

# The IPM Practitioner

Monitoring the Field of Pest Management

Volume XXIII, Number 11/12, November/December 2001

## 2002 Directory of Least-Toxic Pest Control Products

The 2002 Directory is a gateway to more than two thousand useful pest control items (for Quick Access see Box A on page 2 and the Index on page 38). Many of these products, services, or beneficial organisms have come to our attention in connection with articles published in BIRC's *IPM Practitioner* or the *Common Sense Pest Control Quarterly*, through IPM programs designed by our staff, or via recommendations from colleagues.

This Directory is unique because it is compiled by IPM technical experts, includes specific product descriptions, and is organized in concert with the IPM decision-making process (see *The IPM Practitioner* 13(11/12):1-9). All information is current, and is constantly updated on BIRC's computerized database system. It is divided into four management sections: Insects, Plant Disease, Vertebrates, and Weeds. Within each section, information is listed in alphabetical order by specific pest grouping. The IPM decision-making steps used to organize individual pest listings include Identification & Monitoring plus a consideration of Physical, Horticultural, Biological, and Least-Toxic Chemical Control methods.

For each product, specific descriptions are included when applicable, followed by the company name and the product name when available (in parentheses). Addresses and phone numbers of manufacturers and suppliers are listed alphabetically by company name at the end of the Directory. An Index to the Directory follows the List of Addresses.

### Feedback and Disclaimer

Two caveats apply to this information. First, to the best of our knowledge, these products, services, and beneficials are effective and are produced by



Photo courtesy of the USDA

Shown here is the big-eyed bug, *Geocoris punctipes*, a predator of aphids, lygus bugs, caterpillars, mites, and a number of other arthropod plant pests. Sources for this insect and many other least-toxic or non-toxic pest control products can be found in this Directory.

reputable companies. However, they are used at your own risk, and BIRC makes no guarantees or warranties regarding any listing. To help us maintain quality control, we encourage you to contact us about your experiences, both positive and negative, with any of these companies or resources.

Secondly, all information was current at press time. However, pest control is a rapidly changing field: products come and go, and companies change hands and locations on a regular basis. Therefore, if you fail to reach any of the companies listed here, contact us at PO Box 7414, Berkeley, CA 94707; 510/524-2567.

### Beneficial Insects

Both domestic and international producers of beneficials found in the Directory are listed by alphabetical order in the List of Addresses at the end of the

Directory. Names and addresses of Biobest distributors are listed separately in Box B at the beginning of the List of Addresses, and Koppert distributors are listed in Box C.

To obtain speedy delivery and receive advice from experienced sources, we recommend that you order directly from pro-

### Acknowledgment

The *IPM Practitioner* would like to thank all the companies who supplied us with information, the National Biological Control Institute for a grant to help with production (see page 37), the generous support of BIRC members, our advertisers, and William Quarles and Jennifer Bates who did all the clerical and production work on this issue.

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#### Manuscripts

The IPMP welcomes accounts of IPM for any pest situation. Write for details on format for manuscripts.

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#### Subscriptions/Memberships

A subscription to the IPMP is one of the benefits of membership in BIRC. We also answer pest management questions for our members and help them search for information. Memberships are \$60/yr (institutions/libraries/businesses); \$35/yr (individuals). Canadian subscribers add \$15 postage. All other foreign subscribers add \$25 airmail postage. A Dual membership, which includes a combined subscription to both the *IPMP* and the *Common Sense Pest Control Quarterly*, costs \$85/yr (institutions); \$55/yr (individuals). Government purchase orders accepted. Donations to BIRC are tax-deductible. FEI# 94-2554036.

#### Change of Address

When writing to request a change of address, please send a copy of a recent address label.

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ducers. Most of the producers listed rear at least one beneficial, but may distribute organisms produced by other companies.

Some producers may refer you to a distributor for small quantities. Whether the company is a producer or a distributor can be determined when a company representative is contacted. Since space limitations preclude listing all retail distributors of beneficial insects, only a select few are included.

#### International Orders of Beneficials.

U.S. purchasers of natural enemies from Canada or other foreign countries must secure an import permit prior to ordering. Permit form #526 (for Canada) and forms for importing from other countries are available from: USDA-PPQ/APHIS, Federal Center Bldg., Hyattsville, MD 20782. Canadians purchasing from U.S. producers need form #720, available from: Agriculture Canada, PPQD, Permit Office, Ottawa K1A 0C6.

**Quantities of Beneficials.** Questions about quantities to order, timing, and procedures for releasing the natural enemies can be answered by the producers. BIRC members/subscribers can also obtain advice from our technical staff. When making inquiries, please specify pest species, approximate number of plants (e.g., acreage, bench space, etc.), estimate of numbers of pests (e.g., number per sample leaf or percent of crop infested), and life stage of pest (adult, larva, etc.).

**Instructions for Beneficials.** Most producers send instructions for releasing beneficial insects. However, these organisms are most effective when used within a full IPM program. Send for BIRC's Publications Catalog for a listing of 'how-to' articles on incorporating biological control organisms within IPM programs for specific pests.

## Box A. Quick Access

If you are looking for a specific item, see the Index on pages 38 and 39. To find a remedy for your pest problem, look in one of the four major sections according to whether the pest is an insect (arthropod), plant disease pathogen, vertebrate, or a weed. Except for the weed section, pests are listed by alphabetical order in each of the major categories. When you have found the pest listing, there are separate sections for Identification and Monitoring, and for Physical, Horticultural, Biological, or Least-Toxic Chemical Controls. For instance, to find a parasitoid to control aphids, look in the Insect Management section under Aphids, then under Biological Controls, then under Parasitoids. To find a trap for a raccoon, look in the Vertebrate section under Raccoons, then under Physical Controls until you find a listing of traps. Brand name items are enclosed in parentheses, and are attached to a series of suppliers. The first supplier on the list is the manufacturer.

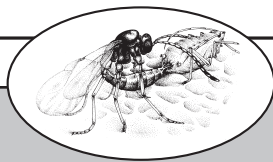
If the product you are seeking is not in the Index, you must know how the product is used, and for which pests, in order to immediately find the listing. If the item you are

seeking is hard to categorize, each of the four main divisions has a Miscellaneous section. If you are looking for a specific item such as insecticidal soap, diatomaceous earth, or silica gel, and do not know which pest category you should look at, browse major pest sections such as Ants and Aphids first, then browse Miscellaneous.

### Beneficials

**To find beneficial insects or arthropods, look first in the Index.** If there is no listing in the Index, find the appropriate major section, then the alphabetical listing of the pest you are trying to control. When you have found the pest listing, then look under **Biological Controls**. Parasitoids available to fight your pest are listed first, followed by effective predators. **Beneficials are listed in alphabetical order by scientific name.**

A list of suppliers follows every item in the Directory. To find the addresses and phone numbers for the suppliers listed, look up each supplier by alphabetical order in the List of Addresses at the end of the Directory.



# INSECT MANAGEMENT

## ANTS

### Physical Controls

#### High Performance Vacuum:

Proteam (L'il Hummer, Optimus)

#### Heat Treatment (carpenter ants):

TPE/Thermapure (Call for local practitioners)

#### Sticky Barrier:

Tanglefoot, Planet Natural, Charley's, Gardens Alive!, Great Lakes, Harmony, • Peaceful Valley • Phero Tech (Stikem Special)

#### Solar-powered Ant Trap (for fire ants):

Heitman Labs (Solar Ant Charmer)

#### Teflon Barrier:

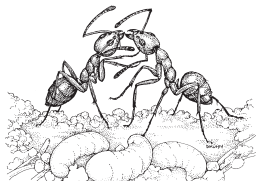
Check local hardware store in plumbing supplies

#### Pet Bowls with Barriers:

Alternative Control (Fool-A-Bug)

#### Tree Wrap:

Olson (Stiky Tree Guards) • Peaceful Valley



### Biological Controls

#### Insect-Attacking Nematodes:

*Mixture of species* (for fire ant): Gulf Coast

#### Parasitic Mites:

*Pymotes tritici*: (for fire ant): ARBICO • Biofac • Praxis

### Least-Toxic Chemical Controls

#### Abamectin Bait (for fire ants):

Whitmire, Planet Natural (Ascend)

**Abamectin Bait (for carpenter and household ants):** Whitmire (Advance)

#### Fenoxycarb Bait (for fire ants):

Syngenta (Award, Logic)

#### Hydramethylnon Bait (for fire ants):

TopPro (Amdro) • Clorox (Maxforce)

**Methoprene Bait (for fire ants):** Wellmark (Extinguish)

**Methoprene Bait (for Pharaoh ant):** Wellmark (Pharorid)

**Pyriproxifen Bait (for fire ant):** Valent USA (Distance)

**Spinosad Bait (for fire ant):** Dow (Conserve)



#### Botanical Sprays:

Woodstream (Mint Oil) • EcoSmart (herbal extracts) • Orange Guard (Orange Oil) • Kinzua (Orange Oil) • Insecto (Pine oil for fire ants)

#### Borate-Based Insecticides:

Waterbury (Mop-Up) • Whitmire (PT 240D Perma-Dust) • Waterbury, Planet Natural (Borid) • NISUS (Nibor)

#### Borate liquid ant baits (1%):

Waterbury, Gardener's Supply, Harmony (Drax) • Peaceful Valley • Woodstream (Victor) • JT Eaton (Dr. Moss) • Whitmire • Innovative

#### Ant Cafe for Liquid Baits:

Innovative Products

**Borate liquid bait (5%):** Senoret, Harmony (Terro) • Roxide (Roxo)

**Borate gel bait:** Blue Diamond (ProJoeS, 4.5% DOT) • Innovative (Gourmet, 6% DOT) • A Safe (Uncle Albert's, 5% DOT)

**Borate granular ant bait:** NISUS, Target (Niban, Niban FG)

**Borate granular fire ant bait (18% boric acid):**

Bushwhacker

**Borate rods (for carpenter ants):**

Pole Care (Impel Rods)

**Borate-treated lumber (for carpenter ants):**

Roy O. Martin • Osmose • Louisiana Pacific

**Borate treatments (for carpenter ants):**

NISUS, Target, Vopak (Bora-Care) • Permachink (Guardian, Shellguard) • Sashco (Penetreat) • NISUS (TimBor)

**Diatomaceous Earth (DE) (ants, crawling insects, stored products. Permaguard, Diafil, Crop Guard, Protect-It, and Dryacide are for stored products use. Baited DE and DE with pyrethrin is used for crawling insects such as ants, roaches, and others):**

Celite (100% freshwater DE, Diafil) • Eagle Picher (100% freshwater DE, Crop Guard, All Gone) • Hedley (90% Marine DE and 10% silica gel, Protect-It) • Natural Insecto, Natural Insect Control (90% marine DE, 10% food bait, Insecto) • Dryacide (97% freshwater DE and 3% silica gel) • Permaguard, Nitron, Pristine (100% freshwater DE, Permaguard) • Intagra, Necessary (Concern) • Harmony • Nature's Control • Peaceful Valley • JT Eaton (Answer) • Gardener's Supply

**With pyrethrin (fire ant):**

Permaguard, Pristine, Nitron (Permaguard Household) • Necessary (Concern) • Gardens Alive • Organic Solutions

**Hydramethylnon Bait Station and Granular Bait:**

Clorox Company (Maxforce, Combat)

**Fipronil Bait Station:**

Clorox Company (Maxforce)

**Integrated Perimeter Bait Station:**

B & G (Perimeter Patrol) • Maxforce • Whitmire (ACE)

**Sulfuramid Bait Stations:**

FMC (Fluor-Gard) • Whitmire (Pro-Control) • S.C. Johnson (Raid Max)

**Insecticidal Soap:**

Woodstream, Planet Natural, Gardens Alive!, Harmony, Nitron, Johnny's, Smith & Hawken, Peaceful Valley, Charley's (Safer Insecticidal Soap)

**With pyrethrin:**

Woodstream, Harmony, Planet Natural (Safer Yard and Garden, Safer Tomato and Vegetable)

**Pyrethrin:**

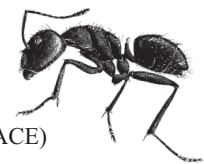
Roxide • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) • Hess & Clark (microencapsulated, Capsul-Ban) • Hess & Clark (Formula 66, LD 44Z) • AgrEvo (Kicker) • Peaceful Valley (w/o PBO, Py-Rin) • Monterey (Bug Buster O, w/o PBO)

**Repellent Garlic Spray:**

Garlic Research Labs, Chemical-Free (Garlic Barrier) • Harmony • Peaceful Valley • Soil Technologies (Garlic Gard) • Ecosci (Enviropeel)

**Silica Aerogel:**

**100% Pure:**



Cabot (Cab-O-Sil) (Must order 10 pound minimum) • Degussa (Wessalon S., Aerosil 380) (Must order 25 pound minimum)

**With pyrethrin:**

AgrEvo, Target (Drione) • Whitmire, Purity Products (PT 239 Tri-Die) • Vopak

## APHIDS

### Identification & Monitoring

**Monitoring Traps:**

Gardens Alive!, Great Lakes, Olson, Gemplers, Trécé (Pherocon) • Consep, Harmony, Gemplers • Natural Insect Control • Peaceful Valley • Phero Tech

**Physical Controls**

**Barriers & Exclusion Devices:**

Gardens Alive! • Planet Natural

**High Pressure Sprayer:**

W.H. Vinton (Water Wand)

**Reflective mulch:**

Mipco

**Row Covers:**

American Agrifabrics (AgGro) • Gardener's Supply • Gardens Alive! (Super-Light) • Great Lakes (BBA) • Harmony (Harvest Guard, Tufbell) • Peaceful Valley (Tufbell, AgGro) • Shepherd's (AgGro) • Mipco • BBA • Natural Insect Control

**Screening:**

Green-Tek • Hydro-Gardens (Fly Barr) • Tipper, Harmony, Peaceful Valley (Tie-Net)

**Sticky Adhesive:**

Seabright, Charley's, Great Lakes, Harmony, Phero Tech, (Stickem Special) • ARBICO, Planet Natural, Great Lakes, Harmony, Natural Insect Control, Gemplers, Tanglefoot (Tangle-Trap) • Peaceful Valley

**Sticky Trap/Tape:**

ARBICO • Gardens Alive • Great Lakes, Olson, Gemplers (Yellow Sticky Traps & Tapes) • Seabright (Sticky Traps) • Phero Tech • Great Lakes, ARBICO, Planet Natural, Gemplers (Versagard) • Peaceful Valley • Harmony • Springstar • Nature's Control • Woodstream

**Traps:**

ARBICO • Planet Natural • Gardens Alive! • Great Lakes • Harmony • IPM Labs • Natural Insect Control • Gemplers • Peaceful Valley • The Green Spot • Olson • Phero Tech

### Biological Controls

**Habitat:**

Earwig Shelter: Biotechnik  
Beneficial Seed Blend (for plants that attract beneficial insects: Harmony • Peaceful Valley • Lohse Mill • Rincon-Vitova • Cornflower Container-grown beneficial plants: Cornflower

**Attractant for lady beetles:**

Woodstream, Harmony, Santa Cruz Hort, ARBICO, Peaceful Valley, Great Lakes, The Natural Gardening (SureFire) • The Green Spot (Ladybug lure) • Springstar

**Microbial Insecticides:**

*Beauveria bassiana* (fungus for aphid control): Troy, Gardener's Supply, Hydrogardens (Naturalis O, L, ES) • Emerald (Mycotrol, Botanigard)  
*Paecilomyces* sp. (fungus for aphid control): Bio Pré • HydroGardens •

BioBest • Certis

*Verticillium lecanii* (fungus for greenhouse use):

Koppert (Mycotal, Vertalec)

**Parasitoids:**

*Aphelinus abdominalis*: Biobest • Duclos • Koppert • Natural Insect Control • Praxis • Rincon Vitova

*Aphidius colemani*: (for cotton aphid): Biological Control • Biobest • Biobest Canada • Syngenta Bioline • International Technology • IPM Labs • Koppert • Natural Insect Control • Plant Sciences • W. Neudorff • The Green Spot • BioBee • Martin Grima • Rincon Vitova • Garta • Florikan • Katz

*Aphidius ervi* (for potato aphid): Bio Pre • Biobest • Biobest Canada • Koppert • W. Neudorff • IPM Labs • Natural Insect Control • Garta

*Aphidius matricariae*: Applied Bionomics • Evergreen • Syngenta Bioline • Gartneri • IPM Labs • Koppert • Natural Pest Control • Nature's Control • Praxis • W. Neudorff • The Green Spot • Rincon Vitova

*Aphidius* sp.: Biological Crop • The Green Spot

*Diaeretiella rapae*: ARBICO • Praxis

*Episyrphus balteatus*: Flora • Katz

*Lysiphlebus testaceipes*: Praxis • Bioplanet • Flora • Katz

*Praon myzophagum*: Biowise

*Trioxys pallidus* (for walnut aphid): Praxis

**Predators:**

aphid midge, *Aphidoletes aphidimyza*: ARBICO • Applied Bionomics • Biobest • Biological Crop • Bio Pre • Evergreen • Planet Natural • Budai • Syngenta Bioline • Biowise • Gartneri • Hydro-Gardens • International Technology • IPM Labs • Koppert • Natural Insect Control • Natural Pest Control • Nature's Control • Peaceful Valley • Plant Sciences • Praxis • Rincon-Vitova • Sautter & Stepper • The Green Spot • W. Neudorff • Flora • EcoSolutions • BioBee • Katz

