

# ARBICO *organics*<sup>®</sup>

NATURAL & ORGANIC IPM SOLUTIONS

FALL/WINTER CATALOG 2022



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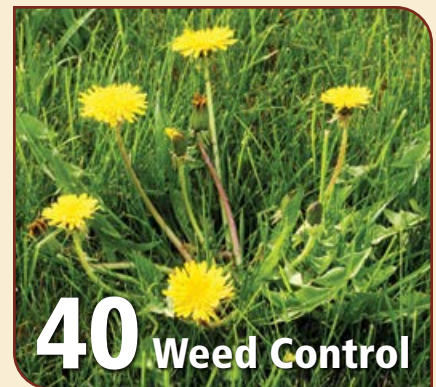
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Through 12/31/2022

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## How To Contact Us:

800-827-2847

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

[customercare@arbico.com](mailto:customercare@arbico.com)

## Assassin Bug - *Zelus renardii*



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

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



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

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

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

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

Larger sizes available.

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

## Minute Pirate Bug - *Orius insidiosus*

Excellent General Predator In Field Crops & Greenhouses.

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

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



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

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

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

**Overnight Shipping Required**

## Green Lacewing - *Chrysoperla spp.*

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

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

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



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

### GREEN LACEWING EGGS:\*

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

### GREEN LACEWING LARVAE:

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

### GREEN LACEWING ADULTS:

|                |               |                 |
|----------------|---------------|-----------------|
| <b>1110006</b> | ≈100 Adults   | <b>\$45.00</b>  |
| <b>1110004</b> | ≈250 Adults   | <b>\$90.00</b>  |
| <b>1110007</b> | ≈500 Adults   | <b>\$160.00</b> |
| <b>1110019</b> | ≈1,000 Adults | <b>\$180.00</b> |

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

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

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

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

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

# APHID CONTROL

## Aphid Predator - *Aphidoletes aphidimyza*

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

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

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

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

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

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

**Overnight Shipping Required**



*Aphidoletes aphidimyza*

## Aphid Parasite - *Aphidius colemani*

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

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

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

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

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

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

**Overnight Shipping Required**



*Aphidius colemani*

## Aphid Parasite - *Aphelinus abdominalis*

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

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

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

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

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

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

**Overnight Shipping Required**



*Aphelinus abdominalis*

## Aphid Parasite - *Aphidius ervi*

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

*Image Citation: Alex Wild*

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

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

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

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

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

**Overnight Shipping Required**



*Aphidius ervi*



## Integrated Pest Management of Whiteflies

1. Carefully inspect new plants before transplanting.
2. Dip foliage and root ball in soapy water, or hydrogen peroxide solution, to clean and kill any existing whitefly eggs, nymphs or adults.
3. Monitor pest thresholds with yellow sticky traps or ribbons.
4. Release Green Lacewing preventatively before infestation becomes severe.
5. Consider specialist parasites and predators for targeted whitefly infestations.
6. For quick knockdown control, consider sprays with a low environmental impact such as *Beauveria bassiana* products or Neem based sprays (see page 20).
7. Clean tools and equipment as well as greenhouse structures between growing seasons. See Cleaning & Sanitizing on page 39.

## Whitefly Parasite - *Eretmocerus eremicus*

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

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



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

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

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

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

**Overnight Shipping Required**

## Whitefly Parasite - *Encarsia formosa*



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

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



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

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

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

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

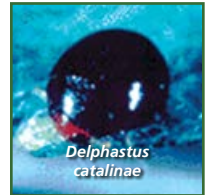
**2nd Day Shipping Required**

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

## Whitefly Predator - *Delphastus catalinae*

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

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



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

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

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

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

**Overnight Shipping Required**

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



## Integrated Pest Management of Fungus Gnats

1. Monitor and trap with yellow sticky traps to assess the severity of infestation.
2. Control soil moisture by providing proper drainage, avoiding standing water and allowing media to dry between waterings.
3. Circulate air and prune plants to ensure adequate air flow.
4. Prevent and treat infestations with *Bacillus thuringiensis israelensis* (see page 18).
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 18.**



## 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 online) or backpack sprayer. **See pages 12-13 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 15).

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

### BULK SIZES:

|                |                                  |                 |
|----------------|----------------------------------|-----------------|
| <b>1152207</b> | ≈25,000 in Bran/Vermiculite Mix  | <b>\$30.00</b>  |
| <b>1152204</b> | ≈50,000 in Bran/Vermiculite Mix  | <b>\$44.00</b>  |
| <b>1152224</b> | ≈50,000 in Vermiculite           | <b>\$45.00</b>  |
| <b>1152205</b> | ≈100,000 in Bran                 | <b>\$60.00</b>  |
| <b>1152206</b> | ≈250,000 in Bran/Vermiculite Mix | <b>\$115.00</b> |
| <b>1152223</b> | ≈250,000 in Vermiculite          | <b>\$120.00</b> |
| <b>1152209</b> | ≈500,000 in Bran/Vermiculite Mix | <b>\$200.00</b> |

### CONTROLLED RELEASE:

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

**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:

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

### CONTROLLED RELEASE:

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

**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 12-13 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:**

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

**CONTROLLED RELEASE:**

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

**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%

|                |            |                 |
|----------------|------------|-----------------|
| <b>1155701</b> | ≈250 Count | <b>\$144.00</b> |
|----------------|------------|-----------------|

**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:**

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

**CONTROLLED RELEASE:**

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

**Overnight Shipping Required**



*Phytoseiulus persimilis* PLUS (see page 9)



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

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

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

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

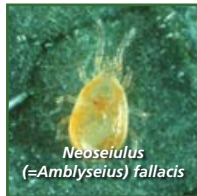
**DESCRIPTION:** This predatory mite effectively suppresses cyclamen mites in strawberry fields, broad mites in greenhouse crops, European red mites and two-spotted spider mites in orchards, spider mites on roses and vegetable crops in greenhouses and general mite problems on mint and hops in northern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

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

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

|                |                          |                 |
|----------------|--------------------------|-----------------|
| <b>1151400</b> | ≈500 Count               | <b>\$38.00</b>  |
| <b>1151401</b> | ≈1,000 Count             | <b>\$52.00</b>  |
| <b>1151402</b> | ≈2,000 Count (2 x 1,000) | <b>\$98.00</b>  |
| <b>1151404</b> | ≈10,000 Count            | <b>\$240.00</b> |

