

# ARBICO *organics*

NATURAL & ORGANIC IPM SOLUTIONS

SUMMER 2023



## Cultivate Your Best



Predatory Insects



Biorational Insecticide



Amendments & Fertilizers



Weed & Disease Control



# Contents



## OUR PROMISE



Guaranteed Live Delivery



Customer Service



Commitment  
to Quality



## HOW TO CONTACT US:

800-827-2847

[www.arbico-organics.com](http://www.arbico-organics.com)  
[customercare@arbico.com](mailto: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.*

ARBICO Organics began in 1979 when Rick Frey embarked on a new endeavor in Tucson, AZ - rearing and selling insects that parasitize developing flies (Fly Eliminators™). Rick's wife, Sheri, had a passion for the environment and the two teamed up to become pioneers of organic growing, promoting their philosophy of "bio-balance" by offering customers sustainable pest control alternatives.

Over the years, we have expanded our product line to meet our customers' diversified needs and our team continues to grow to provide our customers with support and knowledge!

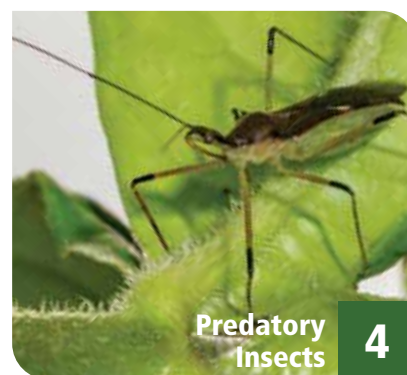


## *We proudly rear insects at our insectary in Catalina, AZ.*

We continue to challenge ourselves to provide the best products we can and to deliver them in a timely manner to our customers. What started with one bug has grown to include so much more and we continue to thank the support of our customers and our community of family, friends and coworkers who have made this all possible!



# NATURAL & ORGANIC IPM SOLUTIONS



## POWERFUL PEST CONTROL



The Assassin Bug is a hardworking predator that feeds in all life stages. Great for greenhouse and indoor cultivations with wide temperature range activity and varied pests. Free Shipping!

### ADVANTAGES

- Predatory in all life stages
- Wide variety of pests consumed
- Active in high temperatures/low humidities
- Not attracted to artificial light

## 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.



### ADVANTAGES

- Predatory in all life stages
- Shipped as adults, ready to consume on arrival
- Good for field crops and greenhouses
- Aggressive against thrips

## 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



*Chrysoperla rufilabris*,  
*Chrysoperla* sp.

Green Lacewing are an economical addition to IPM programs in gardens and greenhouses for soft-bodied insect control. Larvae are voracious predators of the eggs and immature stages of aphids, thrips, whiteflies, leafhoppers, eggs of pest moths and mealybugs. Most effective when introduced preventatively and repeatedly throughout the growing season.

### ADVANTAGES

- Great for outdoor and warmer temperatures
- Economical sizes for gardens
- Available as eggs, larvae and adults for customizable control



### GREEN LACEWING EGGS:\*

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

### GREEN LACEWING LARVAE:

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

### GREEN LACEWING ADULTS:

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

**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.



### Looking For Ladybugs?

If you are looking for ladybugs, we encourage you to consider one of our other generalist or specialist insects. Generalists work great when pests are varied. Specialists will target specific pest infestations. Keep in mind predacious life stages, active temperatures and ordering lead times for how quickly control is needed. A knockdown spray used prior to application of predatory insects may be necessary.

**If You're Unsure Which Beneficial Insect or Predator to Choose, Call One of Our Specialists at 1-800-827-2847.**

## 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 (*Sitobion 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 32) 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 22).
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 (sciarid 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.



*Dalotia coriaria*  
(=*Atheta coriaria*)

**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.



*Stratiolaelaps scimitus*  
(=*Hypoaspis miles*)

**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 22.**





## 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 15-17 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 19).

**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 CONTROL

## 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>
----------------	------------	-----------------

**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**



## 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.



## 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>
----------------	------------	----------------

**Subject to seasonal availability.**

**Overnight Shipping Required**



**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 Eliyahu 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>
----------------	------------	-----------------

#### 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>
----------------	------------	-----------------

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 15-17 for more information.**







## 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.

## 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.

## 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, sciarids, 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	■	Sciarids	■
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
<b>NemaSeek <i>Heterorhabditis bacteriophora</i></b>		
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
<b>NemAttack <i>Steinernema feltiae</i></b>		
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
<b>NemAttack <i>Steinernema carpocapsae</i></b>		
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
<b>NemAttack <i>Steinernema riobrave</i></b>		
1220410	≈5 million	\$36.00
<b>NemaSeek <i>Steinernema kraussei</i></b>		
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
<b>NemaSeek <i>Heterorhabditis indica</i></b>		
1220200	≈5 million	\$36.00

COMBO PACKS		
SKU	Size	Price
<b>▲ ● NemaSeek Hb &amp; NemAttack Sc</b>		
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
<b>▲ ■ NemaSeek Hb &amp; NemAttack Sf</b>		
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
<b>■ ● NemAttack Sf &amp; NemAttack Sc</b>		
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
<b>▲ ■ ● NemaSeek Hb, NemAttack Sf &amp; NemAttack Sc</b>		
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
<b>▲ NemaSeek Pro Hb Beneficial Nematodes</b>		
4004010	≈10 million	\$52.00
4004050	≈50 million	\$90.00
4004250	≈250 million	\$250.00
4004500	≈500 million	\$325.00
<b>■ NemAttack Pro Sf Beneficial Nematodes</b>		
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
<b>● NemAttack Pro Sc Beneficial Nematodes</b>		
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
<b>▲ ■ ● NemaSeek Pro Hb Beneficial Nematodes, NemAttack Pro Sf Beneficial Nematodes &amp; NemAttack Pro Sc Beneficial Nematodes</b>		
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

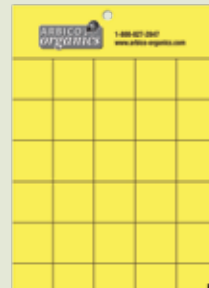
**TARGET:** Use against aphids, bean beetles, California laurel aphids, flea beetles, fungus gnats, greenhouse whiteflies, leafminers, psyllids, shore flies, silverleaf whiteflies, sweet potato whiteflies and more.

**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.

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



## 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.

<b>1254001</b>	Package of 5 Yellow Traps	<b>\$4.49</b>
<b>1254101</b>	Package of 5 Blue Traps	<b>\$5.50</b>



## 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.

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



## Yellow Stiky™ 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 Stiky Tape - 2" wide x 530' long	<b>\$50.00</b>
<b>1259611</b>	Yellow Stiky Tape - 6" wide x 530' long	<b>\$100.00</b>
<b>1259612</b>	Yellow Stiky Tape - 10" wide x 530' long	<b>\$150.00</b>
<b>1259613</b>	Yellow Stiky 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 fence posts 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>

## Olson Garden Guard Yellow Stiky™ Ribbon

**This Ribbon Is Just Right For Encompassing Small Gardens.**

**TARGET:** Whiteflies, aphids, beetles, leafhoppers, thrips and most flying insects.

**DESCRIPTION:** Made for trapping and monitoring, Olson Garden Guard provides another weapon in the sticky trap war on insect pests. Pre-coated with Stiky Stuff adhesive, this narrow (2" wide) and long (100 ft.) roll is ideal as a perimeter barrier; use two levels of ribbon to form a formidable fence of stickiness. Comes packaged in a heavy duty plastic flange for easy dispensing.

**SUGGESTED USE:** Drive some stakes (not included) into the ground and wrap the ribbon around them and loop from one stake to another. To create a "fence" around your garden, place one row of ribbon at 1 ft. off the ground and another 2 ft. higher. Adhesive can be removed with vegetable oil, soap and water, and we recommend using vinyl gloves while handling ribbon for additional ease in cleanup.



<b>1259605</b>	Garden Guard Yellow Stiky Ribbon - 2" x 100 ft.	<b>\$12.50</b>
----------------	---	----------------

# GRUB & BEETLE CONTROL

## 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 15-17 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 16-17), 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 32 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 page 34 for more information.

### BotaniGard® MAXX

*Beauveria bassiana* & Pyrethrins Make A Powerful Team!

**1341030** BotaniGard Maxx - Quart **\$115.00**  
See page 34 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 31 for more information.

### PyGanic® Gardening

Rapid Knockdown & Kill For Outdoor Pests In Your Garden.

**1288710** PyGanic Gardening - 8 oz. **\$25.20**  
See page 34 for more information.

### Molt-X®

An excellent spray with multiple modes of insecticidal action.

**1332771** Molt-X - Quart **\$215.00**  
See online for more information.



## BT NOW®



**An Extremely Effective Biopesticide That Controls Crop-Damaging Caterpillars.**

**TARGET:** Armyworms, bagworms, borers, budworms, caterpillars, earworms, leafrollers, loopers, Spangy Moth larvae, webworms and more.