**Lacewings:**

*Chrysoperla carnea* or *Chrysopa carnea*: A-1 Unique • Bio Ag • Biological Crop • Bioplanet • Bowen • The Green Spot • Gartneri • Gardens Alive • Koppert • Kuida • Natural Insect Control • Natural Pest Controls • Organic Control • Peaceful Valley • Praxis • Rincon-Vitova • Sautter & Stepper • W. Neudorff • American Insectaries • Katz

*Chrysoperla rufilabris* or *Chrysopa rufilabris*: ARBICO • Bio Ag • Biofac • Bowen • Planet Natural • IPM Labs • Kuida • M & R Durango • Natural Insect Control • Nature's Control • Peaceful Valley • Praxis • Rincon-Vitova • Western Farm • The Green Spot • American Insectaries

*Chrysoperla* spp.: Beneficial Insectary • International Technology • Kunafin • Smith & Hawken • Flora • Buena

*Mallada signata*: Bugs for Bugs

**Lady beetles:**

Convergent lady beetle, *Hippodamia convergens*: A-1 Unique • ARBICO • Bio Ag • Biofac • Bowen • Buena • Evergreen • Planet Natural • Gardens Alive • Hydro-Gardens • International Technology • IPM Labs • Koppert • Kunafin • M & R Durango • Natural Insect Control • Natural Pest Controls • Nature's Control • Peaceful Valley • Praxis • Rincon-Vitova • Smith & Hawken • The Green Spot • The Ladybug Company • Ladybug Farms • Western Farm • EcoSolutions

Lady beetle, *Coleomegilla maculata*: IPM Labs • Florikan • Natural Insect Control

Lady beetle, *Propylea quatuordecimpunctata*: Praxis  
Lady beetle, *Harmonia axyridis*: Biobest, Koppert, Applied Bionomics, Rincon Vitova, The Green Spot, Evergreen, Bioplanet  
Lady beetle, *Adalia bipunctata*: Andermatt

#### **Predatory bugs:**

Big-eyed bug, *Geocoris punctipes*: Biofac • Biotactics • Rincon Vitova • Natural Insect Control

Insidious flower bug, *Orius insidiosus*: IPM Labs • Syngenta Bioline • Gartneri • Nature's Control • Rincon Vitova • Katz • Flora

*Orius laevigatus*: Bioplanet

*Orius* spp.: Biobest • Duclos • Natural Insect Control • Peaceful Valley • Syngenta Bioline

Minute pirate bug, *Orius tristicolor*: ARBICO • Planet Natural • Praxis  
Mirid bug, *Deraeocoris brevis*: Applied Bionomics

### **Least-Toxic Chemical Controls**

#### **Cinnamic Aldehyde:**

Emerald, Peaceful Valley (Cinnamite)

#### **Cinnamon Oil, Garlic, Cottonseed Oil:**

JH BioTech, Harmony (GC-Mite)

#### **Aphid Alarm Pheromone:**

Springstar

#### **Diatomaceous Earth: See Ants**

#### **Insect Growth Regulators:**

Wellmark (Enstar)

#### **Insecticidal Oil:**

##### **Highly refined oil (from fish):**

Peaceful Valley

##### **Highly refined oil (from petroleum):**

Monterey, Harmony (Saf-T-Side) • Valent USA, Harmony, Peaceful Valley (Volck) • Sun, Gardens Alive!, Harmony, Peaceful Valley, Charley's (Sunspray) • PBI/Gordon (Acme) • The Green Spot • Florikan (Target Oil) • Gardens Alive (Eco-Oil) • JMS (JMS Stylet Oil)

##### **Highly refined oil (from plants):**

Stoller, Peaceful Valley (Natur'l Oil 93% soybean) • ARBICO (Spreadall 93% cottonseed) • Gardens Alive • Harmony (EcoErase)

#### **Insecticidal Soap:**

Harmony (M-Pede) • Agricola El Sol (ACT-92) • Intagra, Necessary (Concern) • Woodstream (Safer Rose and Flower, Insecticidal Soap, Fruit and Vegetable) • Peaceful Valley • Shepherd's • The Green Spot

#### **With pyrethrin:**

Intagra, Necessary (Concern) • Woodstream, Gardens Alive!, Harmony, Nitron (Safer Yard and Garden, Tomato and Vegetable) • Peaceful Valley

#### **Neem Products:**

Certis, Intagra, Harmony (Azatin) • Woodstream, Harmony, Peaceful Valley (Safer's BioNeem, Japanese Beetle Repellent) • Certis, Planet Natural, Peaceful Valley, Harmony (Neemix, Trilogy) • Green Light • San Jacinto (Organica)

#### **Pyrethrin:**

Johnny's, Peaceful Valley (Pyrenone) • AgrEvo (Kicker) • Whitmire (microencapsulated PT-175 MicroCare, PT 565, PT 505) • Hess & Clark (microencapsulated, Capsul-Ban, Formula 66, LD-44Z) • Peaceful Valley (Py-Rin, w/o PBO) • Monterey, Harmony (Bug-Buster O, w/o PBO) • Intagra, Necessary (Concern) • PBI/Gordon (Garden Guard, Pyrethrin Dust)

#### **Pyrethrin and Oil:**

Gardens Alive (Pyola) • Harmony (Pyola)

#### **Pyrethrin, rotenone, copper, sulfur:**

Bonide, Gardener's Supply (Bonide Garden Dust)

#### **Pyrethrum Powder:**

Planet Natural • Peaceful Valley • Nichols Garden

#### **Repellent Garlic Spray:**

Garlic Research Labs, Chemical-Free, Planet Natural, (Garlic Barrier) • Soil Technologies (Garlic Gard) • The Green Spot • Vegetable Juices (Pure Garlic Oil) • JH Biotech • Harmony

#### **Repellent Mustard Oil:**

Soil Technologies

#### **Repellent Hot Pepper Wax:**

Charley's • Harmony (Wilder's) • The Green Spot • Garden City

#### **Sabadilla Powder:**

Gardens Alive! • Dunhill, Harmony, Peaceful Valley (Veratran) • Nichols Garden

## **BEES**

**(See Yellow Jackets)**

## **BEETLES**

### **(Crop and Stored Product Pests)**

#### **Identification & Monitoring**

##### **Attractant for Cucumber Beetle:**

Sigma Chemical (eugenol) • Trécé (CIDE-TRAK CRW)

##### **Pheromones & Traps:**

##### **For agricultural & horticultural insects:**

Woodstream, Gardens Alive! (Safer Japanese Beetle Trap, Surefire) • Gemplers, Great Lakes, Phero Tech (Wing Trap I and II, Unitrap, Delta Traps) • Scentry, Gemplers, Great Lakes, ARBICO, Planet Natural (Scentry) • Phero Tech (Phero Tech Lures) • Scentry, Great Lakes, ARBICO, Planet Natural, Gemplers, Natural Insect Control (Delta & Wing Trap) • Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers (Pherocon) • Harmony (Catch-em) • Suterra, ARBICO, Insects Ltd., Great Lakes, Intagra, Santa Cruz Hort, Harmony, Gemplers (BioLure) • Hercon, Great Lakes (Luretape) • Tomagro (TomaAttract)

##### **For forestry insects:**

Phero Tech (Phero Tech Lures)

##### **For Japanese beetle:**

Trécé, Gardens Alive, Great Lakes, Olson, Harmony • Phero Tech • Woodstream, Harmony, Great Lakes (Safer) • Tanglefoot • Springstar

##### **For pepper weevil:**

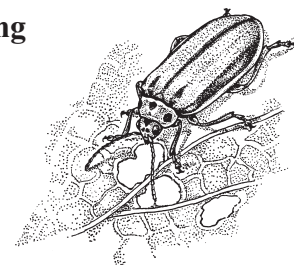
Trécé, Gardens Alive, Great Lakes, Olson, Harmony (Pherocon PEW)

##### **For stored product insects:**

Great Lakes (Trappit Insect Probe) • Verdant, Santa Cruz Hort, ARBICO, Great Lakes, Necessary, Gemplers (Safer) • Trécé, Gardens Alive, Great Lakes, Olson, Harmony, Gemplers (Storgard, WB Probe II for weevils) • Trécé (Dome for confused flour beetle) • Trécé (Dome for cigarette beetle) (Sanitrap for cigarette beetle)

### **Physical Controls**

#### **Controlled Atmosphere System (for stored grains):**



The Aerogen • Air Products (Prism System)

### Row Covers:

American Agrifabrics (AgGro) • Great Lakes (BBA) • Gardener's Supply, Necessary, Gardens Alive! (Floating Row Covers) • Gardens Alive! (Super-Light Insect Barrier) • Harmony (Harvest Guard, Tufbell) • Peaceful Valley (Tufbell, AgGro) • Mipco

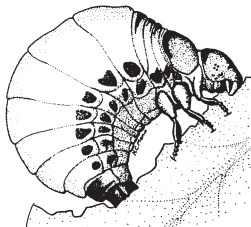
### Spiked lawn aerator sandals

#### (for white grub control):

Gardener's Supply • Planet Natural

### Traps and Sticky Tape:

Sterling Intl. (Japanese Beetle Trap)  
• Phero Tech (Chroma) • Scentry,  
Great Lakes, ARBICO, Planet Natural,  
Gemplers (Scentry) • Peaceful Valley



## Biological Controls

### Attractant for soldier bugs that attack pest beetles:

Sterling Intl., Planet Natural, Natural Insect Control (Rescue!)

### Seed mix to attract beneficial insects:

Lohse, Harmony, Peaceful Valley, Rincon-Vitova

Syringe for nematode injection (for borers): Gardens Alive

### Insect-Attacking Nematodes:

*Heterorhabditis bacteriophora*: BioLogic • IPM Labs • Integrated Biocontrol • Natural Insect Control • Plant Health Care • Koppert  
*Heterorhabditis megidis*: Andermatt • Biological Crop • Biobest • International Technology • W. Neudorff • Plant Sciences  
*Heterorhabditis* spp.: Syngenta Bioline • Biowise • Hydro-Gardens • M & R Durango • Natural Insect Control • Nature's Control • Nematec • W. Neudorff • Peaceful Valley  
*Heterorhabditis marelatus*: Evergreen

*Steinernema carpocapsae*: Biological Crop • Biofac • BioLogic • Certis • Planet Natural • Gardens Alive! • Hydro-Gardens • IPM Labs • M & R Durango • Natural Insect Control • Peaceful Valley  
*Steinernema feltiae*: BioLogic • Certis • International Technology • IPM Labs • Koppert • Natural Insect Control • W. Neudorff  
*Steinernema feltiae* and *Heterorhabditis* sp. (mix): North Country  
*Steinernema riobravisi*: Certis • Harmony

### Microbial Insecticides:

#### *Bacillus thuringiensis* (BT) for beetle larvae:

Bonide, Gardener's Supply (Bonide) • Johnny's, Harmony (Colorado Potato Beetle Beater) • Ecogen (Raven, Foil) • Plant Health Care

#### *Bacillus thuringiensis tenebrionis* (BTT):

Valent USA (Novodor) • Gardens Alive (Potato Shield)

#### *Bacillus popilliae* (milky spore disease):

St. Gabriel, Gardener's Supply, North Country (Milky Spore)

#### *Beauveria brongniartii* (fungus for Melolontha):

Andermatt

#### *Beauveria bassiana* (fungus for grubs):

Troy, Hydrogardens, Planet Natural, Gardener's Supply (Naturalis T)

#### Insecticidal oil spreader-sticker used with BT:

Monterey (Nature's Own)

### Parasitoids:

*Anaphes* spp. (for cereal leaf beetle): Rincon-Vitova

*Anisopteromalus calandrae* (stored product beetles): ARBICO • Biofac • Praxis

*Bathyplectes curculionis* (for alfalfa weevil): Praxis

*Cephalonomia waterstoni* (for rusty grain beetle): Praxis

*Catalaccus grandis* (for boll weevil): Rincon-Vitova

*Catalaccus hunteri* (for pepper weevil): Rincon-Vitova

*Edovum puttleri* (for Mexican bean, CO potato beetle): Praxis

*Lemophagus crioceritor* (for asparagus beetle): Praxis

*Meigenia mutabilis* (for alfalfa weevil): Praxis

*Microctonus* spp. (for alfalfa weevil): Praxis

*Pediobius foveolatus* (for Mexican bean beetle): ARBICO • Praxis • IPM Labs

*Tetrastichus asparagi* (for asparagus beetle): Praxis

*Tetrastichus julis* (for cereal leaf beetle): Praxis

### Predators:

spined soldier bug, *Podisus maculiventris* (for CO potato beetle): ARBICO • Bug Factory • Rincon-Vitova

warehouse pirate bug, *Xylocoris flavipes* (for stored product beetles): ARBICO • Biofac • Praxis

## Least-Toxic Chemical Controls

### Baits (cucurbitacin, with carbaryl for cucumber beetle or corn rootworm):

MicroFlo (Adios, Slam)

### Borate-Based Insecticides:

Whitmire (PT 240D) • Nisus (Niban, Niban FG)

### Diatomaceous Earth: See ANTS

### Epazote (*Chenopodium ambrosioides*)

#### for protection against stored product beetles:

Nichols Garden • J.L. Hudson

### Garlic Repellents:

Garlic Research Labs, Chemical-Free (Garlic Barrier) • Soil Technologies (Garlic Gard) • Harmony (Guardian) • Vegetable Juices (pure garlic oil)

### Mustard Repellent:

Soil Technologies

### Insect Growth Regulators (for beetle grubs):

Bayer Agricultural (halofenzimide, Mach-2)

### Insecticidal Soap (for flea beetle):

Intagra (Concern) • Woodstream (Safer) • Peaceful Valley

#### With pyrethrin:

Intagra (Concern Multi-Purpose), Woodstream, Gardens Alive!, Harmony, Nitron (Safer Yard and Garden) • Peaceful Valley

### Neem Products:

Certis, Planet Natural (Azatin) • Woodstream, Harmony, Gardener's Supply, Peaceful Valley, The Natural Gardening (Surefire Japanese Beetle Repellent) • Woodstream, Harmony, Peaceful Valley (Safer's BioNeem) • Certis, Harmony, Peaceful Valley (Neemix, Trilogy) • Gardens Alive (Neem-Away) • Green Light, Harmony (Rose Defense) • San Jacinto (Organica)

### Nicotine Analog (for beetle grubs):

Bayer Agricultural (imidacloprid, Admire)

### Pyrethrin:

Roxide • Whitmire (microencapsulated PT-175 MicroCare, PT 565, PT 505) • Johnny's, Peaceful Valley (Pyrenone) • Hess & Clark (microencapsulated, Capsul-Ban, Formula 66, LD-44Z) • AgrEvo (Kicker) • Peaceful Valley (Py-Rin, w/o PBO) • Monterey, Harmony (Bug Buster O, w/o PBO)

### Pyrethrin, rotenone, copper, sulfur:

Bonide, Gardener's Supply (Bonide Garden Dust)

### Pyrethrum Powder:

Nichols Garden • Harmony • Peaceful Valley

### Rotenone:

Bonide • Peaceful Valley

### Sabadilla:

Dunhill, Harmony (Veratran) • Peaceful Valley

### Silica Aerogel: See ANTS



**Spinosad Microbial Isolate (leaf beetles):**  
Dow Agro (Conserve)

## BEETLES

### (Structural Pests)

#### Identification & Monitoring

**Trained Dogs (for detection):**  
Industrial Narcotic • Beacon Dogs

#### Physical Controls

**Cold Treatment (liquid nitrogen):**  
Tallon Pest Control (The Blizzard System)

**Electrical Treatment (for drywood termite & boring beetles):**  
ETEX (Electrogun)

**Heat Treatment:**  
TPE/Thermapure (Call for local practitioners) • In Denmark (AS Skadedyrcentralen) • In England (Thermo Lignum) • Topp (Heaters)

**Microwave Treatment:**  
Bio-Integral Resource Center (Call for local referrals)

**Microwave Equipment:**  
Wavelength • Professional Equipment

#### Least-Toxic Chemical Controls

**Borate Rods:**  
Pole Care, Nisus (Impel Rods)

**Borate Termiticide & Wood Preservative:**  
NISUS, Target, Vopak (Bora-Care) • Permachink (Guardian, Shellguard) • Sashco (Penetreat) • NISUS (TimBor)

**Borate Treated Lumber and Building Material:**  
Roy O. Martin • Gross and James (cross ties) • Osmose • Louisiana Pacific

**Borate Treated Logs:**  
Appalachian • Coast-to-Coast • Lok-N-Logs

## BLACKFLY

### (See Mosquitoes)

## BORERS

### (See Beetles)

## BUGS

### (Hemipterans)

#### Identification & Monitoring

**Pheromones & Traps:**  
Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers (Pherocon) • Phero Tech • Peaceful Valley

#### Physical Controls

**Screening:**  
Tipper, Harmony, Peaceful Valley (Tie-Net)

**Row Covers:**  
American Agrifabrics (AgGro) • Great Lakes (BBA) • Gardens Alive (Super-Light) • Gardener's Supply, Gardens Alive (Floating Row Covers) • Harmony (Tuffbell, Harvest Guard) • Peaceful Valley (Tuffbell, AgGro) • Mipco • Gemplers • Shepherd's

**Vacuum:**  
BioQuip • D-VAC • Proteam (Hummer, Optimus, inside use)

#### Horticultural Controls

**Beneficial Seeds and Plants:**  
Cornflower • Harmony • Lohse Mill

#### Insect-Resistant Turfgrass:

**Endophytic Ryegrass (repels billbugs & caterpillars):**  
Lofts Seed (Repell, Repell II, Yorktown III, Palmer II, Prelude II) • Turf Seed (Citation II, Birdie II, Omega II, CBS II, Manhattan II, Charger, Quickstart, 246 Sunrye) • Turf Seed (Sunrye) • Gardens Alive (Turf-Alive) • Turf Seed (Citation III, Bright Star, Catalina, Navajo, Road Runner)

**Endophytic tall fescue (repels billbugs):**  
Turf Seed (Apache, Tomahawk) • Lofts Seed (Jamestown II, Reliant)

#### Biological Controls

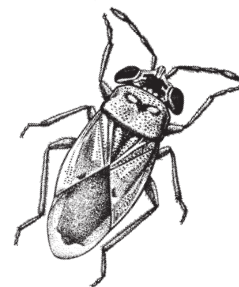
**Attractant for soldier bugs that attack pest bugs:**  
Sterling Intl., Planet Natural, Natural Insect Control (Rescue!)

