

ARBICO *organics*[®]

NATURAL & ORGANIC IPM SOLUTIONS

SUMMER CATALOG 2022



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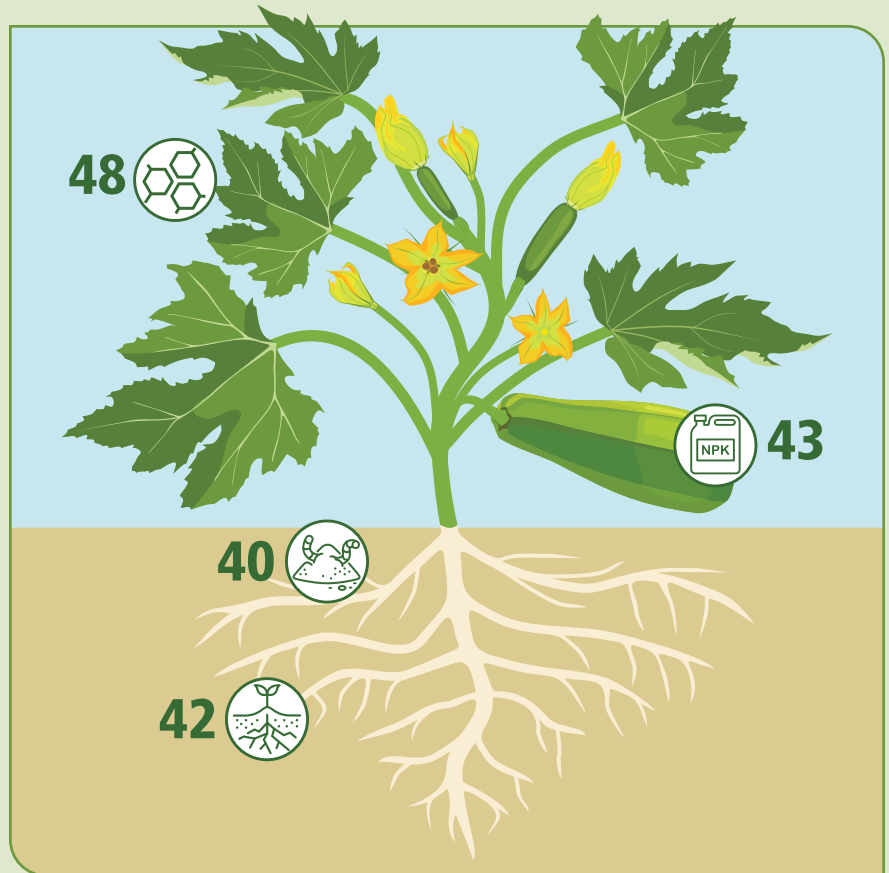
RX GREEN TECHNOLOGIES



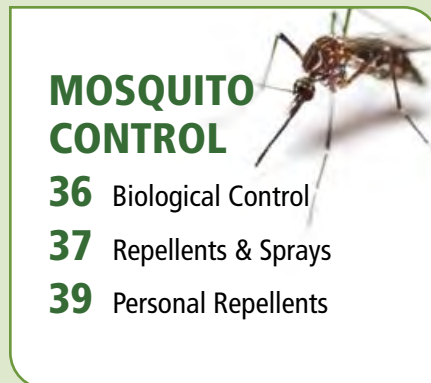
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Guaranteed Live Delivery



Customer Service



Commitment to Quality



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How To Contact Us:

800-827-2847

www.arbico-organics.com

customercare@arbico.com

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



ADVANTAGES

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

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%

1000105	≈250 Eggs	\$25.00
1000106	≈500 Eggs	\$40.00
1000107	≈1,000 Eggs	\$65.00

Larger sizes available.

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

Minute Pirate Bug - *Orius insidiosus*

Excellent General Predator In Field Crops & Greenhouses.

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

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



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

Temperature: 64-82°F

Relative Humidity: Moderate ≈60%

1117001	≈500 Count	\$53.00
1117003	≈1,000 Count	\$88.00
1117004	≈2,000 Count	\$154.00

Overnight Shipping Required



Green Lacewing - *Chrysoperla* spp.

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

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

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



Temperature: Minimum: 60°F Best: 75-90°F **Relative Humidity:** 30-50%
Release Rate: Every 7-10 days

GREEN LACEWING EGGS:*

1110011	≈5,000 Eggs	\$27.00
1110016	≈10,000 Eggs	\$37.80
1110012	≈25,000 Eggs	\$63.00
1110013	≈50,000 Eggs	\$123.75
1110100	≈5,000 Eggs on Cards	\$30.00
1110102	≈10,000 Eggs on Cards	\$50.00
1110105	≈25,000 Eggs on Cards	\$100.00

GREEN LACEWING LARVAE:

1110005	≈400 Larvae in Hex Frame	\$25.00
1110010	≈1,000 Larvae in Bottle	\$24.00
1110030	≈5,000 Larvae in 5 Liter Bag	\$98.00
1110032	≈10,000 Larvae in Bucket	\$175.00

GREEN LACEWING ADULTS:

1110006	≈100 Adults	\$45.00
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.

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



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%

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

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%

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

Overnight Shipping Required



Aphidius colemani

Aphid Parasite - *Aphelinus abdominalis*

These Ravenous Predators Will Eat & Parasitize Aphid Nymphs!

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

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

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

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

1101101	≈250 Mummies	\$83.00
1101103	≈1,000 Mummies	\$235.00

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%

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

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 27) or Neem based sprays.
7. Clean tools and equipment as well as greenhouse structures between growing seasons. See Cleaning & Sanitizing on page 52.

Whitefly Parasite - *Eretmocerus eremicus*

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

TARGET: Greenhouse whiteflies (*Trialetrodes 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 (*Trialetrodes 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%

1132001	≈1,000 Count	\$32.50
1132002	≈3,000 Count	\$46.00
1132003	≈5,000 Count	\$60.00

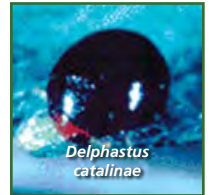
2nd Day Shipping Required

*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

1126001	≈100 Count	\$50.00
1126003	≈200 Count	\$90.00
1126002	≈1,000 Count	\$190.00

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 36).
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.



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

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

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

Overnight Shipping Required

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

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

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



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

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

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

1154000	≈12,500 Count	\$19.00
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 36.**



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 (See page 57) 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%

BULK SIZES:

1152207	≈25,000 in Bran/Vermiculite Mix	\$30.00
1152204	≈50,000 in Bran/Vermiculite Mix	\$38.50
1152224	≈50,000 in Vermiculite	\$50.00
1152205	≈100,000 in Bran	\$60.00
1152206	≈250,000 in Bran/Vermiculite Mix	\$115.00
1152223	≈250,000 in Vermiculite	\$120.00
1152209	≈500,000 in Bran/Vermiculite Mix	\$200.00

CONTROLLED RELEASE:

1152225	≈125,000 in 500 Mini Sachets on Sticks	\$105.00
1152201	≈200,000 in 200 Sachets w/Hooks	\$90.00
1152221	≈200,000 in 400 Mini Sachets w/Hooks	\$80.00
1152222	≈250,000 in 1,000 Sachets w/Hooks	\$135.00
1152226	≈250,000 in 1,000 Mini Sachets on Sticks	\$150.00
1152228	≈500,000 in 500 Sachets w/Hooks	\$185.00
1152227	≈500,000 in 2,000 Mini Sachets on Sticks	\$280.00
1152220	≈1,602,000 in 6 x 525 ft. Strips of Sachets	\$600.00

Overnight Shipping Required



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	\$68.00
1101319	≈50,000 in Tube	\$120.00
1101311	≈125,000 in 5 Liter Bag	\$240.00
1101309	≈200,000 Bulk	\$340.00

CONTROLLED RELEASE:

1101317	≈50,000 in 200 Mini Sachets w/Hooks	\$140.00
1101308	≈62,500 in 250 Mini Sachets w/Hooks	\$170.00
1101318	≈62,500 in 500 Mini Sachets on Sticks	\$245.00
1101306	≈125,000 in 500 Mini Sachets w/Hooks	\$250.00
1101316	≈125,000 in 1,000 Mini Sachets w/Hooks	\$365.00
1101314	≈125,250 in 6 x 328 ft. Strips of Sachets	\$475.00
1101315	≈250,000 in 1,000 Mini Sachets w/Hooks	\$480.00

Overnight Shipping Required



PRO-TIP: Utilize Beneficial Nematodes Above Ground For Additional Thrips Control

The 1st and 2nd instar of the thrips lifecycle live above ground before moving to the roots as larvae to pupate. When using Beneficial Nematodes to kill thrips larvae, consider spraying them onto the foliage for additional control. Be sure to cover the underside of leaves. **See pages 15-17 for more information on Beneficial Nematodes.**

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:

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

CONTROLLED RELEASE:

1101323	≈25,000 in 200 Mini Sachets w/Hooks	\$160.00
1101350	≈25,000 in 200 Mini Sachets on Sticks	\$175.00
1101325	≈62,500 in 250 Sachets w/Hooks	\$225.00
1101355	≈125,000 in 1,000 Mini Sachets on Sticks	\$700.00
1101322	≈125,250 in 6 x 328 ft. Strips of Sachets	\$670.00

Overnight Shipping Required



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%

1155701	≈250 Count	\$144.00
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Overnight Shipping Required



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%

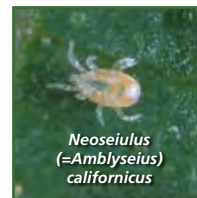
BULK SIZES:

1151214	≈1,000 in Blister Pack	\$20.00
1151213	≈2,000 Count	\$43.00
1151209	≈5,000 Count	\$65.50
1151210	≈10,000 Count (2 x 5,000)	\$106.00
1151212	≈25,000 Count	\$128.00
1151285	≈100,000 Count (4 x 25,000)	\$350.00

CONTROLLED RELEASE:

1151216	≈10,000 - 100 Sachets w/Hooks	\$75.00
1151271	≈25,000 - 100 Sachets w/Hooks	\$162.00
1151215	≈25,000 - 200 Sachets w/Hooks	\$170.00
1151275	≈25,000 - 200 Sachets w/Sticks	\$190.00
1151217	≈50,000 - 500 Sachets w/Hooks	\$250.00
1151273	≈125,000 - 500 Sachets w/Hooks	\$312.50
1151278	≈125,000 - 6 x 328 ft. Sachet Strips	\$650.00
1151279	≈250,000 - 500 Sachets w/Hooks	\$350.00

Overnight Shipping Required



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.

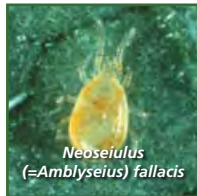
DESCRIPTION: This predatory mite effectively suppresses cyclamen mites in strawberry fields, broad mites in greenhouse crops, European red mites and two-spotted spider mites in orchards, spider mites on roses and vegetable crops in greenhouses and general mite problems on mint and hops in northern climates. 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%

1151400	≈500 Count	\$38.00
1151401	≈1,000 Count	\$52.00
1151402	≈2,000 Count	\$98.00

Overnight Shipping Required



Spider Mite Destroyer - *Stethorus punctillum*

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

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

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

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

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

1113301	≈100 Count	\$98.00
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Subject to seasonal availability.

Overnight Shipping Required



Mite Predator - *Phytoseiulus persimilis*

The Mite Predator With The Highest Consumption & Dispersal Rate.

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

TARGET: Two spotted spider mites and various other mites.

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

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

P. persimilis PLUS Sachets

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

SUGGESTED USE (Depending upon level of infestation):

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

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

P. PERSIMILIS PLUS BULK SIZES:

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

P. PERSIMILIS PLUS CONTROLLED RELEASE:

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

P. PERSIMILIS PLUS RAPID RELEASE:

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

Overnight Shipping Required



MEALYBUG/SCALE CONTROL

Mealybug Parasitoid - *Anagyrus* spp.

Stop Destructive Mealybugs With This Beneficial Parasitoid.

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

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

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

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

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

1132060	≈100 Mummies	\$75.00
1132061	≈200 Mummies	\$80.00
1132072	≈500 Mummies	\$185.00

Currently only available for sale within the state of CA.

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%

1122001	≈10,000 Adults	\$75.00
1122002	≈25,000 Adults	\$80.00
1122003	≈50,000 Adults	\$120.00

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%

1114702	≈100 Adults	\$77.00
1114703	≈250 Adults	\$98.00
1114704	≈500 Adults	\$190.00
1114705	≈1,000 Adults (2 x 500)	\$370.00
1114710	≈5,000 Adults (10 x 500)	\$1,000.00

Overnight Shipping Required



Purple Scale Predator - *Rhyzobius (=Lindorus) lophanthae*

Voracious Adults & Larvae Feed On Scale & Other Pests!

TARGET: Specializes in purple scale, relatively thin scale covered insects and immature stages of soft scale until honeydew forms. Also predate on mealybug and other small insects.

DESCRIPTION: Also known as the Australian Lady-

bird Beetle. Adults are small, shiny black lady beetles. Their larvae is grey and alligator shaped. Both adults and larvae feed on target pests.

SUGGESTED USE (Depending upon level of infestation): Apply about 100/250 sq. ft. for light infestations, 100/100 sq. ft. for heavy infestations, 5 to 10 per heavily infested large plant and 20-40 per tree.

Temperature: Moderate 73-86°F **Relative Humidity:** Low-High ≈20-90%

1121501	≈100 Count	\$85.50
1121502	≈250 Count	\$160.00

Overnight Shipping Required



Moth Egg Parasites - *Trichogramma spp.*



Prevent Worm Pest Damage On Crops!

TARGET: The egg stages of more than 200 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. Each tab contains ≈3,300 eggs per tab.

SUGGESTED USE (Depending upon level of infestation): Use ≈1 tab/3,000 sq. ft.; 50,000-200,000/acre weekly for 2-6 weeks. Release at first flight of moths and every 7-10 days thereafter until infestation subsides. Place tabs where moths are seen. Use traps for monitoring and trapping adult moths.

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

Trichogramma brassicae

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

CARDS:

1131910	≈10,000 (3 Tabs)	\$15.00
1131903	≈20,000 (6 Tabs)	\$20.00
1131911	≈100,000 - 1 Card (30 Tabs)	\$34.00

BULK EGGS:

1131950	≈100,000	\$32.00
1131955	≈1,000,000	\$225.00

CONTROLLED RELEASE - DISPENSERS:

1131961	≈12,500 - 5 Dispensers	\$25.00
1131962	≈25,000 - 10 Dispensers	\$37.50
1131963	≈62,500 - 25 Dispensers	\$43.75
1131965	≈125,000 - 50 Dispensers	\$62.50

CONTROLLED RELEASE - CAPSULES:

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

Trichogramma minutum

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

CARDS:

1129001	≈10,000 (3 Tabs)	\$15.00
1129003	≈20,000 (6 Tabs)	\$20.00
1129010	≈100,000 - 1 Card (30 Tabs)	\$34.00

BULK EGGS:

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

Trichogramma ostriniae

Primarily for European Corn Borer.

CARDS:

1130100	≈8,000	\$22.00
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BULK EGGS:

1130155	≈1,000,000	\$225.00
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Trichogramma platneri

West of the Rockies, orchards and tall crops.

CARDS:

1130001	≈10,000 (3 Tabs)	\$15.00
1130003	≈20,000 (6 Tabs)	\$20.00
1130030	≈100,000 - 1 Card (30 Tabs)	\$34.00

BULK EGGS:

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

Trichogramma pretiosum

General predator.

CONTROLLED RELEASE - DISPENSERS:

1131060	≈12,500 - 5 Dispensers	\$25.00
1131061	≈25,000 - 10 Dispensers	\$37.50
1131062	≈62,500 - 25 Dispensers	\$43.75
1131065	≈125,000 - 50 Dispensers	\$62.50

CONTROLLED RELEASE - CAPSULES:

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

Mix 1 - *brassicae, minutum, platneri*

For multiple pests and crops.

CARDS:

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

Mix 2 - *brassicae, minutum, ostriniae*

For multiple pests and crops including European Corn Borer.

CARDS:

1131300	≈4,000 on Card	\$22.00
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**For Caterpillar Control,
See Page 22.**

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.