**Overnight Shipping Required**



## Mite Predator - *Phytoseiulus persimilis*

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

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

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

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

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

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

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



## Spider Mite Destroyer - *Stethorus punctillum*

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

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

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

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

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

|                |            |                |
|----------------|------------|----------------|
| <b>1113301</b> | ≈100 Count | <b>\$98.00</b> |
|----------------|------------|----------------|

**Subject to seasonal availability.**

**Overnight Shipping Required**



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

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

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

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

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

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

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

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

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

**Overnight Shipping Required**

# MEALYBUG/SCALE CONTROL

## Mealybug 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              | <b>\$77.00</b>    |
| 1114703 | ≈250 Adults              | <b>\$98.00</b>    |
| 1114704 | ≈500 Adults              | <b>\$190.00</b>   |
| 1114705 | ≈1,000 Adults (2 x 500)  | <b>\$370.00</b>   |
| 1114710 | ≈5,000 Adults (10 x 500) | <b>\$1,000.00</b> |

**Overnight Shipping Required**

## Red Scale Parasite - *Aphytis melinus*

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

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



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

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

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

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

**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 Ladybird 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 | <b>\$85.50</b>  |
| 1121502 | ≈250 Count | <b>\$160.00</b> |

**Overnight Shipping Required**

## Integrated Pest Management (IPM)

Integrated Pest Management (IPM) is a process that is used to control pest populations while minimizing the impacts on people and the surrounding environment.

Focusing mainly on long-term pest prevention, a successful IPM program utilizes a combination of control methods including biological control, habitat manipulation, changes to cultural practices and use of resistant plant varieties.



**Planning & Record Keeping**



**Trap & Monitor**



**Cultural Controls**



**Mechanical Controls**



**Biological Controls**



**Natural Pesticides & Botanicals**

**Read more & find additional IPM resources at [arbico-organics.com](http://arbico-organics.com)**

## 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:

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

#### BULK EGGS:

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

#### CONTROLLED RELEASE - DISPENSERS:

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

#### CONTROLLED RELEASE - CAPSULES:

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

### *Trichogramma minutum*

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

#### CARDS:

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

#### BULK EGGS:

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

### *Trichogramma ostriniae*

Primarily for European Corn Borer.

#### CARDS:

|                |        |                |
|----------------|--------|----------------|
| <b>1130100</b> | ≈8,000 | <b>\$22.00</b> |
|----------------|--------|----------------|

#### BULK EGGS:

|                |            |                 |
|----------------|------------|-----------------|
| <b>1130155</b> | ≈1,000,000 | <b>\$225.00</b> |
|----------------|------------|-----------------|

### *Trichogramma platneri*

West of the Rockies, orchards and tall crops.

#### CARDS:

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

#### BULK EGGS:

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

### *Trichogramma pretiosum*

General predator.

#### CONTROLLED RELEASE - DISPENSERS:

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

#### CONTROLLED RELEASE - CAPSULES:

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

### Mix 1 - *brassicae, minutum, platneri*

For multiple pests and crops.

#### CARDS:

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

### Mix 2 - *brassicae, minutum, ostriniae*

For multiple pests and crops including European Corn Borer.

#### CARDS:

|                |                |                |
|----------------|----------------|----------------|
| <b>1131300</b> | ≈4,000 on Card | <b>\$22.00</b> |
|----------------|----------------|----------------|

**For Caterpillar Control,  
See Page 16.**

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.

# BENEFICIAL NEMATODES

## How Do I Choose the Right Beneficial Nematodes?

Use the Nematode Selection Chart below 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, backpack sprayer, pump sprayer or watering can. Lightly water again after application. (See sprayer options online at [www.arbico-organics.com](http://www.arbico-organics.com))

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.



Applying Beneficial Nematodes in the fall reduces overwintering pests, decreasing their populations and damage in the spring.

## NEMATODE SELECTION CHART – Choose Variety By Pest

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



## Beneficial Nematodes

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

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

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

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

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

### SIZE & COVERAGE CHART

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

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



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

## OMRI Listed Beneficial Nematodes



| OMRI LISTED SINGLE SPECIES               |              |          |
|--|--------------|----------|
| SKU                                      | Size         | Price    |
| ▲ NemaSeek Pro Hb Beneficial Nematodes   |              |          |
| 4004010                                  | ≈10 million  | \$52.00  |
| 4004050                                  | ≈50 million  | \$90.00  |
| 4004250                                  | ≈250 million | \$250.00 |
| 4004500                                  | ≈500 million | \$325.00 |
| ■ NemaAttack 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    |
| ● NemaAttack 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, NemaAttack Pro Sf Beneficial Nematodes & NemaAttack 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.

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

\*Larger quantities available.



## ARBICO Organics® Blue Insect Traps

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

**TARGET:** Thrips, leafminers.

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

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

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

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



## Blue & Yellow Sticky Ribbon Rolls



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

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

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

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

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



## 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.

|                |   |                 |
|----------------|---|-----------------|
| <b>1254425</b> | Trapline t+ Sticky Roller Trap - 6" W x 328' L (2 Pack) | <b>\$125.00</b> |
|----------------|---|-----------------|



# CATERPILLAR CONTROL

## BT NOW®



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

**TARGET:** Armyworms, bagworms, borers, budworms, caterpillars, earworms, leafrollers, loopers, spongy 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**  
 Cannot be shipped to the following states: 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



## 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, spongy 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**



## 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 **\$12.99**  
**1201206** BONIDE Thuricide RTU - Gallon **\$41.48**  
**1201201** BONIDE Thuricide Liquid Concentrate - 8 oz. **\$10.97**  
**1201202** BONIDE Thuricide Liquid Concentrate - 16 oz. **\$15.99**



**For biological control of caterpillars see page 11.**



## 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 12-13 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 12-13), 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.

- |                |   |                 |
|----------------|---|-----------------|
| <b>1216001</b> | Milky Spore Powder - 10 oz. - Covers ≈2,500 sq. ft.   | <b>\$31.99</b>  |
| <b>1216040</b> | Milky Spore Powder - 40 oz. - Covers ≈1/4 acre        | <b>\$84.99</b>  |
| <b>1216045</b> | Milky Spore Powder - 25 lb. Drum - Covers ≈2.25 acres | <b>\$800.00</b> |
| <b>1216052</b> | All-Purpose Dispenser Tube                            | <b>\$14.50</b>  |

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 21 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 online for more information.

### BONIDE® Captain Jack's™ Neem Max

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

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

## BEETLE CONTROL

### Monterey Take Down Garden Spray

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

**1257915** Take Down Garden Spray Concentrate - Pint **\$19.99**  
See page 23 for more information.

### PyGanic® Gardening

Rapid Knockdown & Kill For Outdoor Pests In Your Garden.