#### Microbial Insecticides:

**Entomopathogenic fungus:**  
*Beauveria bassiana* (for chinch bugs): Troy, Hydrogardens, Gardener's Supply (Naturalis T) • Emerald (Botanigard)  
*Metarhizium anisopliae* (for meadow spittlebug, coffee leafminer): Agricola El Sol • Bio Pre

**Parasitoids:**  
*Anaphes iole* (for lygus bug): Natural Insect Control • The Green Spot  
• Rincon-Vitova • Beneficial Insectary  
*Trissolcus* spp. (for stink bug eggs): Praxis

**Predators:**  
spined soldier bug, *Podisus maculiventris* (for CO potato beetle, bugs general, caterpillar general): ARBICO • Gardens Alive! • Natural Insect Control • Bug Factory • Rincon-Vitova  
predatory bug, *Deraeocoris brevis* (for lygus bug): The Green Spot • Applied Bionomics



#### Least-Toxic Chemical Controls

**Borate-Based Insecticides:**  
Whitmire (PT 240D, PT 249 Perma-Dust) • Nisus (Niban bait)

#### Diatomaceous Earth: See ANTS

**Garlic-based repellent:**  
Soil Technologies (Garlic Gard) • Harmony (Guardian) • Garlic Research (Garlic Barrier)

**Insecticidal Soap:**  
Intagra (Concern) • Woodstream (Safer) • Peaceful Valley

**With pyrethrin:**  
Woodstream (Safer Yard and Garden, Safer Tomato and Vegetable) • Necessary, Intagra (Concern Multi-purpose) • Peaceful Valley

#### Neem Products:

Certis, Planet Natural, Nitron, Johnny's (Azatin)  
• Woodstream, Harmony (Safer's BioNeem) • Certis, Peaceful Valley,  
Harmony (Neemix, Triology) • Green Light (Rose Defense)

#### **Pyrethrin:**

Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) •  
Johnny's, Peaceful Valley, (Pyrene) • Intagra (Concern) • Hess &  
Clark (microencapsulated, Capsul-Ban, Formula 66, LD-44Z) •  
AgrEvo, Insects Limited (Kicker, Drione) • Peaceful Valley (Py-Rin,  
w/o PBO) • Monterey, Harmony (Bug Buster O, w/o PBO)

#### **Pyrethrin and Oil:**

Gardens Alive (Pyola) • Harmony (Pyola)

#### **Pyrethrin, rotenone, copper, sulfur:**

Bonide, Gardener's Supply (Bonide Garden Dust)

#### **Sabadilla:**

Planet Natural • Gardens Alive! • Dunhill, Harmony (Veratran)

**Silica Aerogel:** See ANTS

## CATERPILLARS

### Identification & Monitoring

#### **Pheromones & Traps:**

**For agricultural & horticultural insects: delta, dome, diamond,  
funnel, jackson, and wing traps**

Great Lakes, Gemplers (Multi-Pher, Unitrap, Delta Traps) • Phero  
Tech, Great Lakes (Unitrap) • Scentry, Gemplers, Great Lakes,  
ARBICO, Planet Natural (Scentry) • Suterra, Harmony, Planet Natural,  
Gardens Alive, Peaceful Valley, The Natural Gardening (BioLure) •  
Phero Tech (Phero Tech Lures) • Scentry, Great Lakes, ARBICO,  
Planet Natural, Natural Insect Control (Delta & Wing Trap, Heliothis  
Trap) • Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers  
(Pherocon) • ARBICO, Harmony (Catch-em) • Peaceful Valley •  
Hercon • San Jacinto • Tanglefoot (Codling Moth) • Tomagro

#### **For forestry insects:**

Phero Tech (Phero Tech Lures)

#### **For stored product insects:**

Woodstream, Santa Cruz Hort, ARBICO, Peaceful Valley, Great Lakes,  
Necessary, Gemplers (Pheromone Traps, Safer) • Phero Tech (Phero  
Tech Lures) • Trécé, Gardens Alive, Olson, Great Lakes, Harmony,  
Peaceful Valley (Storgard) • Woodstream, Santa Cruz Hort (Clothes  
Moth Pheromone) • Springstar • Certis, Harmony (Clothes Moth) •  
Woodstream (Pantry Pest Pheromone) • Springstar (Clothes Moth)

### Physical Controls

#### **Controlled Atmosphere System (for stored grains):**

The Aerogen • Air Products (Prism System)

#### **Row Covers:**

American Agrifabrics (AgGro) • Great Lakes (BBA) • Gardens Alive!  
(Super-Light) • Gardener's Supply, Gardens Alive, (Floating Row  
Covers) • Harmony (Harvest Guard, Tufbell) • Peaceful Valley (Tufbell,  
AgGro) • Mipco • Shepherds

#### **Sticky Barrier:**

Tanglefoot, Planet Natural, Gardens Alive!, Great Lakes, Harmony,  
Intagra, Phero Tech, Peaceful Valley (Tanglefoot)

#### **Sticky Trap/Tape:**

#### **For stored product insects:**

Santa Cruz Hort (Wing & Delta Traps) • Peaceful Valley • Agro  
Biotech • Phero Tech

#### **For agricultural & horticultural insects:**

Scentry, Great Lakes, ARBICO, Planet Natural, Gemplers (Scentry  
Gypsy Moth Trap) • Peaceful Valley • Phero Tech • Tomagro

#### **Traps:**

Woodstream, Harmony, Peaceful Valley, The Natural Gardening  
(Gypsy Moth Trap) • Ladd, Planet Natural (Red Sphere Fruit Fly) •  
Woodstream, Harmony, Great Lakes, Intagra, The Natural Gardening  
(SureFire Codling Moth) • Tomagro

#### **Tree Wrap:**

Olson (Stiky Tree Guards) • Planet Natural, Peaceful Valley (Bug Belt)  
• Phero Tech

### Horticultural Controls

#### **Insect-Resistant Turfgrass:**

#### **Endophytic Ryegrass (repels billbugs & caterpillars):**

Lofts Seed (Repell, Palmer II, Prelude II, Yorktown III) • Turf Seed  
(Citation II, Birdie II, Omega II, CBS II, Manhattan II, Charger,  
Quickstart, 246 Sunrye) • Gardens Alive (Turf-Alive)

#### **Endophytic Tall Fescue (repels caterpillars):**

Turf Seed (Apache II, Tomahawk, Coronado Gold, Tarheel)

### Biological Controls

#### **Attractant for soldier bugs that attack pest caterpillars:**

Sterling Intl., Planet Natural, Natural Insect Control (Rescue!)

#### **Seed Mix to Attract Beneficials:**

Harmony • Peaceful Valley • Lohse Mill • Planet Natural • Gardens  
Alive • Rincon-Vitova • Cornflower (also plants)

#### **Seeds for plants to repel pest Lepidoptera:**

Shepherd's (sweet basil) • Nichols Garden, J.L. Hudson (epazote) •  
Park Seed (holy basil)

#### **Seeds for California Native Plants:**

Pacific Coast Seed

#### **Bat Houses to Attract Moth-Eating Bats:**

The Green Spot • Natural Insect Control

#### **Earwig Shelters (habitat for caterpillar biocontrol in orchards):**

Biotechnik

#### **Insect-Attacking Nematodes:**

*Heterorhabditis bacteriophora*: BioLogic • IPM Labs • Natural Insect  
Control

*Steinernema carpocapsae*: BioLogic, Certis, IPM Labs, Natural Insect  
Control, Peaceful Valley

*Steinernema feltiae*: BioLogic, Certis, IPM Labs, Natural Insect  
Control

*Steinernema riobravisi*: Certis, Harmony

#### **Syringes for nematode injection (for borers):**

Gardens Alive

#### **Microbial Feeding Stimulant:**

Peaceful Valley

#### **Microbial Insecticides:**

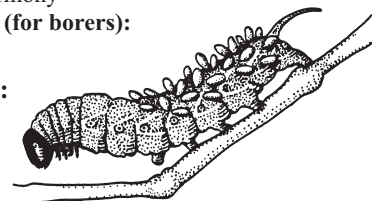
#### ***Bacillus thuringiensis* (BT):**

Valent USA, Peaceful Valley, Johnny's, English Woodlands (Dipel,  
Dipel 4L, 2X, 10G, ES, Xentari WDG) (Topside Dipel) • Koppert,  
PBI/Gordon (Bactospeine) • Nitron (Caterpillar Killer) • ARBICO •  
Planet Natural • Agricola El Sol (BST-88, BST-88A) • Ecogen (Foil)

#### ***Bacillus thuringiensis aizawai* (BTA):**

Valent USA (Xentari, Florbac) • Certis (Agree, Design)

#### ***Bacillus thuringiensis kurstaki* (BTK):**





Ecogen (Condor, flowable) • Monterey (Lepid BT) • Valent USA (Biobit, Foray) • Peaceful Valley, Harmony (Caterpillar Attack, Vegetable Insect Attack) • Certis, Peaceful Valley, Harmony (Javelin WG, CoStar) • Planet Natural • Monterey, Harmony (Caterpillar Clubber) • Plant Health Care, Ecogen (Crymax)

**BT protein encapsulated in *Pseudomonas*:**

Ecogen, Gardens Alive (M-Peril, M-Trak, Match, MVP-II)

***Beauveria bassiana* for soil and turf (sod webworm):**

Troy, Hydro-Gardens, Gardener's Supply (Naturalis-T) • Emerald (Botanigard)

**Insecticidal spreader-sticker oil for BT:**

Monterey (Nature's Own)

***A. orana granulosis virus* (for leafroller):**

Andermatt (Capex)

**Codling moth granulosis virus:**

Andermatt (Madex) • Certis (Cyd-X, call for availability)

**NPV (from alfalfa looper or celery looper):**

Certis (call for availability)

**NPV from *H. zea* (for caterpillars):**

Certis (Gem-Star)

**NPV (nucleopolyhedrosis virus) (for gypsy moth):**

Agricola El Sol (VPN-80, VPN-82) • U.S. Forest Service, USDA

**NPV (nucleopolyhedrosis virus) (for beet armyworm):**

Certis (Spod-X)

**Parasitoids:**

*Anisopteromalus calandrae* (stored product): Biofac

*Blepharipa schineri* (parasitic fly for gypsy moth): USDA Rearing Lab

*Bracon hebetor* (for stored product moth): Biofac • Arbico

*Casinarua arjuna* (for gypsy moth): Praxis

*Coccygomimus disparis* (for gypsy moth): Praxis

*Cotesia marginiventris* (for gypsy moth, stored product moth):

ARBICO • Biofac • Rincon Vitova • The Green Spot • Natural Insect Control

*Cotesia melanoscela* (Korean strain) (for gypsy moth, sales to government agencies only): Biobase • Praxis

*Cotesia plutellae* (for diamondback moth): ARBICO • Biofac • Natural Insect Control

*Diadegma insularis* (for diamondback moth): ARBICO • Praxis

*Glyptapanteles indiensis* (for gypsy moth): Praxis

*Goniozus legneri* (for navel orangeworm, omnivorous leafroller):

ARBICO • Beneficial • Bio Ag • Bowen • California BioWorks •

Kuida • Praxis • Rincon-Vitova • M&R Durango

*Lydella thompsoni* (for European corn borer): Praxis

*Macrocentrus ancylovorus* (for Oriental fruit moth): ARBICO • Praxis

*Meteorus pulchricornis* (for gypsy moth, government agencies only):

Biobase • Praxis

*Microchelonus blackburni* (for pink bollworm): Praxis

*Microplitis plutellae* (for diamondback moth): Praxis

*Ooencyrtus kuvanae* (for gypsy moth): Praxis

*Orgilus lepidus* (for potato tuber moth): Bugs for Bugs

*Pentalitomastix plethoricus* (for navel orangeworm): ARBICO • Bowen • California BioWorks • Praxis

*Trichogramma brassicae*: Beneficial • IPM Labs • Koppert • Nature's Control • Rincon Vitova • The Green Spot

*Trichogramma carverae*: Bugs for Bugs

*Trichogramma dendrolimi* (for moth eggs): Bowen

*Trichogramma evanescens* (for moth): Koppert

*Trichogramma minutum* (for Eastern U.S. orchards): ARBICO •

Beneficial • Biofac • Bowen • Planet Natural • International Technology • IPM Labs • M & R Durango • Nature's Control • Peaceful Valley • Rincon Vitova • The Green Spot

*Trichogramma ostrinae*: Beneficial Insectary

*Trichogramma platneri* (for Western U.S. orchards): ARBICO •

Beneficial • Bio Ag • Bowen • Planet Natural • Kuida • Rincon-Vitova • Peaceful Valley • International Technology

*Trichogramma pretiosum* (for moth eggs in vegetable & field crops):

ARBICO • Beneficial • Bio Ag • Biofac • Bowen • Planet Natural • FAR • Gardens Alive! • Kuida • IPM Labs • M & R Durango • Nature's Control • Rincon-Vitova • Peaceful Valley • The Green Spot • Bugs for Bugs

*Trichogramma* spp. (for moth eggs in vegetable & field crops):

Beneficial Insectary • Conrad Appel • KWS • Kunafin • Natural Insect Control • Natural Pest Controls • Organic Control • Peaceful Valley • Praxis • Smith & Hawken • The Natural Gardening • Arnold Brothers • Buena • Natural Enemy

*Trichogrammatoidea bactrae* (for moth egg in fields & orchards, pink bollworm): Rincon-Vitova • The Green Spot

**Predators:**

big-eyed bug, *Geocoris punctipes*: Biofac • Rincon-Vitova • California Bioworks • Natural Insect Control

predatory bug: *Deraeocoris brevis*: Applied Bionomics • Natural Insect Control

spined soldier bug, *Podisus maculiventris*: ARBICO • Natural Insect Control • Bug Factory • Rincon Vitova

warehouse pirate bug, *Xylocoris flavipes*: (for stored product moths): ARBICO • Planet Natural • Biofac • Praxis

## Least-Toxic Chemical Controls

**Botanical Repellents:**

Shepherd's (sweet basil seeds) • Park Seed (holy basil) • Nichol's Garden, J.L. Hudson (epazote) • Soil Technologies (Garlic Gard) • Gardens Alive (Herbal Moth Repellent) • Garlic Research, Harmony, San Jacinto (Garlic Barrier)

**Diatomaceous Earth: See ANTS**

**Insecticidal Soap: See APHIDS**

**Insect Growth Regulators (IGRs):**

Syngenta (fenoxycarb, Comply, Precision) • Rohm and Haas (tebufenozide, Confirm)

**Microbial Isolate (Spinosad):**

Dow (Conserve)

**Neem Products:**

Certis, Planet Natural, The Green Spot (Azatin) • Woodstream, Harmony, Peaceful Valley (Safer's BioNeem) • Certis, Harmony, Peaceful Valley (Neemix, Trilogy) • Green Light, Gardener's Supply (Green Light)

**Pheromone Mating Disruptants:**

Checkmate for codling moth, tomato pinworm, oriental fruit moth, pink bollworm, peach tree borer; Isomate for codling moth, oriental fruit moth, greater and lesser peach tree borer, oblique-banded leafroller, pandemis leafroller, beet armyworm, pink bollworm; NoMate for toma-

to pinworm, pink bollworm, tufted apple bud moth; Disrupt for peach twig borer, oriental fruit moth, codling moth, and gypsy moth: Suterra, Harmony, Great Lakes, Harmony, ARBICO, Peaceful Valley (Checkmate) • Pacific Biocontrol, Great Lakes, Harmony, Peaceful Valley (Isomate) • Scentry, Great Lakes, ARBICO, Planet Natural (NoMate) • Scentry, Great Lakes, ARBICO, Planet Natural, Gemplers (Attract & Kill, NoMate PBW-MEC for pink bollworm) • Hercon (Disrupt)

**Pheromone Lures for many Lepidoptera:**

Trécé (Pherocon) • Tomagro (TomaAttract) • Great Lakes IPM • Suterra (BioLure) • Phero Tech

**Pyrethrin:**

Roxide • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) • Waterbury (Purge III) • Johnny's, Peaceful Valley (Pyrenone) • Hess & Clark (microencapsulated, Capsul-Ban) • AgrEvo (Kicker) • Monterey, Harmony (Bug-Buster-O, w/o PBO) • Peaceful Valley (Py-Rin, w/o PBO)

**Pyrethrum powder:**

Nichol's Garden • Harmony

**Rotenone:**

Bonide • Peaceful Valley

**Sabadilla:**

Dunhill, Harmony, Peaceful Valley (Veratran)

**Silica Aerogel: See ANTS**

## COCKROACHES

### Identification & Monitoring

**Flashlight with Red Filters:**

Streamlight

**Pheromone Trap:**

Woodstream (Victor)

### Physical Controls

**Caulk:**

Hardware Store

**Teflon barrier protects pet food bowls:**

See hardware store for Teflon tape

**Pet Bowls with Barrier:**

Alternative Control (Fool-A-Bug)

**Traps:**

Woodstream (Victor, sticky) • Gardens Alive (Roach Free) • Certis, Harmony (Lo-Line)

**Pheromone Trap:**

Woodstream

**Glue board trap:**

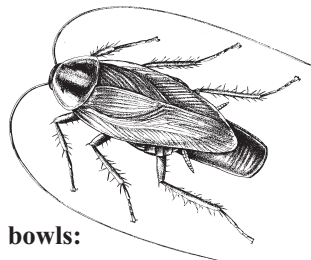
Bell (Trapper) • Woodstream

**Trap & attractant:**

Woodstream, Harmony, ARBICO, Peaceful Valley, Great Lakes (The Dungeon) • Seabright (Safe Stop) • Woodstream (Victor, pheromone) • Springstar

**Vacuums:**

Proteam (Hummer, Optimus)



### Biological Controls

**Parasitoids:**

*Anastatus tenuipes*: Rincon-Vitova • PNE

*Aprostocetus hagenowii*: Bio Pre • PNE • Rincon-Vitova

*Comperia merceti*: Rincon-Vitova • PNE

*Tetrastichus incertus*: Praxis

### Least-Toxic Chemical Controls

**Baits:**

**Abamectin dust or spray:**

Whitmire (Avert PT-300, PT-310) • Gardens Alive!

