/5 gals water; foliar spray: 1/2 cup/1 gal water.

**1459200** The Amazing Dr. Zymes Eliminator - Quart RTU **\$15.82**  
**1459201** The Amazing Dr. Zymes Eliminator - Quart Conc. **\$39.69**  
**1459202** The Amazing Dr. Zymes Eliminator - Gallon Conc. **\$142.32**

Larger sizes available.

**Cannot be shipped to the following states:** CT, DC, ID, IN, KS, LA, ME, MS, NE, NJ, NM, ND, PR, SD



### PureCrop1



**Plant-Based Biostimulant, Insecticide & Fungicide.**

**TARGET:** All sap sucking insects (mites, thrips, aphids, whiteflies, leaf hoppers), mold, mildew and diseases (*Botrytis*, *Fusarium* wilt, powdery mildew and more).

**DESCRIPTION:** PureCrop1 uses advanced biochemistry to eliminate pests, mold and mildew, while increasing plant health. Although it's active ingredients are corn and soybean oil, it is in fact NOT an oil. Through the use of Nanotechnology, it is a rearrangement of molecules to create a colloidal micelle. Due to its small size and electrical properties, PureCrop1 is a natural surfactant, carrier of nutrients and increases sugar levels. When applied as a foliar spray or root drench, it leaves no residue behind and tests clean parts per billion. This product can be used on all stages of growth even up to day of harvest.

**SUGGESTED USE:** As a preventative foliar spray, 1 oz. per gal. every 7-10 days. For knock down foliar spray, 2 oz. per gal. every 2-3 days until desired results. To maintain long term biostimulant benefits spray, 2 oz. per gal. once a week. As a root drench or general surfactant spray, 1.24 oz. per gallon of water.

**1274200** PureCrop1 - 16 oz. **\$38.00**  
**1274201** PureCrop1 - 1/2 Gallon **\$82.50**  
**1274202** PureCrop1 - Gallon **\$165.00**  
**1274203** PureCrop1 - 2.5 Gallons **\$412.50**

Larger sizes available.



### SuffOil-X®



**OMRI Listed Pre-Emulsified Mineral Oil Suffocates Many Soft-Bodied Insects & Controls Certain Fungal Diseases.**

**TARGET:** Aphids, cankerworms, leafhoppers, leafrollers, mealybugs, mites, plant bugs, psyllids, soft scales, webworms, whiteflies, rust and powdery mildew.

**DESCRIPTION:** Made with refined pre-emulsified mineral oil, this suffocant creates the best coverage with limited risk of plant damage. Using a pre-emulsified creates a lighter oil that dries faster, will not cause photoxicity, burn or undue stress, leaves no toxic residue on plants and dilutes easily with water.

**SUGGESTED USE:** Can be used with a wide variety of crops indoors or outdoors. Apply when oil will dry and evaporate in 1-2 hours and when relative humidity is less than 90%. Application rates are generally 1-2 gallons of SuffOil-X per 100 gallons of water or 20-500 gallons of spray solution per acre.

**1332805** SuffOil-X - 2.5 Gallons **\$87.00**  
**1332806** SuffOil-X - Case of 2 ct./2.5 Gals. **\$156.00**

Larger sizes available.

**Shipping Restrictions:** Cannot ship via US Mail or air shipping methods.

**Cannot be shipped to the following states:** AK, DC



## BONIDE® Captain Jack's™ Neem Max

**NEW**

**Powerful Cold Pressed Neem Oil In A 4-in-1 Formulation.**

**TARGET:** Aphids, grasshoppers, beetles, leafhoppers, thrips, borers, leafminers, caterpillars, mealybugs, weevils, flies, gnat, psyllids, wireworms, whiteflies, soil fungal diseases and much more.

**DESCRIPTION:** Made with 70% cold pressed neem oil, this product works as a repellent, a suffocant, an anti-feedant, an insect growth regulator by disrupting the growth/molting process and as a poison if ingested. As a fungicide this product will inhibit mycelial growth by coating the spores, which prevents further spore development. This product will not kill fungal pathogens outright, it will only inhibit further develop so it is crucial to treat the area ahead of a severe infestation. Kills the eggs, larvae & adults.

**SUGGESTED USE:** Can be applied as a foliar spray or soil drench. Insect & mite control: Apply at 0.625-1.8% in a 7-10 day interval. Disease control: Use 1.2-1.8% with a 10-14 day interval. Soil use/nematode control: Use at 1.2-2.4% with a 10-14 day interval.

**1246610** Captain Jack's Neem Max - 8 oz. Conc. **\$14.99**  
**1246611** Captain Jack's Neem Max - 16 oz. Conc. **\$22.99**

Cannot be shipped to the following states: DC, HI, ME, PR



## Monterey Neem Oil

**Effective Against Indoor And Outdoor Insect Pests & Fungal Diseases!**

**TARGET:** Use as an insecticide/miticide and/or fungicide on a wide range of ornamental plants, vegetables, trees and shrubs, as well as fruit and nut crops.

**DESCRIPTION: Insecticide/Miticide Use:** Controls spider mites, aphids, whiteflies, scale, beetles, leafrollers and other insect pests. **Fungicide Use:** Effective against powdery mildew, black spot, downy mildew, anthracnose, rust, leaf spot, *Botrytis*, needle rust, blights and *Alternaria*.

**SUGGESTED USE: Insecticide/Miticide Use:** Mix rate: 1-2 oz./gallon of water. Thoroughly spray all plant surfaces (including the undersides of leaves) until wet. **Fungicide Use:** Apply every 7-14 days; for heavy infestation, apply every 7 days. Use 1 oz./gallon of water & thoroughly spray all plant surfaces until wet. Apply on a 7-14 day schedule until control is achieved.

**1555615** Monterey Neem Oil - 32 oz. RTU **\$14.49**  
**1555616** Monterey Neem Oil - 16 oz. RTS **\$29.49**  
**1555613** Monterey Neem Oil - 8 oz. Concentrate **\$15.99**  
**1555614** Monterey Neem Oil - Pint Concentrate **\$26.99**  
**1555618** Monterey Neem Oil - Gallon Concentrate **\$144.49**

RTU (1555615) cannot be shipped to the following states: ND, WY  
 Concentrate and RTS cannot be shipped to the following states: OR



## SNS 209™ Systemic Pest Control

products available  
**OMRI**  
LISTED  
For Organic Use

**This NOP Compliant Insecticide Works From The Inside Out.**

**TARGET:** For use against spider mites, whiteflies, fungus gnats, thrips, root aphids, scales and more.

**DESCRIPTION:** This unique product formula contains rosemeric acid, a derivative of the rosemary plant, that the plant will uptake and spread throughout its structure. The presence of this acid in the plant cells forms a barrier that insects find distasteful. Once a feeding insect comes in contact with the rosemeric acid, they retreat and look for a more suitable food source. Contact with rosemeric acid can be fatal depending on the size of the pest affected and that pest's maturity. SNS 209 stays in the plant's leaves, stems and roots and can't be diluted by the elements. This provides complete protection for all parts of the plant.

**SUGGESTED USE:** This product may be used as a foliar spray or as a root drench. Use daily or every few days until it begins working in 1-2 weeks. It will be effective for up to 3 weeks. Discontinue use once it starts working and then reapply every 14-28 days as needed. Do not overuse.

**1459105** SNS 209 Pest Control - Pouch Conc. - Makes 5 gal. **\$7.99**  
**1459100** SNS 209 Pest Control - Pint Concentrate **\$24.00**  
**1459102** SNS 209 Pest Control - Gallon Concentrate **\$110.00**  
**1459103** SNS 209 Pest Control - 5 Gallon Concentrate **\$380.00**

Cannot be shipped to the following states: AL, AK, CT, DE, GA, ID, IN, IA, KS, LA, ME, MS, MT, NM, ND, PA, RI, SC, SD, UT, WV, WY



## AzaSol™

products available  
**OMRI**  
LISTED  
For Organic Use

**This Non-Oil Based & Water Soluble Powder Controls A Myriad Of Insect Pests.**

**TARGET:** Whiteflies, aphids, caterpillars, mushroom flies, phorid flies, leafminers, mealybugs, psyllids, weevils and many more.

**DESCRIPTION:** Through a patented process, the active ingredient in Azasol, Azadiractin, is transformed into water-soluble amorphous powder that quickly dissolves in water and won't clog equipment or leave an oily residue or discoloration on plants. When used as directed it is effective on adult insects, larvae and pupae. It will vigorously repel insects, kill them when they come in contact with the spray or feed on sprayed plants and interrupt their life cycles. Won't burn leaves or block photosynthesis. Can be injected in trees for quick results.

**SUGGESTED USE:** Apply as a foliar spray or soil drench to soil or soilless media. A wetting agent may be used. To repel adult flies, use fogging equipment. Use from 1-4 tsp./1000 sq. ft. depending on pest infestation levels, application method and growing environment. For optimum results, 2-3 applications made at 7-10 day intervals is recommended.

**1457620** AzaSol - .25 oz. **\$19.99**  
**1457621** AzaSol - .75 oz. **\$46.99**  
**1457622** AzaSol - 6 oz. (8 x 0.75 oz.) **\$329.99**  
**1457624** AzaSol - 1 lb. Bottle **\$599.00**  
**1457625** AzaSol - 2 lb. Jug **\$1,297.00**



## Organocide® Bee Safe 3-in-1 Garden Spray



This Multi-Purpose OMRI-Listed Garden Spray Will Not Harm Bees, Ladybugs Or Butterflies.

**TARGET:** Soft-bodied insects, spiders and other mites, scale, powdery mildew, downy mildew, spot diseases and more.

**DESCRIPTION:** This organic spray uses a specific blend of potassium sorbate, sesame oil, lecithin and edible fish oil to work as an insecticide, miticide and fungicide. It contains no petroleum solvents and is an ideal alternative to many chemical-based pesticides and sprays. Organocide is effective against soft-bodied insects, spider mites and scale insects, but it also controls many common fungal diseases, like powdery mildew, downy mildew and spot diseases. Can be used on most crops grown indoors and outdoors, but do not use the concentrate indoors. 0-hr REI & 0-day.

**SUGGESTED USE:** Spray to run-off, making sure tops & bottoms are covered. Spray early morning or late evening and allow 3-4 hrs. for product to dry. Do not apply when temps are over 95°F. For control: 1 application. For maintenance: Once a month. Severe problems: 2 applications 3 days apart. Concentrate: Dilute 3 oz/gal water or 1 oz/gal water for severely stressed or damaged plants. Diluted solution can be used for up to 30 days. Use a sprayer that puts out a fine spray.

<b>1150050</b>	Organocide 3-in-1 Garden Spray - 24 oz. RTU	<b>\$12.21</b>
<b>1150055</b>	Organocide 3-in-1 Garden Spray - 16 oz. Conc.	<b>\$16.48</b>
<b>1150056</b>	Organocide 3-in-1 Garden Spray - 32 oz. Conc.	<b>\$23.78</b>
<b>1150058</b>	Organocide 3-in-1 Garden Spray - Hose-End 32 oz.	<b>\$31.87</b>
<b>1150059</b>	Organocide 3-in-1 Garden Spray - Gallon Conc.	<b>\$86.19</b>

Cannot be shipped to the following states: CT, IA, NM



## PyGanic® Gardening



Rapid Knockdown & Kill For Outdoor Pests In Your Garden.

**TARGET:** Over 100 listed pests, including aphids, beetles, caterpillars, crickets, fruit flies, fungus gnats, mites and thrips.

**DESCRIPTION:** This updated version of PyGanic offers the same ingredients and results as the former PyGanic 1.4.

Pyrethrins, the active ingredient here, is made from a daisy extract and has been used effectively for a millennia. This

formulation can be applied in a variety of ways, making it easy to use no matter the size of your garden. Spraying should begin when the insects first appear, not when they are already heavily infested. Thoroughly cover all plant surfaces. This OMRI listed, NOP compliant insecticide can be used throughout your growing season and up to the day of harvest.

**SUGGESTED USE:** For use on outdoor gardens and growing areas. Not for use indoors. Not for use on plants grown for sale. Do not exceed the maximum application rates of 1.4 fl. oz. per 1,000 sq. ft. or 59 fl. oz. per acre.

<b>1288710</b>	PyGanic Gardening - 8 oz.	<b>\$25.50</b>
<b>1288720</b>	PyGanic Gardening - 32 oz.	<b>\$64.00</b>
<b>1288730</b>	PyGanic Gardening - Gallon	<b>\$236.00</b>



## Monterey Garden Insect Spray



Insect Pests Don't Stand A Chance With This Spinosad Product!

**TARGET:** Caterpillars, leafminers, thrips, fire ants and other pests as listed on the label.

**DESCRIPTION:** This OMRI listed spray is made with Spinosad and is specially formulated for use in home environments such as gardens, lawns, ornamentals, shrubs, trees and non-commercial greenhouses. The Spinosad in this spray works on insects' nervous systems, causing paralysis and death within 1-2 days. Because the insects are paralyzed, they may remain stuck on the plants and be mistaken for live insects; we recommend you check your plants 2-3 days after spraying to re-evaluate your control. Not for commercial use.

**SUGGESTED USE:** Apply when listed pests are present. Thoroughly spray and drench all plant foliage until wet, taking care to include undersides of leaves. Repeat applications may be made as indicated in the "Use Restrictions" section of the label. **Toxicity:** This product is toxic to bees for 3 hours following treatment. This product is also toxic to aquatic invertebrates such as insects, crustaceans, mollusks and worms.

<b>1257907</b>	Monterey Garden Insect Spray - 32 oz. RTU	<b>\$13.49</b>
<b>1257906</b>	Monterey Garden Insect Spray Conc. - 32 oz. RTS	<b>\$32.99</b>
<b>1257900</b>	Monterey Garden Insect Spray Conc. - Pint	<b>\$19.99</b>
<b>1257905</b>	Monterey Garden Insect Spray Conc. - Quart	<b>\$30.49</b>
<b>1257910</b>	Monterey Garden Insect Spray Conc. - Gallon	<b>\$103.49</b>

Cannot be shipped to the following states: DC (Concentrate only)



## M-Pede®



A Highly Effective, Organic Version Of Insecticidal Soap.

**TARGET:** Adelgids, aphids, caterpillars, earwigs, lace bugs, leafhoppers, leafminers, mealybugs, mole crickets, plant bugs, psyllids, sawfly larvae, scales, spider mites, tent caterpillars, thrips, whiteflies, spongy moths & chinch bugs. Curative control for powdery mildew.

**DESCRIPTION:** This organic foliar spray insecticide/miticide/fungicide is made from potassium salts of naturally derived fatty acids (aka insecticidal soap) and can be used on a wide range of crops grown organically or conventionally in fields, greenhouses, or interiorscapes. M-Pede works in all life stages of mites, aphids and whiteflies – with other listed insect pests, the effects are limited to early growth stages and eggs. 12-hr REI & 0-day PHI.

**SUGGESTED USE:** This product may be applied with most types of ground or aerial spray equipment, but **DO NOT** use with pulse/thermal fogger applicators or apply through any type of irrigation or hydroponic system. M-Pede rates as low as 0.25% v/v or as high as 4% v/v may be used. The 2% v/v rate is the most frequently used stand-alone rate. **Do not** mix with sulfur or use within 3 days of a sulfur application. To avoid any possible plant injury do not make repeat applications at less than 7-day intervals, or make more than 3 sequential applications at 7- to 14-day intervals

<b>1247650</b>	M-Pede - 2.5 Gallons	<b>\$153.00</b>
<b>1247652</b>	M-Pede - 2.5 Gallons - Case of 2	<b>\$275.40</b>



## BEAUVERIA BASSIANA

### BioCeres® WP



**This Versatile Biopesticide Can Be Used In A Tank Mix Or As A Stand-Alone.**

**TARGET:** Aphids (*Aphidoidea*), whiteflies (*Aleyrodoidea*), thrips (*Thysanoptera*), plant bugs (*Lygus lineolaris*), spotted wing drosophila (*Drosophila suzukii*), borers, beetles and weevils.