**1288710** PyGanic Gardening - 8 oz. **\$25.50**  
See page 23 for more information.

### Azera® Gardening

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

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

## 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**

## MULTI-PURPOSE

### Organic JMS Stylet-Oil®



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

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

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

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

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

\*Call for freight quote. Larger sizes available.

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



### M-Pede®



**A Highly Effective, Organic Version Of Insecticidal Soap.**

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

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

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

- |                |                                  |                 |
|----------------|----------------------------------|-----------------|
| <b>1247650</b> | M-Pede - 2.5 Gallons             | <b>\$142.50</b> |
| <b>1247652</b> | M-Pede - 2.5 Gallons - Case of 2 | <b>\$256.50</b> |



### The Amazing Doctor Zymes Eliminator



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

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

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

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

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

Larger sizes available.

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



### SuffOil-X®



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

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

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

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

- |                |                                     |                 |
|----------------|-------------------------------------|-----------------|
| <b>1332805</b> | SuffOil-X - 2.5 Gallons             | <b>\$77.00</b>  |
| <b>1332806</b> | SuffOil-X - Case of 2 ct./2.5 Gals. | <b>\$138.60</b> |

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.

|                |  |                |
|----------------|--|----------------|
| <b>1246610</b> | Captain Jack's Neem Max - 8 oz. Conc.  | <b>\$14.99</b> |
| <b>1246611</b> | Captain Jack's Neem Max - 16 oz. Conc. | <b>\$22.99</b> |

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 soilless 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.

|                |                      |                |
|----------------|----------------------|----------------|
| <b>1450551</b> | EcoWorks EC - 4 oz.  | <b>\$9.86</b>  |
| <b>1450553</b> | EcoWorks EC - 16 oz. | <b>\$25.99</b> |
| <b>1450554</b> | EcoWorks EC - 32 oz  | <b>\$43.99</b> |

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.

|                |                                   |                 |
|----------------|-----------------------------------|-----------------|
| <b>1450570</b> | Rango - Concentrate - 32 oz.      | <b>\$34.95</b>  |
| <b>1450572</b> | Rango - Concentrate - Gallon      | <b>\$89.95</b>  |
| <b>1450573</b> | Rango - Concentrate - 2.5 Gallons | <b>\$219.99</b> |

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.

|                |  |                 |
|----------------|--|-----------------|
| <b>1555615</b> | Monterey Neem Oil - 32 oz. RTU         | <b>\$14.49</b>  |
| <b>1555616</b> | Monterey Neem Oil - 16 oz. RTS         | <b>\$29.49</b>  |
| <b>1555613</b> | Monterey Neem Oil - 8 oz. Concentrate  | <b>\$15.99</b>  |
| <b>1555614</b> | Monterey Neem Oil - Pint Concentrate   | <b>\$24.99</b>  |
| <b>1555618</b> | Monterey Neem Oil - Gallon Concentrate | <b>\$144.49</b> |

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



## BIORATIONALS

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

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

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

Grandevo CG cannot be shipped to the following states: FL



### Venerate® CG & Venerate® XC

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

**TARGET:** Caterpillars, foliage feeding *Coleoptera*, 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      | \$145.00 |
| 1332960 | Venerate XC - 2.5 Gallons | \$260.00 |

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



### PFR-97™ 20% WDG

Directed Fungal Growth Is The Key To This Remarkable Insecticide.

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

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

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

|         |                         |          |
|---------|-------------------------|----------|
| 1332870 | PFR-97 20% WDG - 5 lbs. | \$260.00 |
|---------|-------------------------|----------|

Cannot be shipped to the following states: AK, AL, AR, IA, UT



### 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



## Monterey Garden Insect Spray



**Insect Pests & Powdery Mildew Don't Stand A Chance With This Spinosad Product!**

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

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

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

|                |   |                 |
|----------------|---|-----------------|
| <b>1257907</b> | Monterey Garden Insect Spray - 32 oz. RTU       | <b>\$13.49</b>  |
| <b>1257906</b> | Monterey Garden Insect Spray Conc. - 32 oz. RTS | <b>\$31.49</b>  |
| <b>1257900</b> | Monterey Garden Insect Spray Conc. - Pint       | <b>\$19.99</b>  |
| <b>1257905</b> | Monterey Garden Insect Spray Conc. - Quart      | <b>\$30.49</b>  |
| <b>1257910</b> | Monterey Garden Insect Spray Conc. - Gallon     | <b>\$103.49</b> |

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



## DES-X™ Insecticidal Soap



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

**TARGET:** Aphids, earwigs, flea hoppers, leafhoppers, mealybugs, mites, 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. 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.

|                |  |                 |
|----------------|--|-----------------|
| <b>1247660</b> | DES-X Insecticidal Soap - 2.5 Gal. Conc.           | <b>\$120.00</b> |
| <b>1247662</b> | DES-X Insecticidal Soap - 2.5 Gal. Conc./Case of 2 | <b>\$216.00</b> |



## Earth's Ally® Insect Control



**Insect Control That's Safe For People, Pets & The Planet.**

**TARGET:** Mites, aphids, whiteflies, mealybugs, leaf-rollers, scale insects, and other soft-bodied insects.

**DESCRIPTION:** This is an organic blend of rosemary, clove and peppermint oils that works as an insecticide, miticide and repellent. It will knockdown, kill and repel soft-bodied insects. Can be used on all plants and trees grown indoors and outdoors and leaves no harmful residues. 0-day PHI. FIFRA 25(b) exempt.

**SUGGESTED USE:** Quart concentrate makes up to 5 gals. RTU: Thoroughly spray all plant parts until runoff. Avoid spraying in the heat of the day and do not apply at temps over 90°F. If a second application is needed, wait at least 5 days before reapplication. For use as a repellent, apply every 7-10 days. Avoid use when pollinators are active, otherwise this product is bee safe. Concentrate: Mix 3/4 cup (6 fl. oz.) of concentrate with 1 gallon of water and follow same instructions as RTU.

|                |   |                |
|----------------|---|----------------|
| <b>1459310</b> | Earth's Ally Insect Control - 24 oz. RTU  | <b>\$12.99</b> |
| <b>1459311</b> | Earth's Ally Insect Control - Quart Conc. | <b>\$39.99</b> |



## SNS 203™ Soil Drench/ Foliar Spray



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

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

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

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

|                |  |                 |
|----------------|--|-----------------|
| <b>1459135</b> | SNS 203 Soil Drench Pouch Conc. - Makes 32 oz. | <b>\$7.99</b>   |
| <b>1459130</b> | SNS 203 Soil Drench - 16 oz. Conc.             | <b>\$24.00</b>  |
| <b>1459131</b> | SNS 203 Soil Drench - Gallon Conc.             | <b>\$110.00</b> |
| <b>1459132</b> | SNS 203 Soil Drench - 5 Gallons Conc.          | <b>\$380.00</b> |

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



## AZADIRACTIN

### AzaSol™



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

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

**DESCRIPTION:** Azasol contains Azadiractin, 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 soilless media. A wetting agent may be used. To repel adult flies, use fogging equipment. Use from 1-4 tsp./1000 sq. ft. depending on pest infestation levels, application method and growing environment. For optimum results, 2-3 applications made at 7-10 day intervals is recommended.