**Abamectin gel bait:**

Whitmire (Avert 320)

**Borate-based bait:**

NISUS (NIBAN Granular Bait, Niban FG) • Blue Diamond Manufacturing (for bait gun) • Seabright (Roach Free) • Waterbury (50% boric acid, CB Attrax) • Blue Diamond (ProJoe)

**Hydramethylnon bait stations (child-resistant):**

Clorox Company (Maxforce, Combat)

**Fipronil bait stations (child resistant):**

Clorox Company (Maxforce)

**Hydramethylnon gel bait:**

TopPro, Target, Van Waters (Siege)

**Sulfluramid bait station:**

S.C. Johnson (Raid Max)

**Xanthine bait station (prevents reproduction):**

Cleary (Ecologix Roach Terminal)

**Bait gun:**

Specialty Products • Target • Jim Simmons • Blue Diamond • Whitmire

**Botanical Sprays:**

Orange Guard, Vopak, Target (orange oil) • Woodstream (Mint Oil) • EcoSmart (herbal oil)

**Dust applicators:**

Parker Pest (Pest Machine) • Peaceful Valley (Pest Pistol)

**Borate-Based Insecticides:**

Organic Control (Ant-T-Roach) • Enforcer (Roach Ridd) • Waterbury (Mop-Up, Roach-Kil, Borid) • Whitmire (PT 240 or 249 Perma-Dust) • Copper Brite, Harmony (Roach Prufe) • Peaceful Valley • Woodstream (Victor) • J.T. Eaton • NISUS (Nibor)

**Diatomaceous Earth:**

Natural Insecto, Natural Insect Control (Insecto w 10% food bait) • Woodstream (SureFire) • Hedley Technologies (Insecolo w 3% food bait) • Hedley Technologies (Protect-It w 10% silica gel) • Celite • Dryacide • Eagle Picher • Peaceful Valley • Pristine (Permaguard D-10) • JT Eaton (Answer) • Necessary, Intagra (Concern)

**With pyrethrin:**

Permaguard, Pristine, Nitron (Permaguard) • The Natural Gardening (Insectigone) • Gardens Alive • Organic Solutions

**Hydroprene IGR:**

Wellmark (Gentrol)

**Hydroprene IGR Controlled Release Station:**

Wellmark (Point Source)

**Pyrethrin:**

Roxide • Whitmire (PT-175 microencapsulated, PT 505, PT 565) • Hess & Clark (microencapsulated, Capsul-Ban, Formula 66, LD-44Z) • AgrEvo, Insects Limited (Kicker)

**Silica Aerogel:**

**100% Pure:**

Cabot (Cab-O-Sil) (Must order 10 pound minimum) • Degussa (Wessalon S., Aerosil 380) (Must order 25 pound minimum)

**With pyrethrin:**

AgrEvo, Target (Drione) • Whitmire, Purity Products (PT 239 Tri-Die)  
• Van Waters & Rogers

## CRICKETS

(See Grasshoppers)

## EARWIGS

### Physical Controls

### Least-Toxic Chemical Controls

**Diatomaceous Earth:** See ANTS

**Insecticidal Soap:** See APHIDS



## FLEAS

### Physical Controls

**Combs:**

Gardens Alive! • Hansen's Pet (Ancol)

**Vacuums:**

Proteam (Hummer, Optimus)

**Sticky light traps:**

Enforcer Products (Over Nite Flea Trap) • Happy Jack • Zema •  
Gardens Alive • Whitmire (Ultralight) • Springstar (Flea Trap) •  
Woodstream (Victor)

**Sticky Traps and Tape:**

Bell (Trapper) • Olson • Gemplers

### Biological Controls

**Insect-Attacking Nematodes:**

Certis (BioFlea) • Peaceful Valley • Organic Control • Gardens Alive •  
Hydrogardens • Planet Natural • Biologic

### Least-Toxic Chemical Controls

**Sodium octaborate:**

The Ecology Works (Flea Nix powder) • Flea Busters (Rx for Fleas)  
(Call company for treatment)

**Insecticidal Oil:**

**Citrus or herbal oil extract:**

Security, Gardens Alive! (Flea Stop Shampoo) • Orange Guard, Vopak,  
Target (Orange Guard) • Woodstream (Poison Free) • EcoSmart  
(BioOrganic, EcoPCO)

**Diatomaceous Earth:**

Natural Animal (EcoZone) • Natural Insecto, Natural Insect Control  
(Insecto) • Necessary • Intagra • Peaceful Valley • Hedley Technologies  
(Protect-It) • Celite • JT Eaton (Answer)

**With pyrethrin:**

Permaguard, Pristine, Nitron (Permaguard) • Organic Solutions

**Insect Growth Regulators:**

**Lufenuron (oral formulation for pet):**

Syngenta (Program) • Drs. Foster and Smith

**Methoprene:**

Wellmark (Precor) • AgrEvo (Alter) • Enforcer (FGR)

**Methoprene (with permethrin) for fleas:**

Wellmark, Gardens Alive!, Necessary, Peaceful Valley (Precor 2000) •  
Enforcer (Flea Fogger, Flea Spray)

**Insecticidal Soap:**

**With pyrethrin:**

Woodstream, Planet Natural, Gardens Alive!, Harmony (Flea & Tick  
Attack) • Woodstream, Gardens Alive!, Harmony, Nitron (Safer Yard  
and Garden) • Peaceful Valley

**Fipronil flea adulticide:**

Merial, Aventis (Frontline) • Drs. Foster and Smith

**Nicotine analog flea adulticide:**

Bayer Animal (Imidacloprid, Advantage) • Veterinarians

**Pyrethrin:**

Del (Lice, Tick & Flea Spray) • Roxide • Whitmire (PT 175 microen-  
capsulated, PT-565, PT-505 XLO) • Enforcer (Flea & Tick Spray,  
Powder, Shampoo) • Hess & Clark (microencapsulated, Capsul-Ban,  
Formula 66, LD-44Z) • AgrEvo (Kicker, Drione)

**Pyrethroid (microencapsulated):**

3M Corp (Sectrol) (Sold only to veterinarians)

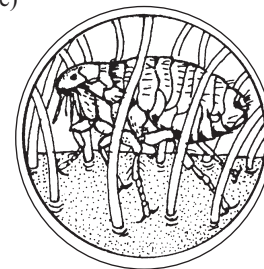
**Pyrethrum powder:**

Natural Animal (EcoZone), Peaceful Valley

**Repellent (Herbal Flea Collar):**

Harmony • Planet Natural

**Silica Aerogel:** See ANTS



## FLIES

(Nuisance)

### Identification & Monitoring

**Pheromones & Traps for Agricultural Pests:**

Security (Trap 'n Toss) • Phero Tech, Great Lakes (Unitrap) • Trécé,  
Gardens Alive!, Great Lakes, Harmony, Olson, Peaceful Valley,  
Gemplers (Pherocon) • Hercon

**Test Kit for Insecticide Resistance:**

Silver Lake

### Physical Controls

**Bag to Seal Caskets against Phorids:**

Ensure-A-Seal (Tyvek)

**Fly bonnet for horses:**

WF Young (Fly Bonnet) • Wiese (Ultra Shield)

**Screening:**

Hydro-Gardens (Fly Barr) • Tipper, Harmony, Peaceful Valley (Tie-  
Net)

**Sticky Adhesive**

Tanglefoot, ARBICO, Planet Natural, Great Lakes, Gemplers,  
Harmony, Natural Insect Control, Charley's (Tangle-Trap) • Phero Tech  
• Seabright

**Cone-Type Solar Traps:**

ARBICO • Great Lakes (Musca Terminator) • Olson (Stiky) • Roxide  
(Aeraxon) • Great Lakes • The Green Spot • Peaceful Valley • Fly  
Master • Natural Insect Control

**Jar-Type and Disposable:**

Woodstream, Great Lakes, Peaceful Valley, Natural Insect Control (Victor Fly-In-Saucer, Fly Magnet) • Fly Master • Security, Gardens Alive (Trap-N-Toss) • Sterling Intl. (Rescue!) • Wiese • Harmony

#### **Electrocution Black Light Fly Traps:**

Gilbert Industries (Electrocuting Light Traps) • B & W (Mantis) • Actron

#### **Adhesive Black Light Traps:**

Olson, Great Lakes, Gempler's (blacklight, sticky) • Whitmire (Vector) • Waterbury (pheromone and light) • Whitmire (Actron, programmable) • Actron

#### **Solar-powered electrocution traps:**

Olson, Great Lakes, Gempler's (Tower of Doom, Dungeon of Doom, solar electrocution) • Baley's

#### **Sticky trap/tape:**

Springstar (fly strip) • Loveland (Sticky Roll) • Olson, Great Lakes, Gemplers (Sticky Pyramid for face flies, Sticky Cylinder for stable flies, Window Trap) • Western Farm • Phero Tech (Chroma) • Roxide (Aerixon, window trap) • Security (Fly Inn, Fly Stop, Big Stik)

## **Biological Controls**

#### **Insect-Attacking Nematodes:**

*Heterorhabditis megidis*: Andermatt • Biological Crop • BioBest • Koppert • International Technology • W. Neudorff

*Heterorhabditis* sp.: Syngenta Bioline • Biowise • Hydro-Gardens • Koppert • M & R Durango • Natural Insect Control • Nature's Control • Nematec • Praxis • Peaceful Valley • Gardens Alive

*Steinernema carpocapsae*: Biofac • BioLogic • Certis • Hydro-Gardens • IPM Labs • M & R Durango • Natural Insect Control • Peaceful Valley • Harmony

*Steinernema feltiae*: BioLogic • BioBest • Biological Crop • Certis • IPM Labs • Natural Insect Control • Koppert • W. Neudorff • International Technology • Harmony • Planet Natural

*Steinernema* sp.: Beneficial • Certis • English Woodlands • Natural Insect Control • Nature's Control • Praxis

#### **Sterile flies for release (onion maggot):**

De Groene

#### **Microbial Insecticides:**

##### **Ivermectin for bot flies, etc.:**

Merial, Aventis (Ivomec Pour-On)  
(Sold only to veterinarians & licensed suppliers)

##### **Ivermectin and clorsulon:**

Merial, Aventis (Ivomec-F Injection)  
(Sold only to veterinarians & licensed suppliers)

#### **Parasitoids:**

*Muscidifurax raptor*: Biofac • IPM Labs • Kunafin

*Muscidifurax raptorellus*: IPM Labs • The Green Spot • Rincon-Vitova

*Muscidifurax* sp.: Beneficial Insectary • Bowen • Peaceful Valley • Spalding

*Muscidifurax zaraptor*: ARBICO • Planet Natural • Kunafin • M & R Durango • Natural Pest Controls • Nature's Control • Rincon-Vitova • The Green Spot • Buena

*Nasonia vitripennis* or *Mormoniella vitripennis*: ARBICO • Natural Pest Controls • Praxis

*Pachycrepoideus vindemiae*: Kunafin • Praxis

*Spalangia cameroni*: Kunafin

*Spalangia gemini*: Kunafin

*Spalangia corana*: Biofac

*Spalangia endius*: ARBICO • Kunafin • Natural Pest Controls • Rincon-Vitova • The Green Spot • Better Pest Management • Buena

*Spalangia nigroaenea*: Kunafin

*Spalangia* sp.: Beneficial Insectary • M & R Durango • Peaceful Valley • Praxis • Spalding • Kunafin

*Sphegigaster* sp.: Peaceful Valley • Praxis

*Trichomalopsis* spp.: Beneficial Insectary

*Urolepis rufipes*: Kunafin

#### **Parasitic mites:**

*Glyptolaspis confusa*: Praxis

*Hypoaspis miles*: Biological Crop

• Koppert • Garta • Florikan • Evergreen

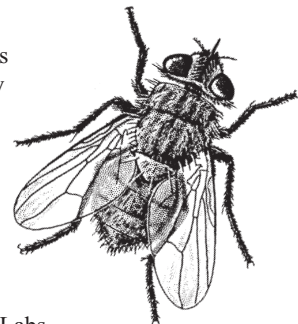
#### **Predators:**

Histerid beetle, *Carcinops pumilio*: IPM Labs

Predatory mite, *Macrocheles* spp.: Praxis

Dung beetle, *Onthophagus gazella*: Praxis

Predatory fly, *Ophyra aenescens*: Praxis



## **Least-Toxic Chemical Controls**

#### **Botanical Fly Repellents:**

Planet Natural, Natural Insect Control, Gardener's Supply (Skeeter Shoo, citronella) • Woodstream, Garden City (Bite Blocker, geranium oil) • Wiese (Horse Shoo, citronella fly repellent) • ARBICO (Aloe Herbal Spray) • EcoSmart (BioOrganic)

#### **Diatomaceous Earth: See ANTS**

#### **Pyrethrin:**

Roxide, Harmony (Revenge) • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) • Waterbury (Purge III) • Hess & Clark (microencapsulated, Capsul-Ban, Formula 66, LD-44Z)) • AgrEvo (Kicker) • Peaceful Valley (Py-Rin, w/o PBO) • Monterey, Harmony (Bug Buster O, w/o PBO)

#### **Silica aerogel: See ANTS**

# **FRUIT FLIES**

## **Identification & Monitoring**

#### **Pheromones & Traps:**

ARBICO, Harmony (Catch-em) • Great Lakes, Gemplers (Multi-Pher, Unitrap, Delta) • Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers (Pherocon) • Suterra (Biolure) • Scenturion

## **Physical Controls**

#### **Traps:**

Woodstream, Great Lakes, Peaceful Valley, Natural Insect Control (Victor Fly-In Saucer, Fly Magnet) • Biobest • Planet Natural • Phero Tech

#### **Apple maggot red sphere trap:**

Ladd, Gemplers, Harmony, Necessary, Natural Insect Control (Ladd) • Harmony (SureFire) • Peaceful Valley • Phero Tech • Springstar

#### **Light traps:**

Gilbert Industries (Professional Light Traps) • Gemplers

#### **Sticky trap/tape:**

Phero Tech (Chroma) • Scentry, Great Lakes, ARBICO, Planet Natural,



## FUNGUS GNATS

### Physical Controls

#### Screening:

Hydro-Gardens (Fly Barr) • ATI (Greenhouse screen) • Tipper (Tie-Net) • Green-Tek

#### Sticky Adhesive:

Seabright, Great Lakes, Harmony, Phero Tech (Stickem Special) • Tanglefoot, ARBICO, Planet Natural, Great Lakes, Gemplers, Harmony, Natural Insect Control, Charley's (Tangle-Trap) • Peaceful Valley

#### Traps:

ARBICO • Natural Insect Control • Woodstream (Safer Flying Insect) • Phero Tech (Chroma) • Olson, Great Lakes, Gemplers (Sticky Stuff, Sticky Traps) • Peaceful Valley • Springstar • IPM Labs

### Biological Controls

#### Insect-Attacking Nematodes:

*Heterorhabditis megidis*: Koppert • W. Neudorff

*Heterorhabditis* sp.: Hydro-Gardens • Koppert • M & R Durango • Nature's Control • Natural Insect Control • Nematec • W. Neudorff • Peaceful Valley • Gardens Alive • Florikan

*Steinernema bibionis*: W. Neudorff

*Steinernema carpocapsae*: Biofac • BioLogic • Biobest • Certis • Planet Natural • Gardens Alive! • Hydro-Gardens • IPM Labs • M & R Durango • Natural Insect Control • Peaceful Valley