Your Multi-Pest Solution For Optimal Growing

Protect Your Farm & Garden From Soil Developing Pests By Applying Beneficial Nematodes



NemaSeek™ Hb
Beneficial Nematodes

NemAttack™ Sf
Beneficial Nematodes

NemAttack™ Sc
Beneficial Nematodes

Apply To Soil For Control Of Target Pests:

- Beetle Grubs
- Borers
- Caterpillars
- Fungus Gnats
- Flea Beetles
- Leafminers
- Rootworms
- Thrips
- 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; however, they have been known to also parasitize above ground stages of adults, nymphs and larvae.

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.

Apply To Soil For Control Of Target Pests:

- Beetle Grubs
- Rootworms
- Leafminers
- Flies
- Thrips
- Worms
- Fungus Gnats
- Weevils
- 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.

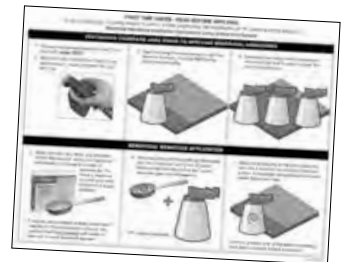
How Do I Apply Beneficial Nematodes?

DO NOT OPEN PACKAGE UNTIL YOU ARE READY TO APPLY

Beneficial Nematodes are applied to the soil mixed with water. Since they are alive and sensitive to light, apply early in the morning or at dusk. It's easy to apply nematodes.

Before applying, make sure the soil is moist. Mix Beneficial Nematodes with enough water for coverage area.

Apply pre-dawn or at dusk with a hose end sprayer (See sprayer options on page 57), backpack sprayer, pump sprayer or watering can. Lightly water again after application.



Keep area moist for at least 2 weeks. Complete nematode application instructions available online and in the package.

Foliar Applications:

Beneficial Nematodes should be applied to the foliage in higher humidity and plants should be kept moist for 3 or more hours. Spray thoroughly to cover all surfaces of the leaves while avoiding runoff. Reapply weekly. Use in conjunction with soil applications.

How Long Can Beneficial Nematodes Be Kept Before Use?

Beneficial Nematodes should be used as soon as possible. If you need to store them, it is best to store them **unopened** in a refrigerator for no longer than 2 weeks. Once opened, use immediately and entirely.

BENEFICIAL NEMATODES

NemaSeek™ *Heterorhabditis bacteriophora* (Hb) Beneficial Nematodes

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



NemaSeek™ *Heterorhabditis indica* (Hi) Beneficial Nematodes

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



NemAttack™ *Steinernema feltiae* (Sf) Beneficial Nematodes

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



NemAttack™ *Steinernema riobrave* (Sr) Beneficial Nematodes

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



NemAttack™ *Steinernema carpocapse* (Sc) Beneficial Nematodes

These nematodes are known to wait for passing pests. NemAttack *S. carpocapse* 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 Beetles	▲	Grubs	▲ ●	Roaches-American, Asian, German	●
Armyworm	● *	Corn Earworm	● ■ *	Hive Beetles	* ●	Root Maggots	■
Artichoke Plume Moth	●	Corn Rootworm	▲	Humpbacked Flies	■	Root Weevils	▲ ●
Asparagus Beetles	▲	Cotton Bollworm	●	Indian Meal Moth	*	Scarabs	▲
Bagworm	▲	Cranberry Girdler	●	Iris Borers	▲	Sclarids	■
Banana Moth	▲	Cranberry Root Weevils	▲	Japanese Beetles	▲ *	Shore Flies	■
Banana Weevils	▲	Cucumber Beetles	● ■ ▲	Large Pine Weevils	●	Sugarcane Stalk Borers	▲
Beet Armyworm	● ■	Cutworm	●	Leafminers	● ■	Strawberry Root Weevils	● *
Berry Root Weevils	▲	Diaprepes Root Weevils	*	May/June Beetles	▲ *	Subterranean Termites	*
Bill Bug	▲	Fall Armyworm	●	Mint Flea Beetles	●	Sweet Potato Weevils	■ ▲
Black Cutworm	● ■ *	Flea Beetles	▲	Mint Root Borers	●	Thrips	■
Black Vine Weevils	● ▲ *	Fleas - Larvae, Pupae	●	Mole Crickets	● *	Ticks	■ ▲
Bluegrass Weevils	●	Fleas - Adult	▲	Navel Orangeworm	●	Tobacco Budworm	●
Cabbage Maggot	■	Fly Larvae	●	Onion Maggots	■	Tobacco Cutworm	■
Carrot Weevils	▲	Fruit Flies	● ■	Pill Worm	■	Vine Borers	▲
Caterpillars	●	Fungus Gnats	■ ▲ ●	Pink Bollworm	*	Webworm	●
Chafer - European, masked	▲ *	Gall Midges	▲	Plum Curculio	*	Western Flower Thrips	■ ●
Citrus Root Weevils	▲ *	Grape Root Borers	▲	Raspberry Crown Borers	■	Wireworm	●
Codling Moth	● ■	Greater Wax Moth	*	Red Flower Beetles	*	Wood Borers	●



Beneficial Nematodes

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

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

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

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

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

SIZE & COVERAGE CHART

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

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



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

OMRI Listed Beneficial Nematodes



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

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

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

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

PEST INSECT TRAPS



Sticky Traps

Monitor & Trap For Best Pest Identification!

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

Aphid/Whitefly Yellow Sticky Traps:

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

Thrips/Leafminer Blue Sticky Traps:

TARGET: Thrips, leafminers.

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

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



Enoz® BioCare® Gnat Stix



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

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

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

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

1280501	Gnat Stix - 12 Per Pack	\$6.65
1280502	Gnat Stix - 12 Per Pack - Bundle of 2	\$11.50
1280503	Gnat Stix - 12 Per Pack - Bundle of 4	\$20.50



ARBICO Organics® Yellow Insect Traps

Monitoring + Trapping = Effective Pest Control

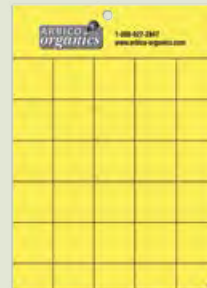
TARGET: Use against aphids, bean beetles, California laurel aphids, flea beetles, fungus gnats, greenhouse whiteflies, leafminers, psyllids, shore flies, silverleaf whiteflies, sweet potato whiteflies and more.

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

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

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

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



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.

1254201	Blue & Yellow Card Trap - 4 Pack	\$9.99
1254202	Blue & Yellow Card Trap - 10 Pack	\$17.99



Yellow Sticky™ Tape

Longer Length Tape To Cover Even More Area.

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

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

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

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

*Larger quantities available.



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.

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



Blue & Yellow Sticky Ribbon Rolls



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

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

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

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

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



Trapline t+ Sticky Roller Trap



Attracts Thrips 3 Ways – By Color And Patterning & With A Pheromone.

TARGET: Western Flower Thrips on soft fruits, vegetables and flowers.

DESCRIPTION: This is a sticky trap in ribbon form. The vivid blue of this trap is highly attractive to thrips and this trap has a specific patterning that optimizes the trapping of Western Flower Thrips. But what really makes this trap stand out is that its glue is infused with a pheromone lure. This trap is intended only for use in greenhouses. Microencapsulated pheromone provides a steady release for up to 5 weeks. The glue can last 10-12 weeks without drying out.

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

1254425	Trapline t+ Sticky Roller Trap - 6" W x 328' L (2 Pack)	\$125.00
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Heterorhabditis indica

Heterorhabditis indica is a heat tolerant, entomopathogenic nematode that attacks pre-pupal stages of small hive beetle in the soil. By suspending the nematodes in water and applying to the soil below and around the hive, the nematodes quickly seek out the pupal stage and attack, typically entering the pest and killing it within 24-48 hours. *H. indica* are a virulent and aggressive species of nematodes and work best when the strength of the hive is maintained.



1220200 *Heterorhabditis indica* - 5 million **\$36.00**

*Free shipping in the contiguous 48 United States. 2nd day shipping required.

Natupol Bumblebee Hives

Put These Portable Hives Where You Need Them Most To Greatly Improve Pollination.

TARGET: For use indoors in greenhouses, hoophouses and other indoor growing, as well as smaller gardens and orchards.



DESCRIPTION: By introducing gentle bumblebees to your crops, you can improve fruit quality, increase productivity, save labor costs by reducing hand pollination and provide pollination that is independent of weather conditions. These hives house the *Bombus impatiens* species of bumblebees and contain a colony with a queen, workers and brood (pupae, eggs and larvae). The Natupol Excel and Natupol Excel Startup hives replace the now-discontinued Natupol Class-A, Class-B & Class-C hives. These new hives have carefully considered innovations in design that keep the bees comfortable inside their hives and make it easier for them to enter and exit. Both have been also developed for use under artificial light and in warmer conditions to serve crops with large numbers of flowers per sq. ft.

SUGGESTED USE:

Natupol Excel: Replaces the Natupol Class-A & Class-C hives. An ideal choice greenhouses that operate consistently; especially so if they are at the beginning of the planting cycle before full bloom. Also excellent for consistently growing hydroponic operations. This hive may take longer to reach its maximum efficiency level than the Natupol Excel Startup, but will retain optimum performance over the course of time.

Covers 1,000-15,000 sq. ft. and last for about 9 weeks.

Natupol Excel Startup: Replaces Natupol Class-B hives. This larger size colony will provide intense pollination from day 1 and reach maximum efficiency rapidly, great for those crops that need heavy pollination in a short period of time. A wonderful choice for greenhouses that are near to or in full bloom and need thorough pollination immediately.

Covers 1,000-15,000 sq. ft. and last for about 9 weeks.

1530111 Natupol Excel **\$240.00**
1530112 Natupol Excel Startup **\$160.00**

UPS Next Day Shipping Required

Cannot be shipped to the following states: HI, OR, PR, VA

Shipments to California require that a permit application be filled out & sent to the California Department of Food & Agriculture. Please call if more information is needed.

Bee-Scent™

Bring More Bees To Your Crops With This WSDA Certified Organic Attractant.

TARGET: Honeybees.

DESCRIPTION: Applying this non-toxic, pheromone-based liquid attractant to your plants will entice honeybees to linger and forage on them. This swell in bee activity boosts pollen transfer, leading to enhanced pollination. Initial application imprints a foraging pattern on bees and they will return if their pollination window was shortened by weather. Bee-Scent contains no hive or bee products. Environmentally sound for bees, crops and applicators.



SUGGESTED USE: Apply with standard ground or aerial application units; no additives or equipment modifications needed. Two applications are recommended: first at early bloom (5-30% bloom) and second 5-8 days later (70-100% bloom). On long-blooming crops, treatments at regular intervals throughout the flowering season may be necessary. Early morning application is important. Weather must be favorable to bee flight – sunny and warmer than 60°F, with winds less than 15 mph. Standard application rate is 2 qts/acre.

1231200 Bee-Scent - 4 oz. **\$10.50**
1231202 Bee-Scent - 8 oz. **\$12.50**
1231204 Bee-Scent - 16 oz. **\$20.50**

Case sizes available.



Enoz® BioCare® Ladybug Lures

An Ingenious Clip-On Lure.

1281607 Enoz BioCare Ladybug Lures - 4 Pack **\$6.99**

Honey Bee Magnet

Increase The Number Of Pollinators Coming To Your Area.

1231317 Honey Bee Magnet - 2 Lures **\$8.00**
1231318 Honey Bee Magnet - 10 Lures **\$24.00**

Predalure™

Attract Ladybugs, Green Lacewings & Many Other Beneficial Insects Into Your Garden.

1231319 Predalure - 2 Pack Lures **\$10.00**
1231320 Predalure - 10 Lures **\$41.00**
1231321 Predalure - 25 Lures **\$85.00**

Tanglefoot TangleGuard Banding Material® & Tree Tanglefoot® Insect Barrier

Protect Your Trees From The Elements Or Add A Sticky Coating & Keep Insects Away Too.

TARGET: Ants, vine weevils, canker worms, gypsy moths, winter moths and other crawling insects.

DESCRIPTION: Tanglefoot TangleGuard Banding Material can be used on its own to protect your trees from sun-scald, rodent/animal feeding, and objects that could hit them. When you apply Tree Tanglefoot Insect Barrier to it, the two form a strong and sticky barrier that will thwart any insects crawling up a tree to feed on or nest in it. This 3" x 50', ready-to-use banding is lightweight, waterproof, and will not smother or otherwise harm your tree. But it's strong enough to last all season. Insect barrier is a non-toxic, oil based, non-drying adhesive that will also last all season, or until covered by insects.

SUGGESTED USE: Insects: Wrap tree tightly from base to trunk. On rough bark, plug the gap under the band with cotton batting, foam or similar material. Brush on a thin layer (1/16") of adhesive. Use adhesive at temps above 60°F. Replace banding when sticky areas become covered with insects and debris. Remove banding at end of season.

1266035	TangleGuard Banding Material (3" x 50' roll)	\$6.95
1266030	Tree Tanglefoot Insect Barrier - 15 oz. tub	\$12.50
1266040	Kit - 1 Roll Banding Material & 1 Tub Insect Barrier	\$17.99



BONIDE® Captain Jack's™ Orchard Spray

Use This 3-in-1 Pesticide For Multiple Pests!

TARGET: Fungal diseases, insects and mites on fruit, citrus, nuts, vegetables, ornamentals, houseplants and lawns.

DESCRIPTION: With the active ingredients of sulfur and pyrethrin, this spray can be used on most plants whether indoors or outdoors. This product is a fungicide, pesticide and miticide and can be used up to one day before harvest.

SUGGESTED USE: For concentrate, mix 5 fl. oz. /1 gal. water (high disease levels = 2 1/2 oz./gal. water). As a fungicide, this product is best used proactively early in the season before diseases appear. To assure contact with the pests/pathogens, thoroughly spray all parts of the plants, especially new shoots and the underside of leaves. Re-spray every 7-10 days, or after a rain. Do not use at temps over 90°F. Do not apply to strawberry fruit intended for canning. Do not spray within 21 days of an oil spray. For use on residential lawns and gardens. Not for use on agricultural establishments growing agricultural crops or commodities for resale.



1247612	Captain Jack's Orchard Spray - 32 oz. RTS	\$24.99
1247610	Captain Jack's Orchard Spray - Pint Conc.	\$15.99
1247611	Captain Jack's Orchard Spray - Quart Conc.	\$23.49

Monterey Fruit Tree Spray Plus

OMRI Listed Spray Combining Pyrethrins & Neem Oil Used As Insecticide, Fungicide & Miticide.

TARGET: Powdery mildew, downy mildew, rusts and leaf spot; aphids, spider mites, whiteflies, loopers, leafminers and more.

DESCRIPTION: Monterey Fruit Tree Spray Plus is a natural control spray for many common pest insects and plant diseases, such as powdery mildew, downy mildew, rusts and leaf spots. A mixture of pyrethrins and 70% Neem Oil ensures that Monterey Fruit Tree Spray Plus is fast-acting when sprayed on your plants up until the day of harvest.

SUGGESTED USE: Concentrate: Mix 2 tablespoons of Monterey Fruit Tree Spray Plus per gallon of water and thoroughly apply to all leaf surfaces including the undersides of the leaves. **RTS:** Attach to a hose with water access and follow spraying directions on the label.

1257931	Fruit Tree Spray Plus - Pint Hose-End RTS	\$28.99
1257930	Fruit Tree Spray Plus - Pint Concentrate	\$25.99
1257932	Fruit Tree Spray Plus - Quart Concentrate	\$41.99

Cannot be shipped to the following states: AK, ND, NE, WY



IV Organic® 3-In-1 Plant Guard™

An Organic Pest Control Solution For Your Trees – Easy As 1-2-3!

TARGET: Insect and small animal pests and sun damage to trees.

DESCRIPTION: This easy-to-use coating offers an eco-friendly solution to combat sun and rodent damage on trees, shrubs and roses. It's made with Neem oil, which deters insects by repelling, coating and smothering them. This product also contains Castor oil, which most small animals find repugnant. Sunburn and sunscald can cause great stress to plants and can lead to death. This highly reflective paint will keep a good portion of the sun's damaging rays out. Requires only one application per year, as a brush-on or in an RTU spray.