**DESCRIPTION:** Uses a strain of *Bacillus thuringiensis kurstaki* to provide broad spectrum control for a long list of *Lepidopteran* pests that feed on a wide variety of plants. Carefully monitor your crops to identify target pest infestations and apply as soon as insects are found or when there are first signs of feeding. Water-based formula, stabilized with UV inhibitors with low resistance potential. Will not harm pollinators or beneficials. 4-hour REI. Compatible with many commonly used fertilizers, pesticides and adjuvants. OMRI listed.

**SUGGESTED USE:** Apply when larvae are small, newly hatched and actively feeding. Do not apply through any irrigation system. Can be used diluted or un-diluted. Dilution with minimal amounts of water will improve coverage. The amount of water needed for a diluted application will depend on crop size, weather, spray equipment and local experience. Please see manufacturer's label for pest and crop specific application rates and guidelines.

<b>1201220</b>	BT NOW - Gallon Concentrate	<b>\$79.99</b>
<b>1201222</b>	BT NOW - 2.5 Gallon Concentrate	<b>\$170.00</b>

Cannot be shipped to the following states: DC



## V9 Tree Belt®



**Stops Caterpillars Before They Can Reach A Tree's Foliage.**

**TARGET:** Spangy Moth (formerly Gypsy Moth) caterpillars, climbing cutworms, elm leaf beetles, earwigs, tent caterpillars, winter moths and other climbing insects.

**DESCRIPTION:** This is a barrier control for Spangy Moth (formerly Gypsy Moth) caterpillars and other climbing pests. As they advance up a tree trunk, the insects will come into contact with the belt and receive a non-lethal shock that will repel them and make them fall to the ground. They can then be disposed of by dropping them in a soapy water. Belt size: 1¾" x 6 ft. long. Requires a 9-volt battery—NOT included.

**SUGGESTED USE:** Install at least 2' above the ground before the branching of the tree. Fix one end using the provided screws. Wrap belt around the tree; don't overlap but avoid any gaps in the circle. Keep the end point as close to the belt as possible. Secure end with screws provided. Excessive rain or snow can affect the conductors, so try to keep the area dry. Do not twist or pull the fence force fully as it may damage the conductors and connections.

<b>1272035</b>	V9 Tree Belt	<b>\$19.99</b>
----------------	--------------	----------------



## DiPel® Pro DF & DiPel® DF



**OMRI Listed & WSDA Approved *Bacillus thuringiensis v kurstaki (Btk)* To Control Most *Lepidopteran* insects.**

**TARGET:** Caterpillars, armyworms, bagworms, budworms, loopers, Spangy Moth larvae, earworms and webworms.

**DESCRIPTION:** This dust-free, flowable powder bioinsecticide works quickly; pests will stop feeding within the hour and die in a few hours to 3 days. Use the smaller-sized DiPel PRO DF for ornamentals and small edibles. The larger-sized DiPel DF is meant for agriculture production. People, beneficials, birds, fish and wildlife are not affected by DiPel.

**SUGGESTED USE:** Can be used indoors and outdoors. Best if used while larvae are actively feeding but before plants are damaged. Small scale applications: Mix 1/2-4 tps./gal. of water. Or use 1/4-2 lbs./acre. Repeat applications every 3-14 days. Add a spreader-sticker on hard-to-wet crops and to improve spray efficacy in poor weather conditions.

<b>1207005</b>	DiPel Pro DF - 1 lb.	<b>\$24.75</b>
<b>1207006</b>	DiPel DF - 1 lb.	<b>\$24.75</b>
<b>1207004</b>	DiPel DF - 5 lbs.	<b>\$119.50</b>



## Monterey B.t.



**An Easy-To-Use Solution For Controlling Caterpillars, Loopers & More!**

**TARGET:** Cabbage looper, imported cabbage worm, tomato hornworm and bagworm, spring cankerworm, fall cankerworm, spangy moth, tent caterpillar, elm spanworm and fall webworm on trees and ornamentals.

**DESCRIPTION:** This biological insecticide contains *Bacillus thuringiensis* subspecies *kurstaki* strain SA-12 solids, spores and *Lepidopteran* active toxins that when eaten by worms or caterpillars will halt feeding, resulting in death. When used as directed, it will not affect birds, earthworms or beneficial insects such as honeybees and ladybugs.

**SUGGESTED USE:** Apply when infestations are in first stages, making applications every 5-7 days until control is reached. Apply directly to all sides of foliage that is being affected by target pest. Fully mix with water and continue agitation during applications and reapply if heavy rain occurs after application. For fruits and vegetables, mix about 2-3 fl. oz. per gallon of water for about 1,000 sq. ft. For ornamentals and trees, mix about 2 fl. oz. per 3 gallons of water. Now available in no-dilute Ready-To-Use and Ready-To-Spray versions.

<b>1201213</b>	Monterey B.t. - 32 oz. RTU	<b>\$14.49</b>
<b>1201214</b>	Monterey B.t. - 32 oz. Hose-End RTS	<b>\$24.49</b>
<b>1201210</b>	Monterey B.t. Concentrate - Pint	<b>\$14.99</b>
<b>1201211</b>	Monterey B.t. Concentrate - Quart	<b>\$22.99</b>
<b>1201212</b>	Monterey B.t. Concentrate - Gallon	<b>\$79.99</b>

Cannot be shipped to the following states: SKU 1201213(RTU): AR, ND, WY



For moth egg control see page 13.

## 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.



## Mosquito Barrier®

For Yards, Parks & Grass Areas – Keeps Mosquitoes Away!

**TARGET:** Mosquitoes, gnats and fleas.

**DESCRIPTION:** Liquid garlic repellent dissipates within minutes of application. Kills adults on contact and suffocates larvae in standing water within approximately 24 hours. Saturate all plants including grass, vegetables and trees. Applications last up to 4 weeks.

**SUGGESTED USE:** **Residential** (1/2 acre): 4 oz. Mosquito Barrier & 2 gallons of water. **Medium Areas** (1.25 acres): 1 quart Mosquito Barrier & 20 gal. of water. **Large Areas** (5 acres): 1 gallon Mosquito Barrier & 98 gallons of water.

**1211001** Mosquito Barrier - Quart **\$22.50**  
**1211002** Mosquito Barrier - Gallon **\$79.90**

This product cannot be shipped to the following states: ID, KS, WY



## SNS 203™ Soil Drench/Foliar Spray

First-Rate Control For Soil-Dwelling Pests That Feed On Roots & Stalks.

**TARGET:** Kills and repels fungus gnats, root aphids, thrips, shore flies and whiteflies.

**DESCRIPTION:** Made of rosemary and clove botanical extracts that cause dehydration and death and will also attack fungus and algae. All botanical extracts are food-grade materials, highly water soluble & completely biodegradable. Created as a root drench, but equally effective as a foliar spray and in hydroponics. For use on a wide range of plants, fruits, and vegetables. 0-hr REI.

**SUGGESTED USE:** Soil drench: 1 gal mixed solution to 10 gal potted plants or 230 sq. ft. Mix 4-8 Tbsp or 2-4 oz\*/1 gal water. Foliar Spray: 1 gal of mixed solution will cover approx. 550 sq. ft. Mix 4-12 Tbsp or 2-6 oz\*/1 gal water. Spray to point of runoff and reapply 2-5 times every 2-3 days. \* Pouch: Mix contents with 32 oz of water and drench or spray area thoroughly. Hydroponic instructions available on label. \*Depending on severity of infestation.

**1459135** SNS 203 Soil Drench/Foliar Conc. - Makes 32 oz. **\$7.99**  
**1459130** SNS 203 Soil Drench/Foliar - 16 oz. Conc. **\$24.00**  
**1459131** SNS 203 Soil Drench/Foliar - Gallon Conc. **\$110.00**  
**1459132** SNS 203 Soil Drench/Foliar - 5 Gallons Conc. **\$380.00**

Cannot be shipped to the following states: AL, AK, AR, CT, DC, DE, GA, IN, IA, KS, LA, MS, NH, NM, ND, SD, UT, WV, WY



## SKEETER Mosquito Control



Powerful Mosquito Control That Combines Botanicals With Beneficial Nematodes.

**TARGET:** Over twenty species of mosquito and midge eggs, larvae, pupae and adults who come in contact with the product. SKEETER is for water application to control mosquitoes and midge where they breed.

**DESCRIPTION:** This organic product uses multiple patented technologies to create powerful Absolute Botanicals (garlic & soybean) plus beneficial nematodes (*Heterorhabditis megidis*) for quick and complete control of targeted insects. The Absolute Botanicals kill and control eggs, larvae, pupae and adults who come in contact with the product, while the nematodes are under the surface seeking and destroying larvae and pupae. The nematodes will enter the larvae and pupae hosts through natural openings on their bodies, release a bacteria that kills them and the nematodes will reproduce, which keeps SKEETER effective for up to 30 days. SKEETER is potent, organic and safe around people, pets, fish and other wildlife. Over 85% kill in 24 hours, 98%+ kill in 48 hours. 0-hr REI.