*Steinernema feltiae*: BioLogic • BioBest • Certis • IPM Labs • Koppert • Natural Insect Control • W. Neudorff • International Technology • Plant Sciences • Andermatt • Garta • M&R Durango

*Steinernema riobravis*: Certis • Harmony

*Steinernema* spp.: Beneficial • Certis • Biowise • Harmony • Hydro-Gardens • Johnny's • Koppert • Natural Insect Control • Nature's Control • BioLogic

#### Microbial Insecticides:

##### *Bacillus thuringiensis* (BT):

Valent USA, Gardens Alive!, Harmony, IPM Labs, Peaceful Valley (Gnatrol) • Gardens Alive (Knock-Out)

**Spreader-Sticker Oil for BT Products:** Monterey (Nature's Own)

#### Predators:

Predatory mite, *Geolaelaps* spp.: Praxis • Rincon-Vitova

Predatory mite, *Hypoaspis miles*: ARBICO • Applied Bionomics • BioBest • BioBest Canada • Biological Crop • Biowise • IPM Labs • Koppert • Natural Insect Control • Bug Factory • International Technology • Plant Sciences • The Green Spot • Nature's Control • Evergreen

### Least-Toxic Chemical Controls

#### Diatomaceous Earth: See ANTS

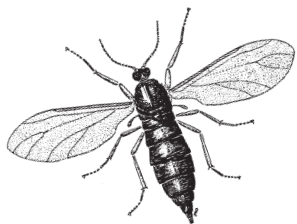
#### Insect Growth Regulators:

##### Methoprene:

Wellmark (Enstar)

##### Cyromazine:

Syngenta (Armor)



### Insecticidal Oil: See APHIDS

#### Neem Products:

Certis, Planet Natural, Harmony (Azatin) • Woodstream, Harmony (Safer's BioNeem) • Certis, Harmony, Peaceful Valley (Neemix, Trilog)

#### Pyrethrin:

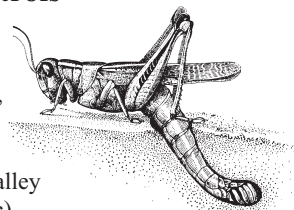
Hess & Clark (microencapsulated, Capsul-Ban) • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) • Peaceful Valley (Py-Rin, w/o PBO) • Monterey, Harmony (Bug Buster O, w/o PBO)

## GRASSHOPPERS

### Physical Controls

#### Row Covers:

American Agrifabrics (AgGro)  
• Great Lakes (BBA) • Gardener's Supply, Gardens Alive! (Floating Row Covers)  
• Gardens Alive! (Super-Light)  
• Harmony (AgGro, Tufbell) • Peaceful Valley (Tufbell, AgGro) • Shepherd's (Agrofabric)  
• Mipco • BBA



### Biological Controls

#### Insect-Attacking Nematodes (for mole crickets):

*Steinernema carpocapsae*: Certis • BioLogic • IPM Labs

• Natural Insect Control • Harmony • Andermatt

*Steinernema feltiae*: Certis • BioLogic • IPM Labs • Natural Insect Control • Harmony

#### Microbial Insecticides:

##### Protozoan pathogen:

*Nosema locustae* (for grasshoppers): Harmony • Hydro-Gardens • M & R Durango (Nolo Bait) • Nitron, Planet Natural, Gardens Alive! (Semispore Bait)

##### Fungal pathogen:

*Beauveria bassiana* (for grasshopper, crickets): Troy, Hydrogardens, The Green Spot, Gardener's Supply (Naturalis-T)

### Least-Toxic Chemical Controls

#### Borate-Based Insecticides:

NISUS, Target (NIBAN Granular Bait for crickets) • Whitmire (PT 240 or PT 249 Perma-Dust)

#### Diatomaceous Earth: See ANTS

#### Insecticidal Soap:

Necessary, Intagra (Concern) • Peaceful Valley • Woodstream (Safer)

##### With pyrethrin:

Necessary, Intagra (Concern Multi-Purpose) • Peaceful Valley • Woodstream, Gardens Alive!, Harmony, Nitron (Safer Yard and Garden Insect Attack)

#### Neem Products (Act as Repellents): See APHIDS

#### Repellent Garlic Spray:

Garlic Research Labs, Chemical-Free (Garlic Barrier) • Soil Technologies (Garlic Gard) • Harmony • Peaceful

#### Rotenone:

Bonide • Peaceful Valley

#### Sabadilla:

Planet Natural • Dunhill, Harmony (Veratran) • Peaceful Valley

## GRUBS

(See Beetles)

## LEAFHOPPERS

### Identification & Monitoring

#### Sticky trap/tape:

Scentry, Great Lakes, ARBICO, Planet Natural (Versagard) • Phero Tech

### Physical Controls

#### Barriers & Exclusion Devices:

Planet Natural • Gardens Alive!

#### Plastic film to attract leafhoppers:

Western Farm (HopperFinder)

#### Sticky Adhesive:

Seabright, Great Lakes, Harmony, Phero Tech (Stikem Special) • Peaceful Valley

#### Traps and Sticky Tape:

ARBICO • Planet Natural • Gardens Alive • Harmony • IPM Labs • Woodstream (Safer) • Peaceful Valley • Phero Tech (Chroma)

### Biological Controls

#### Parasitoids:

*Anagrus atomus*: Biowise • BioBest

*Anagrus epos* (for grape leafhopper): ARBICO • Praxis

*Anagrus* spp.: Biological Crop

### Least-Toxic Chemical Controls

See APHIDS

## LEAFMINERS

### Physical Controls

#### Sticky Adhesive:

Seabright, Great Lakes, Harmony, Phero Tech (Stikem Special) • Tanglefoot, ARBICO, Planet Natural, Great Lakes, Harmony, Natural Insect Control, Charley's (Tangle-Trap) • Peaceful Valley

#### Sticky Trap/Tape:

Olson • Gemplers • Phero Tech • Trécé, Great Lakes (Pherocon) • Harmony • Peaceful Valley • Planet Natural • Gardens Alive

### Biological Controls

#### Parasitoids:

*Dacnusa sibirica*: ARBICO • Biobest • Biobest Canada • Biofac • Biological Crop • Duclos • Biowise • Gartneri • Koppert • Natural Pest Control • Natural Pest Controls • Praxis • Sautter & Stepper • W. Neudorff • The Green Spot • Natural Insect Control

• International Technology • Rincon-Vitova • Garta

*Diglyphus isaea*: • ARBICO • Azienda • BioBee • Biobest • Biofac • Bioplanet • Biological Control • Syngenta Bioline • Duclos • Biowise • Gartneri • Koppert • Natural Pest Control • Natural Pest Controls • Plant Sciences • Sautter & Stepper • W. Neudorff

• Natural Insect Control • The Green Spot • International Technology Rincon-Vitova

*Opius pallipes*: Bio Pre

### Microbial Insecticides:

#### BT (for citrus leafminer):

Valent USA, Peaceful Valley, Planet Natural, English Woodlands (Dipel) • Plant Health Care, Ecogen (Crymax)

#### Entomopathogenic Fungus:

*Metarhizium anisopliae* (for meadow spittlebug, coffee leafminer): Agricola El Sol • Bio Pre

### Least-Toxic Chemical Controls

#### Abamectin:

Merial, Planet Natural, Peaceful Valley (Avid)

#### Cyromazine:

Syngenta (Trigard)

#### Insecticidal Oil:

Florikan (Target Oil) • JMS (JMS Stylet Oil) • (See Aphids for a More Complete Listing)

#### Neem Products:

Certis, Planet Natural, Harmony, Peaceful Valley, The Green Spot (Azatin for ornamentals, Neemix for food crops) • Woodstream, Harmony, Peaceful Valley (Safer's BioNeem) • Gardens Alive (Neem-Away) • Green Light

#### Repellent Hot Pepper Wax:

Charley's • Harmony (Wilder's) • The Green Spot

## LICE

### Identification & Monitoring

#### Head lice detection kit:

Del (Pronto Lice Detection Kit, for home use)

#### Head lice prevention, management and educational products:

National Pediculosis Association

### Physical Controls

#### Head lice comb:

Health Enterprises (MC-12) • National Pediculosis Association (LiceMeister)

### Least-Toxic Chemical Controls

#### Enzyme Shampoos:

Safe Effective (Lice-B-Gone)

#### Permethrin Cream Rinse:

Warner Lambert (Nix)

#### Pyrethrin:

Del (Bare Liquid, Lice, Tick & Flea Spray)

#### Pyrethrin shampoo, for head lice:

Carter-Wallace (Triple X) • Del (Pronto) • Hogil Pharmaceuticals (A-200) • Pfizer (RID) • Care Technologies (Clear, with enzymes)

#### Pyrethrin, with pubic lice comb:

Hogil (Innogel Plus for pubic lice)



## MAGGOTS

(See Flies)

# MEALYBUGS

## Physical Controls

### Screening:

Hydro-Gardens • Tipper, Harmony (Tie-Net) • Peaceful Valley

## Biological Controls

### Parasitoids:

*Anagyrus fusciventris*: Bio Pre

*Anagyrus pseudococci*: Amos Rubin • Bio Bee • Biological Control • Plant Sciences • Praxis

*Leptomastidea abnormis*: Amos Rubin • Bio Pre • Praxis • W. Neudorff • Natural Insect Control

*Leptomastix dactylopii*: Amos Rubin • Azienda • Biobest • Bioplanet • Koppert • Natural Insect Control • Plant Sciences • Praxis • W. Neudorff • The Green Spot • Rincon-Vitova • Flora • Katz

*Leptomastix epona*: Bio Pre • Sespe Creek

*Pauridia peregrina*: Praxis

*Pseudaphycus flavidulus*: Bio Pre

*Pseudaphycus maculipennis*: Bio Pre

### Predators:

Lacewing, *Sympherobius sanctus*: Amos Rubin • Bio Bee • Bio Pre

### Lady beetles:

Mealybug destroyer, *Cryptolaemus montrouzieri*: Amos Rubin • ARBICO • Azienda • Bio Bee • Biobest • Biofac • Bioplanet • Buena • Biological Control • Biological Crop • Bio Pre • Planet Natural • Bugs for Bugs • Biowise • Hydrogardens • IPM Labs • Koppert • M & R Durango • Natural Insect Control • Natural Pest Control • Natural Pest Controls • Bug Factory • Nature's Control • Organic Control • Plant Sciences • Praxis • Rincon-Vitova • W. Neudorff • Peaceful Valley • The Green Spot • Western Farm • EcoSolutions

*Hyperaspis polita*: Amos Rubin

*Nephus reunioni*: Amos Rubin • Bio Pre

*Scymnus bipunctatus*: Amos Rubin

## Least-Toxic Chemical Controls

**Diatomaceous earth:** See ANTS

### Insecticidal Oil:

#### Highly refined oil (from fish):

Peaceful Valley

#### Highly refined oil (from petroleum):

Monterey, Harmony (Saf-T-Side) • Valent USA, Harmony, Peaceful Valley (Volck) • Sun Oil, Gardens Alive!, Harmony, Peaceful Valley, Charley's, The Green Spot (Sunspray) • The Green Spot • Gardens Alive (Eco-Oil)

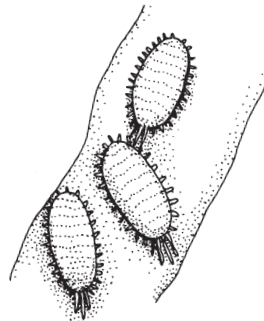
#### Highly refined seed oil:

Stoller, Peaceful Valley (Natur'l Oil, 93% soybean) • ARBICO (Spreadall 93% cottonseed)

**Insecticidal Soap:** See APHIDS

### Neem Products:

See LEAFMINERS



# MITES

## Identification & Monitoring

### Traps:

Phero Tech (Varroa Mite Trap)

## Physical Controls

### Furniture covers for dust mites:

Allergy Control Products

### High Pressure Water Sprayer:

W.H. Vinton (Water Wand)

### Mattress Covers (to exclude dust mite):

Puritans Pride

### Vacuums:

Proteam (Hummer, Optimus)

## Biological Controls

### Microbial Insecticides:

*Beauveria bassiana*: Troy, Hydrogardens, Gardener's Supply (Naturalis-O and L) • Emerald (Botanigard)

### Predators:

Lady beetle, *Stethorus punctillum* (for European red spider mite): Applied Bionomics • Biobest Canada • Evergreen • Rincon Vitova • Nature's Control • Natural Insect Control

### Predatory bugs:

Big-eyed bug, *Geocoris* sp.: Biotactics • Rincon-Vitova • Natural Insect Control

*Orius insidiosus*: Syngenta Bioline • Gartenbau • Gartneri • International Technology • IPM Labs • Koppert • Nature's Control • The Bug Store

*Orius laevigatus*: Koppert • Biological Crop

*Orius majusculus*: Biological Crop • Sautter & Stepper • W. Neudorff

*Orius* spp.: Biobest • Bioplanet • Bio Pre • Duclos • Natural Insect Control • Peaceful Valley • Rincon-Vitova

*Orius tristicolor*: ARBICO • Planet Natural • Praxis

### Predatory gall midge (the mite midge):

*Feltiella acarisuga*: Bio Pre • Biobest • Biobest Canada • Biological Crop • Biowise • Koppert • Natural Insect Control • Rincon-Vitova • Bug Factory

### Predatory mites:

*Amblyseius californicus* (for two-spotted spider mite): ARBICO • Bio Ag • Bio Pre • BioBest • Biotactics • Bowen • Planet Natural • Hydro-Gardens • International Technology • IPM Labs • Koppert • Kuida • M & R Durango • Natural Insect Control • Natural Pest Controls • Nature's Control • Peaceful Valley • Plant Sciences • Rincon-Vitova • Western Farm • The Green Spot • Syngenta Bioline • Beneficial

*Amblyseius cucumeris* (for two-spotted spider mite): Applied Bionomics • ARBICO • Evergreen • Syngenta Bioline • Gartneri • Hydro-Gardens • International Technology • IPM Labs • M & R Durango • Bug Factory • Natural Insect Control • Natural Pest Control • Natural Pest Controls • Peaceful Valley • Plant Sciences • Praxis • Rincon-Vitova • W. Neudorff • Beneficial Insectary • Ecosolution • *Amblyseius degenerans* (for mites): The Green Spot • Evergreen • Syngenta Bioline • Natural Insect Control

*Amblyseius fallacis* (for two-spotted spider mite, European red mite):

Applied Bionomics • Evergreen • IPM Labs • Natural Insect Control • The Green Spot • Beneficial Insectary

*Galendromus annectans* (for perseas mite): ARBICO • Biotactics • Rincon-Vitova • Beneficial Insectary

*Galendromus helveolus* (for perseas mite): ARBICO • Biotactics • Rincon-Vitova • Applied Bio Pest • Beneficial

*Hypoaspis aculeifer* (for bulb mite): Biobest

*Mesoseiulus longipes* or *Phytoseiulus longipes* (for two-spotted spider mite): ARBICO • Biotactics • Planet Natural • Hydro-Gardens • IPM • M & R Durango • Natural Insect Control • Nature's Control • Peaceful Valley • Praxis • The Green Spot

*Metaseiulus occidentalis* or *Galendromus occidentalis*: ARBICO • Bio Ag • Biological Control • Biotactics • Bowen • Planet Natural • Florikan • Gartenbau • IPM Labs • Koppert • Kuida • M & R Durango • Natural Insect Control • Natural Pest Controls • Nature's Control • Peaceful Valley • Plant Sciences • Praxis • Rincon-Vitova • The Green Spot • Western Farm • Beneficial Insectary

*Neoseiulus scyphus* (spider mite): Biotactics

*Neoseiulus setulus* (for cyclamen mite): ARBICO

*Phytoseiulus macropilis* (spider mite): Biotactics • Rincon-Vitova • Beneficial Insectary

*Phytoseiulus persimilis* (for two-spotted spider mite): Applied Bionomics • ARBICO • Azienda • Bio Bee • Bio Ag • Biobest • Biobest Canada • Bio Pre • Biocontrol • Biofac • Bioplanet • Biological Control • Biological Crop • Biotactics • Bowen • Planet Natural • Budai • Syngenta Bioline • CO. DEA • Central Coast • Duclos • Evergreen • Biowise • Florikan • Gartenbau • Gartneri • Hawkesbury • Hydro-Gardens • International Technology • IPM Labs • Koppert • Kuida • M&R Durango • Natural Insect Control • Natural Pest Control • Natural Pest Controls • Bug Factory • Nature's Control • Peaceful Valley • Plant Sciences • Beneficial • Rincon-Vitova • Sautter & Stepper • Sweetbriar • TriCal • W. Neudorff • Zaklad • The Green Spot • Buena • EcoSolutions • Flora • Katz

*Typhlodromus pyri*: Biowise

*Typhlodromus athiasae* (for red mite): Amos Rubin

*Typhlodromus mcgregori* (Banks mite): Biotactics

*Typhlodromus rickeri*: Rincon-Vitova

## Least-Toxic Chemical Controls

**Abamectin (Isolated from *Streptomyces avermitilis*):**

Merial, Planet Natural (Avid)

**Cinnamon oil, garlic extract:**

JH Biotech, Harmony (GC Mite)

**Cinnamic aldehyde (orchard, field mites):**

Emerald, Florikan (Valero)

**Cinnamic aldehyde (greenhouse):**

Emerald, Florikan (Cinnamite)