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

### Neemix® 4.5



**Repels And Kills 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 Azadiractin. 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 |
|---------|--------------------------------|----------|

## 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.  | \$25.50  |
| 1288720 | PyGanic Gardening - 32 oz. | \$64.00  |
| 1288730 | PyGanic Gardening - Gallon | \$236.00 |



### 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





## WHAT ARE FLY ELIMINATORS?

### The Sensible Alternative To Pesticides

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

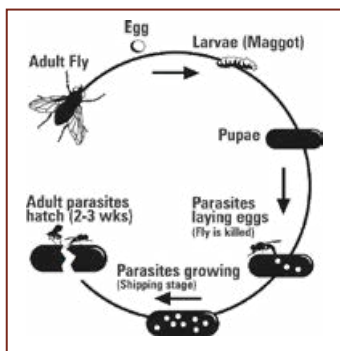


Adult Fly Eliminator emerging from fly pupa.

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

## HOW DO FLY ELIMINATORS WORK?

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



Life cycle of the fly parasite.

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

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

### Philadelphia Park Recommends ARBICO's Fly Eliminators

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



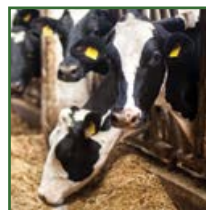
– Roy Smith, Former Track Manager of Philadelphia Park

## WHO USES FLY ELIMINATORS?

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

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

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



## HOW DO I USE FLY ELIMINATORS?

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

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



Fly Eliminators and wood shavings in packaging.





## Use Your Fly Eliminators the RIGHT Way:

### RIGHT Time

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

### RIGHT Place

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

### RIGHT Amount

- ☑ The more Fly Eliminators, the fewer the flies

### RIGHT Schedule

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

### Churchill Downs Chooses ARBICO Organics

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

– Butch Lehr, Former Track Manager of Churchill Downs



### Del Mar Thoroughbred Club Relies On ARBICO Organics

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

– Joe Harper, Chief Executive Officer of Del Mar



## SPECIAL PRICING

**LOCK IN THE LOWEST PRICES FOR 2023 PROGRAMS! Sign Up NOW & Pay LATER!**

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

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

**Order Your Fly Control Program Today!**  
VIP Pricing Valid Through Dec. 31, 2022.

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.



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

## Ecovet™ Fly Repellent

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

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

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

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



|                |                                      |                 |
|----------------|--------------------------------------|-----------------|
| <b>1107550</b> | Ecovet Fly Repellent - 4 oz. Bottle  | <b>\$8.95</b>   |
| <b>1107551</b> | Ecovet Fly Repellent - 18 oz. Bottle | <b>\$24.50</b>  |
| <b>1107552</b> | Ecovet Fly Repellent - Gallon Refill | <b>\$128.00</b> |

## BugPellent® Fly & Tick Spray & BugPellent® Fly & Tick Gel



An Essential Oil-Based Insect Repellent Designed For You & Your Animals.

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

**DESCRIPTION:** This highly effective non-toxic insect repellent uses 8 essential oils in a water-based, non-greasy formula. BugPellent is not just effective against flies and ticks, it also repels gnats and mosquitoes. Can be used on horses, dogs and people (not for use on cats). Free of DEET, alcohol, solvents, pyrethrins, pyrethrums or pyrethroids. FIFRA 25(b).

**SUGGESTED USE: Spray:** Brush fur/hair on animal to remove dust and dirt prior to application. Spray onto body then lightly brush or wipe into fur/skin. Do not saturate an animal's fur. **Wipe-On:** Spray onto cloth or sponge and wipe on in the direction of the hair. Use Gel around face and eyes. **Gel:** Apply liberally, avoiding eyes and mucous membranes. Repeat application daily or as needed.



|                |   |                |
|----------------|---|----------------|
| <b>1256044</b> | BugPellent Spray - 32 oz. w/attached conc. refill | <b>\$20.00</b> |
| <b>1256045</b> | BugPellent Gel - 8 oz.                            | <b>\$8.00</b>  |
| <b>1256046</b> | BugPellent Gel - 16 oz.                           | <b>\$11.00</b> |

## Horse Fly TweetMint



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

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

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

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



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

## 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.

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



### BugPellent® Cylinder

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

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

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



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

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



### 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.

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

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

Replacement parts available online.

\*FREE SHIPPING via ground or US Mail ONLY.

### Harris® Super-Sized Fly Sticky Traps



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

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

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

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



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

## SOIL TESTING



### Luster Leaf® Rapitest® Soil Test Kit

A Quick Way To Test N-P-K!

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

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



Supplies Quick & Clear Soil pH Readings.

|         |                                |         |
|---------|--------------------------------|---------|
| 1275222 | Rapitest Digital Soil pH Meter | \$15.99 |
|---------|--------------------------------|---------|

### Luster Leaf® Rapitest® Digital Soil Test Kit



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

|         |  |         |
|---------|--|---------|
| 1275231 | Rapitest Digital Soil Test Kit - 25 pk | \$25.99 |
|---------|--|---------|

### Luster Leaf® Rapitest® Mini Soil 4-in-1 Tester



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

|         |                                  |         |
|---------|----------------------------------|---------|
| 1275235 | Rapitest Mini Soil 4-in-1 Tester | \$12.49 |
|---------|----------------------------------|---------|

### Luster Leaf® Rapitest® Mini Soil pH Tester



Know Your Soil pH In Minutes!

|         |                              |        |
|---------|------------------------------|--------|
| 1275237 | Rapitest Mini Soil pH Tester | \$8.99 |
|---------|------------------------------|--------|



### CowPots™

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

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

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

### 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.

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

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

## DTE Starter Mix, 3-3-3



**A Perfect Mix Of Nutrients & Mycorrhizae For New Plantings.**

**TARGET:** Flowers, herbs, trees, shrubs and vegetables.

**DESCRIPTION:** If you want healthy plants from the start, this is the soil mix for you. This OMRI listed and CDFA registered organic mix is a powerful combination of primary and secondary plant nutrients and endomycorrhizal fungi. The fungi encourage expansive root development and robust early growth in new plantings. The nutrients will encourage lush, leafy development and provide a foundation for strong, sturdy plants.