**SUGGESTED USE:** For water application including the edges around the water. Mix SKEETER with water in a hand pump or backpack sprayer or other application device to spray the mixture across the water's surface. Spray as much of the surface as possible, SKEETER will continue to spread across creating a surface tension to kill and control mosquitoes and midge. Up to 6oz per gal water for coverage up to 4,000sqft. Higher rates can be used for quicker control and water with high levels of organic matter. May also be used at the dilution rate of 1:500 of product to water as a mixed solution.

**1211402** SKEETER - 32 oz. **\$50.00**

Cannot be shipped to the following states: CT, IN, ME, MT, OR, RI, WI



## MOSQUITO TRAPS



## Enoz® Trap-N-Kill® A-G-O Mosquito Trap

Designed To Work All Season Long – Year After Year.

**1280770** Mosquito Trap - 2 Pack **\$59.99**  
**1280772** Refill Sticky Boards - 2 Pack **\$11.99**

## Skeet-O-Trap™

A Reusable Mosquito Trap That Uses No Electricity, Smoke, Chemicals, Or Sprays.

**1280760** Skeet-O-Trap **\$11.29**

For Personal Mosquito Repellents See Page 45.



# FLY ELIMINATORS



## 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.

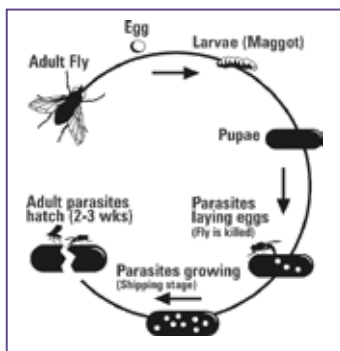


Adult Fly Eliminator emerging from fly pupa.

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



## VALUE PRICING

### HOW TO ORDER:

Call **1-800-827-2847** or visit **www.arbico-organics.com**

**Only \$21.95**  
Per Shipment for 2-5 Horses  
USPS Shipping Included\* in Prices!

Number of Horses/Animals	Suggested Units†	Price Per Shipment
1	1/4 Unit	<b>\$18.95</b>
2 - 5	1/2 Unit	<b>\$21.95</b>
6 - 10	1 Unit	<b>\$32.95</b>
11 - 15	1 1/2 Units	<b>\$43.95</b>
16 - 20	2 Units	<b>\$57.95</b>
21 - 25	2 1/2 Units	<b>\$71.95</b>
26 - 30	3 Units	<b>\$83.95</b>
31 - 35	3 1/2 Units	<b>\$95.95</b>
36 - 40	4 Units	<b>\$106.95</b>
41 - 45	4 1/2 Units	<b>\$118.95</b>
46 - 50	5 Units	<b>\$121.95</b>
51 +	<b>Please Call 1-800-827-2847</b>	

**Order Your Fly Control Program Today!**

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.

## MAGGOT CONTROL

### Sc Beneficial Nematodes



**Add Beneficial Nematodes For Ultimate Fly Control!**

**TARGET:** Fly maggots and other subterranean pests.

**DESCRIPTION:** These live microscopic organisms (non-segmented round worms) occur naturally in soil throughout the world and are parasitic to fly maggots and other subterranean pests. Upon application, they will seek out and enter maggots through body openings. Once inside, the nematode releases bacteria which kill the host maggot within 24 - 48 hours. The bacteria create a food source for the nematodes to reproduce. As the food resources within the dead pest become scarce, the nematodes exit and immediately begin searching for a new host.

**SUGGESTED USE:** Apply nematodes to "hot spot" areas where flies are breeding such as compost and manure piles, around manure and urinating sites, and watering and feeding areas using a watering can, hose end, backpack or pump sprayer or through irrigation or misting systems. Use along with Fly Eliminators for ultimate fly control!

<b>1220319</b>	NemAttack Sc Beneficial Nematodes - ~5 million	<b>\$36.00</b>
<b>1220320</b>	NemAttack Sc Beneficial Nematodes - ~10 million	<b>\$42.95</b>
<b>1220321</b>	NemAttack Sc Beneficial Nematodes - ~50 million	<b>\$72.00</b>

\*See page 17 for free shipping details.



### balEnce™ Fly Spray

**An Easy-To-Use Beneficial Insecticidal Spray To Fight Flies!**

**TARGET:** Larval and adult flies.

**DESCRIPTION:** This EPA approved biological insecticide is suitable for organic programs. Consists of a liquid suspension of beneficial entomopathogenic fungi known as *Beauveria bassiana*. The fungus acts as a parasite on flies, causing white muscardine disease. When the microscopic spores of the fungus come in contact with the body of an adult or larval stage of a fly, they germinate, penetrate the cuticle and grow inside, killing the fly within a matter of days. Soon after, a white mold emerges from the cadaver and produces new spores that continue to infect more flies. After application, adult flies and fly larvae die in 24 to 72 hours. Product will continue to remain viable on residual surface areas for up to about 21 days.

**SUGGESTED USE:** Apply to animal rearing sites, housing and holding areas and manure piles. The 15 oz. container treats up to about 50,000 sq. ft. Apply using a backpack sprayer or fogging equipment. Use no more than 60 oz. per building/area per week. For best results, turn fans off or to lowest level in order to ensure maximum surface area coverage. Can be used in colder months to help curtail impending spring fly blooms. Check for evidence of reduced populations of fly pupae in manure and other breeding areas following application 21 to 35 days or up to 90 days in cooler temperatures.

<b>1272100</b>	balEnce Fly Spray - 15 oz. Bottle	<b>\$145.00</b>
----------------	-----------------------------------	-----------------



## ADULT FLY TRAPS & REPELLENTS

### BugPellent® Cylinder



**All The Fly Control For Little Expense & None Of The Chemicals.**

**TARGET:** Black flies, deer flies, gnats, horse flies, house flies, mosquitoes, stable flies and ticks.

**DESCRIPTION:** This ingenious insect repellent uses the vapors of 9 essential oils to create a repellent barrier that will keep a broad range of insects away from your animals. Simply hang where it's most needed and the pleasant-smelling oil vapors will accumulate under the ceiling and float down to protect the animals. Lasts 4-8 weeks, depending on temperature and airflow; refills available.

**SUGGESTED USE:** Do not combine with insect attractant products. Use in barns, stalls, garages or any enclosed or semi-enclosed structure where the vapors can accumulate. Don't use with fans, the strong airflow they create will prevent the necessary vapor build-up. Use a minimum of 2 cylinders per structure or use 1 cylinder for approximately every 4,000 cu. ft. of indoor space, or 1 cylinder for every 1½ stalls. Hang between 7-12' high at least 6' from a door and 3' from a window. Allow for adequate airflow around the cylinder. Can be placed in entryways at least 6' inside building.

<b>1256040</b>	BugPellent Cylinder	<b>\$18.95</b>
<b>1256041</b>	Refills - 2 Pack	<b>\$20.00</b>



### Captivator® & Fly Terminator® Pro Fly Traps

**These Budget Friendly Fly Traps Can Give You Months of Fly Control.**

**TARGET:** Filth-breeding flies.

**DESCRIPTION:** These lightweight, yet heavy-duty, reusable traps can stand up to the elements and trap tens of thousands of flies in a season. Take care to choose a location that is away from where you and your animals want to be as this trap is very smelly and will quickly attract the flies. The Captivator is a 2-qt size, while the Fly Terminator Pro is a gallon size. The Captivator comes with one 30 gm. water-soluble attractant pouch and the Fly Terminator Pro comes with two. Attractant refills available.

**SUGGESTED USE:** It only takes 3 easy steps to get things going with these traps: dump attractant in, add water and place outside. Rinse and rebait when it dries out, becomes full of flies, or after 30 days.

<b>1256051</b>	Captivator Fly Trap	<b>\$13.99</b>
<b>1256052</b>	Terminator Pro Fly Trap	<b>\$29.99</b>
<b>1256053</b>	Starbar Fly Trap Attractant Refill - 8 ct.	<b>\$13.49</b>





## Epps Biting Fly Trap®

**Kill Pounds Of Flies Every Day Without Smelly Baits or Chemicals.**

**TARGET:** Biting flies, including horse flies, deer flies, bull flies, green heads, yellow heads, black flies and stable flies.

**DESCRIPTION:** Flies are instinctively drawn to any large objects that contrasts with the environment around them (a dark object on a lighter background). They will then circle the target before landing on it. This trap has a large, solid surface surrounded by transparent areas (clear plastic deflectors) that create an object of interest to the fly. As flies approach the trap and try to fly around it, they will hit the deflectors and bounce down into the water in the trays below. For best results, add dish soap to the water. This trap *does not* work on houses, barns or face flies. One trap will cover 20 acres and can reduce flies by up to 80%.