**Insecticidal Oil:**

**Highly refined oil (from fish):**

Peaceful Valley

**Highly refined oil (from petroleum):**

Monterey, Harmony (Saf-T-Side) • Valent USA, Harmony, Peaceful Valley (Volck Supreme Spray) • Sun Oil, Charley's, Gardens Alive!, Harmony, Peaceful Valley (Sunspray) • Gardens Alive (Eco-Oil) • The Green Spot • JMS (JMS Stylet Oil) • PBI/Gordon (Acme Dormant)

**Highly refined seed oil:**

ARBICO (Spreadall, 93 % cottonseed) • Stoller, Peaceful Valley

(Natur'l Oil)

**Insecticidal Soap: See APHIDS**

**Neem Products: See APHIDS**

**Pyrethrin:**

Hess & Clark (microencapsulated, Capsul-Ban, Formula 66, LD 44Z) • Roxide • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) • Peaceful Valley (Py-Rin, w/o PBO) • Monterey, Harmony (Bug Buster-O, w/o PBO)

**Pyrethrin, rotenone, sulfur and copper (garden mites):**

Bonide, Gardner's Supply (Bonide Garden Dust)

**Pyrethroid (fluvalinate):**

Wellmark, Miller Bee (Apistan Strips for bee mites)

**Pyrethroid (permethrin-soaked cotton balls given to laboratory rodents to kill ectoparasite vectors):**

Ecohealth (Mite Arrest)

**Repellent Garlic Spray (for spider mite):**

Garlic Research Labs, Chemical-Free (Garlic Barrier) • Soil Technologies (Garlic Gard) • Peaceful Valley

**Repellent Hot Pepper Wax:**

Harmony • The Green Spot • Peaceful Valley • Garden City

**Silica Aerogel: See ANTS**

**Tannic acid (for house dust mites):**

Allergy Control Products

# MOSQUITOES

## Identification & Monitoring

**Mosquito Traps:**

BioQuip (CDC, EVS, New Jersey) • Gempler's • American Biophysics (carbon dioxide) • Biosensory (baited)

**Attractant for Mosquito Traps:**

Flowtron (Octenol controlled release)

• Sigma Chemical (Octenol) • Biosensory

**Mosquito larvae collection devices:**

Clarke Mosquito Control (Dippers)

• BioQuip • Ben Meadows

## Physical Controls



**Screening and Netting:**

BioQuip • REI • Apex Medical

**Monomolecular Films to Stop Larvae:** Cognis (Agnique) • Henley (Arosurf)

## Biological Controls

**Habitat:**

**Bat Houses:** Harmony, Natural Insect Control, The Green Spot, Peaceful Valley, Plow and Hearth

**Purple martin bird houses:** Nature House (Trio)

**Microbial Insecticides:**

*Bacillus sphaericus* (for Culex larvae): Valent Bio (VectoLex, Spherimos)

*Bacillus thuringiensis israelensis* (BTI) for mosquito & blackfly larvae: Valent Bio, Harmony, Peaceful Valley (Vectobac) • Valent Bio, Peaceful Valley (Skeetal, Bactimos) • Wellmark (Teknar) • Summit, Harmony, Nitron, Sutton, Smith & Hawken, Natural Insect Control (Mosquito Dunks) • Planet Natural, Peaceful Valley (Mosquito Control)

**Parasitoids:**

*Encarsia opulenta* (for citrus blackfly): Praxis

**Predators:**

mosquito fish, *Gambusia affinis*: J. Reilly (Fish shipped May-July) • Natural Pest Controls • Richmond



## Least-Toxic Chemical Controls

### Insecticidal Oil: See APHIDS

### Insect Growth Regulators:

Methoprene pellets, Wellmark (Altosid)

### Repellents (Botanical):

Planet Natural, Natural Insect Control (Skeeter Shoo Botanical) • San Jacinto (Mosquito Beater) • S.C. Johnson, Planet Natural (citronella candles) • Woodstream, Gardens Alive (Bite Blocker, geranium oil) • Tender, A.M. Leonard (Natrappel citronella) • Woodstream (Mosquito Barrier Area Repellent) • Roxide (herbal)

### Seeds or Mosquito-Repelling Plants:

Shepherds (sweet basil) • Park Seed (holy basil) • J.L Hudson (seeds for repellent plants)

### DEET repellent:

REI (Cutter's, Jungle Juice) • BioQuip

### Pyrethrin repellent (not for use on skin):

WPC (Permanone) • Apex Medical (Repel) • Waterbury (Purge III)

## MOTHS

(See Caterpillars)

## NEMATODES

### Biological Controls

#### Beneficial Nematodes:

*Steinernema* spp.: Certis, Nitron, Johnny's • BioLogic • Hydro-Gardens

#### Biocontrol bacteria:

*Burkholderia cepacia*: Market VI (Deny)

*Bacillus chitosporus*: Rincon-Vitova (Activate)

#### Biocontrol Fungi:

*Arthrobotrys* sp. (Europe only): Bio Pre

*Dactylella* sp.(Europe only): Bio Pre

*Hirsutella rhossiliensis* (Europe only): Bio Pre

*Myrothecium verrucaria*: Valent USA (DiTera)

*Paecilomyces lilacinus*: Bio Pre

Experimental Fungus: International Mycological Institute

#### Natural chitin-protein nematicide:

Igene Biotechnology, Harmony, Peaceful Valley (ClandoSan) • Planet Natural

Botanical nematicide: Soil Technologies (Nemastop)

## SAWFLIES

### Physical Controls

#### Traps and Sticky Tape:

Great Lakes

### Least-Toxic Chemical Controls

#### Insecticidal Soap: See APHIDS

#### Neem Products:

Certis, Planet Natural, Harmony (Azatin) • Woodstream, Harmony, (Safer's BioNeem) • Certis, Planet Natural, Harmony, Peaceful Valley (Neemix, Trilogy) • San Jacinto (Organica)

## SCALES

(See Beetles)

### Identification & Monitoring

#### Pheromones & Traps:

ARBICO, Harmony (Catch-em) • Trécé, Great Lakes, Gemplers, Harmony, Peaceful Valley (Pherocon, Multi-Pher, Unitrap, Delta Traps) • Scentry, Great Lakes, ARBICO, Planet Natural, Gemplers, Natural Insect Control (Delta & Wing Trap) • Phero Tech • Woodstream (SureFire) • Scenturion

#### Sticky Trap/Tape:

ARBICO • Planet Natural • Great Lakes • Olson • Gemplers • Scentry • Peaceful Valley • Phero Tech

### Physical Controls

#### Barriers & Exclusion Devices:

Planet Natural • Gardens Alive!

#### Screening:

Hydro-Gardens (Fly Barr)

#### Sticky Adhesive:

Seabright, Great Lakes, Harmony, Phero Tech (Stickem Special)

#### Traps and Sticky Tape:

Planet Natural • Gardens Alive! • Harmony • IPM Labs • Phero Tech (Chroma) • Peaceful Valley

### Biological Controls

#### Parasitoids:

*Aphytis lingnanensis* (for California red scale): Amos Rubin • Bugs for Bugs

*Aphytis melinus* (for red scale): ARBICO • Bio Ag • Bio Pre • Bowen • FAR • IPM Labs • Kuida • Natural Insect Control • Natural Pest Controls • Organic Control • Peaceful Valley • Praxis • Rincon-Vitova • Sespe Creek • Western Farm • The Green Spot • Bioplanet

*Coccophagus lycimnia*: Praxis • Bio Pre

*Comperiella bifasciata* (for red scale): Praxis

*Encyrtus lecaniorum*: Bio Pre

*Metaphycus helvolus* (for black scale): ARBICO • Bio Pre • IPM Labs • Natural Insect Control • Natural Pest Controls • Peaceful Valley • Praxis • Rincon-Vitova • Sespe Creek • The Green Spot

*Metaphycus zebratus* (for soft scale): Bio Pre

*Microterys flavus* (for brown scale): ARBICO • Bio Pre • Natural Pest Controls • Praxis • W. Neudorff

Parasitic mite, *Cunaxoides* spp.: Praxis

#### Predators:

##### Lady beetles:

*Chilocorus baileyi* (for armored scale): Bugs for Bugs • W. Neudorff

*Chilocorus circumdatus* (for citrus snow scale, armored scale): Bugs for Bugs • W. Neudorff

*Chilocorus* spp.: Praxis • Bioplanet

*Chilocorus nigritus* (for hard scale): Bio Pre • W. Neudorff

*Cybocephalus catalinae*: IPM Labs

*Cybocephalus nipponicus*: IPM Labs



*Harmonia axyridis*: Applied Bionomics • Natural Insect Control • Evergreen • Rincon Vitova

*Lindorus lophanthae*: ARBICO • Bio Pre • Bioplanet • Planet Natural • Bugs for Bugs • Natural Insect Control • Rincon-Vitova • The Green Spot • Sespe Creek

*Scymnus* sp. (for soft scale): Bio Pre

Predatory mite, *Euseius* spp. (for scale general, sweetpotato whitefly): Praxis

### Least-Toxic Chemical Controls

#### Insect Growth Regulators

Fenoxycarb: Syngenta (Comply, Precision)

Methoprene: Wellmark (Enstar)

**Insecticidal Oil:** See Aphids

**Insecticidal Soap:** See Aphids

**Pyrethrin:** See Aphids

**Repellent Hot Pepper Wax**

Planet Natural • The Green Spot • Charley's • Harmony

## SILVERFISH

### Least-Toxic Chemical Controls

#### Borate-Based Insecticides:

Waterbury (Mop-Up) • Whitmire (PT 240 aerosol or PT 240 D 99% boric acid dust) • Peaceful Valley (Roach Powder) • Nisus, Target (Niban FG) • NISUS (Timbor) • Planet Natural (Borid) • J.T. Eaton

**Diatomaceous Earth:** See ANTS

#### Pyrethrin:

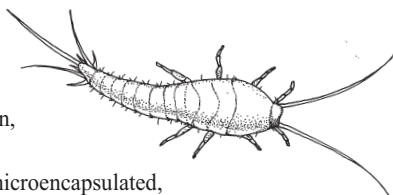
AgrEvo (Kicker, Drione)

• Hess & Clark

(microencapsulated, Capsul-Ban, Formula 66, LD-44Z)

• Roxide • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO)

**Silica Aerogel:** See ANTS



## SLUGS AND SNAILS

### Physical Controls

#### Barriers & Exclusion Devices:

##### Copper snail barrier:

Custom Copper/Snail Barr, Harmony, The Natural Gardening, Peaceful Valley (Snail-Barr) • Woodstream, The Green Spot (Safer)

##### Traps:

Woodstream, Harmony, Santa Cruz Hort., ARBICO, Peaceful Valley, Great Lakes, The Natural Gardening (Safer) • Nitron, Peaceful Valley, Gardens Alive!, ARBICO (Slug Saloon)

##### Trap with barley/rice yeast bait:

Gardener's Supply (Slug Trap)

### Biological Controls

#### Predators:

Predatory nematode for snails, *Phasmarhabditis* sp.: Biowise

Predatory snail, *Rumina decollata* (for brown garden snail): ARBICO • C. H. Musgrove • Peaceful Valley • Rincon-Vitova • Sespe Creek

Predatory fly, *Tetanocera* spp. (for European slug): Praxis

### Least-Toxic Chemical Controls

**Insecticidal Soap:** See APHIDS

#### Slug Bait:

MicroFlo (Slugmaster, metaldehyde) • Garden's Alive (Escargo, iron phosphate) • Monterey, Harmony, Peaceful Valley (Sluggo, iron phosphate)

## TERMITES

### Identification & Monitoring

#### Moisture Meter:

Jim Simmons • Professional Equipment • Van Waters • Ben Meadows

#### Rigid borescope for detecting termites:

Van Waters & Rogers (Econoscope) • Professional Equipment

#### Termite Sniffer:

Professional Equipment

#### Trained Dogs:

Beacon Dogs • Industrial Narcotic

### Biological Controls

#### Insect-Attacking Nematodes:

*Steinernema carpocapsae*: BioLogic • Certis • Hydro-Gardens

### Physical Controls

#### Cold Treatment (liquid nitrogen):

Tallon Pest Control (The Blizzard System)

#### Electrical Treatment (for drywood termite & boring beetles):

ETEX (Electrogun)

#### Heat Treatment:

In Denmark: AS Skadedyrcentralen

TPE/Thermapure (Licenses USA companies - Call for Local Practitioners) • In England (Thermo Lignum) • Topp (heaters)

#### Microwave Equipment:

Wavelength • Professional Equipment

#### Microwave Treatment:

Call the Bio-Integral Resource Center (see address list)

### Least-Toxic Chemical Controls

#### Borate Termiticide & Wood Preservative:

NISUS, Target, Van Waters, Peaceful Valley (Bora-Care, Jecta) • Pole Care (Impel Rods) • Permachink (Guardian, Shellguard) • Sashco (Penetreat) • NISUS (TimBor)

#### Borate-treated logs:

Appalachian • Coast-to-Coast • Lok-N-Logs

#### Borate-treated lumber:

Gross & James (cross ties) • Osmose • Louisiana Pacific

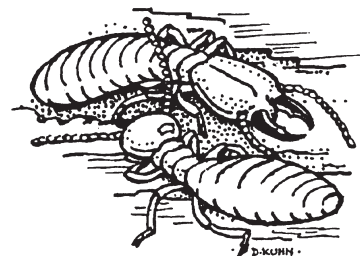
#### Borate application foamer:

Richway Industries

#### Imidacloprid Soil Treatment:

Bayer Agricultural (Premise)

Fipronil Soil Treatment: Aventis (Termidor)



### Termite Baits:

Diflubenzuron Exterra System: Ensystex  
Diflubenzuron Outpost Bait: Whitmire  
Hexaflumuron Sentricon System: Dow AgroSciences  
Sulfluramid Bait: FMC Corporation (FirstLine) • Spectrum (Terminate)  
Termtrol Monitoring Station: Whitmire  
**Silica Aerogel (in wall voids and attics to repel drywood termites):**  
See ANTS

## THRIPS

### Identification & Monitoring

#### Pheromones & Traps:

Great Lakes • Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers (Pherocon) • Peaceful Valley

#### Sticky Trap/Tape:

ARBICO • BioBest • Planet Natural • Great Lakes • Gemplers • Scentry • Western Farm (Blue Plastic) • Phero Tech

### Physical Controls

#### Screening:

Green-Tek, The Green Spot (No-Thrip) • Tipper, Harmony, Peaceful Valley (Tie-Net)

#### Traps and Sticky Tape:

Springstar • Harmony • Natural Insect Control • Olson • Gemplers • Phero Tech • Great Lakes • Peaceful Valley • Western Farm (Blue Plastic)

### Biological Controls

#### Microbials

*Beauveria bassiana*: Emerald, Florikan, Harmony (Botanigard) • Troy (Naturalis O, L)  
*Verticillium lecanii*: Koppert (Mycotal, Vertalec)

#### Predators:

Lacewing, *Chrysoperla* spp.: Smith & Hawken • W. Neudorff  
Lacewing, *Mallada signata*: Bugs for Bugs  
Predatory thrips, *Franklinothrips orizabensis*: American Insectaries

#### Predatory bugs:

*Deraeocoris brevis*: Applied Bionomics • The Green Spot  
*Macropsophus nubilis*: Flora Nutzlinge • Katz  
*Orius albidipennis*: Bio Bee  
*Orius insidiosus*: Syngenta Bioline • Koppert • IPM Labs • Gartneri • Nature's Control • Plant Sciences • The Green Spot • International Technology • Biobest Canada • Natural Insect Control

*Orius laevigatus* (for western flower thrips): Amos Rubin • Bioplanet • Bio Bee • Koppert • Biological Control • Biological Crop • Plant Sciences

*Orius majusculus*: Koppert • Sautter & Stepper • W. Neudorff • Bioplanet

*Orius* spp.: Biobest • Bioplanet • Bio Pre • Duclos • Natural Insect Control • Peaceful Valley • Rincon-Vitova

*Orius tristicolor*: ARBICO • Planet Natural • Praxis

#### Predatory mites:

*Amblyseius barkeri*: FAR • IPM Labs • M & R Durango • Natural Insect Control • Sautter & Stepper • W. Neudorff

*Amblyseius cucumeris*: ARBICO • Applied Bionomics • Biobest • Biofac • Planet Natural • Syngenta Bioline • Gartneri • Hydro-Gardens • International Technology • IPM Labs • Koppert • M & R Durango •

Evergreen • Bug Factory • Natural Insect Control • Natural Pest Control • Natural Pest Controls • Nature's Control • Peaceful Valley • Gemplers • Plant Sciences • Praxis • Rincon-Vitova • W. Neudorff • The Green Spot • Borregaard • Sautter and Stepper • Garta • Biological Crop  
*Amblyseius degenerans*: Amos Rubin • Applied Bionomics • Bio Pre • Bio Bee • Biological Control • International Technology • IPM Labs • Koppert • Natural Insect Control • The Green Spot

*Hypoaspis miles* (for springtail thrips): Applied Bionomics • IPM Labs • Natural Insect Control • Bug Factory • The Green Spot • International Technology • Koppert • Flora • Katz

### Least-Toxic Chemical Controls

**Cinnamon Oil, Garlic:** JH Biotech, Harmony (GC-Mite)

**Diatomaceous Earth:** See Ants

**Insecticidal Soap:** See Aphids

#### Neem Products:

Certis, Planet Natural, Harmony (Azatin, Align) • Woodstream, Harmony (Safer's BioNeem) • Certis, Harmony, Peaceful Valley (Neemix, Neemazad, Trilogy, Triact) • Green Light • San Jacinto (Organica)