**DESCRIPTION:** This OMRI Listed biopesticide uses the power of *Beauveria bassiana* to control insects in developing and adult stages. Upon application, the spores will adhere to and begin penetrating the insect's outer shell. Once inside the insect, the spores will continue to multiply until they reach its hemolymph (blood). When the spores encounter the blood they will begin feeding on it. Death will occur in 7 to 14 days. 0 pre-harvest interval and 4-hour REI.

**SUGGESTED USE:** Repeat at 5-7 day intervals as needed. Apply 1-3 lbs. per acre, according to the density of the insect population. For conventional air and ground applications, use at least 50 gallons of spray volume per acre. Thoroughly cover plant foliage with spray solution, but not to runoff.

**1332890** BioCeres WP - 1 lb. Bag **\$90.00**  
**1332895** BioCeres WP - CA Version - 1 lb. Bag **\$90.00**

Case sizes available.

**SKU 1332890 cannot be shipped to the following states:** AK, HI



### Mycotrol® WPO

**A New Formulation For A Reliable Favorite!**

**TARGET:** Adult and immature stages of whiteflies, thrips, aphids, psyllids, weevils, mealybugs, leafhoppers/plant hoppers, scarab beetles and plant bugs (*Heteroptera*) and more.

**DESCRIPTION:** Mycotrol WPO is a wettable powder mycoinsecticide that contains live spores of the naturally occurring fungus, *Beauveria bassiana*. In fact, this formulation contains the highest concentration of any insecticide containing *Beauveria*. These spores adhere to the host insect and use enzymes to attack and ultimately dissolve the cuticle that surrounds and contains the body cavity. This fungal penetration will ultimately kill the unwanted insects but will not harm beneficials.

**SUGGESTED USE:** For use in greenhouses, nurseries, landscape and interiorscape settings. Mycotrol WPO can be used for a wide range of vegetables, fruits and berries, herbs and spices, ornamentals, ground covers, trees and turf. Apply Mycotrol WPO using hand-held, ground spray equipment and/or low volume application equipment.

**1341100** Mycotrol WPO - 1 lb. **\$125.00**  
**1341105** Mycotrol WPO - 1 lb. (Case of 12) **\$1,350.00**



### *Beauveria bassiana*

*Beauveria bassiana* is an entomopathogenic fungi that causes white muscadine disease in a range of insects including whiteflies, aphids, thrips, grasshoppers and certain types of beetles. *B. bassiana* spores simply need to come in contact with a host. Once the host insect is infected, the fungus rapidly grows inside of the insect, feeding on the nutrients present in the host's body and producing toxins in the process. When the host dies, the *B. bassiana* covers the carcass in a layer of white mold that produces more infective spores.

### BotaniGard® ES & 22WP *Beauveria bassiana* Strain GHA

**Controls A Wide Variety Of Soft-Bodied Insects In Greenhouse, Field & Nursery.**

**TARGET:** A wide variety of soft-bodied insects such as whiteflies, thrips, aphids, psyllids, mealybugs, scarab beetles, plant bugs and weevils.

**DESCRIPTION:** BotaniGard ES is a natural contact insecticide that contains a liquid emulsified suspension of the mycoinsecticide – *Beauveria bassiana* Strain GHA, which controls many varieties of soft-bodied insects in greenhouse, field and nursery crops.



**SUGGESTED USE:** Thorough coverage is required to achieve control. Apply in 7 day intervals. However, if pest population is high, it can be applied in 3-5 day intervals totaling 3 applications.

#### Application Rates of BotaniGard ES

- For whiteflies and aphids, use about .5-1 quart per 100 gallons of water.
- For thrips, use about 1-2 quarts per 100 gallons of water.
- For other insects, use about .5-2 quarts per 100 gallons of water.
- If applying as a high or low volume spray, use up to 3 quarts per 100 gallons of water to cover an area of 5,000-20,000 sq. ft.

#### Application Rates of BotaniGard 22WP

- For whiteflies and aphids, use .5-1 lb. of BotaniGard 22WP per 100 gallons of water.
- For thrips, use 1-2 lbs. of BotaniGard 22WP per 100 gallons of water.
- For other labeled insects, use .5 to 2 lbs. of BotaniGard 22WP per 100 gallons of water.
- Rate depends upon infestation level, consult package instructions before application.

#### BotaniGard ES

**1341010** BotaniGard ES - Quart **\$110.00**  
**1341020** BotaniGard ES - Gallon **\$360.00**

#### BotaniGard 22WP

**1341000** BotaniGard 22WP - 1 lb. Powder **\$95.00**

Case sizes available.

**Shipping Restrictions:** Cannot ship via US Mail.



## NoFly™ WP

**This Aggressive Fungus Controls Soft-Bodied Insects & Hard-To-Kill Livestock Pests.**

**TARGET:** Aphids, Bagrada bugs, beetles (including darkling, litter, carrion & hide), fungus gnats, gnats, grasshoppers, leaf hoppers, locust, lygus bugs, mealybugs, mites (including russet, spider & chicken), Mormon crickets, northern fowl mites, plant bugs, psyllids, red poultry mites, thrips, weevils, and whiteflies.

**DESCRIPTION:** This organic wettable powder mycoinsecticide contains spores of the entomopathogenic fungus *Isaria fumosoroseus* strain FE 9901. This naturally occurring fungus is a common and aggressive predator of insect pests but is not a plant pathogenic organism and will not adversely affect beneficials (including bees). When the spores come into contact with the insect pest, they will immediately attach themselves to the body. As they grow, they will penetrate the host insect's body and disrupt the normal functions of the insect's internal organs and tissues. It will stop feeding within 24 hours and die in 3-7 days. Effective against all life stages of insect pest.

**SUGGESTED USE:** Can be used as a foliar, soil or hydroponic application. Rates for crops: Foliar: 1/2-2 lb/ acre or 2-8 oz/ 11,000 sq. ft. at a minimum of 0.1% solution. Soil: 14-28 oz/100 gals water at a rate of 1 gal of solution per cu ft of growing media or 6-12 oz/5-10 gals water/yard of soil. Hydroponics: 6-16 oz/100 gals water. Rates for turf: 1/2- 2 lb/ acre or 2-8 oz/11,000 sq. ft. applied at a minimum of 0.1% solution. Rates for poultry houses & livestock barns: 1-3 oz/12 gals water.

<b>1332875</b>	NoFly WP - 8 oz.	<b>\$67.78</b>
<b>1332876</b>	NoFly WP - 2 lbs.	<b>\$225.99</b>
<b>1332877</b>	NoFly WP - 20 lbs.	<b>\$1,100.00</b>

Cannot be shipped to the following states: AK, DC



## PFR-97™ 20% WDG

**Directed Fungal Growth Is The Key To This Remarkable Insecticide.**

**TARGET:** Aphids, black vine & root weevils, broad, russet & spider mites, leafminers, *Coleoptera* grubs & larvae, *Lepidoptera* caterpillars & larvae, mealybugs, plant bugs, phorid & scard flies, thrips, whiteflies, root & wireworms.

**DESCRIPTION:** PFR-97 uses an entomopathogenic fungus, *Isaria fumosorosea* Apopka Strain 97, as its active ingredient. This is a naturally occurring, soil-borne fungus that infects and kills many insect pests. Infection, however, is not limited to soil-dwelling pests; it is spread above ground by sick and dying insects. This product has successfully harvested this fungus to control targeted insects. Germination & growth occurs over several days, so application should begin at the first sign of pests, before infestation. Can be mixed with most other products, but the only fungicide it can be mixed with are copper-based ones. 4 hour REI, OMRI listed, NOP approved.

**SUGGESTED USE:** Standard application rate: Apply PFR-97 to moist or pre-irrigated soil at 1-2 lbs. per acre of soil. Spray volume depends on crop size/type: 20-50 GPA on small or young crops; 80-100 GPA or more on full grown crops.

<b>1332870</b>	PFR-97 20% WDG - 5 lbs.	<b>\$235.00</b>
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Cannot be shipped to the following states: AK, AL, AR, IA, UT



## Venerate® CG & Venerate® XC

**This Unique Bioinsecticide Fits In Any IPM & Resistance Management Program (RMP).**

**TARGET:** Caterpillars, foliage feeding *Coleopteran*, aphids, whiteflies, Asian Citrus Psyllids (ACP), leafhoppers, stink bugs, mites, *Lygus* and more.

**DESCRIPTION:** Venerate uses killed cells of the *Burkholderia spp.* strain A396 and spent fermentation media to kill insects in fields and greenhouses. It's toxic when ingested and works on contact to cause enzymatic degradation of exoskeletal structures and fatal interference with the molting process. Not harmful to fish, birds, most beneficials and honey bees.

**SUGGESTED USE:** Mix with water and apply as a foliar spray. Apply 1-4 qts./ acre on a 7-day interval. Smaller scale applications: 2-4 Tbsp./gal. Can alternate with another product on a 7-day interval. No limit on number of applications per season. No spray buffer needed.

<b>1332957</b>	Venerate CG - Quart	<b>\$58.00</b>
<b>1332956</b>	Venerate CG - Gallon	<b>\$150.00</b>
<b>1332960</b>	Venerate XC - 2.5 Gallons	<b>\$260.00</b>



## Garlic Barrier®

**Protect Your Plants With Garlic!**

**TARGET:** Ants, aphids, armadillos, armyworms, beetles, birds, caterpillars, deer, grasshoppers, leafhoppers, leafminers, loopers, mealybugs, mites, rabbits, sawflies, whiteflies and wireworms.

**DESCRIPTION:** Made from 10% garlic extract, when absorbed by plants it helps to protect them from pest insects, repelled by the smell and taste. The garlic odor diminishes about 30 minutes and will not alter taste.

**SUGGESTED USE:** Apply weekly. For nematode and grub control, spray seeds before planting. For foliar applications, apply before noon for best results. Mix at a rate of 1 cup/ 10 cups water to cover about 15,000 sq. ft.

<b>1452602</b>	Garlic Barrier - 1 Quart	<b>\$15.95</b>
<b>1452603</b>	Garlic Barrier AG+ - 1 Gallon	<b>\$73.80</b>

Call for larger sizes.

Cannot be shipped to the following states: AK, AL, AR, DC, DE, IA, ID, KS, KY, LA, MS, ND, SC, WA, WV, WY





## WHAT ARE FLY ELIMINATORS?

### The Sensible Alternative To Pesticides

Fly Eliminators are tiny  $\approx 1/8''$  beneficial insects that parasitize flies in their developing pupal (cocoon) stage, before they can hatch into annoying disease-carrying adult flies. Scientifically they are referred to as Fly Parasites or Fly Parasitoids.

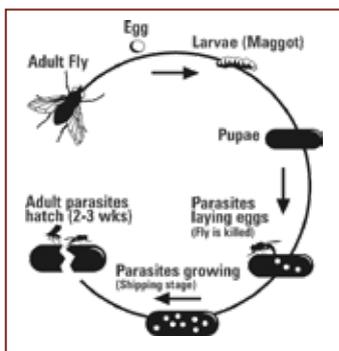


Adult Fly Eliminator emerging from fly pupa.

Fly Eliminators will only parasitize fly pupae and will not bother horses, cattle, livestock, pets, plants, or you.

## HOW DO FLY ELIMINATORS WORK?

Adult female flies lay their eggs in decaying organic matter, especially manure. Only a few hours later, these eggs develop into microscopic larvae (maggot stage) and burrow down into the manure. The maggots grow until they form a pupa (cocoon stage).



Life cycle of the fly parasite.

Then, the female Fly Eliminators seek out the fly pupae and begin to deposit their eggs inside. The eggs grow into larvae that feed on the developing fly, stopping the adult pest fly from hatching.

Fly Eliminators reproduce in about 21 days, constantly strengthening the Fly Eliminator population. Pest flies reproduce at a faster rate than our Fly Eliminators, so we recommend they be replenished on a regular basis, approximately every 2-4 weeks.

### Philadelphia Park Recommends ARBICO's Fly Eliminators

"I was introduced to Fly Eliminators 30 years ago at a Racetrack Symposium and have been using them ever since. They've done a fabulous job and I have recommended Fly Eliminators to many people! They're a great product! Their Fly Eliminators Program was green before green was popular. Without a doubt, this is the way to go. ARBICO Organics is a very good company!"



– Roy Smith, Former Track Manager of Philadelphia Park

## WHO USES FLY ELIMINATORS?

Our customers are all types of horse owners, from the single horse owner to large breeder, including racetracks and farms with many types of animals.

- Boarding Facilities
- Dairy Facilities
- Stables
- Aquariums
- Feed Lots
- Race Tracks
- Poultry
- Kennels
- Equestrian Hobbyists
- Urban Farmers
- Zoos
- Plus more

Please be sure to account for all of your livestock and other animals. Call for special reduced pricing for large facilities, mixed livestock areas and/or custom programs.



## HOW DO I USE FLY ELIMINATORS?

Your Fly Eliminators will arrive in a clear plastic bag which contains parasitized fly pupae in wood shavings.

1. When your Fly Eliminators arrive, check for any signs of hatching.
2. Store in a warm, dry place. Once the Fly Eliminators begin to hatch simply disperse them near breeding sites: manure piles; under water troughs; under bedding; corners of pens and feeding sites.
3. Cover with dirt or manure to protect your Fly Eliminators. They will then start to burrow down and search for fly pupae to lay their eggs in.
4. Repeat every 2-4 weeks.



Fly Eliminators and wood shavings in packaging.



## Use Your Fly Eliminators the RIGHT Way:

### RIGHT Time

- ☑ Start your Fly Eliminators Program before or as soon as your infestation starts
- ☑ Release once you have 3 nights in a row of 40°F temperatures
- ☑ If you start late, just add more Fly Eliminators to your order

### RIGHT Place

- ☑ Release at the end of the day – they're nocturnal
- ☑ Release near manure, urine soaked areas, feeding, watering & bedding areas

### RIGHT Amount

- ☑ The more Fly Eliminators, the fewer the flies

### RIGHT Schedule

- ☑ Shipments every 2-4 weeks are best to break the fly lifecycle

### Churchill Downs Chooses ARBICO Organics

"We started using Fly Eliminators back in 1983. We are still using them today. It's a wonderful product and a successful program that everyone should use! All the big corporations are going green and we were one of the first to go green by using Fly Eliminators."

– Butch Lehr, Former Track Manager of Churchill Downs



### Del Mar Thoroughbred Club Relies On ARBICO Organics

"The Del Mar Thoroughbred Club horse racing facility has been using Fly Eliminators from ARBICO since 1985 with great success. Each summer nearly 2,000 horses and hundreds of thousands of race goers converge on this community making fly control a top priority for both the Del Mar Thoroughbred Club and the community that relies so heavily on the agricultural product we promote. We appreciate the years of timely and professional service ARBICO Organics has provided and look forward to many more good years ahead."

– Joe Harper, Chief Executive Officer of Del Mar



## SPECIAL PRICING

**LOCK IN THE LOWEST PRICES FOR 2024 PROGRAMS! Sign Up NOW & Pay LATER!**

**Only \$17.95**  
Per Shipment for 2-5 Horses  
USPS Shipping Included\* in Prices!

Number of Horses/Animals	Suggested Units†	VIP Price Per Shipment
1	1/4 Unit	<b>\$14.95</b>
2 - 5	1/2 Unit	<b>\$17.95</b>
6 - 10	1 Unit	<b>\$27.95</b>
11 - 15	1 1/2 Units	<b>\$37.95</b>
16 - 20	2 Units	<b>\$49.95</b>
21 - 25	2 1/2 Units	<b>\$60.95</b>
26 - 30	3 Units	<b>\$70.95</b>
31 - 35	3 1/2 Units	<b>\$78.95</b>
36 - 40	4 Units	<b>\$85.95</b>
41 - 45	4 1/2 Units	<b>\$93.95</b>
46 - 50	5 Units	<b>\$97.95</b>
51 +	<b>Please Call 1-800-827-2847</b>	

**Order Your Fly Control Program Today!**  
VIP Pricing Valid Through Dec. 31, 2023.

Please be sure to account for all of your livestock and other animals. Call for special reduced pricing for large facilities, mixed livestock areas and/or custom programs.