**SUGGESTED USE:** Can be used year after year. When assembled, the trap measures 5' tall, 7' long and 18" wide. Four 7-ft T-posts are required but not included. Secure firmly to the ground and do not place it in an area where animals can get to it. Detailed and illustrated assembly instructions included.

**1256011** Epps Biting Fly Trap **\$425.00**



## Biting Fly Trap

**No Poisons! No Baits! No Electricity!**

**TARGET:** Biting flies, stable flies, black flies and bottle flies.

**DESCRIPTION:** As discovered by Dr. D. E. Williams of the USDA, biting flies are attracted to sunlight as it shines through a particular type of fiberglass. A cylinder has been created of this fiberglass and coated with a clear sticky substance. They will be drawn in by the glass but unable to escape the stickiness. One trap can catch up to 5,000 flies! Each package contains the following: 1 fiberglass cylinder, 1 wooden stake, 2 brass fasteners, 2 giant paper clips, 1 sticky sleeve, 1 replacement sleeve (additional sleeves can be purchased as needed) and complete instructions.

**SUGGESTED USE:** Any place biting flies are a problem, i.e., stables, kennels, zoos, compost piles, backyards, swimming pools, golf courses and beaches.

<b>1256020</b>	Biting Fly Trap - Pack of 1	<b>\$18.99</b>
<b>1256021</b>	Biting Fly Trap - Pack of 3	<b>\$48.95</b>
<b>1256022</b>	Biting Fly Trap - Pack of 5	<b>\$75.50</b>
<b>1256023</b>	Replacement Sleeves White - Pack of 1	<b>\$3.95</b>
<b>1256024</b>	Replacement Sleeves White - Pack of 3	<b>\$8.25</b>
<b>1256025</b>	Replacement Sleeves White - Pack of 5	<b>\$12.50</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

**NEW**

**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.



**1254259** Super-Sized Fly Sticky Traps - 20 Pack **\$12.99**

# ADULT FLY SPRAYS & REPELLENTS

## 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>

## Dr. Earth® Final Stop® Pet Spray



Protect Your Furry Friends With This Safe & Effective Oil-Based Spray.

**TARGET:** Fleas, flies, gnats, mites, mosquitoes, ticks and other biting insects on dogs, cats, horses and chickens.

**DESCRIPTION:** This OMRI-listed organic spray uses botanical oils to create a highly effective, all-natural, long-lasting pet spray. It can be used indoors and out and works as a deterrent as well as a barrier insecticide. Keeps bugs off your pets and leaves their fur smooth and dry. Biodegradable and contains no synthetic ingredients, pyrethrin, alcohol or DEET.

**SUGGESTED USE:** Apply directly to animals or use as a barrier treatment around pet bedding, horse stalls, chicken coops and other areas that pets frequent. Hold bottle 8-10" away and apply a light mist, massage into coat or feathers. On cats, spray only between the shoulders. On horses, apply down legs to the hooves, flanks and topline. Spray onto a soft cloth or hands to apply to an animal's face and ears. Reapply as needed.



<b>1107570</b>	Dr. Earth Final Stop Pet Spray - 24 oz. RTU	<b>\$12.99</b>
----------------	---	----------------

## Ecovet™ Fly Repellent

A Vet-Created Fly Repellent That Will Improve Insect-Related Skin Sensitivity.

**TARGET:** All manner of flies (including stable and horn flies), ticks and lice.

**DESCRIPTION:** Ecovet uses a proprietary blend of naturally occurring fatty acids that disrupt and confuse the signals that insects are drawn to. The fatty acids in Ecovet are carried in a silicone oil during application. Once applied, the oil will evaporate in about 20-30 minutes, leaving just the fatty acids behind. They will then evaporate at a certain body temperature point, causing a "zone of repellency" around the animal. With regular use, you will even see improvement in Sweet Itch (hypersensitivity reaction to midge bites) problems with horses.

**SUGGESTED USE:** Only need to apply once every 2-3 days, depending on ambient temperature, fly pressure and rain (when treating for Sweet Itch, however, you should initially spray the animal twice a day until it is under control). Will not affect Fly Eliminators®, honeybees and other beneficials. Apply to hair coat using any commercially available small sprayer, suitable oil applicator or a soft cloth.



<b>1107550</b>	Ecovet Fly Repellent - 4 oz. Bottle	<b>\$7.95</b>
<b>1107551</b>	Ecovet Fly Repellent - 18 oz. Bottle	<b>\$29.95</b>
<b>1107552</b>	Ecovet Fly Repellent - Gallon Refill	<b>\$149.95</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>

## 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.

- |                |                                      |                |
|----------------|--------------------------------------|----------------|
| <b>1274107</b> | Organic JMS Stylet-Oil - Gallon      | <b>\$38.50</b> |
| <b>1274108</b> | Organic JMS Stylet-Oil - 2.5 Gallons | <b>\$60.00</b> |

\*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.

- |                |   |                 |
|----------------|---|-----------------|
| <b>1459200</b> | The Amazing Dr. Zymes Eliminator - Quart RTU    | <b>\$14.65</b>  |
| <b>1459201</b> | The Amazing Dr. Zymes Eliminator - Quart Conc.  | <b>\$34.75</b>  |
| <b>1459202</b> | The Amazing Dr. Zymes Eliminator - Gallon Conc. | <b>\$125.95</b> |

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 re-arrangement 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.

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

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 phytotoxicity, 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.

- |                |                                     |                 |
|----------------|-------------------------------------|-----------------|
| <b>1332805</b> | SuffOil-X - 2.5 Gallons             | <b>\$87.00</b>  |
| <b>1332806</b> | SuffOil-X - Case of 2 ct./2.5 Gals. | <b>\$156.00</b> |

Larger sizes available.

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

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





## 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

## 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, spiders 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.

<b>1273058</b>	Essentria IC Pro – Quart	<b>\$40.99</b>
<b>1273059</b>	Essentria IC Pro – Gallon	<b>\$129.99</b>

## Grower's Ally® Crop Defender 3



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

**TARGET:** Aphids, russet mites, spider mites, thrips and other soft-bodied insects. Also kills powdery mildew.

**DESCRIPTION:** This organic product is a synergistic blend of botanical oils and a surfactant that works as an insecticide, fungicide and miticide. It is suitable for use wherever you are growing—indoors, outdoors, greenhouses or hydroponics. When used as directed, safe for use in veg and flower. Leaves no pollutants on plants or in the soil and there's no reported phytotoxicity. Use weekly—there's no limit to the number of applications per growing cycle. 0-day PHI & 0-hr. REI.



**SUGGESTED USE:** Thoroughly spray the leaves and stems of the plant until there is runoff. Outdoor applications: Spray early morning or evening to avoid the hottest part of the day. Don't spray at temps over 90°F. Indoor applications: Keep lights and fans off for 2–3 hours after spraying. Preventative: Mix at 0.25% or 10 mL/gal water. Repeat weekly. Curative: Mix qt 1.0% or 40 mL/gal water. Repeat every 3-5 days or as needed. RTU: Wait at least 3 days before reapplying.

<b>1459315</b>	Grower's Ally Crop Defender 3 – 24 oz. RTU	<b>\$12.99</b>
<b>1459201</b>	Grower's Ally Crop Defender 3 – 8 oz. Conc	<b>\$49.99</b>
<b>1459202</b>	Grower's Ally Crop Defender 3 – 32 oz. Conc	<b>\$139.99</b>

## MiteXstream



A Quick & Easy Plant-Based Solution For Mites, Molds & Mildews.

**TARGET:** Spider mites, two-spotted mites, pacific mites, Willamette mites, citrus rust mites, broad mites, European red mites and downy mildew, powdery mildew and gray mold

**DESCRIPTION:** This exceptional biochemical product uses food-grade ingredients derived from botanical oils. It kills the adults and eggs of common mite species and eliminates mold and mildews on plants. Lab and field tested and poses no threat to honeybees. Use alone or in rotation with other miticides. Approved for use on cannabis in Colorado. Ideal for IPM programs. Can be used on coffee, cucurbits, hemp, hops, ornamentals and nursery stock, pome fruit, soybeans, stone fruit and strawberries.



**SUGGESTED USE:** For best results, use on low to moderate infestations or when conditions favor mite outbreaks and mold/mildew development. Do not apply with surfactants or through any irrigation system. Effective above freezing (32°F, 0°C) and on low to moderate infestations. Dilute 1 fl oz/gal water. Spray volume rate is 0.5-2 gal conc/acre at proper dilution rate. Stir/agitate thoroughly.