SUGGESTED USE: Brush-on: 1 can contents should cover about 12 young tree trunks (3 gal. size) with a single coat. Fill can with powder and oil fill from can, fill with water and stir. Spray-on: Spray ahead of any expected heatwaves. Coat all exposed leaves, branches and trunk. Some trees may require more than 1 coat.

READY TO SPRAY:

1240150	3-in-1 Plant Guard - 23 oz. Spray-On	\$24.95
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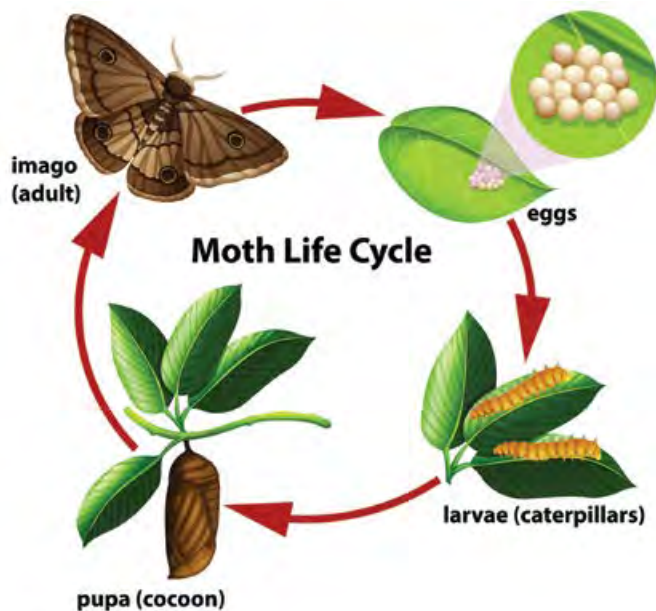
BRUSH ON:

1240100	3-in-1 Plant Guard - Pint White	\$34.95
1240101	3-in-1 Plant Guard - Pint Brown	\$34.95
1240102	3-in-1 Plant Guard - Pint Green	\$34.95

Gallon and case sizes available for the brush-on version.



CATERPILLAR CONTROL



DiPel® Pro DF & DiPel® DF



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



TARGET: Caterpillars, armyworms, bagworms, budworms, loopers, Gypsy 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 tsps./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.

1207005	DiPel Pro DF - 1 lb.	\$24.75
1207004	DiPel DF - 5 lbs.	\$119.50

BT NOW®



An Extremely Effective Biopesticide That Controls Crop-Damaging Caterpillars.

TARGET: Armyworms, bagworms, borers, budworms, caterpillars, earworms, leafrollers, loopers, Gypsy 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.

1201220	BT NOW - Gallon Concentrate	\$79.99
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Cannot be shipped to the following states: HI, DC

Fertilome® Dipel® Dust



It Takes Just One Bite Of This Dust To Make Leaf-Eating Worms Stop Feeding.

TARGET: Armyworms, budworms, diamondback moths, hornworms, leafrollers, loopers, spongy moths (previously known as gypsy moths), tent caterpillars, webworms and more.

DESCRIPTION: This is a biological insecticide powered by the bacterium *Bacillus thuringiensis kurstaki* (Btk). Btk targets pests in the *Lepidoptera* order and poses no threat to any animal or insect outside that order. When a caterpillar ingests treated foliage, the Btk releases a type of endotoxin which paralyzes the caterpillar's digestive tract. The caterpillar will stop feeding and die a short time later. Use on vegetables, shrubs, lawns and flowers.



SUGGESTED USE: Use at the beginning of the pest's life cycle (1st and 2nd instars). Dust thoroughly to cover all plant surfaces. Vegetables: loopers and webworms: 1/4-1 oz; armyworms: 1-2 oz; diamondback moths: 1/4-1/2 oz. Turf: Sod webworms: 2-4 oz. Call or refer to the manufacturer's label online for more detailed crop and pest-specific applications.

1207010	Fertilome Dipel Dust - 1 lb. Puffer	\$7.99
1207011	Fertilome Dipel Dust - 4 lb. Bag	\$8.99

Cannot be shipped to the following states: AK, CA, HI

For biological control of caterpillars see page 13.

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, gypsy 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.

1201213	Monterey B.t. - 32 oz. RTU	\$14.49
1201214	Monterey B.t. - 32 oz. Hose-End RTS	\$24.49
1201210	Monterey B.t. Concentrate - Pint	\$13.99
1201211	Monterey B.t. Concentrate - Quart	\$22.99
1201212	Monterey B.t. Concentrate - Gallon	\$79.99

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

BONIDE® Thuricide

Caterpillar Targeting *Bacillus thuringiensis* var. *kurstaki*

TARGET: Control of caterpillars.

DESCRIPTION: Use Thuricide to control caterpillars that are causing excessive damage. This easy to mix and easy-to-use liquid can be sprayed on any plant that you would like to protect. Can be used on fruits, vegetables and ornamentals and can be used up to the day of harvest. Use weekly until the infestation is under control.

SUGGESTED USE: Easy-to-use for all spray applications, just mix 1-4 tsp. per gallon of water and apply to plants. It is important to target the underside and top of leaves to ensure good coverage. The mix rate you use is dependent on the level of infestation – there is no harm to the plant if you use a stronger mix rate.



1201205	BONIDE Thuricide RTU - Quart	\$12.49
1201206	BONIDE Thuricide RTU - Gallon	\$38.99
1201201	BONIDE Thuricide Liquid Concentrate - 8 oz.	\$10.97
1201202	BONIDE Thuricide Liquid Concentrate - 16 oz.	\$14.99

ADULT MOTH CONTROL



Large Plastic Delta Trap

This Work-Horse Of A Trap Will Last & Last!

1230435	Large Plastic Delta Trap - Pack of 5	\$35.00
1230436	Large Plastic Delta Trap - Pack of 10	\$66.50

Scentry Wing Trap

You'll Get Options & Economy With This Trap!

1230440	Scentry Wing Trap - Pack of 5	\$19.00
1230441	Scentry Wing Trap - Pack of 10	\$35.00

Delta Trap

Catch Those Pests With Ease!

1230426	Delta Trap - Pack of 10	\$21.50
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Spongy (Gypsy) Moth Trap

Moth Pests Disappear With This "Milk Carton" Trap!

1230430	Gypsy Moth Trap - Pack of 5	\$10.45
1230431	Gypsy Moth Trap - Pack of 10	\$18.99

See full line of scentry traps and lures online.
Visit www.arbico-organics.com.



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. **\$31.99**
- 1216040** Milky Spore Powder - 40 oz. - Covers ≈1/4 acre **\$84.99**
- 1216045** Milky Spore Powder - 25 lb. Drum - Covers ≈2.25 acres **\$800.00**
- 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 27 for more information.

AzaGuard®

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

1222204 AzaGuard - 32 oz. **\$225.00**
See page 30 for more information.

BotaniGard® MAXX

Beauveria bassiana & Pyrethrins Make A Powerful Team!

1332820 BotaniGard Maxx - Quart **\$95.00**
See page 31 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 26 for more information.

PyGanic® Gardening

Rapid Knockdown & Kill For Outdoor Pests In Your Garden.

1288710 PyGanic Gardening - 8 oz. **\$22.50**
See page 31 for more information.

Azera® Gardening

This Unique Mix Of Azadirachtin & Pyrethrins Offers Exceptional Insect Control.

1288740 Azera Gardening - 8 oz. **\$41.00**
See page 30 for more information.

MULTI-PURPOSE

Organic JMS Stylet-Oil®

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

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

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

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

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

*Call for freight quote. Larger sizes available.

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



The Amazing Doctor Zymes Eliminator

Use This Year Round For Pest & Mildew Free Plants.

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

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

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

1459200 The Amazing Dr. Zymes Eliminator - Quart RTU **\$14.65**
1459201 The Amazing Dr. Zymes Eliminator - Quart Conc. **\$34.75**
1459202 The Amazing Dr. Zymes Eliminator - Gallon Conc. **\$125.95**

Larger sizes available.

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



M-Pede®

A Highly Effective, Organic Version Of Insecticidal Soap.

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

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

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

1247650 M-Pede - 2.5 Gallons **\$142.50**
1247652 M-Pede - 2.5 Gallons - Case of 2 **\$256.50**



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.

1332805 SuffOil-X - 2.5 Gallons **\$77.00**
1332806 SuffOil-X - Case of 2 ct./2.5 Gal. **\$138.60**

Larger sizes available.

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

Cannot be shipped to the following states: AK, DC



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



ECOWORKS EC®



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

TARGET: Aphids, flies, mealybugs, psyllids, scales, spider mites, thrips, whiteflies, powdery & downy 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. **\$9.86**

1450553 EcoWorks EC - 16 oz. **\$25.99**

1450554 EcoWorks EC - 32 oz. **\$43.99**

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



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 **\$184.99**

Case sizes available.



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 **\$24.99**

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



BEAVERIA 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



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

1332801 BotaniGard ES - Quart **\$92.00**
1332799 BotaniGard ES - Gallon **\$300.00**

BotaniGard 22WP

1332800 BotaniGard 22WP - 1 lb. Powder **\$90.00**

Case sizes available.

Shipping Restrictions: Cannot ship via US Mail.



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.

1332785 Mycotrol WPO - 1 lb. **\$118.00**
1332795 Mycotrol WPO - 1 lb. (Case of 12) **\$1,274.40**

Ships via UPS Ground & FedEx Ground ONLY.



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 subtsugae* strain PRAA4-1^T 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.	\$37.50
1332954	Grandevo CG - 4 lbs.	\$134.00
1332952	Grandevo WDG - 6 lbs.	\$162.00

Grandevo CG cannot be shipped to the following states: FL



SNS 209™ Systemic Pest Control



This NOP Compliant Insecticide Works From The Inside Out.

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

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

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

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

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



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



BONIDE® Insecticidal SUPER Soap



The "Super" In This Soap Is Spinosad.

TARGET: Common insect pests on plants and curative control of powdery mildew.

DESCRIPTION: This easy-to-use spray ups the insecticidal soap game by adding some Spinosad to the mix. Spinosad is a product of a naturally-occurring soil bacterium that attacks an insect's nervous system and causes paralysis and death. Add that to the suffocant/desiccant qualities in traditional soaps and you have a real killer combination. Works in minutes and is NOP compliant.

SUGGESTED USE: For insect control: Apply when pests are present and thoroughly spray all plant parts to wetting. Repeat as needed (with some restrictions per label). Do not apply more than 10 times per year as in greenhouses or more than 6 times per year when treating thrips, leafminer, spider mite and/or diamondback moth control. For powdery mildew control, apply at first signs of mildew and repeat at 7-10 day intervals. Use with care on new seedlings, transplants and blooms. DO NOT use on sweet peas, nasturtiums or delicate ferns.

1247603	BONIDE Insecticidal SUPER Soap RTU - Quart	\$10.15
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Cannot be shipped to the following states: HI



DES-X™ Insecticidal Soap



OMRI Listed. A Fast-Acting Contact Killer For A Long List of Insect & Mite Pests.

TARGET: Adelgids, aphids, earwigs, flea hoppers, lace bugs, leafhoppers, mealybugs, mites, pear slug larvae, plant bugs, psyllids, rose slug larvae, sawflies, scale, spider mites, tent caterpillars, wooly aphids and whiteflies.

DESCRIPTION: This fatty acid-based insecticide is effective against adult, larval and nymph stages of target insects. It penetrates the body of the pest and causes death through disruption of the membrane and interference with normal cell functions. Can be used throughout the growing cycle but is especially useful for treating/spot-treating before the release of biological control agents and beneficials. Use with care on blooms and sensitive plants. 0-day PHI and 12-hr REI.

SUGGESTED USE: For best results, apply when infestation is first noticed. Field applications: apply 2% formulation, 2 gal product/100 gal water at a rate of 75-200 gal/acre using ground spraying equipment. Spray to wet but minimize runoff. Contact all parts of plants. Repeat applications every 1-2 weeks, but do not exceed 3 consecutive applications. Do not use when plants are under stress. Do not apply to new seedlings/ transplants without determining sensitivity first. Avoid spraying in full sun.

1247660 DES-X Insecticidal Soap - 2.5 Gal. Conc. **\$120.00**
1247662 DES-X Insecticidal Soap - 2.5 Gal. Conc./Case of 2 **\$216.00**



Sil-Matrix® LC



OMRI Listed & NOP Approved Silicon-Based Fungicide/Miticide/Insecticide.

TARGET: Aphids, mites and whiteflies and protection from fungal diseases like powdery mildew and botrytis.

DESCRIPTION: This organic product uses potassium silicate (silica) as its active ingredient. It serves as a desiccant and creates a protective barrier on/around the leaf surface. These actions prevent the penetration of fungi and make the surface less palatable to insects. Additionally, silica helps strengthen cell walls and improves photosynthesis, quality and yields. 4-hr REI and 0-day PHI.

SUGGESTED USE: Preventative application is recommended. For best results, spray on a regular schedule no sooner than every 7 days. Foliar applications: 20-250 gal/acre in a 0.25%-1% solution (1-4 qt product/100 gal) at a minimum rate of 20 gal/finished spray/acre. Compatible with most fungicides and insecticides, but sensitive to low pH materials (combine at lowest possible concentration). Use with a nonionic surfactant for maximum efficacy.

1247670 Sil-Matrix LC - 2.5 Gallons **\$99.00**
1247672 Sil-Matrix LC - 2.5 Gallons - Case of 2 **\$178.20**



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:

For insect pests: 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 **\$31.49**
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)



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 **\$134.00**
1332960 Venerate XC - 2.5 Gallons **\$260.00**

Venerate XC - 2.5 Gal. (1332960) cannot be shipped to the following states: CA



AZADIRACHTIN

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: Azasol contains Azadirachtin, a product of the Neem tree. In production, the Neem oil from the seeds of the trees is transformed into a yellowish-white, water-soluble amorphous powder suitable for spraying. 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. This powder quickly dissolves in water and won't clog equipment or leave an oily residue or discoloration on plants. 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 soil-less media. A wetting agent may be used. To repel adult flies, use fogging equipment. Use from 1-4 tsp./1000 sq. ft. depending on pest infestation levels, application method and growing environment. For optimum results, 2-3 applications made at 7-10 day intervals is recommended.

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

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: Azadirachtin, extracted from the neem tree, is the active ingredient here. Insects are repelled by the taste and smell of neem, but azadirachtin 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.



1222204	AzaGuard - 32 oz.	\$225.00
1222206	AzaGuard - Gallon	\$700.00

Azera® Gardening



This Unique Mix Of Azadirachtin & Pyrethrins Offers Exceptional Insect Control.

TARGET: This product will kill the larval, pupal and adult stages of a broad spectrum of over 200 listed insects.

DESCRIPTION: This organic gardening pesticide couples two plant-based powerhouses (Azadirachtin and Pyrethrins) to fight both hard-bodied and soft-bodied insects. Hard-to-kill insects will not get past Azera; they will succumb to the quick knock-down kill or perish more slowly once they ingest it. One of these two processes will kill all stages of an insect's life (larval, pupal and adult), effectively eliminating all future generations. This OMRI listed product is soft on the environment and can be applied the same day of harvest.



SUGGESTED USE: Apply Azera as soon as insects appear; do not wait until plants are heavily infested. Apply with any powered or manual pesticide application equipment. The most commonly used rate of application is 2 pints per acre (32 fl. oz. = 946 ml.) Higher populations of adults and/or hard to kill insects may require 3 pints per acre (48 fl. oz. = 1.42 L) or 3.5 pints per acre (56 fl. oz. = 1.66 L.).

1288740	Azera Gardening - 8 oz.	\$41.00
1288750	Azera Gardening - 32 oz.	\$108.00
1288760	Azera Gardening - Gallon	\$390.00

Neemix® 4.5



Kills, Repels And Deters Sucking & Chewing Insect Pests In Their Immature Life Stages.

TARGET: Aphids, caterpillars, leafminers, loopers, mealybugs, onion maggots, oriental fruit flies, psyllids, stinkbugs, thrips, the larvae of diamondback moths and many, many more.

DESCRIPTION: This is an organic broad-spectrum Insect Growth Regulator (IGR) botanical insecticide with an active ingredient of Azadirachtin. Once a targeted insect (in its larval or nymph form) comes into contact with or ingests this product it interferes with its ability to molt. Treated larvae may die as nymphs. Penetrates leaves via translaminar movement to affect pests on the underside but should still be applied in a manner to obtain complete coverage of plant parts. Minimal impact to beneficials. 0-day PHI and 4-hour REI.