\*USPS shipping included up to 5 units.

†These are units of measurement, not warranties or guarantees of performance. The total seasonal cost of Fly Eliminators depends on the recommended number of shipments which may be different than what competitors may recommend. We recommend releasing a shipment every 2-4 weeks throughout the fly season, but releases ranging from 1-6 weeks are not uncommon. Customer experiences may vary. The quantity required and frequency of application can differ according to region, size and condition of property or stables, severity of fly problem, neighbors, manure management, number of animals and start date of program. All warranties, express or implied are disclaimed. One unit bag shown. © 2023 Arizona Biological Control, Inc.

## BIOLOGICAL CONTROL

### Mosquito Bits®

**Harness The Power Of Bti For A Clean, Quick Kill.**

**TARGET:** Mosquito and fungus gnat larvae.

**DESCRIPTION:** Mosquito Bits uses the biological larvicide *Bacillus thuringiensis v. israelensis* (Bti) to quickly kill mosquito larvae in a wide range of habitats. When spread uniformly over the surface of water, the Bti will float down into the water where the larvae will consume it and die; usually within 24 hours. Bits are not harmful to people, animals or plants. Repeat after a 7-10 day interval. For Fungus Gnat control: Spread the granules over the soil until the area is covered. Moisture in the soil will dissolve the Bits. Re-apply every 3 weeks.

**SUGGESTED USE:** Sprinkle 1 teaspoon per 25 sq. ft. or 1 tablespoon per 75 sq. ft. (1/2 lb. per 2,178 sq. ft.) over the surface of containerized standing water. This includes bird baths, water troughs, unused swimming pools, old automobile tires, water gardens, rain barrels and more. DO NOT APPLY to finished human drinking water sources.

<b>1211108</b>	Mosquito Bits - 8 oz.	<b>\$10.95</b>
<b>1211136</b>	Mosquito Bits - 30 oz.	<b>\$17.80</b>
<b>1211130</b>	Mosquito Bits - 20 lbs.	<b>\$119.00</b>
<b>1211139</b>	Mosquito Bits & Dunks Combo Kit	<b>\$19.92</b>



### Mosquito Dunks® and Chunks®



**Kills Mosquitoes In Their Larval Stage Without Using Poison**

**TARGET:** Mosquito larvae.

**DESCRIPTION:** These popular products are designed to be placed in standing water, where they will slowly release the beneficial bacteria *Bacillus thuringiensis israelensis* (Bti). Mosquito larvae growing in the water will feed on the Bti and die within 24 hours of ingestion. Can alternate between wet and dry without losing efficacy. Species-specific control that will not harm people, pets, fish or plants. Effective for up to 30 days. Dunks can be anchored with a string to keep them in a specific place, while the smaller-sized Chunks are designed to be tossed into the water.

**SUGGESTED USE:** Use in any containerized standing water, except finished, treated drinking water for humans. Can be added to animal drinking water. **Dunks:** Use 1 Dunk per 100 sq ft. **Chunks:** Use 4 Chunks per 100 sq ft. Allow a minimum of 48 hours for control. Can also be used as a pre-treatment in areas prone to flooding.

<b>1211101</b>	Mosquito Dunks - 6 Pack	<b>\$13.95</b>
<b>1211103</b>	Mosquito Dunks - 20 Pack	<b>\$22.95</b>
<b>1211105</b>	Mosquito Dunks Chunks - 5 Pack	<b>\$4.79</b>



### AQUABAC® 200G Granular Bti Mosquito Control



**Use This Bti Larvicide Wherever You Have Mosquitoes Breeding**

**TARGET:** Larval stages of mosquitoes, fungus gnats and black flies.

**DESCRIPTION:** AQUABAC 200G contains *Bacillus thuringiensis var. israelensis* (Bti), a bacteria that specifically targets mosquitoes and black flies in their larval stage, but is harmless to other living things. Once ingested, Bti will work quickly to damage cells and paralyze the larva. In addition, since AQUABAC 200G does not affect larva predators, they will continue their work alongside the Bti.

**SUGGESTED USE:** Can be applied to almost any habitat that supports mosquito or black fly larvae. Do not use directly in water sources for human consumption. Broadcast by hand or hand spreader in small areas or by standard ground or aerial dispersing methods for larger areas. If water is clear, broadcast at 2.4-10 lbs. per acre. If water is brackish, murky, polluted or full of algae, broadcast 10-12 lbs. per acre. Lasts for approximately 2 weeks.

**1211150** AQUABAC Granular Bti - 40 lb. - **Free Shipping\*** **\$187.00**

\*Free Shipping on 40 lb. bag only, in the contiguous 48 states.

Ships via Ground ONLY. Call for pallet pricing.



### AQUABAC® Xt



**Use This Powerful Biocontrol Liquid To Kill Mosquito Larvae In Water.**

**TARGET:** Larval stages of mosquitoes, fungus gnats, aquatic midges and nuisance flies.

**DESCRIPTION:** This *Bacillus thuringiensis var. israelensis* (Bti) offers the same powerful pest control in a convenient liquid form. Bti is a bacterial that expressly targets mosquitoes, fungus gnats, aquatic midges and nuisance flies in their larval stages. Once ingested, it will work rapidly to damage cells and fatally paralyze the larva. AQUABAC Xt will not harm any other form of aquatic life or beneficial insects.

**SUGGESTED USE:** This product can be applied via conventional aerial and ground application equipment (or metered release system) in nearly any habitat that supports the targeted pest larvae. For mosquitoes, use between .25-2.0 pts./100 gals. Higher rates apply when water is polluted, adult populations are high or there is a lot of algae. Do not apply this product in any type of irrigation system or in any sources of water that are for direct human consumption. More specific application rates can be found on the package label.

**1211160** AQUABAC Xt - 2.5 Gallons\* **\$190.00**

**1211161** AQUABAC Xt - 2.5 Gallons/Case of 2\* **\$340.00**

\*Free Shipping in the contiguous 48 states. Ships via ground ONLY. Call for pallet pricing.



## Equiderma Horse Spray

This Powerful Spray Has A Light Citrusy Scent.

**TARGET:** All flies, mosquitoes and gnats. Will also inhibit ticks.

**DESCRIPTION:** This unique combination of botanical oils, neem and aloe will repel biting and blood-sucking insects, control future insect populations and protect your animal's skin from fungal and bacterial skin diseases. The oils are a powerful repellent; the neem oil has antibacterial, antiviral, anti-inflammatory and antifungal properties and also disrupts the insect life cycles, while the aloe helps protect the skin and keep the coat nice and shiny. DEET, Pyrethrin and Permethrin free and can be used on horses, ponies, foals, dogs, pigs, cows, llamas, alpacas and chickens.

**SUGGESTED USE:** For external use only. Dial spray down to its lightest spray; this spray is powerful. Apply sparingly with first application to test your horse's sensitivity to the essential oils contained. Heavy coverage may result in hives. However, this result is rare. If hives appear, cold hose the area thoroughly and re-apply using a lighter spray. If reaction continues, discontinue use.

<b>1107500</b>	Equiderma Horse Spray - 32 oz. RTU	<b>\$28.49</b>
<b>1107501</b>	Equiderma Horse Spray - Gallon RTU	<b>\$99.99</b>



## Horse Fly TweetMint

Keeps Biting Insects Away & Leaves Everything Smelling Minty-Fresh.

**TARGET:** Horse flies, deer flies, ticks, mosquitoes and more.

**DESCRIPTION:** This is a non-toxic spray for use on horses that is designed to repel and eliminate bloodsucking insects. Made of ingredients that are either natural, plant-based or naturally occurring, you can apply this liberally to your animal without worry. In fact, this spray is formulated for use as a shampoo as well. It provides strong repellent power, but it will also leave your animals, and the whole area, smelling great. Helps to remove bot eggs. Highly concentrated. Hypoallergenic, biodegradable and non-toxic.

**SUGGESTED USE: Repellent:** Dilute 2-4 oz. in a 32 oz. spray bottle of water. Spray liberally over the entire body. When applying to the head/face and ears, spray onto a clean mitt or cloth and apply gently. Be careful to avoid getting solution in eyes. Can be sprayed onto droppings, in/around barns, paddocks or stable areas. **Shampoo:** Use concentrate and shampoo animal as usual. Reapply each time the animal is washed, exposed to heavy rain, or sweating.

<b>1202640</b>	Horse Fly TweetMint - 16 oz.	<b>\$35.00</b>
<b>1202641</b>	Horse Fly TweetMint - 32 oz.	<b>\$50.00</b>
<b>1202642</b>	Horse Fly TweetMint - 64 oz.	<b>\$87.50</b>
<b>1202643</b>	Horse Fly TweetMint - Gallon	<b>\$150.00</b>



## ARBICO Organics® Solar Fly Trap

**FREE SHIPPING**

Heavy Duty, Reuseable, Portable & Lightweight Fly Trap!

**TARGET:** Adult flies.

**DESCRIPTION:** This built-to-last, rust-free, heavy duty trap goes anywhere to reduce existing fly populations, fly blooms and migrant flies. Used by gardeners, pet owners, kennels, horse owners, breeding and training facilities, dairies, poultry and swine facilities, feedlots and other places where flies are a problem. Dimensions: 12" diameter x 10.5" tall.

**SUGGESTED USE:** Mix the yeast bait with water and pour into container at the bottom of the trap. Within seconds flies are lured into the trap. They enter into the confinement chamber and dehydrate from exposure to the sun. When it begins to fill up with flies, just empty, hose out and reset with new bait. Comes with one packet of bait, which is enough for approx. 5 weeks. Use 1 trap for 5-10 horses.

<b>1256001</b>	ARBICO Organics Solar Fly Trap - Includes 1 Bait	<b>\$90.00</b>
<b>1256005</b>	ARBICO Organics Solar Fly Trap - Includes 4 Baits	<b>\$108.00</b>
<b>1256002</b>	Replacement Fly Bait	<b>\$9.99</b>

<b>1259990</b>	ARBICO Organics Solar Fly Trap - 2 Pack	<b>\$174.00</b>
<b>1259991</b>	ARBICO Organics Solar Fly Trap - 3 Pack	<b>\$255.00</b>
<b>1259992</b>	ARBICO Organics Solar Fly Trap - 4 Pack	<b>\$332.00</b>

Replacement parts available online.

\*FREE SHIPPING via ground or US Mail ONLY.

## Harris® Super-Sized Fly Sticky Traps

Use Indoors Or Out – Wherever You Need A Little Extra Fly Control.

**TARGET:** Aphids, flies, fruit flies, gnats and more.

**DESCRIPTION:** With 6" x 8" of super-sticky trapping surface on both sides, this pesticide-free trap can be used inside or outside. In addition to flies, this larger-than-average trap will also snare many common plant pests. Comes with a twist tie for hanging.

**SUGGESTED USE:** Avoid placing trap in areas where children, pets and non-target species of wild birds or animals may come into contact with the trap. Remove the protective film and hang. This trap is meant to hang freely-do not stick onto surfaces. Inspect monthly and discard when full of insects or debris.



<b>1254259</b>	Super-Sized Fly Sticky Traps - 20 Pack	<b>\$12.99</b>
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## SOIL TESTING



### Luster Leaf® Rapitest® Soil Test Kit

A Quick Way To Test N-P-K!

1275203	Soil Test Kit for N, P, K, pH	<b>\$18.99</b>
1275204	pH Soil Tester	<b>\$6.99</b>
1275205	10 pH Soil Test Capsules - Green	<b>\$4.79</b>
1275206	10 Nitrogen Soil Test Capsules - Purple	<b>\$4.79</b>
1275207	10 Phosphorus Soil Test Capsules - Blue	<b>\$4.79</b>
1275208	10 Potash Soil Test Capsules - Orange	<b>\$4.79</b>
1275210	Combo Pack of Soil Test Capsules (10)	<b>\$16.99</b>

### Luster Leaf® Rapitest® Digital Soil pH Meter

Supplies Quick & Clear Soil pH Readings.

1275222	Rapitest Digital Soil pH Meter	<b>\$15.99</b>
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### Luster Leaf® Rapitest® Digital Soil Test Kit

Provides Clear And Definitive Results For pH & NPK In Soil.

1275231	Rapitest Digital Soil Test Kit - 25 pk	<b>\$25.99</b>
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### Luster Leaf® Rapitest® Mini Soil 4-in-1 Tester

Works Quickly To Give You All The Essentials For Healthy Growth.

1275235	Rapitest Mini Soil 4-in-1 Tester	<b>\$12.49</b>
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### Luster Leaf® Rapitest® Mini Soil pH Tester

Know Your Soil pH In Minutes!

1275237	Rapitest Mini Soil pH Tester	<b>\$8.99</b>
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## iHort QPlug Propagation Kit

All You Need To Get Growing In One Package – Just Add Clones, Seedlings Or Transplants.



**DESCRIPTION:** This kit provides an easy and convenient start to your growing, no matter what (or how much) you want to grow. These pre-drilled plugs and trays have been developed to give your plants a strong start in life by encourage robust root growth. They offer flexible aeration, optimum lateral root development, excellent water control, maximum cation rates, insulation and natural buffing, and are sturdy but easy to remove. They are made of a fully biodegradable proprietary mix of coco coir, sphagnum peat moss and coconut shell biochar.

**SUGGESTED USE:** This kit contains 50 QPlugs growing media, size 40/40 (1.25" x 1.25" with a 1/8" hole). A carrier tray and a 50-cell plug tray. A refill pack of 50 plugs is available separately. Simply add the seeds, cuttings, clones or transplants of your choice. Once your plants are too big for the tray, the plugs can be removed and replanted; refill plugs go in easily to replace them.

1430055	iHort 40/40 QPlugs, 50 ct. Propagation Kit	<b>\$21.43</b>
1430054	iHort 40/40 QPlugs - 50 ct. Refill Bag	<b>\$20.69</b>



### CowPots™

Eco-friendly CowPots are a top quality plantable pot. Gardeners, farmers, and commercial growers are using and raving about this product. CowPots are made with 100% renewable composted cow manure, are 100% biodegradable, and can simply be planted in the soil with your plant.

With a few easy steps you'll love using CowPots.

Visit [www.arbico-organics.com](http://www.arbico-organics.com) for more detailed directions and information for sizing.

**Need to Know More About Your Soil? Understand Over a Dozen Factors With a Complete Soil Analysis. Visit [www.arbico-organics.com](http://www.arbico-organics.com)**

## Insulated Plant Protector™

Get An Early Start On Your Growing To Make The Most Of Your Season.

**TARGET:** Tomatoes, peppers, melons, cucumbers and more.

**DESCRIPTION:** This 18" tall device works like a mini greenhouse and allows you to plant and harvest weeks earlier than you could otherwise. When filled with water and placed around a plant it will collect and store heat from the sun, protect your plant from freezing, and offer shelter from cold winter winds. Requires no special assembly or tool – just a hose or watering can. Can protect down to 16°F. Allows you to plant 6-8 weeks earlier.



**SUGGESTED USE:** Place in a site with maximum exposure to the sun and over the soil with dark mulch or plastic. Fill the cells (there are 18 of them) of the IPP with water and place around your plant. For added stability, create an internal support with plant stakes (tee-pee design allows you to open and close IPP). Top may be sealed close with a rubber band on extra-cold days and left open on warm days. Remove IPP when danger of frost has passed and store away for use the following year.

**1269520** Insulated Plant Protector - 3 Pack **\$17.99**

## Agribon®

Protect Your Fruits, Vegetables, Row Crops, Trees & Ornamentals With Agribon Row Covers!

**TARGET:** Large home gardens, truck gardens, market growers and others.

**DESCRIPTION:** Agribon row covers are recognized for quality, durability and affordability. The polypropylene fabric is spun-bonded with double-bonded seams and UV stabilizers. You can expect 1-3 growing seasons from Agribon.