<b>1458180</b>	MiteXstream – 8 oz	<b>\$19.00</b>
<b>1458181</b>	MiteXstream – Gallon	<b>\$120.00</b>
<b>1458182</b>	MiteXstream – 5 Gallon jug	<b>\$384.75</b>

Cannot be shipped to the following states: CA, FL

## NEEM OIL

### BONIDE® Captain Jack's™ Neem Max

**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

**NEW**



### Rango™

**Three Types Of Control Delivered Through Superior Suspension.**

**TARGET:** Soft-bodied insects, beetles, borers, caterpillars/moths, leafhoppers, maggots/grubs, leafminers, psyllids, True Plant Bugs, weevils, wireworms & more. Diseases: *Alternaria*, anthracnose, blights, *Botrytis*, mildews, *Fusarium*, molds, *Pythium*, *Rhizoctonia*, rust, scab, sour rot and more. Nematodes: Dagger, Lance, Lesion, Reniform, Root Knot, Soybean Cyst and Sting.

**DESCRIPTION:** OMRI listed Rango is an emulsifiable concentrate made of 70% cold pressed Neem Oil and works as an insecticide, fungicide and miticide. It works as a suffocant on contact, is toxic if ingested, it repels, is an anti-feedant and interferes with the molting process. For disease control, it works by inhibiting mycelial growth. It can be applied in a foliar spray or soil application on a wide range of crops. Do not apply to sensitive plant species like certain ornamentals and flowers.

**SUGGESTED USE:** No additional surfactant is needed. Insecticide/miticide foliar application: Use a concentration of 0.625 - 1.25% v/v for normal pest and crop conditions. Use a concentration 1.8% v/v for heavier infestations. Use no more than 3 qts/acre. Fungicide foliar application: Use a concentration of 1.25 - 1.8% v/v every 10-14 days. Up no more than 6 qts/acre. Soil application: Use a concentration of 1.25 - 2.4% v/v. Use no more than 7.25 qts/acre.

**1450570** Rango - Concentrate - 32 oz. **\$34.95**  
**1450572** Rango - Concentrate - Gallon **\$89.95**  
**1450573** Rango - Concentrate - 2.5 Gallons **\$219.99**  
 Case sizes available.



### ECOWORKS EC®

**An Organic 4-in-1 Pesticide, Nematicide, Fungicide and Miticide.**

**TARGET:** Aphids, flies, mealybugs, psyllids, scales, spider mites, thrips, whiteflies, powdery & downey mildews, rust, *botrytis* and more.

**DESCRIPTION:** Derived from 100% cold-pressed neem oil, ECOWORKS EC contains Azadiractins, neem limonoids, fatty acids, esters and synergistic inert for top-notch bioactivity. Effective against a wide range of biting and sucking insects, soil-borne pests, and several devastating fungal diseases, this is also an exceptional fly repellent. Can be applied as a foliar spray, soil drench, in soil-less media or in recirculating systems. This residue-free formulation is EPA registered, UV stabilized to reduce risk of crop burn and has a 0-day PHI. Can be used with beneficial insects.

**SUGGESTED USE:** Foliar Application - 2 tsp. (10 mL)/gal. water for disease and pest control. 2-3 treatments required for optimal results. For severe infestations, spray every 5-7 days. For preventative purposes, spray every 7-10 days. Soil Drench or Recirculating System Applications - Apply 1 pint (16 oz.)/gal. water once every 7-14 days at a mixing rate of 2-8 mL/gal.

**1450551** EcoWorks EC - 4 oz. **\$8.80**  
**1450553** EcoWorks EC - 16 oz. **\$23.60**  
**1450554** EcoWorks EC - 32 oz **\$40.05**

Cannot be shipped to the following states: AK, ME, MD, MA, VA



### 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



## 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 **\$300.00**

#### BotaniGard 22WP

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

Case sizes available.

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



## BIORATIONAL

### Grandevo® CG & Grandevo® WDG

**Get Widespread Control With This Multi-Action Microbial-Based Insecticide/Miticide.**

**TARGET:** Aphids, whiteflies, thrips, mealybugs, mites, armyworm, Asian Citrus Psyllids, leafhoppers, *Lygus*, cutworms, beetles, *Drosophila*, loopers, moths, sharpshooters, earworms, caterpillars and more.

**DESCRIPTION:** Grandevo uses the bacterium *Chromobacterium subsugae* strain PRAA4-1<sup>†</sup> to provide long-lasting, reliable broad spectrum control of a long list of labeled pests. Its mode of action is multi-faceted; it is toxic when ingested, it repels and it reduces insect reproduction. This OMRI listed and NOP compliant organic pesticide/miticide can be a valuable part of any IPM program. Can be used on a wide range of edible crops in field and greenhouse applications.

**SUGGESTED USE:** In greenhouses: Use 1-3 lbs./100 gals. of water sprayed until just before point of runoff. Ground & aerial application: Use sufficient water to provide thorough coverage plant parts. For tank mix programs: Apply 1-2 lbs./acre For rotational programs: Apply 2-3 lbs./acre when alternating.

1332953	Grandevo CG - 1 lb.	\$40.00
1332954	Grandevo CG - 4 lbs.	\$140.00
1332952	Grandevo WDG - 6 lbs.	\$162.00



### Monterey Garden Insect Spray

**Insect Pests & Powdery Mildew 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.

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

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



### 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.

1332875	NoFly WP - 8 oz.	\$67.78
1332876	NoFly WP - 2 lbs.	\$225.99

Cannot be shipped to the following states: AK, DC



### 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.

1332957	Venerate CG - Quart	\$58.00
1332956	Venerate CG - Gallon	\$160.00
1332960	Venerate XC - 2.5 Gallons	\$260.00



## AZADIRACTIN

### AzaSol™



**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.



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

### AzaGuard®



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

**TARGET:** For controlling and repelling over 300 listed insect species, including aphids, beetles, armyworms, fungus gnats, leafhoppers, caterpillars, mealybugs, webworms, plant parasitic nematodes and root knot nematodes.

**DESCRIPTION:** Azadiractin, extracted from the neem tree, is the active ingredient here. Insects are repelled by the taste and smell of neem, but azadiractin also works as a molting/growth disruptor. This Insect Growth Regulator (IGR) disrupts the life cycle between larval, pupal and nymphal stages by impeding the metabolism of ecdysone. Ecdysone is necessary for molting, without which the insect cannot mature into its next growth stage and will, ultimately, die. NOP Compliant.

**SUGGESTED USE:** Apply using a power or pump sprayer or a hand-held trigger type sprayer. Spray when pests first appear and repeat at 5-7 day interval as required. A sticker agent may be added to product for more complete coverage on waxy or pubescent plant surfaces. Do not exceed the rate of 22.5 fl. oz. (20 g.) per acre per application.



<b>1222204</b>	AzaGuard - 32 oz.	<b>\$275.00</b>
<b>1222206</b>	AzaGuard - Gallon	<b>\$1000.00</b>
<b>1222208</b>	AzaGuard - 2.5 Gallon	<b>\$2,495.00</b>

## PYRETHRINS

### 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>

### BotaniGard® MAXX

**Beauveria bassiana & Pyrethrins Make A Powerful Team!**

**TARGET:** Whiteflies, aphids, thrips, psyllids, spider mites, mealybugs, leafhoppers, weevils, borers and other leaf-feeding insects.

**DESCRIPTION:** This potent biorational formulation provides a quick knock-down of insect and mite pests. The two active ingredients, *Beauveria bassiana* and Pyrethrins, work independently, yet in harmony, to provide multiple mechanisms to kill harmful insects. The pyrethrins will attack the nerve cells of the insect and the *Beauveria bassiana* strain GHA fungal spores penetrate an insect's protective cuticle and destroy it from within.

**SUGGESTED USE:** Can be applied at a rate of up to 2 quarts per 100 gallons of water, however most target insects can be controlled at a rate of 1 quart per 100 gallons of water, 1/2 quart per 50 gallons of water or 1 pint per 25 gallons of water. For best results, use as soon as insect pests are spotted, before their population becomes too large. Results can generally be seen within 2-5 days after the first spraying. Do not reapply within 3 days, unless the infestation is extreme. If this is the case, wait 24 hours for reapplication.



<b>1341030</b>	BotaniGard Maxx - Quart	<b>\$115.00</b>
<b>1341040</b>	BotaniGard Maxx - Gallon	<b>\$365.00</b>
<b>1341050</b>	BotaniGard Maxx - 2.5 Gallons	<b>\$710.00</b>

Case sizes available.

## 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 bsp. 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>
----------------	-------------------------------------	----------------

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/soil-less 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 tbsps. Trunk caliper 1-2", use 4 tbsps.

<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 vermiculture, 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.

## Great White® Premium Mycorrhizae

Promote Strong Root Systems, While Reducing Water & Fertilizer Needs!

**DESCRIPTION:** Great White Premium Mycorrhizae is a concentrated formula that boosts nutrient and water absorption generating root development, plant growth and yield. Water soluble, this product is easy to apply and will quickly begin interacting with plants. It features:



- 15 different species of various endo and ectomycorrhizal
- 14 different species of beneficial *bacillus* bacteria
- 2 species of trichoderma (commonly found to help fight against fungal diseases, i.e., *Sclerotinia sclerotiorum*, *Botrytis*, *Fusarium*, and *Penicillium*)
- Plant vitamins

**SUGGESTED USE:** For hydroponic, drenching or injection applications, mix at a ratio of about 1 tsp. /2 gal. of water or ≈ 1 part/2 parts water.