SUGGESTED USE: Apply when pests first appear. Repeat applications every 7 days or as needed. Repeated applications will break the pest life cycle. Target 30 ppm spray solution by using 4-10 oz/100 gals of carrier. Spray solutions should maintain a pH of 4-7. Use an adjuvant with lower application rates. Apply soon after mixing and do not store for later use.

1457640	Neemix 4.5 - Quart Concentrate	\$245.00
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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.

1288710	PyGanic Gardening - 8 oz.	\$22.50
1288720	PyGanic Gardening - 32 oz.	\$53.00
1288730	PyGanic Gardening - Gallon	\$198.00



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.

1332820	BotaniGard Maxx - Quart	\$95.00
1332821	BotaniGard Maxx - Gallon	\$310.00
1332822	BotaniGard Maxx - 2.5 Gallons	\$720.00

Case sizes available.



Monterey Take Down Garden Spray

A Mix Of Pyretherins & Canola Oil For Affordable, Effective Insect Control!

TARGET: Aphids, beetles, caterpillars, ants (except fire ants, harvester ants, carpenter ants & pharaoh ants), mealybugs, mites, leafhoppers, scale, whiteflies, adelgids, plant bugs, fungus gnats, thrips, sawfly larvae, psyllids, spittlebugs & phylloxera.

DESCRIPTION: This spray works on a broad spectrum of insect pests and will attack ALL stages of insect life – eggs, larvae & adults. With canola oil and pyrethrin as active ingredients, you have a spray that will knock them down and hold them down. Can be used as a dormant or growing season spray and does not persist in the environment. Safe to use up to the day of harvest.

SUGGESTED USE: With concentrate formula, mix in either 1% or 2% solution as follows. **1% Solution:** Mix 2 tsps. of concentrate with 1 qt. water or 1 fl. oz. of concentrate with 3 qts. of water. **2% Solution:** Mix 4 tsps. of concentrate with 1 qt. of water or 2 fl. oz. with 3 qts. of water. Shake or stir frequently during use.

1257917	Take Down Garden Spray RTU - Quart	\$12.99
1257915	Take Down Garden Spray Concentrate - Pint	\$19.99
1257916	Take Down Garden Spray Concentrate - Gallon	\$129.99

Concentrate cannot be shipped to the following states: DC, ND, WY
RTU cannot be shipped to the following states: DC, IA, ND



Monterey Bug Buster-O

Bugs Take A Beating With This Easy To Use OMRI Listed Spray.

TARGET: A very long list of insect pests on crops and plants grown outdoors.

DESCRIPTION: When you need a quick and thorough knockdown and kill, organic Bug Buster-O is the choice for you. You can begin spraying after one simple step to dilute the product. The active ingredient of Pyrethrins is a potent insecticide and will control more than 100 listed insect pests; however, please take care when applying to avoid harming the bees in your area. Contains Pyganic®. Can be used on day of harvest (just wait for it to dry before entering the treatment area).

SUGGESTED USE: Insects: To avoid possible harm to bees, it's advisable to apply in the early morning or late evening hours. Dilute 1-1.4 fl oz/gallon of water/1,000 sq. ft. Can be applied with all types of agricultural sprayers. Spray when pests first appear, do not wait for an infestation.

1288601	Bug Buster-O - 8 oz.	\$28.49
1288602	Bug Buster-O - 16 oz.	\$53.49

Cannot be shipped to the following states: AR, AZ, IA, ID, KY, ND, NE, NV, WV, WY





WHAT ARE FLY ELIMINATORS?

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

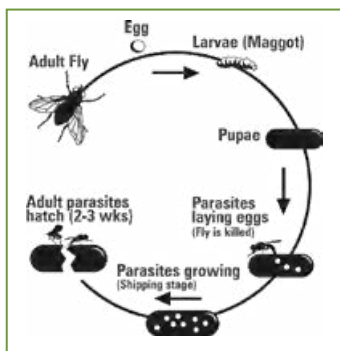


Adult Fly Eliminator emerging from fly pupa.

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

HOW DO FLY ELIMINATORS WORK?

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



Life cycle of the fly parasite.

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

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

Philadelphia Park Recommends ARBICO's Fly Eliminators

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



– Roy Smith, Former Track Manager of Philadelphia Park

WHO USES FLY ELIMINATORS?

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

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

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



HOW DO I USE FLY ELIMINATORS?

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

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



Fly Eliminators and wood shavings in packaging.



Use Your Fly Eliminators the RIGHT Way:

RIGHT Time

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

RIGHT Place

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

RIGHT Amount

- ☑ The more Fly Eliminators, the fewer the flies

RIGHT Schedule

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

Churchill Downs Chooses ARBICO Organics

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

– Butch Lehr, Former Track Manager of Churchill Downs



Del Mar Thoroughbred Club Relies On ARBICO Organics

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

– Joe Harper, Chief Executive Officer of Del Mar



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	\$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 - 30	3 Units	\$83.95
31 - 35	3 1/2 Units	\$95.95
36 - 40	4 Units	\$106.95
41 - 45	4 1/2 Units	\$118.95
46 - 50	5 Units	\$121.95
51 +	Please Call 1-800-827-2847	

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. © 2022 Arizona Biological Control, Inc.

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.

1107500	Equiderma Horse Spray - 32 oz. RTU	\$28.49
1107501	Equiderma Horse Spray - Gallon RTU	\$99.99



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.

1107550	Ecovet Fly Repellent - 4 oz. Bottle	\$8.95
1107551	Ecovet Fly Repellent - 18 oz. Bottle	\$24.50
1107552	Ecovet Fly Repellent - Gallon Refill	\$128.00



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: pply 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.

1107570	Dr. Earth Final Stop Pet Spray - 24 oz. RTU	\$10.49
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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.

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



ADULT FLY TRAPS & REPELLENTS

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.

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



Epp's 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	Epp's Biting Fly Trap	\$425.00
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ARBICO Organics® Solar Fly Trap



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.

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

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

Replacement parts available online.

*FREE SHIPPING via ground or US Mail ONLY.

Captivator® Fly Trap

A Budget Friendly Fly Trap That's A Real Workhorse.

TARGET: Filth-breeding flies.

DESCRIPTION: This lightweight, yet heavy-duty, 1/2 -gallon (2 qt.) sized trap can stand up to the elements and keep working for months of fly control. 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 lots of flies. Comes with one 30 gm. water-soluble attractant pouch.

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



1256051	Captivator Fly Trap	\$12.99
1256053	Starbar Fly Trap Attractant Refill - 8 ct.	\$13.49

BIOLOGICAL CONTROL

Mosquito Bits®

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

TARGET: Mosquitoes and fungus gnats.

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.

1211108	Mosquito Bits - 8 oz.	\$10.95
1211136	Mosquito Bits - 30 oz.	\$17.80
1211130	Mosquito Bits - 20 lbs.	\$119.00
1211139	Mosquito Bits & Dunks Combo Kit	\$18.99

Mosquito Dunks®

Simply Place In Standing Water To Kill Mosquitoes Where They Grow.

TARGET: Mosquitoes.

DESCRIPTION: When placed in standing water, Mosquito Dunks will float on the water and they will slowly release the bacteria *Bacillus thuringiensis v. israelensis* (Bti) as they melt. This bacterium is a potent mosquito larvicide and as it disperses into the water it is eaten by, and kills, the mosquito larvae growing there. Dunks can be anchored with a string to keep them from washing away. They can also alternate between being wet and dry without losing effectiveness. Bti targets specific pests and is not harmful to people, animals or plants. Each dunk is effective for 30 days.



SUGGESTED USE: Use 1 dunk for 100 sq. ft. of water. Use in any containerized standing water found near the home, except finished, treated drinking water. This includes bird baths, water troughs, unused swimming pools, old automobile tires, water gardens, sump pumps and more.

1211101	Mosquito Dunks - 6 Pack	\$13.95
1211103	Mosquito Dunks - 20 Pack	\$22.95
1211139	Mosquito Bits & Dunks Combo Kit	\$18.99

AQUABAC® 200G Granular Bti Mosquito Control



Use This Bti Larvicide Wherever You Have Mosquitoes Breeding

TARGET: Larval stages of mosquitoes 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.
Cannot be shipped to the following states: NY

SKEETER Mosquito Control



Powerful Mosquito Control That Combines Botanicals With Beneficial Nematodes.

TARGET: Twenty species of mosquito and midge larvae, pupae and nymphs, including *Aedes Anopheles* and *Culex*.

DESCRIPTION: This organic product uses botanical oils (garlic & soybean) plus beneficial nematodes (*Heterorhabditis megidis*) for quick and complete control of targeted insects. The oils kill on contact and will take care of pupae and nymphs, while the nematodes go after the larvae. The nematodes will enter and kill the larvae and then use them as a food source, which keeps SKEETER effective for 30 days. 80% kill in 24 hours, 98% kill in 48 hours. 0-hr REI



SUGGESTED USE: For best results, use at the beginning of mosquito infestation. Apply with aerial sprayers, misters and backpack sprayers. Apply to turf, foliage, stagnant and/or standing water and the areas around it like the banks of streams/ponds, the ground around ditches and in the brush along pathways. These oils can be dangerous to other insects; avoid application to natural predators like dragonflies. 1-2 gal/500 gal water. May also be used at the dilution rate of 1:1,000 of product to water.

1211400 SKEETER - 1/2 Gallon (64 oz.) **\$100.00**

Cannot be shipped to the following states: AK, AL, CT, DC, IA, ID, IN, KY, MD, ME, MI, MS, MT, NC, NE, NM, NV, OK, OR, RI, TN, UT, VA, VT, WI

SNS 203™ Root Drench Pesticide



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 Root Drench Pouch Conc. - Makes 32 oz. **\$7.99**

1459130 SNS 203 Root Drench - 16 oz. Conc. **\$24.00**

1459131 SNS 203 Root Drench - Gallon Conc. **\$110.00**

1459132 SNS 203 Root Drench - 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

Mosquito Magician

An Essential Oil-Based Product That Offers 3-in-1 Mosquito Control.

TARGET: *Aedes Aegypti* mosquitoes, gnats, no-see-ums and other biting, flying insects.

DESCRIPTION: Mosquito Magician is a liquid, highly concentrated product that suffocates larvae in the standing water where they breed, kills adult mosquitoes on contact and repels for up to 2 weeks in a single treatment. Made with a combination of citronella, cedar, lemongrass, garlic, geraniol and rosemary oils, Mosquito Magician sprays in a very fine mist for maximum coverage and control. Mosquito Magician has been tested on the *Aedes aegypti* mosquito and was shown to have a 98% mortality rate and an 83% long term repellency rate from just one application. This is the mosquito that carries the Zika, West Nile and Chikungunya viruses, as well as malaria and dengue fever.



- You can buy some concentrate and use your own sprayer or choose from one of the Mosquito Magician Yard Sprayer Combos listed below.

SUGGESTED USE: 1 pint concentrate treats up to 16,000 sq. ft.; 1 quart concentrate treats up to 32,000 sq. ft.; 1 gallon concentrate treats up to 128,000 sq. ft. and 1 gallon RTU treats up to 4,000 sq. ft.

1211140 Mosquito Magician - 16 oz. Concentrate **\$25.29**

1211141 Mosquito Magician - 32 oz. Concentrate **\$39.99**

1211142 Mosquito Magician - Gallon Concentrate **\$99.99**

Mosquito Magician Yard Sprayer Combos

1211138 Battery Sprayer & 2 Gallons RTU **\$69.95**

1211147 Pump Up Sprayer & 2 Pints Concentrate **\$96.55**

1211146 Hose End Sprayer & 1 Gallon Concentrate **\$120.70**

1211148 Pump Up Sprayer & 1 Gallon Concentrate **\$157.45**

1211149 Pump Backpack Sprayer & 1 Gallon Concentrate **\$241.45**

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



Mosquitoes Transmit Serious Disease

Humans: Zika Virus, West Nile Virus, Malaria, St. Louis Encephalitis, La Crosse Encephalitis

Dogs and Cats: Dog Heartworm

Horses: Eastern Equine Encephalitis Virus, Western Equine Virus, West Nile Virus, St. Louis Encephalitis

Livestock: Encephalomyelitis, Anaplasmosis, Swamp Fever, Fowlpox



BONIDE® Mosquito Beater Granules

Simply Sprinkle These For Lasting Mosquito Relief!

TARGET: Mosquitoes.

DESCRIPTION: Made from biodegradable essential oils, these granules can be sprinkled right from the container for mosquito control wherever you need it (although it is not for aquatic use). It takes only 1 hour for this lovely smelling repellent to be effective and then it will retain its efficacy for 3 weeks. If treating larger areas, allow a longer period prior to occupancy.



SUGGESTED USE: Rainfall, temperature and wind may affect effectiveness. For optimal results, apply in the early evening in dry conditions with little or no wind. Broadcast directly from the container or apply with a lawn spreader, dust gun or a hand crank duster (available online). Reapply as needed.

- 1211305** Mosquito Beater Granules - 8 oz. (Treats 1,500 sq. ft.) **\$7.99**
- 1211310** Mosquito Beater Granules - 1.3 lbs. (Treats 4,000 sq. ft.) **\$15.49**

Natular® DT

These Easy-to-Use Fizzy Tablets Kill Mosquito Larvae For 60 days!

TARGET: Use to kill the larvae of container breeding mosquitoes, e.g., *Aedes aegypti* and *Aedes albopictus*.

DESCRIPTION: Use this Spinosad-based product to kill mosquito larvae in standing water. These small bi-layer tablets use a dual-release action to ensure a quick kill and continuous control. The first layer is effervescent and will bubble up, dissolve and spread within 60 seconds and begin killing larvae within 24 hours. The second layer dissolves more slowly over the next 60 days. Can be applied to sites that contain fish and plants. Poses no threat to honeybees and other beneficials. Tablets may be cut in half for use in smaller areas.



SUGGESTED USE: Use 1 tablet to treat up to 50 gallons (192 liters) or 25 sq. ft. For continuous action, keep tablet immersed in water. Can be allowed to dry and rewet for use in sites that intermittently fill with water. Reapply after 60 days. Can be applied as a preventative action (pre-flood treatment) before sites fill with water.

- 1211250** Natular DT - 60 day tablet - 12 ct. Package **\$11.75**

Skeet-O-Trap™



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

TARGET: The most common mosquito species.

DESCRIPTION: This no-fuss water-based mosquito trap mimics the breeding sites of mosquitoes, which entices the females to lay their eggs in it. The inner screen will then trap the larvae and keep them from escaping. Lightweight yet durable, and compact, this trap will work through all but the most extreme weather and keep working as long as you need it. Safe for use around people and pets.



SUGGESTED USE: Add water and grass clippings. Place in a shaded area away from where people gather. Clean and refill as needed.

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

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



Designed To Work All Season Long – Year After Year.

TARGET: Mosquitoes that may carry Zika, Dengue Fever, Yellow Fever, & Chikungunya.

DESCRIPTION: This type of trap was originally developed by the CDC to control and research disease-carrying mosquitoes. This version takes the same design and brings it to the home-owner. Mosquitoes are attracted to dark places with stagnant water to lay their eggs in and these traps mimic those locations. All you will need to add to this clever design is water and a little bit of hay or local dried grass. As mosquitoes arrive to the trap they will enter through the top of the Capture Chamber, but they'll be blocked by the metal screen and will land on the Sticky Board and be captured. Some eggs may still fall through and land in the water; but should they hatch they will not survive and cannot escape through the screen.

SUGGESTED USE: Put together the pieces of the trap (illustrated instructions included), add water and grass/hay and place on the ground near or under vegetative cover. Check traps regularly. Water should always be at least 1/4 full. Replace water and hay/grass every 8 weeks or so. Once the season ends, clean and store upside-down until you need it again.



- 1280770** Mosquito Trap - 2 Pack **\$52.25**
- 1280772** Refill Sticky Boards - 2 Pack **\$9.29**

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

Protector Mosquito Repellent

Don't Let Mosquitoes Ruin Your Outdoor Life!