**SUGGESTED USE:** Apply to surrounding soil when seeding or transplanting, or blend into seed-starting and potting mixes. Make sure that roots come in contact with product. New veg gardens/flower beds: ¼-½ cup/sq. ft. or 2½-5 lbs/100 sq. ft. New transplants: 1-2 Tbsp./ hole. For seeding: ¼ cup/linear foot. Outdoor containers (new): 2 Tbsp./gal soil or 1 cup/cu. ft. (established) 2-4 Tbsp./gal soil. Trees/shrubs (new & transplants): mix 1-3 cups with backfill soil into and around the hole.



- |                |                                    |                |
|----------------|------------------------------------|----------------|
| <b>1300264</b> | Down To Earth Starter Mix - 1 lb.  | <b>\$5.99</b>  |
| <b>1300265</b> | Down To Earth Starter Mix - 5 lbs. | <b>\$17.99</b> |

**Cannot be shipped to the following states:** AR, CT, DE, HI, IL, IN, IA, KS, MS, NH, ND, OK, PR, SD, VT, WV, WY

## Prococo Coco Coir

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

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

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



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

- |                |  |                |
|----------------|--|----------------|
| <b>1305580</b> | Prococo Compressed CocoPeat Block - 10 lbs.      | <b>\$17.95</b> |
| <b>1305582</b> | Prococo Compressed Chips-N-Fiber Block - 10 lbs. | <b>\$17.95</b> |
| <b>1305581</b> | Prococo Compressed CocoChip Block - 10 lbs.      | <b>\$17.95</b> |

## Agribon®

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

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

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



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

### AG-15

Lightweight with 90% light transmission, (.45 oz./square yard). Use for pollination control, heat sensitive crops and insect pests on potatoes, greens, cabbages and radishes. Made of spun bonded polypropylene fabric.

### AG-19

Lightweight (0.55 oz. per sq. yd.), protects to 28°F (provides up to 4°F protection), 85% light transmission. Does not require frames or hoops.

### AG-30

Lightweight (0.9 oz. per sq. yd.), protects to 26°F to 28°F (provides between 4°F – 6°F protection), allows 70% light transmission. Hoops or frames are recommended.

### AG-50

Highest level of protection, weighs in at 1.5 oz. sq. yd., protects to 24°F (provides up to 8°F of protection), allows 50% light transmission. Hoops or frames are recommended.

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

## ARBICO Organics® Compost Plus

**Revitalizes Soil & Speeds Up Decomposition Of Organic Matter.**

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



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

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

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

## ARBICO Organics® 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.

|                |                                     |                |
|----------------|-------------------------------------|----------------|
| <b>1308003</b> | ARBICO Organics Earthworms (≈1,000) | <b>\$45.00</b> |
|----------------|-------------------------------------|----------------|

**Subject to seasonal availability.**

## DTE Azomite Powder, 0-0-0.2

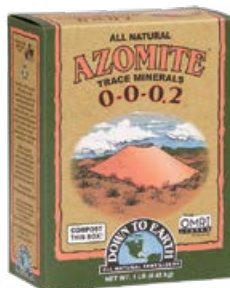
**The A To Z Of Minerals Including Trace Elements.**

**DESCRIPTION:** This OMRI listed and CDFA registered organic slow-release fertilizer is sourced from the dust of an ancient volcano. Brimming with minerals and trace elements, Azomite Powder can boost plant and root system growth and give you higher yields of quality plants with beautiful blooms and tasty fruit and produce. On top of all that, continued use of Azomite will re-mineralize nutrient-depleted soil for successful future plantings. This powder blends easily and can be applied directly to your soil or used in conjunction with other amendments, fertilizers, compost, manure and soil inoculants.

**SUGGESTED USE:** Standard application rates: 1.5 cups≈1 lb; ¼ cup≈2.5 oz; 1 Tbsp.≈0.5 oz. Vegetable gardens/flower beds: Prepping new gardens use 1-2 lbs/10 sq. ft. New transplants: 1-2 tsp/hole. Containers: For new plantings, 1-2 Tbsp./gal soil or 0.5-1 lb/cu. yd. soil. Established plants, 1-2 tsp/gal soil every other month in growing season. Trees, Shrubs & Vines: 1 lb/2" of trunk diameter. For grapes, 0.5-1 lb around each plant. For new trees mix 4-8 oz with backfill soil into and around the hole.

|                |                                       |                |
|----------------|---------------------------------------|----------------|
| <b>1309300</b> | Down To Earth Azomite Powder - 1 lb.  | <b>\$5.49</b>  |
| <b>1309301</b> | Down To Earth Azomite Powder - 5 lbs. | <b>\$15.49</b> |

Cannot be shipped to the following states: FL, IA, NC, ND, PR, WV, WY



## ARBICO Organics® Earthworm Castings

**So Good For Your Garden It's Almost Magical!**

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



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

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

## ARBICO Organics® Root Build 240™ Mycorrhizal Fungi



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

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



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

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

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

## DYNAMYCO™



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 soilless 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.

|                |                                 |                |
|----------------|---------------------------------|----------------|
| <b>1135110</b> | DYNAMYCO Mini-Pouch - 3.5 oz.   | <b>\$14.00</b> |
| <b>1135111</b> | DYNAMYCO Dynamite Stick - 7 oz. | <b>\$26.00</b> |
| <b>1135112</b> | DYNAMYCO Small Pouch - 12 oz.   | <b>\$28.00</b> |
| <b>1135113</b> | DYNAMYCO Large Pouch - 1.65 lb. | <b>\$52.00</b> |

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

## Plant Thrive



18 Strains Of Beneficial Bacteria + 4 Strains Of Beneficial Fungi = A Terrific Product.

**DESCRIPTION:** This microbial-based, granular product was designed to improve soil conditions for vigorous root growth, strong plant establishment, enhanced disease suppression, and increased resistance to plant and environment stress. Each ingredient has unique and valuable characteristics (to fight pathogens, stimulate plant growth, etc.), but when put together they form a synergistic powerhouse of benefits for all types of plants. Can be used as a soil amendment, foliar spray, drench for new and existing plants, and hydroponics.