<b>2000064</b>	Great White Mycorrhizae - 1 oz.	<b>\$14.95</b>
<b>2000065</b>	Great White Mycorrhizae - 4 oz.	<b>\$34.95</b>
<b>2000066</b>	Great White Mycorrhizae - 8 oz.	<b>\$63.95</b>
<b>2000067</b>	Great White Mycorrhizae - 32 oz.	<b>\$219.95</b>
<b>2000072</b>	Great White Mycorrhizae - 5 lbs.	<b>\$395.95</b>

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

## Armory® SP



A Blend Of Beneficial Bacteria That Provides Multiple Plant Promoting Benefits.

**DESCRIPTION:** Each of the four *Bacillus* and *Streptomyces* species in this 100% water soluble organic powder bring their own assets to the table, and in combination with the others they work synergistically to achieve maximum performance in promoting plant health. Also provides a steady food source for the microbes so they can continue to flourish in your soil (or soilless media) throughout the life of your plants. Solubilizes phosphorus and makes iron and manganese more available. Breaks down cellulose and lignin and enhances nutrient cycling. Leaves no residue and is not phytotoxic. Compatible with fungicides, insecticides, fertilizers and biological stimulants **but avoid mixing with** copper sulfate pentahydrate, sulfur and hydrogen peroxide type products.



**SUGGESTED USE:** Residential Use or Reservoir Application: 0.25-1 tsp/gal water. Greenhouse/Nursery: 1-8 oz/100 gals water. Soil Incorporation: 1-2 oz/cu yd soil/media. Outdoor Soil or Foliar: 1-6 oz/acre. In-furrow: 0.5-6 oz/acre. Hydroponics: 1-6 oz/100 gals tank water. Bed, Field or Row Prep: 1-4 oz/acre. Post Fumigation Soil Application: 4-16 oz/acre through irrigation directly to the area fumigated.

<b>1202165</b>	Armory SP - 2 oz.	<b>\$34.99</b>
<b>1202166</b>	Armory SP - 1 lb.	<b>\$165.45</b>

## 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

## 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.

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



## Dr. Earth Fruit Tree & Citrus Fertilizers™

**Excellent Fertilizers For Lush Growth & Abundant Fruit.**

**TARGET:** Citrus, apples, avocados, berries, fruit trees, grapes, nut trees, peaches & all vines.

**DESCRIPTION:** These tree fertilizers are formulated from premium organic nutrients and TruBiotic®, a broad spectrum biological inoculant containing beneficial microbes and mycorrhizae fungi. The beneficial microbes and mycorrhizae work in the soil to allow complete breakdown of organic matter, seamless nutrient uptake, and vibrant root growth. This microbial soil activity works synergistically with the primary and micronutrients to produce plants that perform at their very best. Sustainably made and contains no synthetic ingredients or chicken manure.

**SUGGESTED USE:** Add to the hole while transplanting or use throughout the year. For best results always mix fertilizer with the soil. Before planting, add 1-2 lb/5 gals soil. For established plants, use ½-1 lb/ea inch of trunk diameter. Use every 2-3 months throughout the growing season. Can also be used for tea.

<b>1329120</b>	Dr. Earth Natural Wonder Fruit Tree Fertilizer – 1 lb. bag	<b>\$6.99</b>
<b>1329121</b>	Dr. Earth Natural Wonder Fruit Tree Fertilizer – 4 lb. bag	<b>\$16.49</b>
<b>1329140</b>	Dr. Earth Sweet & Sour Citrus Fertilizer – 4 lb. bag	<b>\$14.99</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 propriety 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.

<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>



## HastaGro Plant Food, 6-12-6



**Gives Plants Multiple Types Of Goodness In One Product.**

**TARGET:** Potted plants, flowers, vegetables, trees, shrubs, transplanting and bed preparation.

**DESCRIPTION:** Contains a high quality 6-12-6 plant food for first-rate nutrition, a soil activator that stimulates biological activity in the soil, humic acid to improve soil structure and nutrient uptake, and seaweed extracts to boost fruiting and flowering. Will not cause leaf burn. Nitrogen is from clean urea sources and complexed with humic acid. Prevents salt and chemical buildup.

**SUGGESTED USE:** Foliar Feeding: ½ oz/gal water. Spray leaves to point of dripping. Do not rinse. Use every 1-2 weeks. Soil Treatment: 1 oz/gal water. Thoroughly water. Use every 2-3 weeks. Houseplants: ½ oz/gal water. Soak soil and/or spray leaves. Use every watering. Transplanting: 1 oz/gal water. Spray foliage and water roots. Do not use undiluted. Use within several hours of mixing. Do not store mixed solution.

<b>1314740</b>	Hasta Gro Plant Food - 32 oz. Concentrate	<b>\$12.89</b>
<b>1314741</b>	Hasta Gro Plant Food - Gallon Concentrate	<b>\$32.49</b>



## Sea Power

Seaweed fertilizers provide broad plant benefits throughout the growing cycle and serve as biostimulants. Kelp's vitamins, minerals and enzymes are a valuable source of nitrogen, magnesium, potassium, zinc and iron. Seaweed and kelp-based fertilizers can reduce the effects of stressors, boost plant recovery and limit nutrient burn while increasing harvest yields.



## 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>

## 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>

## 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.



## 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.



## 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.







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

## DTE Acid Mix, 4-3-6

One Of The Best Fertilizers That Is Specially Formulated For Acid Loving Plants!

1300200	Down To Earth Acid Mix Mini - 1 lb.	\$5.99
1300201	Down To Earth Acid Mix - 5 lbs.	\$15.99

## 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 Blood Meal, 12-0-0

High In Nitrogen – The Key For Leafy Greens & Healthy Bulbs!

1300300	Down To Earth Blood Meal Mini - .5 lb.	\$5.99
1300301	Down To Earth Blood Meal - 5 lbs.	\$25.99
1300302	Down To Earth Blood Meal - 20 lbs.	\$89.59
1300303	Down To Earth Blood Meal - 50 lbs.	\$159.99

## DTE Bone Meal, 3-15-0

Help Your Plants Have The Best Chance To Establish Healthy Roots & Flowers!

1300219	Down To Earth Bone Meal - 5 lbs.	\$16.99
---------	----------------------------------	---------

## DTE Crab Meal, 4-3-0

A Versatile Fertilizer That Provides Nutrients, Is An Excellent Compost Amendment & Has Nematicidal Properties!

1300225	Down To Earth Crab Meal - 5 lbs.	\$16.99
---------	----------------------------------	---------

## 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 Kelp Meal, 1-0.1-2

Down To Earth's Kelp Meal Revitalizes Your Soil & Rejuvenates Your Plants With The Potassium They Need!

1300280	Down To Earth Kelp Meal Mini - .5 lb.	\$5.99
1300281	Down To Earth Kelp Meal - 5 lbs.	\$26.99

## DTE Vegetable Garden, 4-4-4

Give Your Vegetable Garden A Powerful Nutrient Boost!

1300298	Down To Earth Vegetable Garden - 1 lb.	\$4.99
1300299	Down To Earth Vegetable Garden - 5 lbs.	\$14.99
1300294	Down To Earth Vegetable Garden - 15 lbs.	\$39.99

See online for shipping restrictions and larger sizes.

## 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.

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

Large sizes available.

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

## 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 micronized 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**

## 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.

- 1332981** Mycostop - 5 grams **\$36.00**
- 1332982** Mycostop - 25 grams **\$138.00**

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

## 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.)

- 1332766** MilStop SP Foliar Fungicide - 5 lbs. **\$75.00**
- 1332767** MilStop SP Foliar Fungicide - 25 lbs. **\$280.00**

## 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>

## 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>
----------------	----------------------------	-----------------

## 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



# WEED CONTROL

## 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.

- |                |   |                |
|----------------|---|----------------|
| <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.

- |                |  |                |
|----------------|--|----------------|
| <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> |



## 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



## BROAD SPECTRUM

### 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



## 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.

<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



## BONIDE® Captain Jack's™ Deadweed Brew



**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>
----------------	--	----------------



## Earth's Ally® Weed & Grass Killer



**Simple Ingredients Create Superb Results.**

**TARGET:** Kills all common weeds, including broadleaf, crabgrass, dandelion, clover, ivy, chickweed and more.

**DESCRIPTION:** This non-selective herbicide uses sea salt (sodium chloride) to quickly and thoroughly eliminate unwanted weeds. You'll get the results you want, without the harsh chemicals and harmful side-effects found in glyphosate herbicides. Kills all the way down to the roots with visible results in 3 hrs. Contains no pre-emergent qualities and will not inhibit future plant growth, so you can replant or sod once the area is dry.