1212020	Protector Spray - Mosquitoes - 2 oz.	\$4.99
1212021	Protector Spray - Mosquitoes - 4 oz.	\$5.99
1212022	Protector Spray - Mosquitoes - 8 oz.	\$8.99
1212028	Protector Balm Stick - Mosquitoes - 2 Pack	\$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
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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®, Camp Grids & Pet Tags

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

TARGET: Mosquitoes, fleas and ticks.

DESCRIPTION: Adjustable bands are one-size fits all and measure about 9.8" long x .47" wide. Waterproof, sweat-proof and work by masking human odors. Grids cover up to 300 sq. ft. Plastic is impregnated with essential oils of citronella, lemongrass and geranium.

SUGGESTED USE: Hang grids indoors or outdoors. Bands and grids last up to 100 hours; each pet tag lasts up to 15 hours.

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



AMENDMENTS

ARBICO Organics® Compost Plus

Revitalizes Soil And 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.

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

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

ARBICO Organics® Earthworms - *Eisenia fetida*

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

DESCRIPTION: These red wigglers 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.

1308003	ARBICO Organics Earthworms (≈1,000)	\$45.00
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Subject to seasonal availability.

DTE Insect Frass, 3-1-1



A 100% Natural Insect-Based Fertilizer.

DESCRIPTION: This organic fertilizer comes from sustainable insect farming and contains the waste and exoskeletons of Black Soldier Fly larvae. Raised solely on pre-consumer food waste, these larvae produce an excrement (frass) that's full of nutrients and chitin (bits of exoskeleton left over from molting). Plants respond to chitin as if there are insects present and make themselves stronger to fight off the perceived threat. The result is bigger and healthier plants. The combination of nutrients and chitin makes this an exceptional product. OMRI listed and CDFA registered.



SUGGESTED USE: Can be used for vegetable gardens, outdoor containers, trees and shrubs. Vegs: New plants: 1-2 lbs/100 sq ft or 1-2 tbsp/each hole. Side dress 1-2 oz on established plants. Outdoor containers: New plants: 1-2 tbsp/gal soil or 1 cup/cu ft. Mix 1-2 tbsp/gal on established plants. Trees/ Shrubs: New trees: prepare transplant hole and mix 1-2 cups with backfill soil. Spread 1 lb/1 inch of trunk diameter around the base of established trees/ shrubs.

1300255	DTE Insect Frass - 2 lbs.	\$12.99
1300256	DTE Insect Frass - 10 lbs.	\$29.99

Cannot be shipped to the following states: AR, CT, DE, GA, IA, IN, KS, ME, MN, MS, MT, NC, ND, NH, OH, PA, PR, RI, SC, SD, VA, 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.

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

DOWN TO EARTH



Andesite Mineral Complex™



**Bring Volcanic Power To Your Soil
With This Biodynamic Amendment!**



DESCRIPTION: This product returns essential beneficial minerals and trace elements from volcanic rock to your soil in a slow, natural release. Your plants will benefit by having enhanced resistance to insect pests, disease, frost and drought as well as improved nutrient uptake. This paramagnetic rock aids in carbon exchange (CDC) in soil, helps balance soil pH levels, improves brix levels in plants and works with other natural inputs. Can be used in any growing media and will not clog hydroponic or irrigation systems. Can be used on all crops and can be made into a compost tea.

SUGGESTED USE: Can be applied throughout the year or growing cycle. Cannot be over-applied and will not burn. Apply as little as 1-2 tsp. per pot to 25-40 for garden beds. See website for full application rates.

1308320 Andesite Mineral Complex - 3 lbs. **\$18.49**

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

VRD: Volcanic Rock Dust™



**This Easy-to-Use Amendment
Unleashes Mineral Power From
Deep In The Earth.**



DESCRIPTION: VRD is sourced from Indonesia, where it is mechanically extracted in an ecologically sound manner without using chemicals. Then it is meticulously sifted through a 200 mesh screen until it turns into a smooth dust that will slowly release in the soil. VRD contains calcium, magnesium, iron, sodium and naturally occurring hydrophobic fulvic acid. It can be applied to soil (or a growing medium), used as a top dressing, made into a tea, used as a compost invigorator, and in vermicomposting. Excellent for all types of plants.

SUGGESTED USE: Gently dig into soil surface once per month or as desired. For gardens, landscapes, transplanting & premixing soil for potted plants and planter boxes: Use up to 5 lbs/200 sq ft or 25 lbs/ 1,000 sq ft. As a top dressing: Mix 1 tbsp/gal of soil or growing medium.

1308325 Volcanic Rock Dust - 5 lbs. **\$18.95**

Cannot be shipped to the following states: ID

Azomite Powder, 0-0-0.2



The A To Z Of Minerals Including Trace Elements.

1309300 Down To Earth Azomite Powder - 1 lb. **\$5.49**

1309301 Down To Earth Azomite Powder - 5 lbs. **\$9.79**

DTE Dolomite Lime



A Simple Way to Sweeten Your Soil.

1300245 Down To Earth Dolomite Lime - 5 lbs. **\$8.99**

DTE Garden Gypsum



Improves the Condition of Your Soil While Adding Essential Nutrients.

1300249 Down To Earth Garden Gypsum - 5 lbs. **\$10.49**

DTE Langbeinite, 0-0-22



Get 3 Crucial Plant Nutrients In One Mineral Application.

1300263 Down To Earth Langbeinite - 5 lbs. **\$13.39**

DTE Rock Phosphate, 0-3-0



Dose Your Soil With This Before Planting – Your Plants Will Love You For It.

1300269 Down To Earth Rock Phosphate - 5 lbs. **\$11.39**



See more Down to Earth
Fertilizers on pages 46-47.

MYCORRHIZAE & MICROBIAL INOCULANTS

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 ecto-mycorrhizae 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 10⁸ spores/gr.



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

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

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

SCD ProBio Balance Original™



Promotes & Restores A Healthy Microbial Balance.

DESCRIPTION: This is a blend of probiotic cultures that have been produced through a natural fermentation process that uses proprietary probiotic technology. When introduced into any living system, these cultures promote the growth of naturally occurring beneficial microorganisms. Contains enhanced levels of phototropic Purple Non-Sulfur Bacteria (PNSB). These bacterial can live in both aerobic and anaerobic environments, which allows this highly concentrated product to work in many different applications. All-natural, environmentally safe and biodegradable.

SUGGESTED USE: Large scale food composting: Spray on compost at a rate of 1-3 liters/ton of compost material. Dilute with water as needed. Indoor composting: Dilute at a ratio of 1:10 with water and apply every 2 weeks. Commercial/residential odor control: Spray on the affected areas at a rate of 1:10-1:100.



1202120	SCD ProBio Balance Original - Gallon	\$27.45
1202121	SCD ProBio Balance Original - Quart	\$70.35

DYNOMYCO™



Two Strains Of Mycorrhizae That Help Plants Reach Their Highest Potential.

DESCRIPTION: This innovative mycorrhizal inoculant contains *Glomus intraradices* and *Glomus mosseae*. Sourced from the Israeli desert, these two strains have adapted to thrive in harsh conditions (high salinity, drought). Rapidly colonizes the root zone for multiple benefits. Provides improved phosphorus availability. Can be used with organic and synthetic fertilizers. Highly concentrated & cost effective. Compatible with soil, coco, or soil-less blends. Provides a high rate of transplant success and rapid, strong plant development with robust root growth and improved nutrient uptake. Do not use with systemic fungicides.



SUGGESTED USE: Apply before transplant in the transplant hole, as a root-ball coating, or mixed into the growing medium. Must make direct contact with the roots of the plants to be fully effective. With initial planting of seeds, clones, or seedlings: 1 tsp/pint of growing media. When transplanting: 1 tsp/gal either mixed in media or spread in bottom and sides of planting hole.

1135110	DYNOMYCO Mini-Pouch - 3.5 oz.	\$14.00
1135111	DYNOMYCO Dynamite Stick - 7 oz.	\$26.00
1135112	DYNOMYCO Small Pouch - 12 oz.	\$28.00
1135113	DYNOMYCO Large Pouch - 1.65 lb.	\$52.00

Cannot be shipped to the following states: AR, ID, IN, IA, LA, MD, MN, MS, NH, NC, ND, SC, SD, UT, WV, WI, WY

Earth Alive™ Soil Activator™



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

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



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

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

Cannot be shipped to the following states: AL, AR, CA, LA, SD, VT, WV, WI

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.

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



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



Multiple Organic Accreditations For One Exceptional Fertilizer.

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

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

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

1314750	AgroThrive Fruiting & Flowering Fertilizer - 32 oz.	\$20.97
1314752	AgroThrive Fruiting & Flowering Fertilizer - Gallon	\$34.49



High Nitro Bat Guano, 8-3-1



A Traditional Fertilizer Upgraded To The Highest Organic Standards.

TARGET: Plants in need of a nitrogen boost.

DESCRIPTION: This organic nitrogen-rich bat guano is sourced from insect-eating bats in Indonesia (where it is sustainably managed and harvested). As an essential nutrient, nitrogen is crucial for healthy plant life-it greens up plants and supports photosynthesis. When you use this product, you can expect to see dynamic shoot growth and increased size and quality of fruit/bud development and fruit set. CFDA registered organic.

SUGGESTED USE: Gardens & landscapes: Up to 22 lbs/ 1000 sq. ft. Gently dig into the soil surface once per month or as desired. Transplanting & pre-mixing soil and top dressing: 1 tsp/gal soil or growing medium. Tea mixes: 2 Tbsp/ gal into a mesh bag, never loose in solution.

1300120	High Nitro Bat Guano - 5 lbs.	\$17.95
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Cannot be shipped to the following states: ID, WA



High Phos Bat Guano, 3-6-1



Provides A Healthy Dose of Both Phosphate & Calcium.

TARGET: For lackluster plants that need a boost of phosphate and calcium.

DESCRIPTION: This high-quality guano is produced by insect and fruit eating bats in the jungle of Indonesia (where it's sustainably managed and harvested). It's 42% organic material and contains a significant amount of both phosphate and calcium. Phosphates spur root growth, smooth the way for optimal nutrient uptake and help create plentiful, high-quality blooms and foliage. Calcium is essential for strong plant tissues, vigorous growth and healthy cell activity.

SUGGESTED USE: Gardens & landscapes: Up to 22 lbs/ 1000 sq. ft. Gently dig into the soil surface once per month or as desired. Transplanting & pre-mixing soil and top dressing: 1 tsp/gal soil or growing medium. Tea mixes: 2 Tbsp/ gal into a mesh bag, never loose in solution.

1300130	High Phos Bat Guano - 5 lbs.	\$16.95
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Cannot be shipped to the following states: CA, ID, WA



Understanding N-P-K & Why its Important

Selecting the right fertilizer for your plants is very important for optimum health and growth. Here are some tips to help you make your selection:

N = Nitrogen: Important for plant tissue growth.

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

K = Potassium: Helps carbohydrate production and regulates metabolism.

Identify Common Symptoms of Nutrient Deficiencies

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

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

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



Maxicrop® Liquid Seaweed, 0-0-1

Boost Plant Growth With This Concentrated & Nutrient Rich Fertilizer!

TARGET: Poor root development, slow growth, and disease caused from lack of minerals, nutrients and enzymes.

DESCRIPTION: Made from *Ascophyllum nodosum* seaweed from Norway, Maxicrop contains over 70 different elements, vitamins and minerals that activate enzyme systems and act as stimulants for root and plant growth. This product will also condition soil, increase pest resistance and is a balanced fertilizer. A harvested, renewable resource, this product is a sustainable choice to boost the health of your indoor/outdoor plants, gardens and lawns. **Due to EPA regulations, this product's label states that it is not intended for use on agricultural food site crops since it is now considered a plant vitamin hormone.**

SUGGESTED USE: The 32 oz. concentrate makes approximately 32 gal. See website or label for specific application rates.

1313005	Maxicrop Liquid Seaweed - 32 oz.	\$14.00
1313006	Maxicrop Liquid Seaweed - Gallon	\$30.00
1313007	Maxicrop Liquid Seaweed - 2.5 Gallons	\$61.00



Maxicrop® Liquid Fish, 3-1-1

A Classic Fertilizer That's Always A Great Choice.

TARGET: Growers looking for more than N-P-K in a high quality liquid fertilizer.

DESCRIPTION: Made from Menhaden fish, this concentrated liquid fish fertilizer will provide high quality protein, naturally occurring amino acids, and essential micro-nutrients without the risk of burning. This formulation will provide all the tools your plants need for healthy metabolism and effective nutrient uptake. Can be used as a foliar spray or soil drench.

SUGGESTED USE: Prepare for one application only. Can be used on cuttings, outdoor plants, lawns, and as a foliar feed and compost enhancer. Standard application: 1 oz/gal water. Every 2 weeks. For lawns: 1/2 gal/1,000 sq. ft.

1313010	MaxiCrop Liquid Fish - 32 oz.	\$14.00
1313011	MaxiCrop Liquid Fish - Gallon	\$27.50
1313012	MaxiCrop Liquid Fish - 2.5 Gallons	\$63.00

Larger sizes available.



Maxicrop® Soluble Seaweed Powder, 0-0-17

Improves Germination & Helps Prevent Diseases.

TARGET: Soils that need additional minerals.

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

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

1313001	Maxicrop Soluble Seaweed Powder - 10.7 oz.	\$20.00
1313002	Maxicrop Soluble Seaweed Powder - 27 oz.	\$38.00
1313003	Maxicrop Soluble Seaweed Powder - 5 lbs.	\$70.00
1317202	Maxicrop Soluble Seaweed Powder - 44 lbs.	\$463.20



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.

1314801	Maxicrop Kelp Meal - 5 lbs.	\$18.00
1314804	Maxicrop Kelp Meal - 55 lbs.	\$107.00



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.

1315012	Pint	\$13.79
1315011	Quart	\$18.99
1315013	Gallon	\$46.99
1315014	5 Gallons	\$169.99

Larger sizes available.



Neptune's Harvest Liquid Crab & Lobster Shell, 2-0-2



Nutrient Rich Plant Food Derived From Crab & Lobster Shell Meal

TARGET: Flowers, vegetables, fruits, containers/raised beds, houseplants, clones, transplants & lawns.

DESCRIPTION: Made by using micronization to grind Neptune's Harvest Crab & Lobster into an extremely fine powder. This powder is then stabilized in a liquid carbon base and bottled up. The final result is a drip line and sprayer friendly product that typically stays in suspension for 30+ minutes.

SUGGESTED USE: Flowers/vegetables: 1 oz/gal water foliarly every 2 weeks. Once flowers or buds appear, soil drench only. Lawn & Turf: 1 qt/2,000 sq. ft. Apply once a month spring-fall. Fruit: 1 oz/gal water every 1-2 weeks. Containers/raised beds: 1 oz/gal water every 1-2 weeks. Houseplants: 1 Tbsp/gal water every week. Clones/transplants: Dip roots in solution of 1 oz/gal water for 5 seconds before planting. Use 1 oz/gal water every 3 days until well established.

1315020	Liquid Crab & Lobster Shell - Pint	\$19.49
1315021	Liquid Crab & Lobster Shell - Quart	\$26.99
1315022	Liquid Crab & Lobster Shell - Gallon	\$71.29
1315023	Liquid Crab & Lobster Shell - 5 Gallons	\$264.59



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.

1315001	Pint	\$11.99
1315000	Quart	\$16.49
1315002	Gallon	\$41.39
1315003	5 Gallons	\$165.50

Larger sizes available.



Neptune's Harvest Crab & Lobster Shell, 5-3-0



An Excellent Alternative To Bone Meal If You Are Looking For A Calcium Additive.

TARGET: Gardens, field applications, row crops, orchards, compost, turf, potting mixes, seedbeds, bedding plants, bulbs and fertilizer mix.

DESCRIPTION: This is a superior dry fertilizer for all your growing needs. It has an NPK of 5-3-0, but also contains calcium (17%) and magnesium (1%). This slow release fertilizer is high in chitin and will promote the growth of beneficial organisms in the soil that help deter plant parasitic nematodes. The high calcium content of NH Crab and Lobster Shell reduces the effects of fungal diseases such as blossom end rot and helps plants develop healthy, strong cells. Works well with kelp meal fertilizers. High calcium fertilizers are great for bulbs and flowers.