- Prolongs the growing season by protecting from frost, sun, and wind damage.
- Protects from drying conditions and conserves water by reducing evapotranspiration.
- Speeds up germination.
- Protects seeds from birds.
- Protects plants from marauding insects.
- Make sure that Agribon is securely installed to ensure that plants are protected to the limits of the product. Use Agribon with loop hoops for plant protection that will remain in place until you remove it.

## Prococo Coco Coir

This Compressed Coconut Coir Can Be Used in Hundreds Of Ways!

**TARGET:** For use in greenhouses, container plants, nurseries, gardens and landscaping as a replacement for soil and peat moss or as a soil amendment. Can also be used for animal and reptile bedding, playground mulch, in composting, liquid containment and much more.



**DESCRIPTION:** Made from the natural byproducts of coconut cultivation (crushed coconut husks), this premium coco coir product is renewable and sustainable. In addition to being earth-friendly, coco coir offers many advantages: it is free of bacteria and fungal spores, improves soil by slowly adding organic matter, has a low salt content and contains very little dust. It is also easy to hydrate and is resistant to mold and mildew.

Prococo is available in 3 different variations depending on your needs. Prococo Compressed **CocoPeat Block** is finely-ground coir and an excellent moisture-holder. Prococo Compressed **Chips-N-Fiber Block** contains a mixture of rolled and finely chopped husks. Prococo Compressed **CocoChip Block** is made from coarsely chopped husks allowing for excellent drainage.

**1305580** Prococo Compressed CocoPeat Block - 10 lbs. **\$17.95**  
**1305582** Prococo Compressed Chips-N-Fiber Block - 10 lbs. **\$17.95**  
**1305581** Prococo Compressed CocoChip Block - 10 lbs. **\$17.95**

AG-15
Lightweight with 90% light transmission, (.45 oz./square yard). Use for pollination control, heat sensitive crops and insect pests on potatoes, greens, cabbages and radishes. Made of spun bonded polypropylene fabric.
AG-19
Lightweight (0.55 oz. per sq. yd.), protects to 28°F (provides up to 4°F protection), 85% light transmission. Does not require frames or hoops.
AG-30
Lightweight (0.9 oz. per sq. yd.), protects to 26°F to 28°F (provides between 4°F – 6°F protection), allows 70% light transmission. Hoops or frames are recommended.
AG-50
Highest level of protection, weighs in at 1.5 oz. sq. yd., protects to 24°F (provides up to 8°F of protection), allows 50% light transmission. Hoops or frames are recommended.

For sizes and availability, please call (800) 827-2847 or visit [www.arbico-organics.com](http://www.arbico-organics.com).

## ARBICO Organics® Compost Plus

Revitalizes Soil & Speeds Up Decomposition Of Organic Matter.

**DESCRIPTION:** This premium compost is product of our insectary and is a blend of fermented nitrogenous and carbonaceous material along with beneficial bacteria, insect frass and wood shavings. Use compost as a mulch and soil amendment to improve soil structure, texture, aeration, water-holding capacity and to provide additional nutrition for microorganisms.



**SUGGESTED USE:** For potted plants, use 3-10 tsp. per pot. Otherwise, mix 1 lb./12 sq. ft. of soil. 2 cu. ft. of compost will treat 50 sq. ft. For farms, 2-4 tons will treat 1 acre.

<b>1305601</b>	Compost Plus - 1 lb. Bag	<b>\$8.90</b>
<b>1305602</b>	Compost Plus - 5 lb. Bag	<b>\$11.50</b>
<b>1305610</b>	Compost Plus - 1 Cubic ft. Bag	<b>\$17.00</b>
<b>1305603</b>	Compost Plus - (2) 1 Cubic ft. Bags	<b>\$28.00</b>
<b>1305607*</b>	Compost Plus - 1/2 Ton Pickup Truck Load	<b>CALL</b>

\*Call to arrange pickup. Pickup in Catalina, AZ.

## ARBICO Organics® Red Composting Worm Mix - *Eisenia fetida*, *Eisenia hortensis*, *Perionyx excavatus*

A Natural Way To Aerate Your Soil & Fertilize Your Garden.

**DESCRIPTION:** These worms are nature's decomposers and soil aerators. They consume organic matter and turn it into castings full of nitrogen, phosphorus, potash, magnesium and calcium. As they move through the soil, they break it up and introduce beneficial bacteria and oxygen. This stimulates fungal activity and more rapid breakdown of organic matter. Plants love soil that these worms have been in!



**SUGGESTED USE:** Use 2-3 worms/sq. ft. 1,000 worms cover approximately 400 sq. ft.

<b>1308003</b>	ARBICO Organics Earthworms (~1,000)	<b>\$45.00</b>
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Cannot be shipped to the following states: HI, PR, VI, GU, AS, PW

Subject to seasonal availability.

## Mighty Plant™ Instant Compost Tea

**NEW**

Compost Tea Has Never Been Easier

**DESCRIPTION:** This innovative product is a compost tea in water soluble powder form that requires no brewing. 100% natural with no fillers and densely packed with nutrition and beneficial microbes. It can be used on any plant under any nutrition program at any stage of plant growth. 1 lb makes 160 gallons of tea. More sanitary and less messy than brewing, while eliminating the risk of introducing pathogens that can occur in that process.



**SUGGESTED USES:** Unchlorinated water is highly recommended. Can be applied as a drench or spray on indoor and outdoor plants in soil/soilless media, transplants, clones/cuttings and trees. Most application rates are 1-2 tsp/gal water every 14-21 days or 1 lb/100 gals water. Rows: Evenly spread 1/2 cup/10 ft of row or 1 cup/ 100 sq ft and water in. Trees: Pot size 2-4", use 1 tsp. 6-10", use 1-2 tbsp. Trunk caliper 1-2", use 4 tbsp.

<b>1305565</b>	Mighty Plant Instant Compost Tea - 5 oz	<b>\$18.00</b>
<b>1305566</b>	Mighty Plant Instant Compost Tea - 1 lb	<b>\$45.00</b>
<b>1305567</b>	Mighty Plant Instant Compost Tea - 5 lbs	<b>\$200.00</b>
<b>1305568</b>	Mighty Plant Instant Compost Tea - 25 lbs	<b>\$950.00</b>

Cannot be shipped to the following states: AL, DE, IA, KS, KY, NJ, ND, OK, OR, RI, SC, VT, WA, WV, WY

## ARBICO Organics® Earthworm Castings

So Good For Your Garden It's Almost Magical!

**DESCRIPTION:** A sustainable byproduct of vermiculature, these castings have a bounty of benefits for your soil. They provide a slow release of micronutrients and trace minerals, add microbial life, reduce transplant shock, aerate and condition the soil and add chitinase (which helps in disease suppression and root knot nematode control). Can be used indoors and outdoors on anything you grow and can be used with other fertilizers and amendments.



**SUGGESTED USE:** Mix into potting soil at the rate of 3%-5% by volume. Top-dress around pots beds, shrubs, trees or rows at a rate of 1/4" - 1/2" every 2-4 mos. Incorporate into the top several inches of pots or beds prior to planting or mulching. Repeat when transplanting to reduce shock. Apply onto turf and rake in for lush, green grass.

<b>1308200</b>	Earthworm Castings - 1 lb. Bag	<b>\$4.95</b>
<b>1308201</b>	Earthworm Castings - 5 lb. Bag	<b>\$15.20</b>
<b>1308202</b>	Earthworm Castings - 10 lb. Bag	<b>\$25.00</b>
<b>1308203</b>	Earthworm Castings - 25 lb. Bag	<b>\$47.95</b>

## ARBICO Organics® Root Build 240™ Mycorrhizal Fungi



This Potent Mycorrhizal Fungi Has An Incredible 240 Spores/gr To Maximize Root Colonization.

**DESCRIPTION:** New Root Build 240 contains both micronized Endo and Ecto mycorrhiza for a wide range of plant applications. This greater diversity in beneficial fungi meets the needs of a greater variety of plants. When introduced early in the life of a plant, the endo and ecto will increase the roots' ability to absorb water and nutrients. Endomycorrhizae work within and around the roots of most vegetables, grasses, flowers and ornamentals while ectomycorrhizae live only on the outside of roots and focus on conifers. The high spore count in Root Build 240 means there will be maximum colonization of your plants' roots. Endo Spores: 240 spores/gr. Ecto Spores: 1 x 10<sup>6</sup> spores/gr.



**SUGGESTED USE:** Inoculate roots with mycorrhizal spores (1 oz. is ≈3 Tbsp.) For vegetables, grasses, flowers, shrubs, fruit trees and ornamentals.

<b>1135001</b>	ARBICO Organics Root Build 240 - 1 oz.	<b>\$9.00</b>
<b>1135002</b>	ARBICO Organics Root Build 240 - 2 oz.	<b>\$12.50</b>
<b>1135003</b>	ARBICO Organics Root Build 240 - 8 oz.	<b>\$31.50</b>
<b>1135004</b>	ARBICO Organics Root Build 240 - 1 lb.	<b>\$45.00</b>
<b>1135005</b>	ARBICO Organics Root Build 240 - 10 lbs.	<b>\$329.00</b>

\*Free shipping in the contiguous 48 United States via USPS mail.

## Mikro-Myco

A Heady Combination Of Mycorrhizae, Rhizobacteria & Beneficial Fungi.

**DESCRIPTION:** Mikro-Myco contains a combination of endo and ectomycorrhiza, phosphate solubilizing fungi (PSF) and plant growth promoting bacteria (PGPB). Together, the mycorrhizae and supplemental microbes work to develop the ultimate interchange between roots, soil, and plants. It will encourage root growth, but also provide fungal hyphae in the root zone to help move nutrients up into the soil. The beneficial fungi in this blend are able to release fixed phosphorus and provide support for the plant to fight off pathogens and overcome stressors, allowing the plant to put its energy into maximizing growth and fruit/flower output.



**SUGGESTED USE:** Water Suspension: 1 tsp/1 gal distilled or tap water and drench the root area. Dry Application: 1 tsp-1 Tbsp. to root system while planting/transplanting. Powder must come in direct contact with the roots.

<b>1202510</b>	Mikro-Myco - 2 oz. Pouch	<b>\$10.99</b>
<b>1202511</b>	Mikro-Myco - 4 oz. Pouch	<b>\$19.99</b>
<b>1202512</b>	Mikro-Myco - 5 lb. Pail	<b>\$279.00</b>
<b>1202513</b>	Mikro-Myco - 30 lb. Pail	<b>\$1,399.00</b>

Cannot be shipped to the following states: AL, CA, CO, ID, IA, KS, LA, ME, MD, MN, MO, NE, ND, OH, SC, SD, WY

## Earth Alive™ Soil Activator™



Bring Your Soil To Life With This Powerful Organic Soil Inoculant!

**DESCRIPTION:** This OMRI listed soil inoculant is a patent-pending mix of three naturally occurring soil microorganisms and an all-natural wood extract (a forestry by-product). The beneficial bacteria in Soil Activator solubilize phosphorus and fix atmospheric nitrogen for improved nutrient availability to plants and increased yields. They also encourage active root growth for robust plants from the root up. Can be used as a dry mix soil or as a soil drench.



**SUGGESTED USE:** Use at the beginning of each growth cycle or season. Option 1: 3.5 oz. of treats up to 21 gallons of soil. Mix with soil at seeding or transplant. Option 2: 3.5 oz. treats up to 1,080 sq. ft. of garden. Mix with at least 2 gallons of water and apply at the base of plants.

<b>1202170</b>	Earth Alive Soil Activator - 1.76 oz.	<b>\$4.29</b>
<b>1202171</b>	Earth Alive Soil Activator - 15 oz.	<b>\$19.99</b>
<b>1202172</b>	Earth Alive Soil Activator - 2.2 lbs.	<b>\$36.99</b>

Cannot be shipped to the following states: AL, AR, CT, HI, KS, LA, MD, SD, WV

## EM•1® Microbial Inoculant



Faster Breakdown Of Organic Matter.

**DESCRIPTION:** EM-1 is a versatile microbial product that converts organic matter into humus and improves soil structure; it can be used in garden, agricultural, hydroponic and houseplant applications. It works by producing high levels of polysaccharides, beneficial enzymes and organic acids. The resultant amended soil is better able to absorb and retain moisture, as well as cycle nutrients. As it rapidly breaks down organic matter around animals and in compost piles, it lessens odors and will leave fewer breeding areas for flies and other insects.



**SUGGESTED USE:** Can be applied via a hose-end sprayer or other watering device. General application rate is 1 oz (2 Tbsp.) per gal/water. Hydroponics: Add EM-1 as a 3% solution several times a week.

<b>1202098</b>	EM•1 Microbial Inoculant - 16 oz.	<b>\$29.70</b>
<b>1202101</b>	EM•1 Microbial Inoculant - Quart	<b>\$45.00</b>
<b>1202102</b>	EM•1 Microbial Inoculant - Gallon	<b>\$79.70</b>
<b>1202103</b>	EM•1 Microbial Inoculant - 5 Gallons	<b>\$398.50</b>

Call for larger sizes.

Cannot be shipped to the following states: HI, PR, VI

## BRANDS YOU TRUST

Organic fertilizers feed your plants while adding organic material to the soil, which helps keep the soil loose, airy, and ready to hold moisture and nutrients.

Constant use of chemical fertilizers causes degradation of the soil and stops natural microbial activity essential to the development of healthy root systems.

**ARBICO Organics** sells organic and naturally based fertilizers designed to support healthy gardens, orchards, and farms.



## Do You Know What Fertilizer Your Plants Need?

### 1. Understand N-P-K and why it is important

**N = Nitrogen:** Important for plant tissue growth.

**P = Phosphorus:** Transfers energy to different parts of plants.

**K = Potassium:** Helps carbohydrate production and regulates metabolism.

### 2. Identify common symptoms of nutrient deficiencies

**Nitrogen Deficiency:** Yellowing of leaves and light green coloration of plant parts.

**Phosphorus Deficiency:** Burnt leaf tips, leaves look dark green/reddish-purple.

**Potassium Deficiency:** Burnt leaf tips, wilting and yellowing in between veins.

## Down To Earth™

Down to Earth makes organic fertilizers that boost soil health and encourage plant growth in an earth-friendly and sustainable manner. Nutrients provided by the fertilizers give your plants that needed extra boost for vigorous growth and the countless microorganisms in the soil will thrive with the extra sustenance and keep your soil healthy. Have a small garden? Try the new "mini" sizes.



## JRM Chemical, Inc.

This Cleveland-based company focuses on biological biostimulants, water-saving polymers, and mycorrhizal products that create optimal conditions for plant growth and high yields. Conveniently packaged in small sizes with easy application methods and clear, no-fuss instructions, these products will bring professional quality ingredients to the home grower.



## John & Bob's Smart Soil Solutions

Rich, vibrant soil is the key to a fertile and self-sustaining garden ecosystem. John & Bob's creates soil products that build healthy, productive soils the way that nature does – with beneficial microorganisms, minerals and microbes. Create soil that is bursting with life with the four product system of Optimize, Maximize, Nourish-Bio-sol and Penetrate.



## Maxicrop

Maxicrop goes to the frigid waters off the Norwegian coast for the seaweed that they use in their products. There the confluence of arctic waters, mountain run-off and the Gulf Stream creates the perfect environment for the finest seaweed to grow. The quality of their products show the journey's worth it.



## Neptune's Harvest

Neptune's Harvest, a division of Ocean Crest Seafood, makes their fertilizers from the fish that they catch in the nutrient-rich North Atlantic Ocean. In this way, they utilize 100% of the seafood they harvest. These highly nutritious protein fertilizers are made by using a cold process employing enzymes (natural biological catalysts) to break down the flesh, and other parts of the fish, into simpler protein complexes. This process is called Hydrolysis and the result is an exceptional fish hydrolysate fertilizer.