**SUGGESTED USE:** Use on a bright, sunny day and be careful to avoid overspray on desirable plants. Do not dilute. Thoroughly wet the weed you want to eliminate. Do not use during rainfall or when the weeds are wet. Multiple applications may be needed for certain tough and dense weeds. Avoid use when pollinators are active, otherwise this product is bee safe.

<b>1459340</b>	Earth's Ally Weed & Grass Killer RTU - 24 oz.	<b>\$12.99</b>
<b>1459341</b>	Earth's Ally Weed & Grass Killer RTU - Gallon	<b>\$29.99</b>



## Orange Guard® Home Pest Control



**Works Against A Broad Range Of Insects On Contact, Keeps Repelling For Weeks.**

**TARGET:** Crawling pest insects.

**DESCRIPTION:** Orange Guard has proven effective to provide effective control against a broad range of insects including cockroaches, ants, fleas, locusts, weevils, and many other hard to control insects. Orange Guard contains d-Limonene, which is steam distilled orange peel oil. Orange Guard may be used around food, humans and pets and is EPA registered. Smells great too!

**SUGGESTED USE:** For indoor use, spray from 12 inches directly on pest insects. Saturate until visibly wet. Wait 3 minutes, then wipe excess with damp cloth. Apply to pet bedding to repel fleas. Keeps repelling for weeks. For outdoor use, generously spray perimeter of home and anywhere pests can enter to make a barrier of protection.

- |                |   |                |
|----------------|---|----------------|
| <b>1460001</b> | Orange Guard Pest Control - 32 oz. RTU Spray Bottle | <b>\$11.49</b> |
| <b>1460002</b> | Orange Guard Pest Control - 1 Gallon with Sprayer   | <b>\$36.49</b> |
| <b>1460003</b> | Replacement Sprayer for 1 Gallon Orange Guard       | <b>\$5.30</b>  |



## 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.

- |                |  |                |
|----------------|--|----------------|
| <b>1273050</b> | Essentria G Granular Insecticide - 22 lbs. | <b>\$67.50</b> |
|----------------|--|----------------|



## 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.

- |                |   |                |
|----------------|---|----------------|
| <b>1457403</b> | EcoPCO® AR-X Multi-Purpose Insecticide - 15 oz. | <b>\$19.49</b> |
|----------------|---|----------------|
- 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.

- |                |   |                |
|----------------|---|----------------|
| <b>1459360</b> | Final Stop Pest Control Killer Spray - 24 oz. RTU | <b>\$14.49</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** Fertilome 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

## PERSONAL REPELLENTS

### BiteBlocker® Insect Repellents



**DEET Free Protection From Biting Pests.**

- 1211820** BiteBlocker Family Safe Pen - Single - .5 oz. **\$3.60**
- 1211821** BiteBlocker Family Safe Pen - 2 pack - .5 oz. each **\$6.00**
- 1211815** BiteBlocker Herbal Insect Repellent Spray - 4.7 oz. **\$7.99**
- 1211819** BiteBlocker Xtreme Insect Repellent - 6 oz. **\$8.98**

### Medella Naturals™ Insect & Mosquito Repellent Spray



**You Will Love The Smell, But Biting Insects Will Not.**

- 1212050** Insect & Mosquito Repellent Spray - 2 oz. **\$5.99**
- 1212051** Insect & Mosquito Repellent Spray - 4 oz. **\$7.99**
- 1212052** Insect & Mosquito Repellent Spray - 8 oz. **\$10.99**

### Aunt Fannie's Mosquito Spray



**Tough On Mosquitoes But Gentle Enough To Use On Your Kids.**

- 1280681** Aunt Fannie's Mosquito Spray - 150 ml **\$10.99**

### Aunt Fannie's Mosquito Wipes



**A Deet-Free Mosquito Repellent Wipe That Is Perfect For On-The-Go!**

- 1280670** Mosquito Wipes - 10 Towlettes **\$9.49**
- 1860675** Mosquito Wipes - Case of 12/10-Packs **\$102.48**

### Bug Bam Mosquito Band®, Grids & Pet Tags



**Keep Mosquitoes, Fleas & Ticks Off Your Family & Pets The Natural Way!**

- 1211700** Bug Bam! Mosquito Band - 2 Pack **\$5.00**
- 1211703** Bug Bam! Mosquito Band - 2 Pack - Bundle of 10 **\$36.00**
- 1211702** Bug Bam! Mosquito Band - 2 Pack - Case of 24 **\$84.00**
- 1211809** Bug Bam! Mosquito Grid - 1 Pack **\$6.00**
- 1211812** Bug Bam! Mosquito Grid - Bundle of 5 **\$25.00**
- 1211813** Bug Bam! Mosquito Grid - Bundle of 10 **\$45.00**
- 1211811** Bug Bam! Mosquito Pet Tags - 2 Pack **\$7.00**
- 1211816** Bug Bam! Mosquito Pet Tags - 2 Pack - Bundle of 5 **\$30.00**
- 1211817** Bug Bam! Mosquito Pet Tags - 2 pack - Bundle of 10 **\$55.00**

# CATALOG INDEX

Aphid Parasite - <i>Aphelinus abdominalis</i> .....	6	DTE All Purpose Mix, 4-6-2.....	39	Molt-X.....	20
Aphid Parasite - <i>Aphidius colemani</i> .....	6	DTE Bat Guano, 7-3-1.....	39	Monterey B.t.....	21
Aphid Parasite - <i>Aphidius ervi</i> .....	6	DTE Bio-Live, 5-4-2.....	39	Monterey Complete Disease Control.....	41
Aphid Predator - <i>Aphidoletes aphidimyza</i> .....	6	DTE Blood Meal, 12-0-0.....	39	Monterey Garden Insect Spray.....	33
AQUABAC 200G Granular Bti Mosquito Control.....	22	DTE Bone Meal, 3-15-0.....	39	Monterey Neem Oil.....	31
AQUABAC Xt.....	22	DTE Crab Meal, 4-3-0.....	39	Mosquito Barrier.....	23
ARBICO Organics Beneficial Nematodes.....	14-17	DTE Fish Bone Meal, 4-12-0.....	39	Mosquito Bits.....	22
ARBICO Organics Blue Insect Traps.....	19	DTE Kelp Meal, 1-0-1-2.....	39	Mosquito Dunks.....	22
ARBICO Organics Compost Plus.....	35	DTE Vegetable Garden, 4-4-4.....	39	Moth Egg Parasites - <i>Trichogramma spp.</i> .....	13
ARBICO Organics Earthworm Castings.....	35	Earth's Ally Weed & Grass Killer.....	43	Mycostop.....	40
ARBICO Organics Red Composting Worm Mix.....	35	EcoPCO AR-X Multi-Purpose Insecticide.....	44	Mycotrol WPO.....	32
ARBICO Organics Fly Eliminators.....	24-25	EcoMulch Rolls.....	42	Neptune's Harvest Fish & Seaweed Fertilizer, 2-3-1.....	38
ARBICO Organics Root Build 240 Mycorrhizal Fungi.....	36	EcoVet Fly Repellent.....	28	Neptune's Harvest Fish Fertilizer, 2-4-1.....	38
ARBICO Organics Solar Fly Trap.....	27	EcoWorks EC.....	31	Neptune's Harvest Seaweed Plant Food, 0-0-1.....	38
ARBICO Organics Yellow Insect Traps.....	18	EM•1 Microbial Inoculant.....	36	NoFly WP.....	33
Armory SP.....	36	Enoz BioCare Gnat Stix.....	18	Olson Garden Guard.....	19
Assassin Bug - <i>Zelus renardii</i> .....	4	Enoz Trap-N-Kill A-G-O Mosquito Trap.....	23	Orange Guard Fire Ant Control.....	45
Aunt Fannie's Mosquito Spray.....	45	Epps Biting Fly Trap.....	27	Orange Guard Home Pest Control.....	44
Aunt Fannie's Mosquito Wipes.....	45	Equiderma Horse Spray.....	28	Organic JMS Stylet-Oil.....	29
Avenger AG Optima Burndown Herbicide.....	43	Essentria G Granular Insecticide.....	44	Organocide Bee Safer 3-in-1 Garden Spray.....	30
Avenger Weed Killer.....	42	Essentria IC Pro.....	30	Pest Wizard Blue-Yellow Card Trap.....	18
AzaGuard.....	20, 34	Fertilome Come And Get It II Fire Ant Killer.....	45	PureCrop1.....	29
AzaSol.....	34	Fish Sh!t.....	37	PyGanic Gardening.....	20, 34
balEnce Fly Spray.....	26	Fly Terminator Pro Fly Trap.....	26	Rango.....	31
BIO520.....	37	Fungus Gnat Predator - <i>Stratiolaelaps scimitus</i> .....	8	Red Scale Parasite - <i>Aphytis melinus</i> .....	12
BioCeres WP.....	20, 32	Grandevo CG & Grandevo WDG.....	33	Regalia CG & Regalia.....	41
BioSafe Weed & Grass Killer.....	43	Great White Premium Mycorrhizae.....	36	RootShield Plus Granules & RootShield Plus WP.....	40
BiteBlocker Insect Repellents.....	45	Green Lacewings - <i>Chrysoperla rufilabris</i> .....	5	Rove Beetle - <i>Dalotia coriaria</i> .....	8
Biting Fly Trap.....	27	Grower's Ally Crop Defender 3.....	30	Serenade ASO.....	41
Blue & Yellow Sticky Ribbon Rolls.....	19	Harris Super-Sized Fly Sticky Traps.....	27	SKEETER Mosquito Control.....	23
BONIDE Captain Jack's Deadweed Brew.....	43	HastaGro Plant Food, 6-12-6.....	37	Skeet-O-Trap.....	23
BONIDE Captain Jack's Lawnweed Brew.....	42	Horse Fly TweetMint.....	28	SNS 203 Soil Drench/Foliar Spray.....	23
BONIDE Captain Jack's Neem Max.....	20, 31	Maxicrop Kelp Meal, 1-0-2.....	38	Spider Mite Destroyer - <i>Feltiella acarisuga</i> .....	10
BONIDE Sulfur Plant Fungicide.....	40	Maxicrop Soluble Seaweed Powder, 0-0-17.....	38	Spider Mite Destroyer - <i>Stethorus punctillum</i> .....	11
BotaniGard ES & 22WP <i>Beauveria bassiana</i> GHA.....	32	Mealybug Destroyer - <i>Cryptolaemus montrouzieri</i> .....	12	Sticky Traps.....	18
BotaniGard MAXX.....	20, 34	Mealybug Parasitoid - <i>Anagyrus spp.</i> .....	12	SuffOil-X.....	29
BT NOW.....	21	Medella Natural's Insect & Mosquito Repellent Spray.....	45	The Amazing Doctor Zymes Eliminator.....	29
Bug Bam Mosquito Band, Grids & Pet Tags.....	45	Mighty Plant Instant Compost Tea.....	35	Thrips & Whitefly Predator - <i>Amblyseius swirskii</i> .....	9
BugPellent Cylinder.....	26	Milky Spore Powder.....	20	Thrips Predator - <i>Amblyseius cucumeris</i> .....	9
Captivator Fly Trap.....	26	MilStop SP Foliar Fungicide.....	40	V9 Tree Belt.....	21
Cease Biological Fungicide.....	41	Minute Pirate Bug - <i>Orius insidiosus</i> .....	4	Venerate CG & Venerate XC.....	33
DiPel Pro DF & DiPel DF.....	21	MiteXStream.....	30	WeedGuardPlus - Heavy Weight Rolls.....	42
Dr. Earth Final Stop Pest Control Killer Spray.....	44	Mite Predator - <i>Amblyseius andersoni</i> .....	10	Whitefly Parasite - <i>Encarsia formosa</i> .....	7
Dr. Earth Final Stop Pet Spray.....	28	Mite Predator - <i>Neoseiulus californicus</i> .....	10	Whitefly Parasite - <i>Eretmocerus eremicus</i> .....	7
Dr. Earth Fruit Tree & Citrus Fertilizers.....	37	Mite Predator - <i>Neoseiulus fallacis</i> .....	11	Whitefly Predator - <i>Delphastus catalinae</i> .....	7
DTE Acid Mix, 4-3-6.....	39	Mite Predator - <i>Phytoseiulus persimilis</i> .....	11	Yellow Sticky Tape.....	19