**SUGGESTED USE:** Do not co-apply this product with pesticides, fungicides, herbicides, insecticides, nematicides or fumigants. If you must use them, apply in rotation allowing 5-7 days between application of Plant Thrive and these agents. A small scoop is included for easy measuring of the following rates: For plants up to 8": 1/2 scoop in the planting hole. Bare root material: lightly dust with product before planting. Pot sizes: 4-8": 1/2 scoop, 1-2 gal: 1 scoop, 3-4 gal: 2 scoops, 5-10 gals: 3 scoops. Soil drench: Mix 1/2 - 3/4 scoop/gal water. Foliar spray: same as soil drench. Apply bi-weekly. See label online for more information on application rates.

|                |                      |                |
|----------------|----------------------|----------------|
| <b>1202220</b> | Plant Thrive - 3 oz. | <b>\$10.85</b> |
|----------------|----------------------|----------------|

## Mikro-Myco

A Heady Combination Of Mycorrhizae, Rhizobacteria & Beneficial Fungi.

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



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

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

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

## 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.



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| <b>1202120</b> | SCD ProBio Balance Original - Gallon | <b>\$27.45</b> |
| <b>1202121</b> | SCD ProBio Balance Original - Quart  | <b>\$70.35</b> |

## EM•1® Microbial Inoculant



**Faster Breakdown Of Organic Matter.**

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

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



|                |                                      |                 |
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| <b>1202098</b> | EM•1 Microbial Inoculant - 16 oz.    | <b>\$29.70</b>  |
| <b>1202101</b> | EM•1 Microbial Inoculant - Quart     | <b>\$37.00</b>  |
| <b>1202102</b> | EM•1 Microbial Inoculant - Gallon    | <b>\$79.70</b>  |
| <b>1202103</b> | EM•1 Microbial Inoculant - 5 Gallons | <b>\$297.00</b> |

Call for larger sizes.

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

## 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.

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

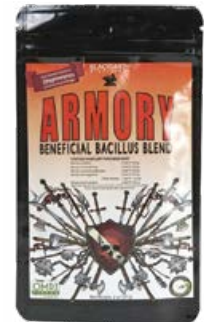
Cannot be shipped to the following states: AL, AR, CT, HI, KS, LA, MD, SD, WV, WI

## Armory® SP



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

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



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

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



## Fish Sh!t



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

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

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

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

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



## 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 matter 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 & premixing soil and top dressing: 1 tsp/gal soil or growing medium. Tea mixes: 2 Tbsp./gal into a mesh bag (never loose in solution).

|                |                              |                |
|----------------|------------------------------|----------------|
| <b>1300130</b> | High Phos Bat Guano - 5 lbs. | <b>\$16.95</b> |
|----------------|------------------------------|----------------|

**Cannot be shipped to the following states:** CA, ID, WA



## Earth Juice™ Hi-Brix MFP, 0-0-3



**This Traditional Favorite Makes An Exceptional Addition To A Plant's Diet.**

**TARGET:** Plants in need of a boost of high-quality nutrition.

**DESCRIPTION:** This is a plant additive made from pure premium grade, unsulphured sugar cane molasses. It contains carbohydrates (sugars), as well as macro/micronutrients and will give your plants a little jolt of energy when they need it. Can be used through all the stages of plant life, including the transitional and ripening stages. 72% Brix. For use indoors and out. Excellent for brewing teas.

**SUGGESTED USE:** Slowly add product and mix into a volume of room temperature water or fertilizer solution. Hand Feeding: Mild-1 tsp., Medium-1 Tbsp., Strong-2 Tbsp. Use every 4 weeks. Hydroponics: Mild-0.25 tsp., Medium-0.50 tsp., Strong: 1 tsp. Add at every nutrient change. It is recommended to continuously aerate the reservoir solution. Every 7-14 days, drain and flush the reservoir with clean water. Compost Tea: 4 Tbsp. Add prior to brewing.

|                |                                  |                |
|----------------|----------------------------------|----------------|
| <b>1305750</b> | Earth Juice Hi-Brix MFP - 32 oz. | <b>\$11.99</b> |
| <b>1305751</b> | Earth Juice Hi-Brix MFP - Gallon | <b>\$29.99</b> |

**Cannot be shipped to the following states:** PR, VA, WY



## HastaGro Plant Food, 6-12-6



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

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

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

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

|                |   |                |
|----------------|---|----------------|
| <b>1304740</b> | Hasta Gro Plant Food - 32 oz. Concentrate | <b>\$12.89</b> |
| <b>1304741</b> | Hasta Gro Plant Food - Gallon Concentrate | <b>\$32.49</b> |





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

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



Fertilizer For All Of Your Growing Needs!

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

## DTE Bat Guano, 7-3-1



High-Nitrogen Fertilizer From Bat Guano.

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

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



A Microbe-Rich Fertilizer To Help Build Living Soil!

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

## DTE Citrus Mix, 6-3-3



The Nutrients You Need For Vibrant & Delectable Citrus!

|         |                                   |         |
|---------|-----------------------------------|---------|
| 1300295 | Down To Earth Citrus Mix - 1 lb.  | \$5.99  |
| 1300296 | Down To Earth Citrus Mix - 5 lbs. | \$15.99 |

Larger sizes available - please go online or call.

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



Marine Based Bone Meal For All Of Your Growing Needs.

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

## DTE Langbeinite, 0-0-22



Get 3 Crucial Plant Nutrients In One Mineral Application.

|         |                                    |         |
|---------|------------------------------------|---------|
| 1300263 | Down To Earth Langbeinite - 5 lbs. | \$18.99 |
|---------|------------------------------------|---------|

## DTE Rose & Flower Mix, 4-8-4



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

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

## DTE Vegetable Garden, 4-4-4



Give Your Vegetable Garden A Powerful Nutrient Boost!

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

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



The Best Of Both Products For A Complete Fertilization Program.

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

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

|         |           |          |
|---------|-----------|----------|
| 1315012 | Pint      | \$14.99  |
| 1315011 | Quart     | \$22.79  |
| 1315013 | Gallon    | \$54.59  |
| 1315014 | 5 Gallons | \$164.99 |

Larger sizes available.



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



Versatile Without Unpleasant Odors!

**TARGET:** Soils requiring rapid nourishment.

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

|         |           |          |
|---------|-----------|----------|
| 1315001 | Pint      | \$12.49  |
| 1315000 | Quart     | \$18.49  |
| 1315002 | Gallon    | \$45.49  |
| 1315003 | 5 Gallons | \$151.29 |

Larger sizes available.