SUGGESTED USE: Can be worked into the soil, scratched into topsoil or placed around plants. Apply in early spring as soon as soil can be worked. For perennial crops, apply at the end of dormancy. Mix thoroughly with the soil or growing media. Do not apply in concentrated form directly to the roots. For trees and turf, apply directly as a top dressing. Please call for crop-specific application rates and/or mixing rates.

1315004	Crab & Lobster Shell - 4 lb. Bag	\$17.99
1315005	Crab & Lobster Shell - 12 lb. Bag	\$49.99
1315016	Crab & Lobster Shell - 44 lb. Bag	\$73.49



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.

1315008	Pint	\$13.29
1315007	Quart	\$16.99
1315009	Gallon	\$41.49
1315010	5 Gallons	\$165.99

Larger sizes available.



FERTILIZERS



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

DTE 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.	\$4.49
1300201	Down To Earth Acid Mix - 5 lbs.	\$11.79



DTE All Purpose Mix, 4-6-2

Fertilizer For All Of Your Growing Needs!

1300209	Down To Earth All Purpose Mix Mini - 1 lb.	\$4.49
1300207	Down To Earth All Purpose Mix - 5 lbs.	\$11.79



DTE Bat Guano, 7-3-1

High-Nitrogen Fertilizer From Bat Guano.

1300006	Down To Earth Bat Guano Mini - .25 lb.	\$4.49
1300007	Down To Earth Bat Guano - 2 lbs.	\$13.39
1300008	Down To Earth Bat Guano - 10 lbs.	\$37.29



DTE Bio-Fish, 7-7-2

Nitrogen & Phosphorus Rich For Robust Fruit & Blooms.

1300315	Down To Earth Bio-Fish - 5 lbs.	\$15.99
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DTE Bio-Live, 5-4-2

A Microbe-Rich Fertilizer To Help Build Living Soil!

1300260	Down To Earth Bio-Live - 5 lbs.	\$17.99
1300261	Down To Earth Bio-Live - 25 lbs.	\$62.99
1300262	Down To Earth Bio-Live - 50 lbs.	\$103.49



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.	\$4.49
1300301	Down To Earth Blood Meal - 5 lbs.	\$20.99
1300302	Down To Earth Blood Meal - 20 lbs.	\$62.29
1300303	Down To Earth Blood Meal - 50 lbs.	\$121.19



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.	\$14.39
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DTE Citrus Mix, 6-3-3

The Nutrients You Need For Vibrant & Delectable Citrus!

1300295	Down To Earth Citrus Mix - 1 lb.	\$4.49
1300296	Down To Earth Citrus Mix - 5 lbs.	\$11.79

Larger sizes available - please go online or call.



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.	\$15.79
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DTE Feather Meal, 12-0-0

Provides A Slow & Steady Source Of High Quality Nitrogen.

1300247	Down To Earth Feather Meal - 5 lbs.	\$16.99
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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.	\$4.49
1300287	Down To Earth Fish Bone Meal - 5 lbs.	\$11.99

DTE Granular Humic Acids



Highly Concentrated Source Of Humic Substances.

1300320	Down To Earth Granular Humic Acids - 1 lb.	\$3.59
1300321	Down To Earth Granular Humic Acids - 5 lbs.	\$10.39
1300322	Down To Earth Granular Humic Acids - 25 lbs.	\$27.79

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.	\$4.49
1300281	Down To Earth Kelp Meal - 5 lbs.	\$27.99

DTE Neem Seed Meal, 6-1-2



Another Outstanding Product From The Well-Loved Neem Tree.

1300267	Down To Earth Neem Seed Meal - 5 lbs.	\$17.99
1300268	Down To Earth Neem Seed Meal - 20 lbs.	\$50.89

DTE Rose & Flower Mix, 4-8-4

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

1300233	Down To Earth Rose & Flower Mini - 1 lb.	\$4.49
1300231	Down To Earth Rose & Flower Mix - 5 lbs.	\$11.79

DTE Starter Mix, 3-3-3



Feed Your Young Plants Well With This Nutrient & Mycorrhizae Mix.

1300264	Down To Earth Starter Mix - 1 lb.	\$4.49
1300265	Down To Earth Starter Mix - 5 lbs.	\$12.39

DTE Tree & Shrub, 4-2-4

Fertilizer + Mycorrhizae To Support Healthy Tree & Plant Growth.

1300250	Down To Earth Tree & Shrub - 5 lbs.	\$18.79
1300251	Down To Earth Tree & Shrub - 25 lbs.	\$56.29

DTE Vegan Mix, 3-2-2



A Veganic Fertilizer From Down To Earth For All Your Growing Needs!

1300237	Down To Earth Vegan Mix - 5 lbs.	\$11.79
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DTE Vegetable Garden, 4-4-4



Give Your Vegetable Garden A Powerful Nutrient Boost!

1300298	Down To Earth Vegetable Garden - 1 lb.	\$4.49
1300299	Down To Earth Vegetable Garden - 5 lbs.	\$11.79
1300294	Down To Earth Vegetable Garden - 15 lbs.	\$29.99

See online for shipping restrictions and larger sizes.



Disease Control

Healthy plants start at the roots. Just as we strive to give our children the best start in order to become strong adults, plants need support right from the start. Creating a hardy root zone is the first step in keeping diseases at bay. The introduction of beneficial microorganisms to the soil leads to increased colonization of the root zone. This creates an environment that enhances rooting and suppresses pathogens with a symbiotic network of roots and microbes filling the void where pathogens often enter. In doing so, disease incidence is reduced, plant health is boosted and harvest yields are increased.

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.

1332754	RootShield Plus Granules - 10 lb. Box	\$200.00
1332755	RootShield Plus Granules - 40 lb. Bag	\$440.00
1332756	RootShield Plus WP - 1 lb. Bag	\$140.00
1332757	RootShield Plus WP - 3 lb. Box	\$300.00

Large sizes available.

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

Howler Fungicide



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

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

DESCRIPTION: This organic wettable powder fungicide uses the active ingredient of *Pseudomonas chlororaphis* strain AFS009 to work inside the plant microbiome to attack the pathogenic fungi that cause plant diseases. It does this by producing natural antibodies that directly attack the fungi and enzymes that break down fungal cell walls and prevent spore attachment. All of this action induces a resistance response in the plants that further inhibits fungal growth. For use on a wide range of crops. Can be applied into the soil, in a drench, in a drip, as a foliar spray and in chemigation. 4 hr. REI and 0-day PHI. Approved for use on cannabis in CO.



SUGGESTED USE: Do not apply by aerial application. To ensure tank-mix combinations, they must be evaluated prior to use. Using Howler Alone: 5 lbs/ acre. Fruiting & Leafy Vegetables, Beans, Peas, Dry Pulses & Cole Crops: 67-100 oz/100 gal or 5-15 lbs/acre, depending on application method. Greenhouse Soil Incorporation: 1.75-8.5 lbs/cu. yd. Hydroponic Crops: 1.8-6 oz/1,000 sq. ft. Repeat at 7-10 day intervals.

1332930	Howler Fungicide - 5 lbs.	\$64.50
1332935	Howler Fungicide - 5 lbs. - pack of 3	\$174.00

Cannot be shipped to the following states: HI

Stargus™



From A Leader in Bio-Innovations Comes This Triple-Action Biofungicide.

TARGET: Foliar and soil-borne plant diseases like downy mildew, *Botrytis*, *Fusarium*, white mold and many more.

DESCRIPTION: This organic biological fungicide uses *Bacillus amyloliquefaciens* strain F727 to deliver several modes of action against fungal and bacterial pathogens. Stargus uses the *Bacillus* rhizobacterium to colonize root and plant surfaces, which prohibits the pathogens from accessing the plant. It also has a protective effect by inducing a systemic resistance and acquired resistance response within the plant and a curative effect by inhibiting mycelial growth and sporulation of the fungus on the leaf surface. MRL exempt. 0-day PHI and 4-hr REI.



SUGGESTED USE: Can be used alone or in rotation. Labeled rates of 2 quarts to 4 quarts/acre. Usual recommendation of 2 qts/acre. Apply 2-4 times at 7-10 day intervals.

1332975	Stargus - 2.5 Gallons	\$178.00
1332976	Stargus - 2.5 Gallons - Case of 2	\$340.00

Cannot be shipped to the following states: CA

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, ID, IA, LA, NE, ND, SC, SD, TN, WV, WY



Cueva® Fungicide Concentrate



Kills Fungal & Bacterial Plant Diseases With Good Ole' Copper Soap.

TARGET: *Alternaria*, anthracnose, spots, bacterial blast, bacterial cankers, specks, rots, black pod, blotch, molds, *Botrytis*, downy mildew, fireblight, fly speck, leaf smut, knots, powdery mildew, *Rhizoctonia*, rusts, scab & more.

DESCRIPTION: Organic Cueva combines a soluble copper fertilizer with a fatty acid to create a true soap in a patented flowable liquid formulation. This formula lets the product spread easily across plant surfaces and helps the copper get into fungal or bacterial cells and destroy them. As it moves across the plants and into the cells, it forms a protective layer that creates a hostile environment for pathogens.

SUGGESTED USE: On vegetables, field-grown herbs and crops, nuts, fruits, citrus and berries: Mix 0.5-2.0 gals/30-100 gals of water and apply to one acre. Begin treatment when disease first appears and reapply at 7-10 day intervals. This schedule may vary somewhat according to crop specific application needs. Use the higher rate following heavy rain or when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application. Use the higher rate to control diseases that may go dormant and overwinter.

1332920	Cueva Fungicide Concentrate - 2.5 Gallons	\$143.50
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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 P₅ 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.

1332968	Regalia CG - Quart	\$51.00
1332969	Regalia CG - Gallon	\$117.00
1332970	Regalia - 2.5 Gallons	\$220.00

Cannot be shipped to the following states: Regalia CG (1332968, 1332969) cannot ship to FL. Regalia 2.5 gal (1332970) cannot ship to CA.



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.

1332724	Cease - Gallon	\$85.00
1332727	Cease - 2.5 Gallons	\$185.00
1332725	Cease - Gallon, Case of 4	\$306.00
1332728	Cease - 2.5 Gallons, Case of 2	\$333.00



Thymox® Control Organic



Thyme Oil Control Delivered With Nano Technology.

TARGET: Fungal diseases like Powdery Mildew and Grey Mold and bacterial diseases like Fireblight.

DESCRIPTION: This organic foliar spray combines thyme oil with innovative and proprietary nano emulsion technology to provide a highly effective, broad-spectrum, non-specific fungicide/bactericide. It delivers billions of nano-sized droplets of botanically based thyme oil for superior coverage of plant surfaces and thorough contact with pathogens. Once this product touches the plant surfaces it begins to destabilize and damage the cell of any pathogens it encounters, which causes cell leakage and subsequent death of the pathogen. MRL & FIFRA 25(b) exempt. 0-day PHI & 0-hr REI.



SUGGESTED USE: *Not for aquatic use.* Dilute 1 part of product/200 parts water (0.5%) or 64 fl oz/100 gals of water. Do not apply undiluted. Use immediately after dilution, do not store diluted product. Apply as a foliar treatment any time during growing season, when conditions (humidity, temperature, etc.) promote microbial growth or when fungal disease symptoms first begin to appear. Reapply every 5-7 days, or as needed.

1458380	Thymox Control Organic - Liter	\$47.25
1458381	Thymox Control Organic - Gallon	\$148.99
1458382	Thymox Control Organic - 2.5 Gallons	\$350.99

Cannot be shipped to the following states: AL, AK, AR, CO, CT, DE, FL, HI, ID, IN, IA, KS, KY, LA, ME, MD, MI, MS, MT, NE, NV, NH, NM, ND, OH, PA, RI, SD, TN, UT, VT, VA, WV, WI, WY

ZeroTol® HC



Clean Up & Protect Your Plants With One Powerful Product.

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

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

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



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

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, WSDA registered foliar fungicide. Potassium bicarbonate-based fungicide that 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: Generally 2.5 lbs./100 gal. of water. (See label online for specific crops, diseases and application systems.)

1332766	MilStop SP Foliar Fungicide - 5 lbs.	\$65.00
1332767	MilStop SP Foliar Fungicide - 25 lbs.	\$275.00



Procidic®



This Organic Fungicide/Bactericide Works Two Ways: On Contact & Systemically.

TARGET: *Agrobacterium, Alternaria*, anthracnose, bacterial complex, black chaff, black sigatoka, *Botrytis*, cankers, citrus greening, damping off, dirty grain, downy mildew, *Fusarium*, gummosis, leaf streak, leaf stripe, lettuce drop, mummy berry, root tumor, rust, spots, specks, wilts and more.

DESCRIPTION: This WSDA certified foliar spray uses citric acid to eliminate pathogenic fungi and bacteria. This exceptional product will work on contact, but is also absorbed rapidly into the plant. Once inside, it will work its way towards the apex of plant. This action allows new tissue to grow infection-free. Additionally, as it moves through the plant, it stimulates the production of phytoalexins (a plant's natural defense against microbial attacks), which inhibits the future growth of fungi and bacteria. May be applied in regular foliar spray applications or in tank mixes and there is no maximum number of applications per season. 0-hour REI and 0-day PHI. Can be used on a wide range of plants and crops.

SUGGESTED USE: Best when applied preventatively. Procidic has crop-specific application rates that can be found on the manufacturer's label. A general application is to apply in a minimum of 10 gals of water per acre.

1458220	Procidic RTU - 32 oz.	\$15.99
1458221	Procidic Concentrate - 16 oz.	\$39.50
1458222	Procidic Concentrate - Gallon	\$270.00

Cannot be shipped to the following states: AL, AK, GA, HI, ID, IN, KY, MS, MT, NC, SC, SD, TN, UT, WV, WI, WY



BONIDE® Liquid Copper Fungicide

Use For The Control & Prevention Of Many Fungal Diseases!

TARGET: Works as a knockdown control for the following: anthracnose, bacterial blight, bacterial leaf spot, black spot, *Botrytis*, brown rot, Cedar apple rust, citrus scab, downy mildew, fireblight, *Phytophthora*, powdery mildew, and scab.

DESCRIPTION: Liquid copper fungicide helps prevent and treat many diseases on a wide variety of trees and ornamental plants. Liquid Copper can be used on grapes, vegetables, fruit trees, berry bushes, roses, pine, cedars and more. For garden use only.



SUGGESTED USE: RTS does not need to be diluted. Concentrate: Mix ≈2-6 Tbsp./gal. of water or 1 qt./100 gal. depending upon infestation. Repeat at 7-14 day intervals until harvest. Plant and crop-specific instructions included.

1455110	BONIDE Liquid Copper Fungicide - 32 oz. RTU	\$10.99
1455105	BONIDE Liquid Copper Fungicide - 16 oz. RTS	\$21.99
1455106	BONIDE Liquid Copper Fungicide - 32 oz. RTS	\$36.00
1455101	BONIDE Liquid Copper Fungicide - 16 oz. Conc.	\$17.99

RTS (SKUs 1455105 & 1455106) **cannot be shipped to the following states:** PR
Concentrate (SKU 1455101) **cannot be shipped to the following states:** AK, DC

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

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.

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

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

CRD™ Botrytis Test



Find Out Quickly If It's *Botrytis* That's Plaguing Your Plants.

TARGET: Over 200 crops including hemp and fruiting crops.

DESCRIPTION: *Botrytis* (aka Bud Rot, Grey Mold, Bunch Rot and more) can be devastating to crops and once it's gotten a foothold it can be difficult to control. Early detection and treatment are essential to keeping this pathogen away from your plants, so the quicker you know the better you are. With this easy-to-use test you'll know on the spot if it's *Botrytis* you're dealing with. This kit comes with everything you'll need to get results in 10 minutes. Results can be read on included scorecard.



SUGGESTED USE: Apply plant material to buffer solution and agitate. Insert test strip and leave it for 10 minutes. Read test strip at 10 minutes. If so desired, you can read it again but not after 20 minutes.

1275010	CRD Botrytis Test Kit - 25 Pack	\$300.00
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The Power of Peroxyacetic Acid

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

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

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

SaniDate® 5.0



An OMRI Listed Sanitizer/Disinfectant.