#### Pyrethrin:

Johnny's, Peaceful Valley (Pyrenone) • AgrEvo (Kicker) • Necessary (Concern)

#### Repellent Garlic Spray:

Garlic Research Labs, Chemical-Free (Garlic Barrier) • Soil Technologies (Garlic Gard) • Peaceful Valley • Harmony

#### Sabadilla:

Dunhill, Harmony (Veratran)



## TICKS

### Physical Controls

#### Curved tweezers:

BioQuip Products (foreceps)

#### Tweezers, magnifier & specimen storage bag:

REI (Tick Solution Kit) • BioQuip • A.M. Leonard (TickPick)

### Least-Toxic Chemical Controls

#### Diatomaceous Earth, with pyrethrin:

Permaguard, Pristine, Nitron (Permaguard Pet & Animal) • Pristine, Nitron (Permaguard Household)

#### Insecticidal Oil:

##### Citrus oil (d-limonene) extract:

Orange Guard, Vopak, Target

##### Pennyroyal, Eucalyptus, Citronella Shampoo:

Hansen's Pet Systems

#### Repellents:

##### DEET repellent:

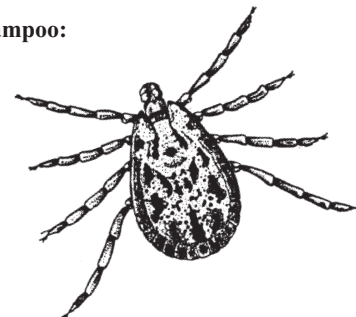
REI (Cutter's, Jungle Juice)

##### Permethrin tick repellent:

WPC, Apex Medical, Forestry Suppliers (Permanone) • Sawyer

##### Selective Pesticide Fipronil:

Merial, Aventis (Frontline) • Veterinarians



## **Insecticidal Soap:**

### **With pyrethrin:**

Woodstream, Planet Natural, Gardens Alive!, Harmony (Flea & Tick Attack) • Woodstream, Gardens Alive!, Harmony, Nitron, The Natural Gardening (Safer Yard and Garden) • Peaceful Valley

### **Pyrethrin:**

Del (Lice, Tick & Flea Killing Spray)

### **Pyrethroid (permethrin-soaked cotton balls taken to rodent nests to kill ectoparasite vectors):**

Ecohealth, Harmony (Damminix)

**Silica Aerogel:** see ANTS

## **WASPS**

(See Yellowjackets)

## **WEEVILS**

(See Beetles)

## **WHITEFLIES**

### **Identification & Monitoring**

#### **Pheromones & Traps:**

Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers (Pherocon) • Phero Tech • Peaceful Valley • The Green Spot

#### **Sticky Trap/Tape:**

Scentry, Great Lakes, ARBICO, Planet Natural, Gemplers (Versagard) • Hansen's • ARBICO • Natural Insect Control • Peaceful Valley

### **Physical Controls**

#### **Screening:**

Hydro-Gardens (Fly Barr) • Tipper, Harmony, Peaceful Valley (Tie-Net) • Green-Tek, The Green Spot (Anti-Virus)

#### **Sticky Adhesive:**

Tanglefoot, ARBICO, Planet Natural, Great Lakes, Gemplers, Harmony, Natural Insect Control, Charley's (Tangle-Trap) • Seabright, Harmony, Great Lakes (Stickem) • Peaceful Valley • Phero Tech

#### **Traps:**

Woodstream (Safer Flying Insect) • ARBICO (Insect-A-Peel) • Phero Tech • Springstar

#### **Light traps:**

Gilbert Industries (Light Traps)

#### **Sticky trap/tape:**

ARBICO • Natural Insect Control • Olson, Great Lakes, Gemplers, Charley's (Stiky Stuff, Stiky Traps) • Seabright (Sticky Traps) • Harmony • Peaceful Valley • Nature's Control

### **Biological Controls**

#### **Microbial Insecticides:**

*Beauveria bassiana* fungus: Troy, Hydro-Gardens, Gardener's Supply, Planet Natural (Naturalis O, L, ES) • Emerald, Hydro-Gardens, Harmony, Rincon-Vitova (Mycotrol, Botanigard)

*Paecilomyces fumosoroseus* fungus (call for availability in the U.S.): Certis • Biobest • Hydro-Gardens • Bio Pre • Harmony

*Verticillium lecanii* fungus (for greenhouse use): Koppert (Mycotal, Vertalec)

Codacide oil to use with fungal spray: Microcide

#### **Parasitoids:**

*Encarsia deserti*: Hydro-Gardens

*Encarsia formosa* (for greenhouse whitefly): ARBICO • Applied Bionomics • Biobest • Biofac • Bioplanet • Biological Crop • Budai • Syngenta Bioline • CIE • CO. DEA • Duclos • Biowise • Evergreen • Gartneri • Hydro-Gardens • IPM Labs • Koppert • M & R Durango • Natural Insect Control • Natural Pest Control • Natural Pest Controls • Nature's Control • Organic Control • Peaceful Valley • Planet Natural • Plant Sciences • Praxis • Rincon-Vitova • Sautter & Stepper • W. Neudorff • Zaklad • The Green Spot • Flora • International Technology • Biobest Canada • Katz

*Encarsia mundus*: Bioplanet

*Eretmocerus californicus* (for sweetpotato or silverleaf whitefly): Beneficial • Bio Pre • Florikan • International Technology • IPM Labs • Plant Sciences • Praxis • The Green Spot • Rincon-Vitova • Buena

*Eretmocerus eremicus*: Syngenta Bioline • Hydrogardens • Biobest Canada • The Green Spot • Plant Sciences • Natural Insect Control • Koppert • Biological Crop • M&R Durango • Rincon-Vitova

#### **Predators:**

Lacewing (greenhouse use), *Chrysoperla carnea* or *Chrysopa carnea*: See APHIDS for suppliers

Lacewing (greenhouse use), *Chrysoperla rufilabris*: See APHIDS for suppliers

Lacewing (greenhouse use), *Mallada signata*: Bugs for Bugs

Lady beetle, *Delphastus pusillus* (for sweetpotato or silverleaf whitefly): Amos Rubin • ARBICO • Biobest • Biological Crop • Evergreen • Planet Natural • Hydro-Gardens • International Technology • IPM Labs • Natural Insect Control • Nature's Control • Praxis • Rincon-Vitova • Peaceful Valley • The Green Spot • American Insectaries

Lady beetle, *Delphastus catalinae*: Applied Bionomics • Rincon-Vitova

Predatory mite, *Euseius rubini*: Amos Rubin

Predatory bug, *Macrolophus caliginosus*: Biobest • Bioplanet • Biowise • Koppert

Predatory bug, *Dicyphus hesperus*: Applied Bionomics • Bug Factory

### **Least-Toxic Chemical Controls**

**Diatomaceous Earth:** See ANTS

#### **Insect Growth Regulators:**

Wellmark (Enstar)

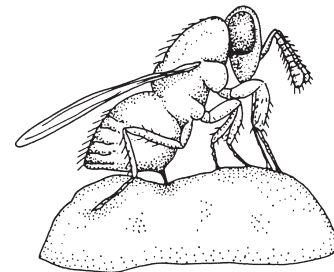
#### **Insecticidal Oil:**

##### **Highly refined oil (from petroleum):**

Monterey, Harmony (Saf-T-Side) • Sun Oil, Gardens Alive!, Harmony, Peaceful Valley (Sunspray) • Florikan (Target Oil) • Gardens Alive (Eco-Oil) • The Green Spot • PBI (Acme)

##### **Highly refined seed oil:**

Stoller, Peaceful Valley (Natur'l Oil) • Gardens Alive (Oil Away)



**Insecticidal Soap:** See APHIDS

**Neem Products:**

Certis, Planet Natural, Harmony (Azatin) • Woodstream, Harmony, Peaceful Valley (Safer's BioNeem) • Certis, Harmony, Peaceful Valley (Neemix, Trilogy) • San Jacinto (Organica)

**Pyrethrin:**

Johnny's, Peaceful Valley (Pyrenone) • AgrEvo, Insects Limited (Kicker) • Peaceful Valley (Py-Rin, w/o PBO) • Monterey, Harmony (Bug Buster-O w/o PBO)

**Repellent Garlic Spray:**

Garlic Research Labs, Chemical-Free (Garlic Barrier) • Soil Technologies (Garlic Gard) • Peaceful Valley

## WORMS

(See Caterpillars)

## YELLOWJACKETS and BEES

### Identification & Monitoring

**Pheromones & Traps:**

Woodstream, Planet Natural, Peaceful Valley, Harmony, Great Lakes (SureFire) • Phero Tech (Phero Tech Lures) • Phero Tech, Great Lakes (Unitrap) • Trécé, Gardens Alive!, Great Lakes, Olson, Gemplers (Pherocon) • San Jacinto (for Africanized bees)

**Training Video for Honeybee Emergencies:**

A.I. Root

### Physical Controls

**Beekeeping equipment for use on bee swarms, yellowjacket nest removal:**

A.I. Root (bee veil, gloves, suits) • Dadant & Sons (Bee veils & coveralls) • BioQuip

**Bee swarm traps:**

Scentry, Great Lakes, ARBICO, Planet Natural (Swarm Trap)

• San Jacinto • Gemplers

**Bee Pheromone Lure:**

Miller Bee • Phero Tech

• San Jacinto

**Bee Pheromone Spray to attract bees:**

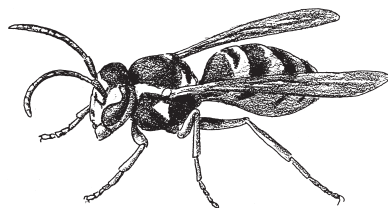
Phero Tech (Fruit Boost)

**Bee Varroa Mite Trap:**

Phero Tech

**Yellowjacket Traps:**

Seabright, Great Lakes, Harmony, Phero Tech, Gemplers (Yellowjacket Inn) • Sterling Intl. (Rescue! Yellowjacket) • Woodstream, Great Lakes, Peaceful Valley, Natural Insect Control (Victor Fly-In-Saucer) • Woodstream, Harmony, Santa Cruz Hort, ARBICO, Peaceful Valley, Great Lakes, The Natural Gardening (SureFire) • Woodstream (Safer Pheromone Trap)



### Least-Toxic Chemical Controls

**Boric acid:**

Whitmire (PT 240 20% aerosol, PT 240D 99% pure boric acid dust)

**Diatomaceous Earth (with pyrethrin):** See ANTS

**Insecticidal Soap:**

**For Africanized Bees:**

Harmony (M-Pede)

**Pyrethrin:**

Hess & Clark (Capsul-Ban microencapsulated, Formula 66, LD-44Z) • Roxide • Whitmire (PT 175 microencapsulated, PT-565, PT-505 XLO) • Gardener's Supply (Pyrethrin and Rotenone)

**Essential Oils:**

Ecosmart (BioOrganic, EcoPCO)

**Mint Oil:**

Woodstream (Poison Free)

**Resmethrin plus components that "freeze" wasps:**

Roxide (Revenge Wasp & Hornet Killer)

**Silica Aerogel (with pyrethrin):** See ANTS

**Sting Stop (for pain):** Boericke

**Wasp/Bee Sting Medication:**

**Self-injected epinephrine:**

Darby (EpiPen) • Hollister-Stier (Ana-Guard) • Dey Labs (EpiPen)

**First-aid for bee stings:**

Miller Bee (Sting Aid)

## MISCELLANEOUS

### Educational Materials

**Databases (Pest Management):**

Bio-Integral Resource Center (Online Organic) • University California Statewide IPM Project (IMPACT Database) • World Wide Web  
**On-line, CD-ROM database of registered pesticide products, chemical fact sheets, MSDS sheets:**

NPIRS User Services (Pest Bank) • World Wide Web

**Pest Management Publications & AV Products:**

**Books on agriculture, horticulture, pest management:**

Jack and the Beanstalk

**Integrated Pest Management publications:**

Bio-Integral Resource Center (BIRC)

**Slides on biological control:**

BCW

**Slides, reference library, training manuals:**

Vopak

**Videos introducing IPM in agriculture, landscaping, & greenhouses, two pest ID slides kits:**

San Luis Video

### Identification & Monitoring

**Computers & Software:**

**Apple scab forecasting equipment:**

Gemplers (PSAOC consultant software)

**Compost maturity test kit:** Woods End (Solvita)

**Portable data recording equipment:**

Wescor (Biophenometers)

**Information/Identification Services & Supplies:**

**Entomological specimens (10,000 species):** Combined Scientific Supplies, Great Lakes, Gemplers, BioQuip

**Equipment, supplies & books:** BioQuip • Gemplers

**Ichneumonid identification service:** American Entomological Institute

**Identification and information service for pests and beneficial insects:** CAB Biosci • BioNet

**Identification of insect pathogens:** Consulting Diagnostic Service

**Identification of Entomopathogenic Nematodes:** CAB Biosci

**Information, identification of agricultural, urban insects:** Cooperative Extension Service (local offices)

**Information service on biological control:** CAB Biosci • Bio-Integral Resource Center (BIRC)

**Information on Pheromone Use and Development:** American Semiochemical Association

**Information on Pesticide Toxicity:** <http://ace.orst.edu/info/extoxnet> • <http://www.pesticideinfo.org> • Bio-Integral Resource Center

**Information on BIRC Publications:** <http://www.birc.org>

**Information on Biocontrol Insectaries:** ANBP

**Online Organic Database:** <http://www.birc.org>

**Sustainable Agriculture Website:**

<http://www.sarep.ucdavis.edu/grants/database>

**Monitoring Devices:**

**Data Logger:** Onset Computer (Hobo)

**Electronic insect counter:** Automata (Data-Lynx BUGCOUNT)

**Flashlight with red filters:** (Streamlight)

**Flashlight Helmet:** Streamlight (Cyclone)

**Inspection mirror:** Applied Bionomics, Harmony Farm (Magnifier hand lenses, headband magnifiers)

**Microscopes:** Gemplers (Donegan Optical) • RF Inter-Science, Gemplers (Macroscope 25, Macroscope 45, Macroscope 18-36 Zoom)

**Moisture meters:** Delmhorst (Delmhorst) • Jim Simmons • Professional Equipment

**Termite Sniffers:** Professional Equipment

**Radon Test Kits:** Professional Equipment

**Sweep nets:** Oakfield Apparatus • BioQuip • Great Lakes

**Temperature monitor:** Great Lakes (Taylor Min/Max Thermometer) • (CropClok 1000 Temperature Integrator, Dickenson Self-Contained Temperature Recorders) • Gempler's

**Maximum-Minimum Thermometer:** BioQuip • Great Lakes

**Degree-day Calculators:** Gemplers • BioQuip

**Vacuums:** ARBICO (Bug Sweep) • BioQuip Products (Insect Vacs) • D-VAC Company (D-VAC) • McCluney • Gardener's Supply (Bug Vacuum) • Proteam (Hummer, Optimus) • Peaceful Valley

**Water bacteria analysis kits:** Professional Equipment • Idexx • Neogen

**Weather monitor & disease forecasting system:** Automata (Data-Lynx Degree Day) • Neogen (EnviroCaster) • Gemplers (Pessl Metos Products)

**Pesticide Residue Detection:**

**Aquatic sampling equipment:** Wildlife Supply

**Detection of carbamate, organophosphate & thiophosphate residues in air, water, soil or surfaces:** Neogen (Veratox, Ticket) •

Silverlake

**Lead testing kit:** Professional Equipment • Planet Natural

**Lead, pesticides, nitrates test kit:** Silverlake

## Physical Controls

**Row Covers:**

Charley's (Harvest-Gard) • See Beetles (crop pests)

## Biological Controls and Supplies

**Artificial Diets:**

**For lacewings & lady beetles:**

Rincon-Vitova • The Ladybug Company • The Green Spot (Biodiet) • Oliver

**Wheat for lacewings & lady beetles:**

Planet Natural • Peaceful Valley, Charley's (Pred-Feed) • Natural Insect Control

**Teflon Insect Barrier:**

Local Hardware Store (see Plumbing Supplies)

**Habitat:**

**Bat house to encourage insect predation by bats:**

Gardener's Supply (Bat House) • Peaceful Valley • Green Spot • Natural Insect Control • Harmony

**Seed mixture for beneficial insect habitat:**

Gardens Alive! (Haven Flowering Herbs, Haven Cover Crop) • Peaceful Valley (Good Bug Blend, Border Patrol) • Lohse Mills • Shepherd's • Gardner's Supply • W. Atlee Burpee

**California Native Grass and Flower Seeds:** Pacific Coast Seeds

**Soil analysis test kits:** BioQuip • Great Lakes • Peaceful Valley

**Transplants for beneficial insect habitat:**

Cornflower Farms

**Insect and Microbial Rearing Supplies:**

**Autolysed yeast (rearing medium, fruitfly attractant, baiting control):** Bugs for Bugs

*Sitotroga cerealella* (moth eggs for Trichogramma rearing medium): Kunafin

**Supplies for rearing insect pathogens:** International Mycological Institute • Oliver • Invitrogen

**Pollination aids:**

Ecogen (Bee-Scent) • Phero Tech (Fruit Boost)