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



Contains Over 60 Naturally Occurring Nutrients & Amino Acids!

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

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

|         |           |          |
|---------|-----------|----------|
| 1315008 | Pint      | \$13.99  |
| 1315007 | Quart     | \$19.49  |
| 1315009 | Gallon    | \$47.49  |
| 1315010 | 5 Gallons | \$174.79 |

Larger sizes available.



## Do You Know What Fertilizer Your Plants Need?

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

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

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

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

### 2. Identify common symptoms of nutrient deficiencies

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

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

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

## 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 |





## 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.

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

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.

|                |                                       |                 |
|----------------|---------------------------------------|-----------------|
| <b>1332930</b> | Howler Fungicide - 5 lbs.             | <b>\$64.50</b>  |
| <b>1332935</b> | Howler Fungicide - 5 lbs. - pack of 3 | <b>\$174.00</b> |

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

## MilStop SP Foliar Fungicide



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

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

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



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

|                |                                       |                 |
|----------------|---------------------------------------|-----------------|
| <b>1332766</b> | MilStop SP Foliar Fungicide - 5 lbs.  | <b>\$65.00</b>  |
| <b>1332767</b> | MilStop SP Foliar Fungicide - 25 lbs. | <b>\$275.00</b> |

## Regalia® CG & Regalia®



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

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

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



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

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

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

## Asperello T34 Biocontrol



**Multiple Applications & Modes of Action Makes This Fungicide/Bactericide Especially Effective.**

**TARGET:** *Botrytis*, black stem, blights, *Fusarium*, leaf blotch, root rots, *Phytophthora*, *Pythium*, *Rhizoctonia*, *Sclerotinia* and more.

**DESCRIPTION:** This biological fungicide/bactericide uses the dried spores of the beneficial fungus *Trichoderma asperellum* strain T34 to provide plant protection, boost overall plant growth, and improve plant defenses against plant diseases and abiotic stresses. Meant to be used preventatively. Optimal soil temperature for use is 68-86°F. High spore count for rapid root colonization and faster protection.



**SUGGESTED USE:** Apply at plant propagation and continue to use throughout crop cycle. DO NOT apply to mushrooms. Seeds: 0.1-3.2 oz/cwt seed. Dips: 0.35-0.7 oz/12 gal water. In soil: 0.17-0.35 oz/2-10 gal water and apply to 1 cu. yd. substrate. Drench at propagation (seed trays, multi-pots): 1.8 oz/1,000 sq. ft. Drench at or after transplanting: 0.7 oz/100 gal water. Foliar application: 0.5-2.5 oz/10,000 sq. ft. in 12-25 gal water (ensure full coverage but avoid run off).

|                |  |                 |
|----------------|--|-----------------|
| <b>1332924</b> | Asperello T34 Biocontrol - 250g            | <b>\$144.99</b> |
| <b>1332925</b> | Asperello T34 Biocontrol - 500g            | <b>\$264.99</b> |
| <b>1332928</b> | Asperello T34 Biocontrol - 250g - CA Label | <b>\$144.99</b> |

**Cannot be shipped to the following states:** 1332924 & 1332925: AK, CA, DC, DE, HI, ID, KS, LA, MN, MS, MT, NE, NH, NJ, NC, ND, OR, VA, WV, WY. 1332928: All states but 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.

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

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

## CEASE® Biological Fungicide



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

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

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



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

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

## Monterey Complete Disease Control



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

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

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

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

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

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



## 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.

|                |   |                 |
|----------------|---|-----------------|
| <b>1222410</b> | ZeroTol HC - Gallon Concentrate             | <b>\$42.99</b>  |
| <b>1222412</b> | ZeroTol HC - Gallon Concentrate - Case of 4 | <b>\$154.76</b> |



## 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.

|                |                               |                 |
|----------------|-------------------------------|-----------------|
| <b>1458220</b> | Procidic RTU - 32 oz.         | <b>\$15.99</b>  |
| <b>1458221</b> | Procidic Concentrate - 16 oz. | <b>\$39.50</b>  |
| <b>1458222</b> | Procidic Concentrate - Gallon | <b>\$270.00</b> |

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® Sulfur Plant Fungicide

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

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

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

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

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|----------------|--|----------------|
| <b>1454701</b> | BONIDE Sulfur Plant Fungicide - 1 lb. Bottle | <b>\$8.75</b>  |
| <b>1454702</b> | BONIDE Sulfur Plant Fungicide - 4 lb. Bag    | <b>\$17.00</b> |

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





## The Power of Peroxyacetic Acid

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

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

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

## OxiDate® 2.0

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.

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

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

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

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



## 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.

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

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

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

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



## ZeroTol® 2.0

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

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

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

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

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|----------------|---------------------------|-----------------|
| <b>1222401</b> | ZeroTol 2.0 - 2.5 Gallons | <b>\$230.00</b> |
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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



# 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 on top of existing weeds and/or invasive plant roots and smother them out. Saves money; no need to buy expensive herbicides. Improves yields; your plants will have a chance to establish themselves without competing with weeds. Porous yet strong; so plants can be watered by natural rainfall or by other means. Allows air flow. Maintains this porosity through all but the most severe of weather. Can be applied by machine or by hand; 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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|----------------|---|----------------|
| <b>1453851</b> | Heavy Weight - Smooth Finish - 36" x 100' | <b>\$32.99</b> |
| <b>1453852</b> | Heavy Weight - Smooth Finish - 48" x 100' | <b>\$39.99</b> |



## PRE-EMERGENT

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

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

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

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

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

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



## SELECTIVE

### BONIDE® Captain Jack's™ Lawnweed Brew



Kills the Weeds – Not Your Lawn.

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

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

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

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

Cannot be shipped to the following states: CA, PR



## BROAD SPECTRUM

### Avenger® Weed Killer



Fast-Acting Natural Herbicide.

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

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

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

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

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. NOP compliant.

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

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

Cannot be shipped to the following states: CA

\*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.

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



**A Fast-Acting Non-Selective Herbicide That's A Total Vegetation Killer.**

**TARGET:** Common annual, biennial and perennial broadleaf weeds as well as algae and moss.

**DESCRIPTION:** This OMRI listed organic spray is a blend of caprylic acid and capric acid that spreads easily for thorough coverage and causes rapid weed burndown. Total kill is generally within 12-72 hours. If rain falls within 3 hrs of treatment, an additional spray may be required. For best results, use during sunny or warm conditions. Optimize your spray coverage and target small weeds. For use in and around all food and non-food crops. 24-hr REI & 0-day PHI.