Shop Thousands of Products Available Online 24/7

[www.arbico-organics.com](http://www.arbico-organics.com)



Insecticides



Traps and Lures



Fertilizers



Weed Control

## ASK THE EXPERTS

Take advantage of our FREE consultation! Let us help solve your gardening and farming issues with our start to finish ARBICO Organics solutions. Our trained staff will help determine what problem you have (insect, disease, weed, nematode, critter, pet issue, fertility needs), offer solutions for immediate relief and prescribe a long term sustainable program for continued success.

## AUTO SHIP PROGRAM

We can automatically ship any product on a schedule so you won't run out. Popular auto ship products include: Fly Eliminators, Beneficial Nematodes, Predatory Mites as well as most in stock pest control and soil health products.

## PAYMENT OPTIONS

**Credit Cards** (ARBICO accepts all major credit cards) and **PayPal**.

**Mail Checks or Money Orders To:**

ARBICO Organics, 10831 N. Mavinee Dr., Ste. 185, Oro Valley, AZ 85737-9531

**We do not accept cash via mail.**

## CUSTOMER SERVICE

**All phone calls answered by a live person during regular business hours:** Monday through Friday, 8:00 AM - 4:30 PM (Arizona Time)

• Se habla Español

**Toll Free: 800-827-2847**

**International calls: 520-825-9785**

**Fax: 520-825-2038**

## CRITICAL INFORMATION FOR CERTIFIED ORGANIC GROWERS

Please be aware that the certified status of a product can change at any time without notification from the manufacturer or OMRI. Although we make every attempt to assure that the status of the products listed as certified organic are current and up-to-date, when purchasing a product we advise you to protect your certification by checking with your certifying agency that it is acceptable or by going online to OMRI at [www.omri.org](http://www.omri.org).

## LIVE DELIVERY & REFUND POLICY

**For products other than live insects:** Unused, unopened, undamaged items in original packaging can be returned within 30 days. For full details, see our Return Policy at [www.arbico-organics/category/return-policy](http://www.arbico-organics/category/return-policy).

**For live insects:** We guarantee that you will receive live beneficial insects (mites and beneficial nematodes). If your insects perish en route, we will gladly send you a replacement order. We cannot accept returns or make refunds for other reasons since these are perishable products with a limited lifespan and cannot be resold. We cannot guarantee results with live insects since we have no control over how the product is applied, the extent of the problem, and other variables. But if you are not satisfied with your results, we will cancel any unshipped orders and refund the portion of any prepayment that applies to unshipped orders.



## ARBICO Organics

10831 N. Mavinee Dr., Ste. 185  
Oro Valley, AZ 85737-9531

**800-827-2847**

Please call for  
product availability.



## Limitations and Disclaimers

This publication is designed and produced by ARBICO Organics solely for informational purposes. Reasonable efforts have been made to provide accurate information, but errors may occur. All insect quantities are approximate (and the "double tilde" symbol ≈ so indicates). All prices are subject to change without notice. Product specifications are provided by the manufacturers and are also subject to change without notice. Photographs are for illustrative purposes only.

Notwithstanding any other statements in this catalog, **all warranties, express and implied, including warranties of merchantability and fitness for a particular purpose, are hereby disclaimed and excluded.** By placing an order with ARBICO, buyer agrees that the limited remedies described in "Our Satisfaction Guaranties" are the sole and exclusive remedies available to buyer. All damages, including incidental and consequential damages, are hereby excluded.

## ARBICO Organics Brand Partners

Providing Natural & Organics Solutions for Growers of All Sizes







10831 N. Mavinee Dr., Suite 185  
Oro Valley, AZ 85737

Presorted  
Standard  
U.S. Postage  
**PAID**  
ARBICO

# ARBICO FLY ELIMINATORS<sup>®</sup>

SERIOUS FLY CONTROL



*"We've been growing Fly Eliminators in our insectary for over 40 years. Join the 1,000's of satisfied ARBICO customers who use Fly Eliminators for fly control year after year!"*

*Sheri Herrera de Frey,  
Vice President,  
ARBICO Organics<sup>®</sup>*

**Only \$21.95**  
Per Shipment for 2-5 Horses  
USPS Shipping Included\* in Prices!

Number of Horses/Animals	Units Suggested <sup>†</sup>	Value Pricing
1	1/4 Unit	\$18.95
2 - 5	1/2 Unit	\$21.95
6 - 10	1 Unit	\$32.95
11 - 15	1 1/2 Units	\$43.95
16 - 20	2 Units	\$57.95
21 - 25	2 1/2 Units	\$71.95
26 +	Please Call 1-800-827-2847	

**Order Your Fly Control Program Today!**

\*USPS shipping included up to 5 units.

<sup>†</sup>These are units of measurement, not warranties or guarantees of performance. The total seasonal cost of Fly Eliminators<sup>®</sup> 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.

**\$10 OFF**

Any Order of \$75 or More

Available by phone or online at [arbico-organics.com](http://arbico-organics.com).

Special Offer Code: **Summer23**

Expires: 10/31/2023 • Minimum \$75 purchase.

Cannot be used on Fly Eliminators • Cannot be used with any other offers  
Cannot be used on items with free shipping



1-800-827-2847 • [www.arbico-organics.com](http://www.arbico-organics.com)



© 2023 ARBICO Organics<sup>®</sup>. All Rights Reserved.

06/2023