## RX Green Technologies

RX Green Technologies provides simple to use, research-backed and scrupulously made products to cannabis cultivators with a heavy emphasis on customer service. Their research and development facility is the only cannabis specific facility in the industry and they are always examining and fine-tuning their products to offer the very best to their customers.



## Dr. Earth® Root Zone® Starter Fertilizer, 2-4-2

Provides New Seeds & Transplants With Beneficial Soil Microbes.

**TARGET:** Seeds, transplants, flowers, vegetables, fruits, container/bedding plants, houseplants, trees & shrubs.

**DESCRIPTION:** This organic and sustainably made fertilizer contains TruBiotic® beneficial soil microbes with mycorrhizae. These carefully chosen microbes will work to thoroughly break down nutrients in the soil and then release them in the root zone to promote drought tolerance and vigorous root and plant growth. Nutritionally balanced and can be used on summer & winter plants. Non-GMO and contains no biosolids, chicken manure, composted household waste, or synthetic chemicals.



**SUGGESTED USE:** Mix well into soil and water in thoroughly. Flowers/vegetables/ground covers: Broadcast 1.5 cups/10 sq ft, or 1.75 cups/12 ft of row, with a good quality soil amendment. Mix into the soil approx. 4" - 8" deep. Container plants: When planting, mix 2 Tbsp/1 qt of potting medium, or .5 cup/.5 cu. ft. (approx. 5 gals) of soil. Transplants from containers: Dig planting hole, mix 2 Tbsp/4" container or .25 cup /1 gal container with your soil and a good quality soil amendment.

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|----------------|--|----------------|
| <b>1329110</b> | Dr. Earth Root Zone Starter Fertilizer - 1 lb. Bag | <b>\$6.99</b>  |
| <b>1329111</b> | Dr. Earth Root Zone Starter Fertilizer - 4 lb. Bag | <b>\$16.99</b> |

Cannot be shipped to the following states: HI

## Fish Sh!t



Provides A Robust & Diverse Microbe Profile For Multiple Plant Benefits.

**TARGET:** Fruits, herbs and vegetables grown in soil, hydro or coco.

**DESCRIPTION:** This OMRI listed soil conditioner is a byproduct of a Tilapia farm where the fish are fed a proprietary mix of organic feed. At the proper time, the digested feed is carefully harvested and bottled under strictly managed conditions. The result is a product with a complex microbial profile of thousands of different species of bacteria, fungi and protozoa. These microbes are essential to maintaining a living soil and to growing top quality plants. Fish Sh!t will increase yield and nutrient uptake, release essential oils and terpenes for aromatic and flavorful plants and fruits, and promote overall health to keep your plants growing and producing at their highest level.

**SUGGESTED USE: Soil:** Can be used in conjunction with any nutrient line and in all phases of the plant's lifecycle. 3-6 mL per gallon. **Hydro/Coco:** 2-4 mL per gallon.

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| <b>1315100</b> | Fish Sh!t - 120 mL (4 oz.)   | <b>\$19.88</b>  |
| <b>1315101</b> | Fish Sh!t - 250 mL (8.5 oz.) | <b>\$33.75</b>  |
| <b>1315102</b> | Fish Sh!t - 500 mL (17 oz.)  | <b>\$56.25</b>  |
| <b>1315103</b> | Fish Sh!t - Liter (34 oz.)   | <b>\$101.25</b> |



## AgroThrive™ Fruiting & Flowering Fertilizer, 3-3-5



Multiple Organic Accreditations For One Exceptional Fertilizer.

**TARGET:** Gardeners looking for balanced organic nutrition for fruiting and flowering plants.

**DESCRIPTION:** Designed to nurture vegetables, fruit and flower-bearing plants, this premium organic formulation will not only feed your plants the nutrients they crave, it will enhance soil microbial activity by activating indigenous micro-flora in the soil. This healthy soil activity will create a smooth release for, and improved availability of, the nutrients (70% fast release, 30% slow release). You will see faster growth of vibrant blooms and higher yields of flavorful crops in no time. Derived from fish inedibles, grain, and sulfate of potash and sourced from repurposed organic material. OMRI, CDFa, USDA and WSDA listed/certified organic.

**SUGGESTED USE:** Mature Plant Application: Mix ½ cup of product with 1 gallon of water to cover 35 sq. ft. of garden and apply every 2 weeks. Nursery & Foliar Applications: Mix 3 Tbsp of product with 1 gallon of water to cover 150 sq. ft. and apply weekly.

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| <b>1314750</b> | AgroThrive Fruiting & Flowering Fertilizer - 32 oz. | <b>\$20.99</b> |
| <b>1314752</b> | AgroThrive Fruiting & Flowering Fertilizer - Gallon | <b>\$34.49</b> |



## BIO520



An Exceptional Blend Of Nutrients That Could Be Your Only Additive.

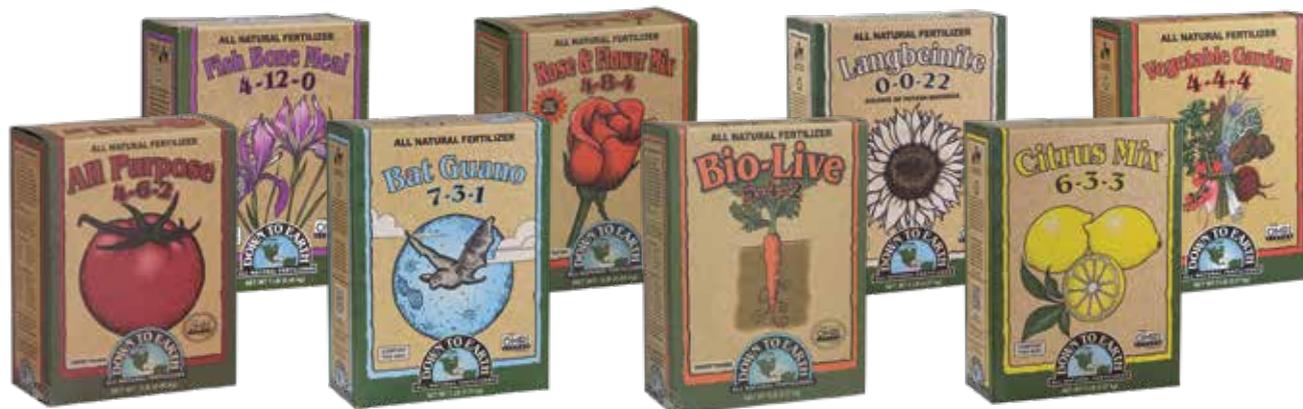
**TARGET:** Seeds, clones, transplants and all sorts of crops grown using a wide variety of methods.

**DESCRIPTION:** This all-natural liquid nutrient product promotes overall growth enhancement and supports optimal plant cultivation. It has over 100 veganic compounds, humic and amino acids, microorganisms, diatomaceous material, vitamins, plant enzymes, marine extracts and more. Boosts plant health, improves nutrient uptake, increases yield, produces high-quality fruit and flowers and blocks the uptake of heavy metals and toxins. Contains no animal products or manure. Use on its own or as a part of a feeding regime.

**SUGGESTED USE:** For all kinds of growing media. For best results, remove all animal-derived fertilizers from your irrigation solution and replace with BIO520. Seed germination: 1 part conc/500 parts irrigation water. Irrigation: 1 part conc/1,000 parts irrigation water. Irrigate at normal volumes and frequency.

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| <b>1320120</b> | BIO520 – Pint   | <b>\$47.50</b>  |
| <b>1320121</b> | BIO520 – Gallon | <b>\$266.00</b> |





Down To Earth™ (DTE™) organic fertilizers are ideal for enhancing soil fertility and stimulating plant growth in a sustainable and environmentally friendly way. Organic fertilizers add nutrients to the soil for uptake by plants and for use by the myriad microorganisms that inhabit healthy, productive soil.

## DTE All Purpose Mix, 4-6-2



Fertilizer For All Of Your Growing Needs!

1300209	Down To Earth All Purpose Mix Mini - 1 lb.	\$5.99
1300207	Down To Earth All Purpose Mix - 5 lbs.	\$15.99

## DTE Bat Guano, 7-3-1



High-Nitrogen Fertilizer From Bat Guano.

1300006	Down To Earth Bat Guano Mini - .25 lb.	\$5.99
1300007	Down To Earth Bat Guano - 2 lbs.	\$16.99
1300008	Down To Earth Bat Guano - 10 lbs.	\$57.99

## DTE Bio-Live, 5-4-2



A Microbe-Rich Fertilizer To Help Build Living Soil!

1300260	Down To Earth Bio-Live - 5 lbs.	\$20.49
1300261	Down To Earth Bio-Live - 25 lbs.	\$74.98
1300262	Down To Earth Bio-Live - 50 lbs.	\$119.99

## DTE Citrus Mix, 6-3-3



The Nutrients You Need For Vibrant & Delectable Citrus!

1300295	Down To Earth Citrus Mix - 1 lb.	\$5.99
1300296	Down To Earth Citrus Mix - 5 lbs.	\$17.99

Larger sizes available - please go online or call.

## DTE Fish Bone Meal, 4-12-0



Marine Based Bone Meal For All Of Your Growing Needs.

1300286	Down To Earth Fish Bone Meal Mini - 1 lb.	\$5.99
1300287	Down To Earth Fish Bone Meal - 5 lbs.	\$16.99

## DTE Langbeinite, 0-0-22



Get 3 Crucial Plant Nutrients In One Mineral Application.

1300263	Down To Earth Langbeinite - 5 lbs.	\$18.99
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## DTE Rose & Flower Mix, 4-8-4



USDA Organic. A Nutrient-Rich Fertilizer That Invigorates Roses, Bulbs & Flowering Plants!

1300233	Down To Earth Rose & Flower Mini - 1 lb.	\$5.99
1300231	Down To Earth Rose & Flower Mix - 5 lbs.	\$16.99

## DTE Vegetable Garden, 4-4-4



Give Your Vegetable Garden A Powerful Nutrient Boost!

1300298	Down To Earth Vegetable Garden - 1 lb.	\$4.49
1300299	Down To Earth Vegetable Garden - 5 lbs.	\$14.99
1300294	Down To Earth Vegetable Garden - 15 lbs.	\$39.99

## Neptune's Harvest Fish & Seaweed Fertilizer, 2-3-1



The Best Of Both Products For A Complete Fertilization Program.

**TARGET:** All types of plants and crops.

**DESCRIPTION:** Increase yields and improve shelf life of fruits and vegetables. Flowers and foliage will be stronger and more colorful. Great for hydroponics.

<b>1315012</b>	Pint	<b>\$14.99</b>
<b>1315011</b>	Quart	<b>\$22.79</b>
<b>1315013</b>	Gallon	<b>\$54.59</b>
<b>1315014</b>	5 Gallons	<b>\$164.99</b>

Larger sizes available.



## Solutions from the Sea

In addition to NPK, Seaweed and kelp-based fertilizers are valued for their many vitamins, minerals and enzymes including magnesium, zinc and iron.

They provide broad plant benefits throughout the growing cycle and can act as biostimulants.

Kelp fertilizers are known to reduce the effects of stressors, boost plant recovery and limit nutrient burn as well as increase harvest yields.

Our ocean continues to grow kelp rapidly creating ample and renewable resources that can be converted to extracts, powders or liquids to deliver nutrient dense fertilizers for growers.

## Neptune's Harvest Fish Fertilizer, 2-4-1



Versatile Without Unpleasant Odors!

**TARGET:** Soils requiring rapid nourishment.

**DESCRIPTION:** Nitrogen and other nutrients are chelated, so they are readily available. Unlike fish emulsions, Neptune's Harvest retains the fish proteins and oils and has no unpleasant odor.

<b>1315001</b>	Pint	<b>\$12.49</b>
<b>1315000</b>	Quart	<b>\$18.49</b>
<b>1315002</b>	Gallon	<b>\$45.49</b>
<b>1315003</b>	5 Gallons	<b>\$151.29</b>

Larger sizes available.



## Maxicrop® Soluble Seaweed Powder, 0-0-17



Improves Germination & Helps Prevent Diseases.

**TARGET:** Soils that need additional minerals.

**DESCRIPTION:** Maxicrop provides more than 70 minerals, growth hormones, cytokinins, auxins, vitamins, and enzymes. Improves overall plant vigor and can prevent diseases such as downy and powdery mildews.

**SUGGESTED USE:** 1 tsp/gal water or 2 lbs./acre over the season.

<b>1313001</b>	Maxicrop Soluble Seaweed Powder - 10.7 oz.	<b>\$20.00</b>
<b>1313002</b>	Maxicrop Soluble Seaweed Powder - 27 oz.	<b>\$38.00</b>
<b>1313003</b>	Maxicrop Soluble Seaweed Powder - 5 lbs.	<b>\$75.00</b>
<b>1317202</b>	Maxicrop Soluble Seaweed Powder - 44 lbs.	<b>\$463.20</b>



## Neptune's Harvest Seaweed Plant Food, 0-0-1



Contains Over 60 Naturally Occurring Nutrients & Amino Acids!

**TARGET:** Plants and crops exposed to stress.

**DESCRIPTION:** Enhances plant development, color and vigor. Increases plant hardiness and resistance to adverse conditions, such as early frost, extreme heat and lack of moisture. Can be used as a seed inoculant, increases and accelerates germination, for rapid development of a healthy root system.

<b>1315008</b>	Pint	<b>\$13.99</b>
<b>1315007</b>	Quart	<b>\$19.49</b>
<b>1315009</b>	Gallon	<b>\$47.49</b>
<b>1315010</b>	5 Gallons	<b>\$174.79</b>

Larger sizes available.



## Maxicrop® Kelp Meal, 1-0-2



Successful Growers Choice To Correct Deficiencies & Improve Plant Nutrition!

**TARGET:** Deficient soils that need macronutrients.

**DESCRIPTION:** Maxicrop Kelp Meal (1-0-2) is composed of slow-dried, ground seaweed - cleaned, desalted and dust free. This is a rich organic source of over 70 trace minerals (including calcium, magnesium, sulfur, and chlorine) as well as vitamins, amino acids and plant hormones. It is an excellent soil additive that stimulates microbial activity and provides a strong supply of naturally chelated nutrients.

**SUGGESTED USE:** Incorporate into potting soils, seed and transplant beds. Top or side dress gardens and farms. Excellent for hydroponic growing. 1 cup/100 sq. ft.; 55 lbs. treats ≈3,000 sq. ft.; 2,200 lbs. treats ≈3 acres.

<b>1314801</b>	Maxicrop Kelp Meal - 5 lbs.	<b>\$23.50</b>
<b>1314804</b>	Maxicrop Kelp Meal - 55 lbs.	<b>\$107.00</b>



## RootShield® Plus Granules & RootShield® Plus WP



**Use This Biological Fungicide To Eliminate Hard To Control Diseases!**

**TARGET:** Plant pathogens and resulting diseases such as *Phytophthora*, *Rhizoctonia*, *Pythium*, *Fusarium*, *Thielaviopsis*, and *Cylindrocladium*.

**DESCRIPTION:** OMRI listed and EPA registered, this product will help eliminate damaging fungal pathogens by colonizing plant root systems and by boosting biological diversity of the rhizosphere. This unique product is comprised of live microbial beneficial fungi *Trichoderma harzianum* strain T-22 and the newly developed *Trichoderma virens* strain G-41, delivering an extended array of pathogen control.

**SUGGESTED USE:** For control and prevention of major fungal pathogens and resultant diseases on greenhouse and nursery vegetables, herbs, ornamentals, fruits, conifer tree seedlings, various trees, legumes, oil seeds and peanuts. One application will last for approximately 12 weeks, and can be used with a 0-hr REI. This product can be used in conjunction with certain other fungicides, see label and other online resources for details.

For granular usage, mix about 1.5-3 lbs. to 1 cu. yd. of mix or about four 40 lb. bags to 100 cu. yds. of soil mix. For WP, use about 6 oz. of powder to 100 gal. of water. For plug trays, flats and small pot with 1-3 in. of soil, use about 100 gal. mix/800 sq. ft. For beds and pots 4-5 in. deep, use about 100 gal. mix/400 sq. ft. For azalea pots 6 in. deep, use about 100 gal. mix/1600 pots.