**SUGGESTED USE:** Can be used in pre/post-planting applications, sucker control, trimming and pruning, as a harvest aid and as a desiccant. Not for use in any kind of irrigation system. Use 3% solution for weeds under 5" tall and for moss and algae. Use 3-6% solution for larger perennial weeds and grasses. Use 5-9% solution for tough to kill weeds, vines, brush and sucker control. Apply the mixed solution at 0.69-9.2 gallons/1,000 sq. ft. (35-400 gallons/acre). In situations where weed pressure is high and/or weeds are larger than 5 inches, higher volumes are advised for acceptable control. Repeat treatment as needed to control new weeds.

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| <b>1453895</b> | Homeplate - 2.5 Gallons             | <b>\$195.00</b> |
| <b>1453896</b> | Homeplate - 2.5 Gallons (Case of 2) | <b>\$351.00</b> |



### Earth's Ally® Weed & Grass Killer



**Simple Ingredients Create Superb Results.**

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

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

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

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



## 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

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|----------------|---|-----------------|
| <b>1402403</b> | ThermX-70 Natural Wetting Agent - Quart           | <b>\$27.50</b>  |
| <b>1402404</b> | ThermX-70 Natural Wetting Agent - Gallon          | <b>\$94.50</b>  |
| <b>1402405</b> | ThermX-70 Natural Wetting Agent - 5 Gallons       | <b>\$350.00</b> |
| <b>1402406</b> | ThermX-70 Natural Wetting Agent - 55 Gallon Drum* | <b>CALL</b>     |

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

## 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.

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| <b>2000600</b> | Boogie Blue Basic | <b>\$29.90</b> |
| <b>2000605</b> | Boogie Blue Plus  | <b>\$59.00</b> |

## Harris® Multi-Purpose Shaker & Multi-Purpose Sifting Scoop Applicators



### Takes The Guesswork Out Of Applying Powders & Granules.

**TARGET:** Diatomaceous Earth and other granular and powdered products.

**DESCRIPTION:** These applicators make applying the proper amount of powder and granular products easy and mess-free. The shaker applicator has a wide mouth for easy filling and comes with a convenient scoop. The top of this shaker has 12 holes that can be adjusted so that you can control your pour to release the amount of product desired. The sifting scoop applicator has a thin edge that makes scooping easy and holds up to 3 qts. Additionally, it has 150 small holes which will hold the product in the applicator until you are ready to release it with a gentle shake.



**SUGGESTED USE:** The uses for these applicators are nearly endless, you can use them with Diatomaceous Earth (DE), grass seed, ant/fire ant granules, fertilizers, cat litter, ice melt products, home and garden products and animal feed. The sifting scoop applicator can even be used in metal detecting to remove dirt and sand from around your finds.

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| <b>1407005</b> | Multi-Purpose Shaker Applicator        | <b>\$9.99</b>  |
| <b>1407006</b> | Multi-Purpose Sifting Scoop Applicator | <b>\$13.99</b> |

## 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.

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

## GOPHER CONTROL

### Root Guard Gopher Wire Baskets

#### Stop Gophers From Damaging Plant Roots!

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

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

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



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

### Chase™ Granular Mole & Gopher Repellent

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

**TARGET:** Gophers & moles.

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

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

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



## RODENT CONTROL

### BONIDE® Rat Magic™

Two Different Ways To Get The Same Great Rodent Control.

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

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

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

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

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



### The Smart Mouse Trap

A Humane Solution For Trapping Pesky Mice!

**TARGET:** Mice.

**DESCRIPTION:** This innovative, no-kill and easy-to-use trap is made of green transparent plastic and has two stainless steel springs that maneuver the special trap door. As a mouse enters the trap to retrieve a snack, its minimal weight releases the spring trigger closing the door behind them! The little critter will then remain in the trap enjoying its treat until safely released back into the wild. Measures 3" x 7" x 2.5".

**SUGGESTED USE:** Bait with a "saltine" cracker (add peanut butter for extra appeal) in the bait holder, set the trap and check frequently. Release mouse as soon as possible! Trap can be cleaned and reused.

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| <b>1255001</b> | Smart Mouse Trap - 1 Per Box | <b>\$14.20</b> |
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## FIRE ANT CONTROL

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



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

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

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

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

**1460020** Fertilome Fire Ant Killer - 1 lb. Bag **\$22.99**  
**Cannot be shipped to the following states:** AK, CA, CO, HI, ID, MT, NM, NV, OR, WY



### Orange Guard® Fire Ant Control



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

**TARGET:** Fire ants.

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

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

**1460005** Orange Guard Fire Ant Control - Gallon **\$32.75**  
**Cannot be shipped to the following states:** AK, CO, DC, DE, ID, IL, IN, IA, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, OR, PA, PR, RI, SD, UT, VT, VA, WA, WI, WV, WY



### Aunt Fannie's Pest Powder



**The Power Of Essential Oils In An Easy-To-Use Powder.**

**TARGET:** Ants, bed bugs, fleas, roaches, silverfish and ticks.

**DESCRIPTION:** The essential oils in this pumice powder work to control many of the most common household pests and leave the area smelling great. With just one sprinkle of this versatile and vegan product you can get rid of multiple species of crawling pests. People and pet friendly. Contains no petroleum propellants. FIFRA 25(b) exempt. Product will settle during shipping and is sold by weight, not volume.

**SUGGESTED USE:** **Not** for use near birds, fish, snakes or plants. **Indoors:** Sprinkle power evenly and lightly in areas where bugs can be found or where they enter the house. This includes cracks and crevices, on carpets, behind or around furniture, along closet perimeters, under the kitchen or bathroom sink and along windows and doorways. **Outdoors:** Sprinkle around the perimeter of your home.

**1460035** Aunt Fannies's Pest Powder - 11.5 oz. **\$10.97**  
**Cannot be shipped to the following states:** AK, NE, WA



### 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 **\$12.99**



## Essentria™ G Granular Insecticide

**A Granular That Handles A Handful Of Outdoor Pests!**

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

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

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

**1273050** Essentria G Granular Insecticide - 22 lbs. **\$67.50**



## Essentria® IC-3 - Concentrate

**Kills And 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**



## 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® 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**

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• Se habla Español

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

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

**Fax: 520-825-2038**

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**ARBICO Organics**  
 10831 N. Mavinee Dr., Ste. 185  
 Oro Valley, AZ 85737-9531  
**800-827-2847**

Please call for product availability.

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09/2022