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

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

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

1222515 SaniDate 5.0 - 2.5 Gallons **\$230.00**
1222517 SaniDate 5.0 - 5 Gallons **\$300.00**

Larger sizes available. All sales are final. No returns or refunds allowed.
 *Free Shipping in the contiguous 48 states. Ships via Ground ONLY.

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



OxiDate® 2.0



Clean Your Greenhouse & Tools With This Environmentally Friendly Alternative To Copper Fungicides!

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

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

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

1222501 OxiDate 2.0 - 2.5 Gallons **\$230.00**
1222502 OxiDate 2.0 - 5 Gallons **\$340.00**

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

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

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



ZeroTol® 2.0



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

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

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

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

1222401 ZeroTol 2.0 - 2.5 Gallons **\$230.00**
 All sales are final. No returns or refunds allowed.

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

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



FORTIFY SKY



Continuous, Effective Odor Control Delivered From Above.

TARGET: Clone rooms, veg rooms, flower rooms, curing rooms, and other cultivation facilities.

DESCRIPTION: FORTIFY SKY is your no-fuss solution for routine odor control in cultivation facilities. Using a controlled release technology, this innovative product emits trace amounts of pure chlorine dioxide gas from a humidity-activated chlorine dioxide generation system contained in a small pouch. No chemical mixing and no expensive generator technology required. Leaves no residue on surfaces and requires no post-treatment cleanup.

SUGGESTED USE: Use one 50 g pouch to treat 4,000 cubic feet. To treat an area larger than 4,000 cubic feet, use additional pouches at equal spacing. Carefully open outer foil packet and remove inner pouch. Do not open inner pouch. Place inner pouch 12-18 inches above plant canopy by hanging via hole in pouch. Inner pouch is effective for up to 30 days of use. Avoid direct exposure to water.

3000570 FORTIFY SKY - 50 g **\$64.99**

Cannot be shipped to the following states: AL, GA, HI, ID, IN, IA, KS, KY, NE, NC, OR, SC, TN, TX, UT, VA, WI, WY



FORTIFY CLEAR



Industrial-Strength, Safe, Ready-To-Use ClO² Concentrate With Multiple Applications.

TARGET: Irrigation systems, hard surfaces, tools and other equipment needing disinfection.

DESCRIPTION: This liquid chlorine dioxide product is designed for use in irrigation systems and to be directly applied for cleaning and disinfecting hard surfaces, tools, and equipment. It can also be used to treat and purify water (see label for details). Quickly and efficiently controls biofilm in irrigation lines and other areas but is also effective against pathogenic organisms like *Raoutella Terrigena* (and other bacteria), Poliovirus, Rotavirus (and other viruses) as well as mold, mildew, protozoa, algae and fungi. It's also first-rate for odor control. Fortify Clear is EPA, FDA, NSF certified and much less corrosive and safer for the environment than many other cleaning/disinfecting options.

SUGGESTED USE: Concentration and contact times are application specific. Minimum contact time for control of listed pathogenic organisms is 5 minutes, but 10 minutes is the average time. Disinfecting in Horticulture & Greenhouses: 250 pp (dilution rate 1:12). Removing Slime: 50 ppm (dilution rate 1:60). Inhibiting Reemergence: 0.25 ppm (dilution rate 12000:1). Cleaning Pots & Flats: 500 ppm (dilution rate 1:6). Greenhouse Glass, Walkways, etc: 125-250 ppm (1:24-1:12).

3000580 Fortify Clear - 5 Gallons **\$514.00**

All sales are final. No returns or refunds allowed.

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

Cannot be shipped to the following states: AL, GA, HI, ID, IN, IA, KS, KY, NE, NC, OR, SC, TN, TX, UT, VA, WI, WY



TweetMint™ Plant Wash



Keeps Plants Healthy & Your Area Smelling Great.

TARGET: Plants grown indoors or outdoors.

DESCRIPTION: The enzymatic action of this all-purpose, highly-concentrated and biodegradable product will get to work on plant surfaces to clean them and create an environment that less conducive to pest infestations. It also serves as an exceptional deodorizer. With regular use, you'll have healthy plants that can better fight off pests as well as a sweet-smelling growing area. Will not harm people, pets or the environment. Can be used on indoor and outdoor plants. Contains no parabens, dyes, phthalates, fragrances, formaldehyde, MEA, DEA, TEA, most common allergens, or synthetic and/or volatile compounds.

SUGGESTED USE: Use 1/2-1 oz of concentrate/gallon of water for low dose and 1-2 oz/gallon of water for high dose. Spray the dilution on the entire plant, both the top and bottom of the leaves. Do not apply (or store) in direct sunlight or in temperatures above 90°F degrees.

1202620	Tweetmint Plant Wash - 16 oz.	\$35.00
1202621	Tweetmint Plant Wash - 32 oz.	\$50.00
1202622	Tweetmint Plant Wash - 64 oz.	\$87.50
1202623	Tweetmint Plant Wash - 128 oz.	\$150.00



SaniDate® All Purpose Disinfectant



It May Not Wipe Away All Your Worries, But It Will Clean Many Pathogens.

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

DESCRIPTION: This simple-to use cleaner is an antibacterial, disinfectant and deodorant. It works with Hydrogen Peroxide and Peroxyacetic Acid and kills 99.9% of *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Salmonella enteri* bacteria. This OMRI listed product also controls mold and mildew and is excellent for spot-cleaning rugs. Works on contact, is bleach and scent free and leaves no harmful residue.

SUGGESTED USE: Not recommended for use on brass or marble. Can be used daily. 32 fl oz solution: 0.75 fl oz (1.5 tbl) + 32 fl oz/water. 1 gal solution: 3.0 fl oz (6 tbl) + 1 gal/water. Pre-clean heavily soiled surfaces. Spray using a coarse spray until area is thoroughly wet. Treated surface must remain wet for 10 minutes and then be allowed to air dry. Rinse food contact surfaces prior to reuse. Cleaning mold/mildew: Use 2.5-3.0 fl oz/gal water. After 10 minutes, remove solution and soil. Repeat every 7 days or more often if new growth appears.

1222519	All Purpose Disinfectant - 64 oz. Conc.	\$14.99
1222520	All Purpose Disinfectant - 1 Gal. Conc.	\$24.99
1222522	All Purpose Disinfectant - 1 Gal. Conc. - Case of 2	\$36.50

Cannot be shipped to the following states: DC



WEED CONTROL

WEED BARRIERS

WeedGuardPlus® Organic - 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 right 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, to overheating by the sun. Maintains this porosity through all but the most severe of weather. Can be applied by machine or by hand; the creped version is highly flexible and best for machine applications. These rolls are excellent for textured soils and/or those projects that are meant to be long-term. 54% heavier than the standard rolls and offers 12+ months of weed control.

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

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| 1453851 | Heavy Weight - Smooth Finish - 36" x 100' | \$32.99 |
| 1453852 | Heavy Weight - Smooth Finish - 48" x 100' | \$39.99 |



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 dandelion, clover, chickweed and thistle.

DESCRIPTION: This product offers pre-and post-emergent control using an active ingredient derived from Iron(Fe). Mixes quickly & 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.

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| 1453754 | Captain Jack's Lawnweed Brew - 16 oz. Conc. | \$14.99 |
| 1453752 | Captain Jack's Lawnweed Brew - 32 oz. Conc. | \$21.99 |

Cannot be shipped to the following states: CA, PR



PRE-EMERGENT

Earth Harvest Gluten-8 Liquid Corn Gluten - Set of 2

Easy-To-Apply Liquid Weed Control Without The Effort Of Lifting A Heavy Bag Of Corn Gluten Meal.

TARGET: Pre-emergent weed control and mild nitrogen fertilizer.

DESCRIPTION: Water-soluble and derived from corn gluten meal, it provides pre-emergent control of annual grasses and broadleaf weeds without the effort of applying the granular corn gluten. This product is packaged in a container that has a hose-end spray head for a reliable application.

SUGGESTED USE: A 2 quart set of Gluten-8 represents a 40 pound bag of corn gluten meal and treats approximately 2,000 sq. ft.

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| 1273015 | Gluten-8 Liquid Corn Gluten - Set of 2 - 32 oz. Hose End | \$29.45 |
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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.

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| 1453808 | Avenger Weed Killer - 24 oz. RTU | \$12.95 |
| 1453809 | Avenger Weed Killer - Quart Concentrate | \$30.00 |
| 1453810 | Avenger Weed Killer - Gallon Concentrate | \$90.00 |
| 1453812 | Avenger Weed Killer - 5 Gallons Concentrate | \$330.00 |

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



BROAD SPECTRUM

Avenger® AG Optima Burndown Herbicide



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

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

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



1453740	AG Optima - 32 oz. Concentrate	\$35.00
1453741	AG Optima - Gallon Concentrate	\$100.00
1453713	AG Optima - 2.5 Gallons - Case of 2 (5 Gal.)	\$395.00
1453714	AG Optima - 55 Gallon Drum*	CALL

Cannot be shipped to the following states: CA

*Call for freight quote.

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.



1453822	Biosafe Weed & Grass Killer - Gallon Concentrate	\$69.99
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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.



1453780	Deadweed Brew - Pint Concentrate	\$19.99
1453781	Deadweed Brew - Quart Concentrate	\$34.99
1453786	Deadweed Brew - Gallon Concentrate	\$158.99

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 organic, 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.



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

ThermX™ -70 Natural Wetting Agent



Overcome Adverse Water Conditions!

TARGET: Increases water & fertilizer uptake.

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



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

Soil: ≈1-2 tsp./gal. water, ≈16 oz./acre

1402403	ThermX-70 Natural Wetting Agent - Quart	\$27.00
1402404	ThermX-70 Natural Wetting Agent - Gallon	\$94.50
1402405	ThermX-70 Natural Wetting Agent - 5 Gallons	\$330.55
1402406	ThermX-70 Natural Wetting Agent - 55 Gallon Drum*	CALL

*Call for freight quote. Call for larger sizes.

Exhale CO₂ Bags

A Continuous Shower Of CO₂ Directly Onto Your Plants.

TARGET: Plants grown under artificial light.

DESCRIPTION: Because plants grown indoor struggle to get enough carbon dioxide to photosynthesize effectively, Exhale CO₂ Bags have been developed to provide the supplemental carbon dioxide they need. The innovative, maintenance-free design of these bags utilizes natural processes of beneficial fungal mycelia to cultivate carbon dioxide 24 hours a day for months without refilling or installing additional equipment. Use in vegetative and flowering stages for increased canopy size, faster growth and prolonged production during budding. Increasing CO₂ levels can also help plants tolerate higher temperatures in grow rooms using bright lighting.



SUGGESTED USE: Place bags slightly above the plants in grow room to allow CO₂ to precipitate down onto the cultivated plants. These bags come ready to use and should be placed as soon as possible after delivery. ExHale Micro: Clone domes and seeds trays (3.5 cu ft); produces CO₂ for 3 mos. Exhale Original: Small-med spaces (128 cu ft); produces CO₂ for 6 mos. ExHale XL: Med-large spaces (288 cu ft); produces CO₂ for 6 mos. ExHale 365: Area needing prolonged CO₂ production; produces CO₂ for 9 mos (3 wks to build up to peak output).

2000502	Exhale CO ₂ Micro	\$20.95
2000500	Exhale Original Bag	\$27.00
2000503	Exhale CO ₂ 365	\$31.50
2000501	Exhale CO ₂ XL	\$42.20
2000504	Replacement CO ₂ Bag Hanger	\$9.80

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

iHort Q-Plug Propagation Kit

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



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

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

1430055	iHort 40/40 Q-Plugs, 50 ct. Propagation Kit	\$21.43
1430054	iHort 40/40 Q-Plugs - 50 ct. Refill Bag	\$20.69

RAW Yucca Flow

Add Just A Pinch Of This And Watch Your Plants Take Off.

TARGET: Improves nutrient delivery and water retention, prevents nutrient lock-up and removes excess salts.

DESCRIPTION: Made from 100% natural yucca extract, this is the perfect addition to any nutrient or foliar spray program. It will keep minerals and nutrients in suspension during delivery and prevent nutrient lock-up. When used in a soil drench or flush, it helps distribute water and nutrients deeper and more thoroughly while pushing out excess salts from the root zone. Fully water soluble and very concentrated. Can be used in all stages of growth and flower. Increases water retention and helps plants recover from drought stress.



SUGGESTED USE: Works in conjunction with all nutrient and feeding programs. Add 1/16 to 1/8 tsp./5 gal. water in reservoir for irrigation or final spray solution. Apply directly to soil or foliage as needed. Do not exceed recommended dilution amounts.

1308420	RAW Yucca Flow - 2 oz.	\$18.99
1308421	RAW Yucca Flow - 8 oz.	\$53.99

Cannot be shipped to the following states: AK, MA, ME, MT, NC, NH, PA, RI, SC, TN, UT, VA, WI

Boogie Blue Water Filters

A Great Grow Deserves Great Water.

TARGET: Chlorine, chloramine, pesticide residue, mercury, heavy metals, dissolved solids, fluoride and other chemicals.

DESCRIPTION: Whether you are dealing with additives in municipal water, or worry about what-all is in your well water, Boogie Blue filters can help. They attach quickly and easily to your hose and use catalytic carbon and/or KDF membranes to greatly reduce chemical compounds and organic matter in your water (up to 99% of the chlorine and 87% of the chloramine in municipal waters). Available as Boogie Blue Basic, which will last for 10,000-50,000 gallons of spray volume and Boogie Blue Plus, which will last for 40,000-50,000 gallons.

SUGGESTED USE: Attach filter to any standard 3/4" hose. Before initial use, flush filter by running water through it for 1 minute or until water runs clear. When not in use, keep attached to hose or remove and keep closed at both ends. Do not leave filter under constant water pressure. When storing, do not allow filter to dry out; storing in a zip-lock type bag works well.



2000600	Boogie Blue Basic	\$29.90
2000605	Boogie Blue Plus	\$59.00

Bug Blaster™

This Magic Wand Will Blast Away Destructive Bugs.

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

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



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

1452530	30" Anodized Blaster	\$24.95
1452535	Replacement Nozzle	\$12.99

LAWN & GARDEN SPRAYERS



BONIDE® Auto Mix Hose End Sprayer

Just A Few Quick Steps To Flawless Spraying.

1800010	BONIDE Auto Mix Hose End Sprayer	\$17.99
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Chameleon Adaptable Hose End Sprayer

Get Perfect Application With This Highly Adjustable Sprayer.

1800006	Chameleon Adaptable Hose End Sprayer	\$13.75
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Economical Liquid Hose End Sprayer

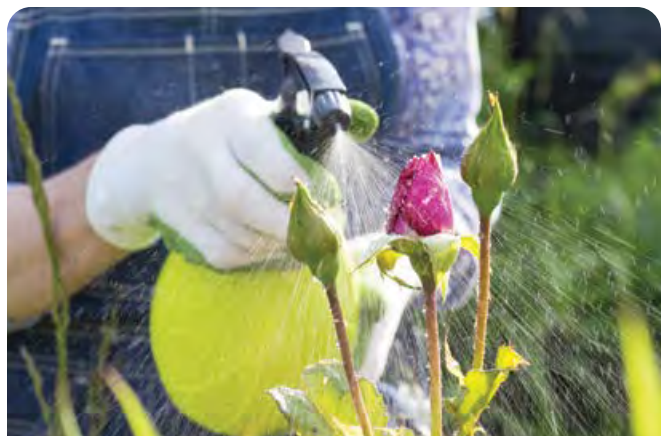
This Simple Sprayer Does All That You Need It To.

1800106	Economical Liquid Hose End Sprayer	\$11.99
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Flo-Master By Hudson Lawn & Garden Sprayer

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

1800101	Flo-Master Lawn & Garden Sprayer - 1 Gallon	\$10.99
1800102	Flo-Master Lawn & Garden Sprayer - 2 Gallon	\$14.99



ANIMAL CONTROL

Root Guard Gopher Wire Baskets

Stop Gophers From Damaging Plant Roots!

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

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

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



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

Chase™ Granular Mole & Gopher Repellent

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

TARGET: Gophers & moles.

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

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



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| 1287900 | Chase Granular Mole & Gopher Repellent - 6 lbs. | \$27.00 |
| 1287901 | Chase Granular Mole & Gopher Repellent - 32 lbs. | \$85.00 |

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 & 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.