<b>1332756</b>	RootShield Plus WP - 1 lb. Bag	<b>\$145.00</b>
<b>1332757</b>	RootShield Plus WP - 3 lb. Box	<b>\$300.00</b>
<b>1332755</b>	RootShield Plus Granules - 40 lb. Bag	<b>\$485.00</b>

Larger sizes available.

**Granular cannot be shipped to: AK • WP cannot be shipped to: AK**



## Regalia® CG & Regalia®



**OMRI Listed Control For Both Bacterial & Fungal Diseases.**

**TARGET:** Powdery mildew, downy mildew, white mold, early blight, shot hole, *Fusarium*, bacterial spots and specks, brown rot, *Rhizoctonia* and more.

**DESCRIPTION:** This biofungicide uses a plant (*Reynoutria sachalinensis*) extract to protect crops from certain soil-borne or foliar diseases and to boost production by improving overall plant health. Regalia can be used in multiple application methods on field and edible crops in conventional, sustainable and organic production. Unique FRAC P<sub>5</sub> classification. 4-hour REI.

**SUGGESTED USE:** Use early for disease prevention and overall plant health and through the season for continued disease control. Small Scale Applications: 2 Tbsp./gal. of water. Foliar Applications: Downy Mildew and White Mold: 2-4 qts/acre. Soil Applications: *Fusarium*: 3-4 qts/acre.

<b>1332968</b>	Regalia CG - Quart	<b>\$51.00</b>
<b>1332969</b>	Regalia CG - Gallon	<b>\$120.00</b>
<b>1332970</b>	Regalia - 2.5 Gallons	<b>\$235.00</b>



## Howler Fungicide



**A Super-Effective & Ultra-Versatile OMRI Listed Biofungicide.**

**TARGET:** *Alternaria*, *Botrytis*, *Colletotrichum*, downy mildew, *Fusarium*, *Pestalotiopsis*, *Phytophthora*, powdery mildew, *Pythium*, *Rhizoctonia* and *Sclerotinia*.

**DESCRIPTION:** This organic wettable powder fungicide uses the active ingredient of *Pseudomonas chlororaphis* strain AF5009 to work inside the plant microbiome to attack the pathogenic fungi that cause plant diseases. It does this by producing natural antibodies that directly attack the fungi and enzymes that break down fungal cell walls and prevent spore attachment. All of this action induces a resistance response in the plants that further inhibits fungal growth. For use on a wide range of crops. 4 hr. REI and 0-day PHI. Approved for use on cannabis in CO.

**SUGGESTED USE:** Can be applied into the soil, in a drench, in a drip, as a foliar spray and in chemigation. Do not apply by aerial application. Howler Lawn and Garden Fungicide: 3.5 - 5 tablespoons per gal. of water. For Turf: 1-6 gal. per 1,000 sq. ft. Howler Fungicide: 5 lbs/acre. Fruiting & Leafy Vegetables, Beans, Peas, Dry Pulses & Cole Crops: 67-100 oz/100 gal or 5-15 lbs/acre, depending on application method. Greenhouse Soil Incorporation: 1.75-8.5 lbs/cu. yd. Hydroponic Crops: 1.8-6 oz/1,000 sq. ft. Repeat at 7-10 day intervals.

<b>1332937</b>	Howler Lawn & Garden 2.8 oz	<b>\$29.95</b>
<b>1332930</b>	Howler Fungicide - 5 lbs.	<b>\$75.00</b>
<b>1332935</b>	Howler Fungicide - 5 lbs. - pack of 3	<b>\$202.50</b>

**Cannot be shipped to the following states: HI**



## MilStop SP Foliar Fungicide



**Excellent For Controlling Powdery Mildew & Other Fungal Diseases!**

**TARGET:** Powdery mildew, *Alternaria* blight, Anthracnose, black spot, *Botrytis* blight, *Cercospora* leaf spot, downy mildew, *Phomopsis* blight, and *Septoria* leaf spot.

**DESCRIPTION:** MilStop SP is an OMRI listed foliar fungicide. This potassium bicarbonate-based fungicide kills powdery mildew on contact by pulling water from spores and their growing strands. It also inhibits enzymes involved in fungal cell wall formation by altering the pH on the leaf surface. Foliar applications provide 1-2 weeks of residual protection.

**SUGGESTED USE:** MilStop must be mixed with water before spraying. Field applications: Mix 2-5 lbs. per acre in a volume of water sufficient for complete coverage of plant foliage. Greenhouse applications: Mix 1.25 - 5 lbs per 100 gallons of water. (See label online for specific crops, diseases and application systems.)

<b>1332766</b>	MilStop SP Foliar Fungicide - 5 lbs.	<b>\$75.00</b>
<b>1332767</b>	MilStop SP Foliar Fungicide - 25 lbs.	<b>\$280.00</b>



## CEASE® Biological Fungicide



**For Control Of Soil Pathogens That Cause Fungal & Bacterial Plant Diseases.**

**TARGET:** *Alternaria*, Anthracnose, *Botrytis*, *Didymella bryoniae* (gummy stem blight), *Entomosporium*, *Erwinia*, *Fusarium*, powdery mildew, *Pseudomonas*, *Xanthomonas*, *Rhizoctonia*, *Pythium*, *Phytophthora* and more.

**DESCRIPTION:** Cease is an organic contact fungicide/bactericide containing a patented strain of *Bacillus subtilis*. It works by occupying space that the invading pathogens would use and then it disrupts the germination and growth of those pathogens. OMRI listed and NOP compliant. Can be used in combination and/or rotation with other products. 0-day PHI interval and 0-hours REI. No phytotoxicity or residues on flowers or foliage.

**SUGGESTED USE:** Use 2-8 qts/100 gals water about once a week. See label for crop and disease-specific directions. Suitable for wet applications, but use of a spreader/sticker is recommended under those conditions.



<b>1332724</b>	Cease - Gallon	<b>\$100.00</b>
<b>1332727</b>	Cease - 2.5 Gallons	<b>\$215.00</b>
<b>1332725</b>	Cease - Gallon, Case of 4	<b>\$360.00</b>
<b>1332728</b>	Cease - 2.5 Gallons, Case of 2	<b>\$387.00</b>

## Monterey Complete Disease Control



**This Biofungicide/Bactericide Works As A Spray Or As A Drench.**

**TARGET:** Blights, molds, spots, rots and mildews.

**DESCRIPTION:** This organic, broad-spectrum preventative biofungicide/bactericide contains *Bacillus amyloliquefaciens* strain D747. When used as a soil drench, this naturally occurring bacterium goes straight to the plant's roots, where it will establish itself and grow. This colonization prevents the establishment of disease-carrying bacteria and fungi in the soil. Used as a foliar spray, this bacterium will overcome any pathogenic spores present on foliage.

**SUGGESTED USE:** Standard mix rate: 1 tsp. /gal. of water. Foliar spray: Repeat every 7-10 days or as needed. As a soil drench: Drench the roots of transplants with approximately 4 fl. oz. immediately before transplanting. Lawns/Grassy Areas: Apply as a fine spray to the surface area. 2-5 gals/1,000 sq. ft. of lawn.



<b>1458203</b>	Complete Disease Control - 32 oz. RTU	<b>\$16.99</b>
<b>1458204</b>	Complete Disease Control - 32 oz. Hose-End RTS	<b>\$28.49</b>
<b>1458200</b>	Complete Disease Control - 8 oz. Concentrate	<b>\$12.99</b>
<b>1458201</b>	Complete Disease Control - Pint Concentrate	<b>\$17.79</b>
<b>1458202</b>	Complete Disease Control - Gallon Concentrate	<b>\$96.99</b>

SKUs 1458200, 1458201, 1458202 & 1458204 cannot be shipped to the following states: ND

## Mycostop®



**A Versatile & Highly Effective Stand-Alone Biofungicide.**

**TARGET:** *Fusarium*, seed or soil-borne damping off, *Alternaria*, *Phomopsis*, *Botrytis*, *Pythium*, *Phytophthora* and *Rhizoctonia*.

**DESCRIPTION:** This classic biofungicide contains mycelium and spores of *Streptomyces* Strain K61, a naturally occurring bacterium derived from *Sphagnum* peat. This strain controls some of the most destructive of plant pathogens by rapidly colonizing plant roots, displacing the pathogenic fungi there and robbing it of nutrients; disrupting and ultimately breaking down the cell wall of the pathogens and producing metabolites that constrain the pathogens while encouraging plant defense mechanisms and healthy growth. For best results, use preventatively.

**SUGGESTED USE:** Can be applied as a seed treatment, in potting media, as a transplant or cutting dip, soil spray or drench applications or in an irrigation system. In most applications, use in the form of an aqueous solution. A suspension of 0.01% to 0.1% by weight is a basic rate for soil applications. Repeat every 2-6 weeks as needed for diseases control. Use the higher rate and more frequent application for high disease pressure and for larger plants.



<b>1332981</b>	Mycostop - 5 grams	<b>\$36.00</b>
<b>1332982</b>	Mycostop - 25 grams	<b>\$138.00</b>

Cannot be shipped to the following states: AL, AK, DC, HI, GA, ID, IA, LA, NE, ND, SC, SD, TN, VA, WV, WY

## Serenade ASO



**Contains A Powerful Soil Bacterium That Controls Many Common Diseases**

**TARGET:** *Alternaria*, Anthracnose, Blights, *Botrytis*, Damping-Off, Downy Mildew, *Erwinia*, *Fusarium*, Leaf Spots, *Monilinia*, *Phomopsis*, Powdery Mildew, *Pseudomonas*, *Pythium*, *Rhizoctonia*, *Sclerotinia*, Sooty Blotch, Sour Rot, *Xanthomonas* and more.

**DESCRIPTION:** Designed to be applied preventatively, this OMRI-listed biofungicide uses *Bacillus subtilis* QST 713 to control soil and foliar bacterial and fungal diseases. It forms a biofilm around seeds, roots and transplants; kills outright; promotes enhanced photosynthesis and healthy growth that can ward off disease. Can be applied to most common crops. Non-toxic to beneficials. 0-day PHI & 4-hr REI. No resistance risk.

**SUGGESTED USE:** Apply with spray equipment for ground and aerial applications and irrigation systems used for chemigation. Most effective when used preventatively. May be used with other fungicides and pesticides (with restrictions). Rate: 2-6 qts/acre or 1.28-3.8 oz/gal of water. Re-treat in 2-10 day intervals. A surfactant may improve efficacy.



<b>1332910</b>	Serenade ASO – 2.5 gallons	<b>\$132.90</b>
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## BONIDE® Sulfur Plant Fungicide

Effective Against Several Key Insect Pests As Well As Fungal Diseases.

**TARGET:** Knockdown control for apple cedar rust, black rot, brown rot, chiggers, citrus red spider, fleas, frog eye, leaf spot, powdery mildew, quince rust, rust mite, scab, scale, sooty blotch, thrips, ticks, two-spotted spider mites and russet mites.

**DESCRIPTION:** The fine particles of this micronic sulfur product provide optimum coverage, adhesion and disease control and work equally well whether applied as a dust or mixed with water for a spray. For best results, apply thoroughly to all leaf surfaces before diseases develop and repeat weekly to maintain control.

**SUGGESTED USE:** Specially formulated for use on berries, cherries, grapes, citrus, apples, cucurbits, apricots and currants. Do NOT use when an oil spray has been applied within the prior month or when temperatures are expected to exceed 80°F. This container covers approximately 500 sq. ft. at the general mix and application rate.

**1454701** BONIDE Sulfur Plant Fungicide - 1 lb. Bottle **\$8.75**  
**1454702** BONIDE Sulfur Plant Fungicide - 4 lb. Bag **\$17.00**

Cannot be shipped to the following states: AK, DC, PR



## MULTI-PURPOSE CONTROLS

Maximize your efforts by considering a control to fight both pests and pathogens.

### Debug® Turbo



OMRI Listed. Controls Over 200 Pest Insects, Pest Nematodes And Other Plant Pathogens.

**1450500** Quart **\$74.00**  
**1450502** Gallon **\$275.00**

## ZeroTol® HC



Clean Up & Protect Your Plants With One Powerful Product.

**TARGET:** *Alternaria*, Anthracnose, *Aphanomyces*, molds & mildews, bacteria, spots & rots, *Erwinia*, *Phytophthora* (blights, rots), *Plasmopara*, *Pseudomonas*, *Pythium*, *Rhizoctonia*, rust, scab, smut, *Thielaviopsis*, *Xanthomonas*, wilts & blights, fungi, algae and Tobacco Mosaic virus.

**DESCRIPTION:** ZeroTol HC has been designed for use in hemp and cannabis production and for homeowners and hobby growers. Use this OMRI listed product on hard, non-porous surfaces to eliminate pathogens that linger there. It can also be applied to soil and directly to all kinds of plants to prevent/treat/control many common plant diseases and algae growth. Made from Hydrogen Peroxide and Peroxyacetic Acid. No strong odor or toxic residue.

**SUGGESTED USE:** Do not combine or mix with any other pesticide concentrates. Do not reuse solution; make fresh daily. Surfaces/equipment: Dilute at 1:150 or .85 fl oz/gal water. Foliar: Dilute at 1:150 or .85 fl oz/gal water for initial treatment. Apply as needed for control. For prevention: Apply every 5-7 days at 1:200 or 0.64 fl oz/gal water. If disease reappears, apply every 3 days. Turf: Dilute 1.3 fl oz/gal water. 3-10 gals treats approximately 1,000 sq. ft.

**1222410** ZeroTol HC - Gallon Concentrate **\$42.99**  
**1222412** ZeroTol HC - Gallon Concentrate - Case of 4 **\$154.76**

Cannot be shipped to the following states: DC



### Eco-1® 40



OMRI Listed. Strong Control That's Gentle Enough To Use On Edible And Medicinal Plants.

**1458140** Gallon **\$269.99**

### Grower's Ally® Crop Defender 3



OMRI Listed. 4 Botanical Oils Plus A Surfactant Make A Killer Combo.

**1459315** 24 oz. RTU **\$12.99**  
**1459316** 8 oz. Concentrate **\$49.55**  
**1459317** 32 oz. Concentrate **\$139.99**

### Rango™

Three Types Of Control With Time-Proven Neem Oil.

**1450570** Quart Concentrate **\$34.95**  
**1450572** Gallon Concentrate **\$89.95**

### Sil-Matrix® LC



OMRI Listed Silicon-Based Fungicide/Miticide/Insecticide

**1247670** 2.5 Gallons **\$99.00**

See website for more information and state registrations.



## The Power of Peroxyacetic Acid

Similar in chemical makeup, SaniDate 5.0 and OxiDate 2.0 are two very different products with very different uses.

**SaniDate 5.0** is a no rinse required sanitizer for greenhouse use. Using a peroxy compound, SaniDate can quickly and effectively reduce harmful pathogens. Not only can this product be used on hard surfaces in the greenhouse, it can be used for equipment sanitation, food prep surfaces and also irrigation lines. It can also be used as a post-harvest sanitizer. Mix SaniDate in your dip tank or spray directly onto harvested fruits and vegetables to prevent the pathogens that cause spoilage. SaniDate is a great, environmentally responsible alternative to chlorine.

**OxiDate 2.0** is a pre-harvest bactericide and fungicide. OxiDate can be used in certified organic and conventional agriculture. Not only does OxiDate help prevent plant pathogens, it works as a curative product by killing fungal spores and bacterial inoculum. OxiDate does not have a REI and can be used until harvest. This product can be tank mixed with fungicides and insecticides for extra protection and because of the active ingredient is peroxygen, there is not concern of resistance.

## OxiDate® 2.0

**Bactericide & Fungicide For Wide Use**

**TARGET:** Preventative and curative treatment against plant pathogens and diseases such as *Alternaria*, anthracnose, *Aphanomyces*, bacterial spot, bacterial speck, black spot, *Botrytis* (grey mold), brown spot, downy mildew, *Erwinia*, *Fusarium* (root rot), leaf spot, *Phytophthora*, *Plasmopara*, powdery mildew, *Pseudomonas*, *Pythium*, *Rhizoctonia*, rust, scab, smut and *Thielaviopsis*.

**DESCRIPTION:** OxiDate uses the rapid oxidative property of peroxygen to eliminate bacteria and fungi on contact. Use repeatedly on a variety of crops without cultivating resistance or leaving behind any visible residues or odor. OxiDate may also be used for cleaning surfaces, tools, water filters and equipment. Excellent for use in cleaning greenhouses.

**SUGGESTED USE:** Ensure that a minimum ratio of 1:100 is used.

<b>1222501</b>	OxiDate 2.0 - 2.5 Gallons	<b>\$230.00</b>
<b>1222502</b>	OxiDate 2.0 - 5 Gallons	<b>\$340.00</b>

Larger sizes available. All sales are final. No returns or refunds allowed.

\*Free Shipping in the contiguous 48 states. Ships via Ground ONLY.

**Cannot be shipped to the following states:** DC



## SaniDate® 5.0

**An OMRI Listed Sanitizer/Disinfectant.**

**TARGET:** Bacteria including *Salmonella*, *Streptococcus*, *E. coli*, *Pseudomonas*, *Staphylococcus aureus*, *Listeria* and molds, including mildew.

**DESCRIPTION:** Contains hydrogen peroxide and peroxyacetic acid as an alternative to chlorine to sanitize and disinfect post harvest equipment, fruit and vegetables and various hard surfaces. Usage industries include farms, dairies, beverage plants, food processing plants, greenhouses, etc. No dumping or run-off restrictions.

**SUGGESTED USE:** For general disinfection, sanitation of surfaces, food safety programs, irrigation systems and greenhouse use mix about 0.5 fl. oz./1 gal. of water. Solution can be applied various ways depending on desired usage. Applications can be made with mops, sponges, spraying devices, etc.

<b>1222515</b>	SaniDate 5.0 - 2.5 Gallons	<b>\$230.00</b>
<b>1222517</b>	SaniDate 5.0 - 5 Gallons	<b>\$300.00</b>

Larger sizes available. All sales are final. No returns or refunds allowed.

\*Free Shipping in the contiguous 48 states. Ships via Ground ONLY.

**Cannot be shipped to the following states:** AK, HI, PR

**WARNING Corrosive:** Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through skin. Harmful if swallowed. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wear goggles, face shield, and rubber gloves when handling. Do not enter an enclosed area without proper respiratory protection. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse. Strong oxidizing agent. Do not use in concentrated form. Mix only with water in accordance with label instructions. Never bring concentrate in contact with other pesticides, cleaners or oxidative agents.



## ZeroTol® 2.0

**Kills Pathogens On Plants As Well As Bacteria, Algae & Fungi On Hard Surfaces.**

**TARGET:** *Alternaria*, Anthracnose, *Aphanomyces*, molds & mildews, bacteria, spots & rots, *Erwinia*, *Phytophthora* (blights, rots), *Plasmopara*, *Pseudomonas*, *Pythium*, *Rhizoctonia*, rust, scab, smut, *Thielaviopsis*, *Xanthomonas*, wilts & blights, fungi, algae and Tobacco Mosaic virus.

**DESCRIPTION:** This liquid wonder uses a combination of Hydrogen Peroxide and Peroxyacetic Acid to prevent and control a wide range of pathogens on plants and in the soil. It works equally well to suppress and control bacteria, fungi and algae on hard surfaces and equipment. This is especially useful to contain the spread of disease in your growing area. When used as directed, there will be no strong odor, visible residue or harmful effects on plants.

**SUGGESTED USE:** For use as a foliar spray, in irrigation and fogging applications, as a soil drench, seed treatment, in hydroponics, as a pre-plant dip and on hard surfaces. Curative treatment: between 1:100-1:400 (1-4 gals./100 gals. water). Apply every 3-5 days until control is achieved. Preventative treatment: 1:200-1:400 (or 32-64 fl. oz./100 gals. water) every 5-10 days. Large scale application: 50-500 gals./acre or 11.5-115 gals/10,000 sq. ft. Ensure thorough coverage of all foliage, stems, branches and stalks.

<b>1222401</b>	ZeroTol 2.0 - 2.5 Gallons	<b>\$230.00</b>
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All sales are final. No returns or refunds allowed.

\*Free Shipping in the contiguous 48 states. Ships via Ground ONLY.

**Cannot be shipped to the following states:** PR, VI, GU, AS, PW, AK, HI



## WEED BARRIERS

### WeedGuardPlus® - Heavy Weight Rolls

**This Tough Weed Block Will Hold Up Under The Elements!**

**TARGET:** Use for weed suppression.

**DESCRIPTION:** This paper weed block is adaptable to nearly any size growing operation in nearly any environment. 100% biodegradable; no need to remove it. Saves time; just lay it down before planting and save yourself countless hours of weeding, spraying or disposing of materials. Or apply it on top of existing weeds and/or invasive plant roots and smother them out. Saves money; no need to buy expensive herbicides. Improves yields; your plants will have a chance to establish themselves without competing with weeds. Porous yet strong; so plants can be watered by natural rainfall or by other means. Allows air flow. Maintains this porosity through all but the most severe of weather. Can be applied by machine or by hand. These rolls are excellent for textured soils and/or those projects that are meant to be long-term. 54% heavier than the standard rolls and offers 12+ months of weed control.

**SUGGESTED USE:** Put in place before you install transplants or seedlings, or before you sow seeds. Simply prepare the ground, place over the soil, and cover the edges with dirt. Product may be affected by variances in weather or soil conditions.

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| <b>1453851</b> | Heavy Weight - Smooth Finish - 36" x 100' | <b>\$37.99</b> |
| <b>1453852</b> | Heavy Weight - Smooth Finish - 48" x 100' | <b>\$54.99</b> |



### EcoMulch Rolls

**Season-Long Weed Protection With No Clean Up**

**TARGET:** Home gardening, commercial growers, organic growers, nurseries, seasonal landscaping, habitat restoration and more.

**DESCRIPTION:** This is an OMRI-listed seasonal-use weed barrier paper that offers superior weed prevention from planting through harvest. Made from 100% natural, biodegradable fibers sourced from corrugated box clippings, this product will decompose slowly over the growing season. At the end of the season till any remaining paper into the soil. Adds texture and organic matter to soil. Porous to allow air, water and nutrients to pass through. Opaque to keep weeds from developing past germination. Creped finish makes it more flexible for easy application and dark color keeps soil warm.

**SUGGESTED USE:** Can be applied by hand, by tractor or by a mechanical mulch layer. Suitable for overhead or drip tape irrigation methods. Do not attempt application on a windy day. Put in place before you sow seeds or install transplants and seedlings. Product may be affected by variances in weather or soil conditions.

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| <b>1453858</b> | EcoMulch - 24" x 50' rolls – 2 pk - Creped | <b>\$20.99</b> |
| <b>1453859</b> | EcoMulch - 36" x 50' rolls – 2 pk - Creped | <b>\$28.99</b> |



## PRE-EMERGENT

### Gluten-8 OLP™ Liquid Corn Gluten, 1.5-0-0

**This Easy-to-Use Liquid Weed Control Plus Nitrogen Works Wonders!**

**TARGET:** Knockdown control for annual grasses and broadleaf weeds.

**DESCRIPTION:** Gluten-8 OLP Liquid Corn Meal offers pre-emergent weed control with 1.5% nitrogen to feed your soil. This product is derived from water soluble corn gluten meal, which provides effective and economical pre-emergent control of annual grasses and broad leaf weeds with much less effort than the granular corn gluten. Gluten-8 also contains 1.5% nitrogen (lower than granular corn gluten), which can help you manage nitrogen loads. All ingredients are EPA Section 25-B exempt. DO NOT use on grass that's been recently seeded; after the first mowing, apply at will. This 1 gallon bottle covers up to 4,000 sq. ft.

**SUGGESTED USE:** Mix 1 quart Gluten-8 to 3 quarts water to make 1 gallon. Each mixed one gallon treats 1,00 sq. ft. Each gallon of Gluten-8 OLP makes enough mixture to treat 4,000 sq. ft.

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|----------------|---|----------------|
| <b>1273010</b> | Gluten-8 OLP Liquid Corn Gluten, 1.5-0-0 - Gallon | <b>\$61.00</b> |
|----------------|---|----------------|
- Case sizes available.



## BROAD SPECTRUM

### Avenger® AG Optima Burndown Herbicide

**A Versatile D-Limonene Herbicide That Works Quickly & Thoroughly.**

**TARGET:** Grasses and broadleaf weeds (both annual and perennial).

**DESCRIPTION:** This non-selective weed killer uses d-limonene (a natural citrus oil) as its active ingredient and has been developed for agricultural and non-agricultural uses. This clean-smelling citrusy spray will not translocate or stain brick, concrete or pavement. NOP compliant.

**SUGGESTED USE:** Mix in water and apply to all sides of foliage until weeds are thoroughly wet. Spray when temps are above 50°F. Fill spray tank 1/2 full with clean water, add product while agitating. Apply at a 7-10% mixture, depending on the size of the weeds. Use lower rate for smaller weeds and higher rate for larger, hard-to-kill weeds. Use lower rate whenever possible. Do not exceed 5 gals product/acre per application or a total of 16 gals/acre/year. Be careful to avoid spray drift.

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| <b>1453740</b> | AG Optima - 32 oz. Concentrate               | <b>\$35.00</b>  |
| <b>1453741</b> | AG Optima - Gallon Concentrate               | <b>\$110.00</b> |
| <b>1453713</b> | AG Optima - 2.5 Gallons - Case of 2 (5 Gal.) | <b>\$425.00</b> |

Cannot be shipped to the following states: CA



## Avenger® Weed Killer

### Fast-Acting Natural Herbicide.

**TARGET:** Broadleaf, crab grass and other unwanted weeds.

**DESCRIPTION:** Avenger Weed Killer is a natural citrus oil based non-selective herbicide that eliminates broadleaf, crab grass and other unwanted weeds naturally and quickly.

**SUGGESTED USE:** Varies depending on size of weeds. The 24 oz. RTU is already mixed at a 1:3 ratio. Concentrate: Small annual weeds use 1:6 ratio; large annual weeds use 1:4.5 ratio; Hard to control weeds use 1:3 ratio.



<b>1453808</b>	Avenger Weed Killer - 24 oz. RTU	<b>\$13.50</b>
<b>1453809</b>	Avenger Weed Killer - Quart Concentrate	<b>\$30.00</b>
<b>1453810</b>	Avenger Weed Killer - Gallon Concentrate	<b>\$94.00</b>
<b>1453812</b>	Avenger Weed Killer - 5 Gallons Concentrate	<b>\$360.00</b>

Cannot be shipped to the following states: DC, PR, SD, VI

## BONIDE® Captain Jack's™ Deadweed Brew

**NEW**

### Uses Caprylic Acid To Quickly & Safely Kill Unwanted Vegetation

**TARGET:** Broadleaf weeds, grasses, algae and moss (both perennial and annual).

**DESCRIPTION:** This non-selective herbicide can be used anytime of the year but works best during warm and dry conditions. Can be applied virtually anywhere around the home and garden to control existing weeds, either before or after planting. Will not translocate. Pint bottle treats up to 1,600 sq. ft. and quart treats up to 3,200 sq. ft. Pint makes up to 4 gals finished spray; qt makes up to 8 gals and gal makes up to 32 gals.

**SUGGESTED USE:** Apply with a handheld or backpack type of sprayer. Apply the mixed solution at 2 1/2 - 7 1/2 gals/1,000 sq. ft. (lower rates for small weeds, higher rates for larger ones). Spray weed thoroughly, using a coarse nozzle setting to reduce drift. Damage will be visible from a few hours to a few days after spraying. Re-treat every 2-3 weeks.



<b>1453780</b>	Deadweed Brew - Pint Concentrate	<b>\$19.99</b>
<b>1453781</b>	Deadweed Brew - Quart Concentrate	<b>\$34.99</b>
<b>1453786</b>	Deadweed Brew - Gallon Concentrate	<b>\$158.99</b>

## BioSafe Weed & Grass Killer



### This Soap-Based Weed Killer Produces Visible Results Within 24 Hours.

**TARGET:** For control and burndown suppression of annual & perennial broadleaf and grasses. Also controls spore producing plants such as mosses and liverworts.

**DESCRIPTION:** Biosafe Weed & Grass Killer is a non-selective herbicide that works on contact when applied as a foliar application with a manual sprayer. For best results, cover plant leaves thoroughly and uniformly with spray. Take care to avoid contacting wanted plants. This soap product uses Ammonium Nonanoate to penetrate the cell walls of the plant to disrupt their normal functioning and cause death. This product does not move through the soil or between plants and leaves no harmful residue.

**SUGGESTED USE:** Do not apply this product through any type of irrigation system. Use a hand-held or hose-end sprayer that produces a uniform spray; this will cover the most leaf area for optimal weed control. A 10-13% volume to volume (V/V) dilution (13-16 fl. oz. per gal. of water) is recommended for most situations. Larger weeds, perennial weeds and some grasses may require several applications. Also available in a ready-to-use formulation.



<b>1453822</b>	Biosafe Weed & Grass Killer - Gallon Concentrate	<b>\$69.99</b>
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## SELECTIVE

## BONIDE® Captain Jack's™ Lawnweed Brew

### Kills the Weeds – Not Your Lawn.

**TARGET:** Moss, algae, lichens, liverwort, lawn diseases (dollar spot, rust, snow mold), and common broadleaf weeds such as dandelion, clover, chickweed and thistle.

**DESCRIPTION:** This product offers pre-and post-emergent control using an active ingredient derived from Iron(Fe). Mixes quickly and thoroughly with water and works quickly (within hours) to kill down to the roots. Can be applied in temperatures down to 50°F and is rainfast in 3 hours. Once the spray has dried, treated areas are safe for people and animals. Do not apply to recently seeded lawns, but lawns can be reseeded 1 day after application. Gives lawns a green-up.

**SUGGESTED USE:** Use with any standard handheld, backpack, compression or knapsack sprayer. Mix 1 part product with 24 parts water (5 fl oz in 1 gal water). Repeat in 3-4 wks for spot control. Pre-emergent control; Apply 5-10 gals of spray solution/1,000 sq ft depending on weed pressure. Reapply 3-6 wks later. Ensure lawn is well watered before application. Do not apply to bentgrass. Do not apply at temps over 85°F. Do not apply if rainfall is expected with 3 hrs of application. Do not apply to the same area more than 4 times a year. To avoid staining, wait until treated area dries before re-entry.



<b>1453754</b>	Captain Jack's Lawnweed Brew - 16 oz. Conc.	<b>\$14.99</b>
<b>1453752</b>	Captain Jack's Lawnweed Brew - 32 oz. Conc.	<b>\$21.99</b>

Cannot be shipped to the following states: CA, PR

## ThermX™-70 Natural Wetting Agent



### Overcome Adverse Water Conditions!

**DESCRIPTION:** This natural wetting agent is derived from yucca and contains 20% saponin extracted from *Yucca schidigera*. Saponin helps plants overcome adverse water conditions and is a great sticker for other sprays. Use ThermX-70 to increase crop's ability to establish in stressed conditions and increase water and fertilizer uptake. Increases permeability in heavy clay soil and reduces salt and alkali problems by improving drainage. Stimulates root growth, extending the area irrigation reaches.

**SUGGESTED USE: Wetting Agent:** ≈1/4 tsp./gal. water, ≈2-3 oz./acre. **Soil:** ≈1-2 tsp./gal. water, ≈16 oz./acre



<b>1402403</b>	ThermX-70 Natural Wetting Agent - Quart	<b>\$27.50</b>
<b>1402404</b>	ThermX-70 Natural Wetting Agent - Gallon	<b>\$94.50</b>
<b>1402405</b>	ThermX-70 Natural Wetting Agent - 5 Gallons	<b>\$370.00</b>
<b>1402406</b>	ThermX-70 Natural Wetting Agent - 55 Gallon Drum*	<b>CALL</b>

\*Call for freight quote. Call for larger sizes.