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| 1460020 | Fertilome Fire Ant Killer - 1 lb. Bag | \$22.99 |
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- 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.

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



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.

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

Essentria® IC-3 - Concentrate

Kills & Controls Most Crawling & Flying Insects Most Anywhere You Find Them.

TARGET: More than 60 flying and crawling pests including aphids, bedbugs, caterpillars, flies, mites, mosquitoes and ticks.

DESCRIPTION: This essential oil insecticide contains rosemary oil, geraniol and peppermint oil to provide immediate knockdown and long-term residual control. It can be used in food preparation areas, schools and other places where there is a high level of human traffic. It can also be applied directly to livestock, horses and poultry. This FIFRA 25(b) exempt product has Octopamine blocker technology and has no water setbacks.



SUGGESTED USE: Can be used indoors, outdoors, in fogging and mosquito misting systems on plants, turf and ornamentals and as a perimeter barrier. Can also be applied directly to livestock, horses and poultry. May be diluted with water or oil (for livestock applications). Use lower application rates for maintenance and higher for infestations. General pest control indoors (don't apply directly to houseplants): 0.5-6 fl. oz./gal. water. Bedbugs: 1-4 fl. oz./gal. water and apply as a spot treatment. Mound drench for fire ants: 2-4 fl. oz./gal. water. Mosquitoes and other biting insects: 1-3 fl. oz./gal. water. Turf/grass: 2-4 fl. oz./gal. water. Trees and shrubs: 1-2 fl. oz./gal. water.

1273055	Essentria IC-3 - Concentrate - Quart	\$40.99
1273056	Essentria IC-3 - Concentrate - Gallon	\$129.99

Essentria™ G Granular Insecticide

A Granular That Handles A Handful Of Outdoor Pests!

TARGET: Ants, bermudagrass mites, centipedes, chiggers, chinch bugs, clover mites, cockroaches, crickets, earwigs, fall armyworms, fleas, leafhoppers, millipedes, sowbugs/pillbugs, and other insect pests.

DESCRIPTION: This quick and long-lasting natural granular insecticide uses essential botanical oils clove, thyme and wintergreen to treat various pests. Easy-to-use outdoors on landscapes, turf, building facilities and around organic operations, sensitive areas such as schools, and in aquatic environments.



SUGGESTED USE: Use with a hand spreader. For treatments around buildings, apply uniformly a band about 5-10 ft. wide. For landscapes and turf, use around 3-5 lbs./1000 sq. ft. Water in, applying about 1/8 in. - 1/4 in. of water without puddling. For ant mounds, use about 1-2 tsp./nest. For red imported fire ants, use around 1/2 cup/nest and make a 2 ft. band around nest.

1273050	Essentria G Granular Insecticide - 22 lbs.	\$67.50
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Dr. Earth® Final Stop® Pest Control Killer Spray



Works Fast & Provides Continued Protection For Weeks.

TARGET: Ants, centipedes, chiggers, cockroaches, crickets, earwigs, fleas, gnats, mosquitoes, moths, pillbugs, silverfish, spiders, stinkbugs, ticks and wasps.

DESCRIPTION: This organic pest control spray is crafted from a selection of essential oils (rosemary, sesame, peppermint, thyme, cinnamon and garlic). Each of these oils has its own valuable characteristics for pest control, but when put together their synergistic power outweighs each individual ingredient. Works as a knockdown and kill spray but will also provide weeks-long protection. Insect death occurs minutes to hours after application. No synthetic ingredients. For indoor or outdoor use.

SUGGESTED USE: This product is ready-to-use from the bottle. Prior to application, test a small, discreet area first to check for surface discoloration. Use around your home and garden. Thorough coverage of the insect is required. Repeat applications as often as needed to kill target insects. Do not spray plants directly, this is a very strong spray that will cause leaf burn.



1459360	Final Stop Pest Control Killer Spray - 24 oz. RTU	\$11.99
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**For Crawling Insect Traps,
See Page 60.**

INDOOR PEST TRAPS



Enoz® BioCare® Birdseed & Pantry Moth Traps

Keep Moths From Eating Food Intended for You & Your Feathered Friends.

1280315	2 Pack	\$5.99
1280316	2 Pack - Bundle of 2	\$10.00

Enoz® BioCare® Clothes Moth Traps

Break The Reproductive Cycle By Luring, Trapping & Killing Adult Male Moths.

1260702	2 Traps	\$6.99
1260703	3 Pack - 2 Traps per Pack	\$18.00

Enoz® BioCare® Flour & Pantry Moth Traps

Stop Sharing Your Food With Pesky Moths.

1280318	2 Pack	\$5.99
1280319	2 Pack - Bundle of 2	\$10.00

Enoz® Trap-N-Kill® Crawling Pest & Insect Trap

Rid Your House of Crawling, Creeping, Scurrying & Scuttling Pests!

1280205	6 Pack	\$4.99
1280206	6 Pack - Bundle of 3	\$13.99

Enoz® Trap-N-Kill® Earwig Traps

Get These Moisture-Loving Insects Out Of Your Space Without Using Poison.

1280220	3 Pack	\$5.99
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Enoz® Trap-N-Kill® Flea Trap

Works Day & Night, Year-Round, To Eliminate Fleas Without Poisons.

1280110	1 Trap	\$16.99
1280111	Pack of 3 Traps	\$45.87

Enoz® Trap-N-Kill® Roach Traps

Professional Quality Cockroach Traps That Are Effective & Easy To Use.

1260210	6 Pack	\$6.99
1260211	6 Pack - Bundle of 2	\$12.99

Harris Bed Bug Detection Traps

This Low-Cost Option Provides 24/7 Detection Power.

1240315	Harris Bed Bug Detection Traps - 4 Pack	\$6.79
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Harris Cricket Traps

Chirping Driving You Mad? Get These Traps.

1452443	Harris Cricket Traps - 2 Pack	\$6.49
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Harris Plug-In Flea & Insect Trap with Night Light Attractant

These Traps Work Quietly In The Night To Capture Insect Pests.

1280120	Plug-In Flea & insect Trap w/Night Light	\$13.99
1280125	Refill Glue Boards - 4 Pack	\$6.49

Harris Roach Traps

This First Step In Total Roach Control Is Their Last Step.

1219552	Harris Roach Traps - 2 Pack	\$6.79
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Harris Spider Traps

Do Spiders Creeping Around Give You The Creeps? Get These Traps.

1280210	Harris Spider Traps - 2 Pack	\$6.79
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SOIL CARE

E-Z Root®



At Last! An Organic Rooting Compound Without Hormones.

1202210	E-Z Root - 2 oz.	\$7.99
1202211	E-Z Root - 8 oz.	\$25.99

Soil Moist™ Container Mix

Pamper Your Potted Plants With This Dynamic Combo Mix.

1202242	Soil Moist Container Mix - 8 oz.	\$8.99
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DYNOMYCO™

Two Strains Of Synergistic Mycorrhizae.

1135110	DYNOMYCO Mini-Pouch - 3.5 oz.	\$14.00
1135111	DYNOMYCO Dynamite Stick - 7 oz.	\$26.00

Cannot be shipped to the following states: AR, DC, HI, ID, IN, IA, KS, LA, MD, MN, MS, NE, NH, NJ, NC, ND, SC, SD, TN, UT, VA, WV, WI, WY

PEST CONTROL

Enoz® BioCare® Gnat Stix

Stop The Pest Lifecycle With Easy-to-Use Traps.

1280501	Gnat Stix - 12 Per Pack	\$6.65
1280502	Gnat Stix - 12 Per Pack - Bundle of 2	\$11.50

TweetMint™ Plant Wash

Keeps Plants Healthy & Your Area Smelling Great.

1202620	Tweetmint Plant Wash - 16 oz.	\$35.00
1202621	Tweetmint Plant Wash - 32 oz.	\$50.00

BONIDE® Insecticidal Soap

This Ready-to-Use Spray Kills Plants Pests On Contact.

1247601	BONIDE Insecticidal Soap - 12 oz. RTU	\$5.65
1247602	BONIDE Insecticidal Soap - 32 oz. RTU	\$10.25

Cannot be shipped to the following states: HI

NUTRIENTS

Dr. Earth® House Plant Indoor Liquid Plant Food, 1-1-1

Made Using High Quality Food Scraps From Grocery Stores.

1305511	Dr. Earth Organic House Plant Food - 16 oz.	\$9.99
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Cannot be shipped to the following states: State(s)

IV Organic® All Purpose Organic Fertilizers



An Organic, Super-Versatile Fertilizer That's Conveniently Sized.

1314770	Premium Blend Fertilizer - 11.8 oz.	\$14.95
1314775	Super Blend Fertilizer Plus Azomite - 11.8 oz.	\$29.95

TOOLS

Delta Hanging Plant Waterer

Don't Risk Your Neck To Water Those Hard To Reach Plants!

1403202	Delta Hanging Plant Waterer - 32 oz.	\$7.00
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WaterWorks Crystals®

Reduce Your Watering By As Much As 75%!

2000660	WaterWorks Crystals - 3 oz. Package	\$2.99
2000662	WaterWorks Crystals - Bundle of 3	\$8.52

Plant Keeper

Going Out Of Town? Water Once Before You Go And Your Plants Are Taken Care Of.

2000480	Plant Keeper - 4 oz. Bottle	\$8.79
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Aunt Fannie's Mosquito Wipes	39	Enoz BioCare Birdseed & Pantry Moth Traps	60	Neptune's Harvest Fish Fertilizer, 2-4-1	45
Avenger AG Optima Burndown Herbicide	55	Enoz BioCare Clothes Moth Traps	60	Neptune's Harvest Liquid Crab & Lobster Shell, 2-0-2	45
Avenger Weed Killer	54	Enoz BioCare Flour & Pantry Moth Traps	60	Neptune's Harvest Seaweed Plant Food, 0-0-1	45
AzaGuard	24, 30	Enoz BioCare Gnat Stix	18, 61	NoFly WP	28
AzaSol	30	Enoz BioCare Ladybug Lures	20	Orange Guard Fire Ant Control	58
Azera Gardening	24, 30	Enoz Trap-N-Kill A-G-O Mosquito Trap	38	Orange Guard Home Pest Control	59
Azomite Powder, 0-0-0.2	41	Enoz Trap-N-Kill Crawling Pest & Insect Trap	60	Organic JMS Stylet-Oil	25
Bee-Scent	20	Enoz Trap-N-Kill Earwig Traps	60	OxiDate 2.0	52
BioCeres WP	24, 27	Enoz Trap-N-Kill Flea Trap	60	Pest Wizard Blue-Yellow Card Trap	18
BioSafe Weed & Grass Killer	55	Enoz Trap-N-Kill Roach Traps	60	Plant Keeper	61
BiteBlocker Insect Repellents	39	Epp's Biting Fly Trap	35	Praying Mantids - <i>Tenodera aridifolia</i>	5
Biting Fly Trap	35	Equiderma Horse Spray	34	Predalure	20
Blue & Yellow Sticky Ribbon Rolls	19	Essentria G Granular Insecticide	59	Procidic	50
BONIDE Auto Mix Hose End Sprayer	57	Essentria IC-3 Concentrate	59	Protector Spray Repellent - Mosquitoes	39
BONIDE Captain Jack's Deadweed Brew	55	Exhale CO ₂ Bags	56	Purple Scale Predator - <i>Rhyzobius lophanthae</i>	12
BONIDE Captain Jack's Lawnweed Brew	54	E-Z Root	61	PyGanic Gardening	24, 31
BONIDE Captain Jack's Neem Max	24, 26	Fertilome Come And Get It II Fire Ant Killer	58	Rango	26
BONIDE Captain Jack's Orchard Spray	21	Fertilome Dipel Dust	22	RAW Yucca Flow	56
BONIDE Insecticidal Soap	61	Fish Sh!t	43	Red Scale Parasite - <i>Aphytis melinus</i>	12
BONIDE Insecticidal SUPER Soap	28	Flo-Master By Hudson Lawn & Garden Sprayer	57	Regalia CG & Regalia	49
BONIDE Liquid Copper Fungicide	51	Fortify Clear	53	Root Guard Gopher Wire Baskets	58
BONIDE Mosquito Beater Granules	38	Fortify Sky	53	RootShield Plus Granules & RootShield Plus WP	48
BONIDE Sulfur Plant Fungicide	51	Fungus Gnat Predator - <i>Stratiolaelaps scimitus</i>	8	Rove Beetle - <i>Dalotia coriaria</i>	8
BONIDE Thuricide	23	Grandevo CG & Grandevo WDG	28	SaniDate 5.0	52
Boogie Blue Water Filters	57	Green Lacewings - <i>Chrysoperla rufilabris</i>	5	SaniDate All Purpose Disinfectant	53
BotaniGard ES & 22WP <i>Beauveria bassiana</i> GHA	27	Gypsy Moth Trap	23	SCD ProBio Balance Original	42
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BT NOW	22	Harris Cricket Traps	60	Sil-Matrix LC	29
Bug Bam Mosquito Band, Camp Grids & Pet Tags	39	Harris Plug-In Flea & Insect Trap	60	Skeeter Mosquito Control	37
Bug Blaster	57	Harris Roach Traps	60	Skeet-O-Trap	38
Captivator Fly Trap	35	Harris Spider Traps	60	SNS 203 Root Drench Pesticide	37
Cease Biological Fungicide	49	High Nitro Bat Guano, 8-3-1	43	SNS 209 All Natural Systemic Pest Control Conc	28
Chameleon Adaptable Hose End Sprayer	57	High Phos Bat Guano, 3-6-1	43	Soil Moist Container Mix	61
Chase Granular Mole & Gopher Repellent	58	Honey Bee Magnet	20	Spider Mite Destroyer - <i>Feltiella acarisuga</i>	10
CRD Botrytis Test	51	Horse Fly TweetMint	34	Spider Mite Destroyer - <i>Stethorus punctillum</i>	11
Cueva Fungicide Concentrate	49	Howler Fungicide	48	Stargus	48
Delta Hanging Plant Waterer	61	iHort Q-Plug Propagation Kit	56	Sticky Traps	19
Delta Trap	23	IV Organic 3-In-1 Plant Guard	21	SuffOil-X	25
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Dr. Earth Final Stop Pet Spray	34	Maxicrop Liquid Fish, 3-1-1	44	Thrips Predator - <i>Amblyseius cucumeris</i>	9
Dr. Earth House Plant Indoor Liquid Plant Food	61	Maxicrop Liquid Seaweed, 0-0-1	44	Thymox Control Organic	50
DTE Acid Mix, 4-3-6	46	Maxicrop Soluble Seaweed Powder, 0-0-17	44	Trapline t+ Sticky Roller Trap	19
DTE All Purpose Mix, 4-6-2	46	Mealybug Destroyer - <i>Cryptolaemus montrouzieri</i>	12	Tree Tanglefoot Insect Barrier & Tanglefoot Banding	21
DTE Bat Guano, 7-3-1	46	Mealybug Parasitoid - <i>Anagyrus spp.</i>	12	TweetMint Plant Wash	53, 61
DTE Bio-Fish, 7-7-2	46	Medella Naturals Insect & Mosquito Repellent Spray	39	Venerate CG & Venerate XC	29
DTE Bio-Live, 5-4-2	46	Milky Spore Powder	24	VRD: Volcanic Rock Dust	41
DTE Blood Meal, 12-0-0	46	MilStop SP Foliar Fungicide	50	WaterWorks Crystals	61
DTE Bone Meal, 3-15-0	46	Minute Pirate Bug - <i>Orius insidiosus</i>	4	WeedGuardPlus Organic - Heavy Weight Rolls	54
DTE Citrus Mix, 6-3-3	46	Mite Predator - <i>Amblyseius andersoni</i>	10	Whitefly Parasite - <i>Encarsia formosa</i>	7
DTE Crab Meal, 4-3-0	46	Mite Predator - <i>Neoseiulus californicus</i>	10	Whitefly Parasite - <i>Eretmocerus eremicus</i>	7
DTE Dolomite Lime	41	Mite Predator - <i>Neoseiulus fallacis</i>	11	Whitefly Predator - <i>Delphastus catalinae</i>	7
DTE Feather Meal, 12-0-0	46	Mite Predator - <i>Phytoseiulus persimilis</i>	11	Yellow Sticky Tape	19
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