## Bug Blaster™

**This Magic Wand Will Blast Away Destructive Bugs.**

**TARGET:** Aphids, whiteflies, mealybugs, spider mites and other soft bodied insects.

**DESCRIPTION:** With this sprayer, you can quickly and effectively wipe out soft bodied insects and/or rid your plants of detritus. It can also impede mildew growth by keeping plant and other surfaces clean. All without using anything but water. The Bug Blaster nozzle creates a forceful 360° flat spray of water while the slender wand lets you insert it into, under and around the center of the plants to hit every plant surface. The spray will be strong enough to fatally traumatize soft bodied insects from eggs to adults, but will not harm the plants. Uses 60% less water than a standard spray gun.



**SUGGESTED USE:** Absolutely **DO NOT** use with any type of pesticide or fertilizer. Simply screw the Bug Blaster nozzle onto watering wand and connect to your garden hose and you are ready to go. Spray infested plants every 3-5 days for 2-3 weeks. Spray plants that are susceptible to powdery mildew, black spot or rust in the morning to give plants a chance to dry out during the day.

<b>1452530</b>	30" Anodized Blaster	<b>\$24.95</b>
<b>1452535</b>	Replacement Nozzle	<b>\$12.99</b>

## LAWN & GARDEN SPRAYERS



### BONIDE® Auto Mix Hose End Sprayer

Just A Few Quick Steps To Flawless Spraying.

<b>1800010</b>	BONIDE Auto Mix Hose End Sprayer	<b>\$19.99</b>
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### Chameleon Adaptable Hose End Sprayer

Get Perfect Application With This Highly Adjustable Sprayer.

<b>1800006</b>	Chameleon Adaptable Hose End Sprayer	<b>\$14.99</b>
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### Economical Liquid Hose End Sprayer

This Simple Sprayer Does All That You Need It To.

<b>1800106</b>	Economical Liquid Hose End Sprayer	<b>\$12.49</b>
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### Flo-Master By Hudson Lawn & Garden Sprayer

Economical, Easy-To-Use, Light Duty Sprayer For Home & Garden.

<b>1800101</b>	Flo-Master Lawn & Garden Sprayer - 1 Gallon	<b>\$13.49</b>
<b>1800102</b>	Flo-Master Lawn & Garden Sprayer - 2 Gallon	<b>\$14.99</b>

**Sprayers can be used to apply Beneficial Nematodes, Foliar Fertilizers, Insecticides & Herbicides.**

**Consider separate sprayers to avoid contamination!**

## GOPHER CONTROL

### Root Guard Gopher Wire Baskets

**Stop Gophers From Damaging Plant Roots!**

**TARGET:** Use to protect small planting areas, bulbs, flowers, shrubs, trees, lawns, raised beds, planter boxes, and entire garden areas.

**DESCRIPTION:** Designed to keep the smallest and most pernicious gophers from ruining your garden or lawn. Built from long-lasting 20-gauge, double galvanized metal.

**SUGGESTED USE:** Pull basket sides apart, flatten out bottom fold, bend side seams flat against bottom, round sides and place in a pre-dug hole. There is a 3" green strip indicating how deep to place the basket. Leave green edge exposed to help deter above ground feeding. Place plant in the basket, fill hole with soil, and water as usual. When selecting proper size, choose a basket that is one size larger to allow for plant growth.



<b>1257200</b>	Wire Mini Basket (Pack of 6)	<b>\$9.50</b>
<b>1257201</b>	Wire Basket - 1 Gallon (Pack of 2)	<b>\$9.50</b>
<b>1257202</b>	Wire Basket - 3 Gallon	<b>\$7.75</b>
<b>1257203</b>	Wire Basket - 5 Gallon	<b>\$12.00</b>

### Chase™ Granular Mole & Gopher Repellent

**A Very Effective Granular Repellent That's Super-Easy To Apply By Hand Or With A Spreader.**

**TARGET:** Gophers & moles.

**DESCRIPTION:** This is a biodegradable, granular repellent that will chase burrowing animals from your lawn or garden. Use from spring through late fall when the tunnels or cone-shaped mounds from these animals are present. Chase will not kill the target animals, but the active ingredient of Castor Oil is extremely irritating to them. It causes topical itching when they come in contact with it, and when they ingest it they experience digestive distress. All of this will make them uncomfortable enough to avoid treated areas and relocate elsewhere.

**SUGGESTED USE:** Apply by hand or with a broadcast or drop spreader. Application rate: 1 lb./1,000 sq. ft. Treat the entire affected area at once or "move" the animals by applying 1/3 of product furthest from the point that you want them to exit from. At 1-2-day intervals apply product closer to the exit point. Continue this pattern until animals have left the area. This moving technique works particularly well in locations larger than 100 ft. x 100 ft.



<b>1287900</b>	Chase Granular Mole & Gopher Repellent - 6 lbs.	<b>\$27.00</b>
<b>1287901</b>	Chase Granular Mole & Gopher Repellent - 32 lbs.	<b>\$85.00</b>

## RODENT CONTROL

### BONIDE® Rat Magic™

**Two Different Ways To Get The Same Great Rodent Control.**

**TARGET:** Use to drive away rats, squirrels, chipmunks and other rodents.

**DESCRIPTION:** This combination of cedarwood, castor, clove and peppermint oils is repugnant to rodents and triggers an escape/avoidance response in them. This formula comes in two versions, granules and scent packs. Both are biodegradable and easy to use, simply choose what suits your particular needs the best. Not harmful to plants, people or pets.



**SUGGESTED USE:** Scent Packs: Distribute where rodents hide, feed or congregate. Use 1 pack per average size room and increase as needed until desired affect is achieved. Granules: Barrier/perimeter treatment - Sprinkle to create a band around area to protect. 1 lb. will treat a band 2' W x 100' L. For maintenance, use 1 lb/200 sq. ft. Reapply every 2 weeks or after rains. Indoor Use: Sprinkle where rodents hide, feed or congregate. Vacuum up and reapply every 2 weeks or until infestation is eliminated.

<b>1287720</b>	BONIDE Rat Magic Scent Packs - 8 Count	<b>\$16.99</b>
<b>1287721</b>	BONIDE Rat Magic Granules - 5 lbs.	<b>\$19.99</b>

**Cannot be shipped to the following states: 1287720:** IN, ME, NM, SD  
**1287721:** IN, NM

## DEER CONTROL

### Deer Guard Ribbon, Cards and Strips

**NEW**

**Odorless, Season Long Protection From Deer For Your Plants.**

**TARGET:** Use to protect plants growing in beds, rows, pots or trees from deer.

**DESCRIPTION:** Available in 3 pre-coated styles, Deer Guard repellent is ready-to-use right out of the box and lasts all season due to it's durability and weather resistance. Powered by hydrolyzed feather meal and capsiacum and spice blends, Deer Guard repellent is odorless to humans, but repellent to deers through both smell and taste. Use ribbon rolls, cards or strips in your garden bed, on shrubs or container plants or mix and match for maximum coverage.

**SUGGESTED USE:** For containers, use Deer Guard Cards (and included wire holders) to position card near buds/blooms. Use strips to loop around branches or foliage and they will move with the plant as it grows. Ribbons are best for rows of plants, shrubs and trees.

<b>1264068</b>	Deer Guard Strips - 1.25" x 12" - 24pk	<b>\$19.95</b>
<b>1264065</b>	Deer Guard Cards - 4" x 6" - 12pk	<b>\$27.95</b>
<b>1264060</b>	Deer Guard Ribbon - 150'	<b>\$24.95</b>
<b>1264061</b>	Deer Guard Ribbon - 500'	<b>\$59.95</b>



## FIRE ANT CONTROL

### Fertilome® Come And Get It II Fire Ant Killer

**Kills The Whole Colony And Its Queen.**

**TARGET:** Red Imported Fire Ants (*Solenopsis invicta*) and Harvester Ants.

**DESCRIPTION:** Fire Ants are notoriously hard to get rid of but even harder to live with. But this spinosad-based bait is very appealing to these insects. So much so, that they will take it back into their mound to share with the rest of the colony – including their queen. Ants start dying in 24-36 hours with mound or colony destruction in 3-14 days. Broadcast applications may take longer.



**SUGGESTED USE:** Apply around the perimeter of homes, ornamental plants, trees and shrubs, and in lawns and gardens. **Mounds:** 4 Tbsp. for each mound. For mounds larger than 15" in diameter, use 6 Tbsp. Sprinkle over and around mound in a 4 ft. diameter circle. **Broadcast:** Use 1/3-2/3 cup/1,000 sq. ft. or 3-6 cups/10,000 sq. ft. or 2 1/2-5 lbs/acre. Use higher rates for heavier infestations, faster activity and greater overall control. Spread with a hand-held or ground-driven rotary spreader. Extremely large mounds may require repeat applications. Use every other month during warm months to keep ants away. For outdoor use only.

**1460020** Fertilo-me Fire Ant Killer - 1 lb. Bag **\$22.99**

Cannot be shipped to the following states: AK, CA, CO, HI, ID, MT, NM, NV, OR, WY

### Orange Guard® Fire Ant Control



**Control Fire Ant Mounds Without Risking The Health Of Your Family, Pets Or The Environment.**

**TARGET:** Fire ants.

**DESCRIPTION:** Orange Guard Fire Ant Control contains ingredients which are on the FDA GRAS list (generally recognized as safe). Orange Guard Fire Ant Control is water based, so further dilution is easy. It works by dissolving away the waxy coating on the ant's exoskeleton, which clogs their spiracles (how they breathe), and they suffocate.



**SUGGESTED USE:** Puncture the mounds and then saturate them, using 1/2 gallon of either full strength or diluted (3 parts water to 1 part Orange Guard Fire Ant Control). Dilution does not harm grass and covers approx. 8 mounds.

**1460005** Orange Guard Fire Ant Control - Gallon **\$32.75**

Cannot be shipped to the following states: AK, CO, DC, DE, ID, IL, IN, IA, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, OR, PA, PR, RI, SD, UT, VT, VA, WA, WI, WV, WY

### EcoPCO® AR-X Multi-Purpose Insecticide

**Quick Pest Knockdown In A Gentle Botanical-Based Formula!**

**TARGET:** Ants, carpet beetles, carpenter ants, carpenter bees, centipedes, chocolate moths, clover mites, cockroaches, crickets, drugstore beetles, earwigs, elm leaf beetles, fleas, millipedes, pillbugs, power post beetles, scorpions, silverfish, spiders, termites, *Trogoderma* beetles and wood wasps.



**DESCRIPTION:** This Pyrethrin-based, multi-purpose insecticide is designed for use in sensitive areas and is approved for use in food handling areas like homes, hospitals, commercial kitchens, daycare centers, restaurants and food processing facilities. This unscented contact kill product is non-staining and contains no PBO or CFCs. Can be used inside and out, with the outside applications limited to direct applications to vegetation, foundations and crack and crevices. Not for exterior aerial applications.

**SUGGESTED USE:** Apply to cracks and crevices; release approximately 1 second of product per crack-crevice application and from 2-3 seconds per cubic foot of closed void space. For wood pests, locate infestation and drill holes 8-10" into insect tunnels and inject 5-10 seconds per hole. Apply more liberally for heavy infestations. Ensure contact with as many insects as possible.

**1457403** EcoPCOAR-X Multi-Purpose Insecticide - 15 oz. **\$19.49**

Ships via Ground ONLY.

### Dr. Earth® Final Stop® Pest Control Killer Spray



**Works Fast & Provides Continued Protection For Weeks.**

**TARGET:** Ants, centipedes, chiggers, cockroaches, crickets, earwigs, fleas, gnats, mosquitoes, moths, pillbugs, silverfish, spiders, stinkbugs, ticks and wasps.

**DESCRIPTION:** This organic pest control spray is crafted from a selection of essential oils (rosemary, sesame, peppermint, thyme, cinnamon and garlic). Each of these oils has its own valuable characteristics for pest control, but when put together their synergistic power outweighs each individual ingredient. Works as a knockdown and kill spray but will also provide weeks-long protection. Insect death occurs minutes to hours after application. No synthetic ingredients. For indoor or outdoor use.



**SUGGESTED USE:** This product is ready-to-use from the bottle. Prior to application, test a small, discreet area first to check for surface discoloration. Use around your home and garden. Thorough coverage of the insect is required. Repeat applications as often as needed to kill target insects. Do not spray plants directly, this is a very strong spray that will cause leaf burn.

**1459360** Final Stop Pest Control Killer Spray - 24 oz. RTU **\$15.99**

## Essentria™ G Granular Insecticide

**A Granular That Handles A Handful Of Outdoor Pests!**

**TARGET:** Ants, bermudagrass mites, centipedes, chiggers, chinch bugs, clover mites, cockroaches, crickets, earwigs, fall armyworms, fleas, leafhoppers, millipedes, sowbugs/pillbugs, and other insect pests.

**DESCRIPTION:** This quick and long-lasting natural granular insecticide uses essential botanical oils clove, thyme and wintergreen to treat various pests. Easy-to-use outdoors on landscapes, turf, building facilities and around organic operations, sensitive areas such as schools, and in aquatic environments.

**SUGGESTED USE:** Use with a hand spreader. For treatments around buildings, apply uniformly a band about 5-10 ft. wide. For landscapes and turf, use around 3-5 lbs./1000 sq. ft. Water in, applying about 1/8 in. - 1/4 in. of water without puddling. For ant mounds, use about 1-2 tsp./nest. For red imported fire ants, use around 1/2 cup/nest and make a 2 ft. band around nest.

**1273050** Essentria G Granular Insecticide - 22 lbs. **\$67.50**



## Essentria® IC Pro

**Handles Most Crawling & Flying Insects Most Anywhere You Find Them.**

**TARGET:** Ants, aphids, American cockroach nymphs, beetles, box elder bugs, crickets, earwigs, face flies, German cockroaches, Indian meal moths, millipedes, mosquitoes, spiders, spider mites, stink bugs and more.

**DESCRIPTION:** Derived from botanical oils, this earth-friendly product will repel and kill a wide variety of insects in all sorts of locations. Formulated for maintenance control as well as active infestations. This water-based formula is made from food-grade inerts, has a light fragrance and is safe for use in food prep areas. For cannabis, hemp and unspecified food crop use. Safe around livestock. FIFRA 25(b) exempt.

**SUGGESTED USE:** Labeled for broadcast, barrier, perimeter, spot treatments and spatial repellent (mosquitoes). General application rate: 1-8 fl oz/gal water (lower rate for maintenance and higher rate for active infestations) and apply at the rate of 2 gals/1,000 sq ft. Do not apply directly to houseplants. Avoid or cover any pools or aquaria prior to spraying.

**1273058** Essentria IC Pro – Quart **\$40.99**  
**1273059** Essentria IC Pro – Gallon **\$129.99**



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## Avenger Roach Tablets

Clean & Easy-to-Use Roach Control.

**1219566** 6 oz. **\$2.69**

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Break The Reproductive Cycle By Luring, Trapping & Killing Adult Male Moths.

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## Enoz® BioCare® Flour & Pantry Moth Traps

Stop Sharing Your Food With Pesky Moths.

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Rid Your House Of Crawling, Creeping, Scurrying & Scuttling Pests!

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## Enoz® Trap-N-Kill® Flea Trap

Works Day & Night, Year-Round, To Eliminate Fleas Without Poisons.

**1280110** 1 Trap **\$19.99**

**1280111** Pack of 3 Traps **\$45.87**

## Harris® Roach Traps

This Pesticide-Free Will Be Their Last Step!

**1219552** 2 Pack **\$6.79**

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• Se habla Español

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## ARBICO Organics

10831 N. Mavinee Dr., Ste. 185  
Oro Valley, AZ 85737-9531

**800-827-2847**

Please call for  
product availability.



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