**Pollinators:** bumble bee, *Bombus* spp.: W. Neudorff • Biobest • Koppert • Natural Insect Control • Bio Bee

**Predators:**

Chinese praying mantid, *Tenodera aridifolia sinensis*: ARBICO • Planet Natural • M & R Durango • Natural Insect Control • Natural Pest Controls • Peaceful Valley • Praxis • Smith & Hawken • A-1 Unique • Nature's Control • The Green Spot

**Red hybrid earthworms, *Lumbricus* sp.:**

A-1 Unique • Rincon-Vitova

## Pesticide Application Equipment

**Application equipment for structural pest control:**

B & G • Harmony • Peaceful Valley • Professional Equipment • Vopak

**Bait applicator:**

Specialty Products (BaitGun) • Whitmire • Blue Diamond

### Dusters:

B&G Equipment (B&G Dusters) • AgrEvo (Actisol) • Planet Natural, Nitron, Peaceful Valley, Gardens Alive, Charley's (Dustin Mizer) • Vopak (Getz Gun) • Parker (P.E.S.T. Power Applicator) • Woodstream, Peaceful Valley (Pest Pistol)

### Electrostatic sprayers/dusters:

Electrostatic Spraying Systems • Pristine • Bee Tee • Agr Evo

### Sprayers:

Planet Natural • Bee Tee, Pristine (Murayama) • Gardener's Supply (Spraydoc) • Green Pro • Harmony • Vopak • Gempler's

### Tool for Injecting Wall Voids: B & G

Protective Skin Coating: Gloves in a Bottle

### Respirators:

BWS • Harmony • Lab Safety Supply (full hood respirator) • Survivair (Series 86 Disposable APR) (Call Survivair for local distributors) • Vopak

### Production Supplies

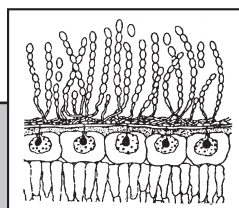
Irrigation Equipment: Harmony

Organic Fertilizer: Gardener's Supply • San Jacinto • Harmony • Peaceful Valley • New Era

## Recycling Resources

Compost, Used Materials: Calmax • New Era

Portable Bailer to Recycle Solarization Plastic: Kennco



# PLANT DISEASE MANAGEMENT

## CROWN GALL DISEASE

### Biological Controls

#### Microbial Fungicides:

*Agrobacterium radiobacter strain K84*: AgBioChem, Necessary, Harmony (Galltrol-A, Gallex) • New BioProducts, IPM Labs (NoGall K1026) • Western Farm

## PATHOGENS

### of Flowers, Foliage and Fruit

#### Identification & Monitoring

#### Apple scab forecasting equipment:

Harmony (Qualimetrics Hygrothermograph) • Automata (Scab Off software)

Automata (Grapemold)

#### Lettuce downy mildew prediction software:

Automata (Let Down)

Indicator plant (Summer Madness petunia) for tomato spotted wilt: Ball Seed

Tomato spotted wilt virus detection kit: Agdia

Plant disease detection kits: Neogen (Reveal)

### Weather monitor & disease forecasting system (for fire blight):

Gemplers (MARYBLYT)

## Physical Controls

### Fungal Barriers:

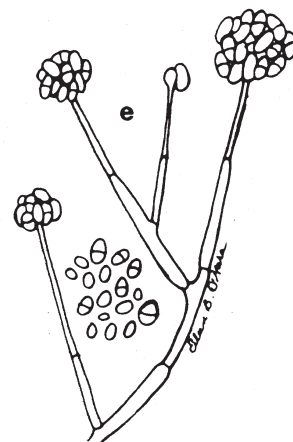
#### Antitranspirants:

Green Pro (Vita Coat) • Miller (Vapor Gard) • PBI/Gordon (Transfilm) • Precision (Preserve) • Wilt-Pruf (Wilt-Pruf) • Nature's Touch (Leaf Cote Clear) • Peaceful Valley

#### Habitat:

Styrofoam blocks to increase ventilation:

Beaver Plastics, First Choice (Ventblocks)



## Horticultural Controls

### Disease-Resistant Roses:

Heritage Rosarium • High Country • Hortica • Heirloom • Jackson and Perkins • Lowe's Own • Vintage Gardens • Rose Catalog • American Rose Society

## Biological Controls

### Microbial Fungicides:

*Amelomyces quisqualis* (biofungicide for powdery mildew):

Ecogen, Harmony, Plant Health Care (AQ-10)

*Bacillus pumilis* (biofungicide): Rincon-Vitova (Activate)

*Bacillus laterosporus* (Rosa Flora): Better Flora

*Bacillus subtilis* (Serenade): AgraQuest

*Candida oleophila* (for postharvest protection of citrus):

Ecogen (Aspire)

Compost tea brewers: Growing Solutions • SoilSoup • Microb Brewer • Earth Tea

*Pseudomonas fluorescens* (for fire blight): Plant Health Technologies, Peaceful Valley (Blight Ban)

*Pseudomonas solanacearum* (non-pathogenic for bacterial wilt control): Natural Plant Protection

*Trichoderma harzianum* (for grey mold): Makhteshim-Agan (Trichodex) • Bioworks (Plant Shield) • Borregaard • Binab (Plant Gard)

*Trichoderma* sp. (for chlorotic vine leaf curl): Binab (Binab-T)

Streptomycin antibiotic (for pear, apple fire blight):

Peaceful Valley (Agrimycin)

## Least-Toxic Chemical Controls

Baking soda with sticker: Gardener's Supply (Remedy) • Monterey • Peaceful Valley

Calcium Foliar Spray: Bonide (Rot-Stop)

**Cinnamic aldehyde:** Emerald (Valero)

**Garlic and Oil:** JH Biotech, Harmony (GC-3)

### **Copper & Sulfur Fungicides:**

Planet Natural (micronized sulfur) • Monterey (Nordox, Copper Count N, Micronized Sulfur) • Peaceful Valley, The Natural Gardener (Kocide, Bordeaux) • Harmony • Bonide, Gardener's Supply (Bonide Garden Dust) • Gardens Alive (copper soap) • Woodstream (Rose and Flower) • Intagra, Necessary (Concern fungicidal soap) • Stoller (TopCop)

### **Flowable sulfur formulation:**

Woodstream, Harmony, Charley's, (Safer Garden Fungicide) • Peaceful Valley • Stoller (That)

**Fungicidal Soap (copper and soap):** Gardens Alive (Soap Shield)

**Peroxide Oxidants:** Biosafe (Oxidate, Zero Tol)

### **Oil and Lime-Sulfur:**

The Green Spot • Best Sulfur Products

### **Calcium Thiosulfate:**

Best Sulfur Products (Thiocal)

### **Highly refined oil (from petroleum) & sulfur:**

Necessary • Peaceful Valley

**Mint oil:** Soil Technologies (Fungastop)

**Neem Products (for mildew, botrytis, rust):** Certis, Harmony, Peaceful Valley (Trilogy, Triact) • Greenlight • San Jacinto (Organica)

**Horticultural Oil:** See APHIDS

pythium, phytophthora, etc.): Kemira, Hydro-Gardens (Mycostop) • AgBio (Mycostop) • Peaceful Valley • Rincon-Vitova • Harmony • Plant Health Care

*Streptomyces* sp.: Spray-N-Grow (RootGuard)

*Streptomyces lydicus* (for fusarium, rhizoctonia, pythium):

San Jacinto (MicroGro)

*Trichoderma harzianum* (soil treatment for root pathogens): BioWorks (Rootshield, Turfshield) • Binab • Wilbur-Ellis (Bio-Trek, for brown patch, dollar spot on golf courses) • Borregaard • Harmony

*Trichoderma atroviride* (cold tolerant): Ag Tech (Plant Helper)

*Trichoderma* sp. (for growth promotion): Plant Health Care (Compete)

### **Disease-Suppressive Seed or Soil Treatment:**

*Bacillus subtilis*: Gustafson (Kodiak) • Plant Health Care • Rincon-Vitova (Activate) • AgraQuest (Serenade)

*Bacillus uniflagellus*: Rincon-Vitova (Activate)

*Bacillus* spp. (mixture): Rincon-Vitova

*Burkholderia cepacia*: Market VI

*Trichoderma harzianum* (seed treatment for root pathogens): BioWorks (Rootshield, Planter's Box) • Agricola Mas Viader • Plant Health Care

### **Disease-suppressive peat moss:**

Southern Importers (Southland)

### **Disease-suppressive container mixes or compost:**

BioComp • Earthgro (Scotts) • Sun-Gro • Southern • Louisiana Pacific • O.M. Scotts (Hyponex) • Paygro

**Micronutrients:** Spray-N-Grow

**Compost Tea Brewing Equipment:** Growing Solutions • SoilSoup • Microb Brewer • Earth Tea

### **Endomycorrhizae to increase plant nutrition and help protect against disease:**

*Glomus* sp. (VAM fungus): Bioscientific (Mycorise) • BioOrganic • Green Releaf (BioReleaf) • Mikro-Tek • Plant Health Care (Mycor) • Biological Crop • Natural Fertilizer • Philom (TagTeam) • Rincon-Vitova • AgBio • Roots • Mycorrhizal Applications

**Ectomycorrhizae (forest nurseries, urban trees):**

*Pisolithus tinctorius*: Rincon-Vitova • Plant Health Care (Mycortrees) • Plant Revolution • AgBio • Mycorrhizal Applications

*Pisolithus*, *Rhizopogon* mixtures: Roots • Plant Health Care

## ROOT PATHOGENS

### Identification and Monitoring

#### **Detection kit for pathogens:**

Neogen (Reveal)

#### **Physical Controls**

##### **Heat, Steam and Hot Water:**

**Heat (electric soil sterilizer):**

Olson, Great Lakes, Gemplers

##### **Hot Water:**

Aqua Heat

##### **Solarization Plastic:**

Mipco • AEP • Peaceful Valley

##### **Portable Bailer to Recycle**

##### **Solarization Plastic:**

Kenngo Manufacturing

##### **Steam Machines and Boilers:**

Sioux • Saskatoon

#### **Biological Controls**

##### **Microbial Fungicides:**

*Burkholderia cepacia*: Market VI (Deny)

*Fusarium oxysporum* (non pathogenic): Natural Plant Protection

*Gliocladium virens* (for pythium, rhizoctonia):

Certis, Harmony, Gardens Alive (SoilGard)

*Gliocladium* sp. (for fusarium, pythium): Kemira Oy, Hydro-Gardens (Gliomix)

Microbial Antagonists: San Jacinto (MicroGro) • Rincon-Vitova

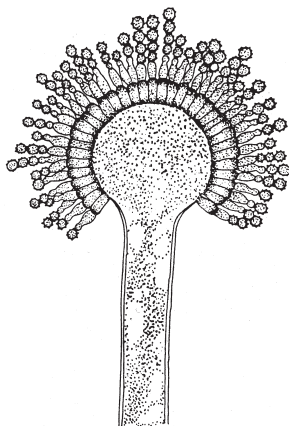
*Pseudomonas aureofaceans* (leased system for golf courses): EcoSoil (BioJect system)

*Pseudomonas cepacia*: Soil Technologies (Bac-Pack)

*Pseudomonas solanacearum* (non-pathogenic): Natural Plant Protection

*Pseudomonas* spp. (also includes other antagonists, mycorrhizae and growth stimulating enzymes): Green Releaf (BioReleaf)

*Streptomyces griseoviridis* strain K61 (for fusarium, damping off,



## TREE WOUND PATHOGENS

### Biological Control

*Trichoderma* sp.: Binab (Binab-T), to treat tree wounds

## TURF DISEASES

### Identification & Monitoring

#### **Detection kit for turf diseases:**

Neogen(Reveal) • Neogen (Alert)

#### **Compost maturity test kit:**

Woods End (Solvita)

#### **Physical Controls**

##### **Turf Aerator:**

Harmony, Peaceful Valley (Gorilla Core Aerator)

##### **Horticultural Controls**

##### **Brown patch resistant turfgrass:**

Turf Seed (Tar Heel, Wolfpack, Coronado Gold, Olympic Gold)



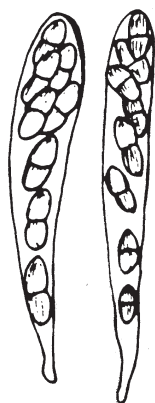
## Biological Controls

### Microbial Soil Amendments:

New Era Farm Service (composted soil amendments) • Jade Mountain (composting toilet) • Northeast Organics (Turf Cocktail to stimulate microbes in soil) • Lane • Agro Dist

### Beneficial microorganisms that attack turf pathogens:

Gardener's Supply (Green Magic) • Green Releaf (BioReleaf) • Peaceful Valley (Restore) • Wilbur-Ellis (BioTrek) • Bioworks (Turfmate) • Eco-Soil (BioJect) • Soil Technologies (BacPack) • Natural Fertilizer • Plant Health Care (Compete)



## MISCELLANEOUS

### Educational Materials

#### Pest Management Publications & AV Products:

#### Integrated Pest Management publications, videos:

Bio-Integral Resource Center (BIRC)

### Identification & Monitoring

#### Apple scab forecasting equipment:

Great Lakes IPM (Belfort Leaf Wetness Recorder)

#### Information/Identification Services:

**Fungal identification service and supplies:** CAB Biosci

**Information, identification of agricultural, urban insects:**

Cooperative Extension Service (local offices)

**Information service on biological control using microbes:** CAB

Biosci

**Miscellaneous Compost Aids:** Beckner (Compost Aerator) • Charley's

(Compost Thermometer) • Natural Insect Control (Earthworms) •

Woods End (Compost Maturity Test Kit)

**Compost Tea Brewing Equipment:** Growing Solutions • SoilSoup •

Microb Brewer • Earth Tea

**Mycotoxin Detection Kits:** Neogen

**Nematode identification service:** CAB Biosci

**Plant Disease Detection Kits** (for fusarium mold, pythium, phytophthora, rhizoctonia, sclerotinia, brown patch, dollar spot): Neogen Corp.

(Alert, Agri-Screen, Reveal)

**Plant Disease Detector:** Automata Inc. (Leaf Moisture Sensor)

**Plant Disease Prediction Software** (for general fungal disease, apple scab, botrytis, powdery mildew): Automata Inc. (GET WELL) •

Automata (Scab Off) • Automata (GrapeMold)

**Recycler for Solarization Plastic (Portable Bailer):** Kennco

**Recycler Catalog (sources of compost, etc.):** Calmax

**Soil Testing Kits, pH Meters:** BioQuip • Great Lakes • Great Lakes

(Hannah) • Ben Meadows • Harmony • Peaceful Valley • Gemplers

**Soil Testing, Microbials and Minerals:** BBC Labs • Soil Foodweb



## VERTEBRATE MANAGEMENT

### BATS

#### Educational Materials

#### Bat House Construction Booklet:

Bat Conservation International, Plow & Hearth, Peaceful Valley, Harmony

**Bat Houses:** The Green Spot • Natural Insect Control • Harmony • Peaceful Valley

#### Identification & Monitoring

#### Flashlight with red filters:

Streamlight (Streamlight)

#### Physical Controls

#### Copper mesh hole filler:

Allen Special Products (Stuf-Fit)

#### Netting:

Wildlife Control (Bat Kit, Swallow & Woodpecker Kit for home-made bat check valve, Wildlife Net) • Gemplers (Wildlife Net)



## BIRDS

#### Physical Controls

#### Barriers & Exclusion Devices:

Wildlife Control (Pigeon Barrier) • Birdbarrier (Daddi Long Legs)

#### Copper mesh hole filler:

Allen Special Products (Stuf-Fit)

#### Metal projectors:

Cat Claw (Cat Claw) • Wildlife Control • Bird-X • Nixalite (Nixalite) • Birdbarrier (Birdpoint)

#### Netting:

Wildlife Control, Gemplers (Wildlife Net) • Bird-X • JT Eaton • InterNet, Great Lakes (Internet) • Animal Repellents • Peaceful Valley • Nichols Net • Nixalite (Netting) • Sterling Marine • Sutton • Tenax (Ornex) • Tipper, Harmony, Peaceful Valley (Tie-Net) • Birdbarrier (Birdnet, Stealth Net) • BioCare • Margo

#### Wire exclusion systems:

National Netting • Birdbarrier (Birdwire, Birdcoil)

#### Deterrents:

#### Alarms & detonators:

Bird-X (BirdGard, Transonic IX-L, Ultrason ET) • Birdbarrier (Birdwailer) • Reed-Joseph (Electronic Scare Away, Scare Away Pyrotechnics, Multi Bang Automatic Cannon, Rotomat Revolving Platform) • Wildlife Control (ZON Propane Cannons, Shell Crackers,

Bird Bombs, Bird Whistlers, ZON Automatic Scarecrow) • Agricultural Supply, Margo (Zink Bird Banger) • Bird-X (Nixalite) • Sutton (bird bomb, cannon)

**Distress calls to deter Canada geese:**

Wildlife Control

**Electric Shock Deterrent:**

Birdbarrier (American Birdfence, solar)

• Avian Flyaway



**Flashing light deterrent:**

Bird-X (Bird Strobe Light)

**Reflective tape:**

Reed-Joseph, W. Atlee (Scare-Away Reflecting Tape) • Wildlife Control, Agricultural Supply, Peaceful Valley (Mylar Silver Strips) • Bird-X (Irri-Tape) • Smith & Hawken (Birds Beware) • Sutton

**Live Traps (for starlings, pigeons, etc.):**

National Live Trap • Nature House • Reed-Joseph (Trap Away) • Tomahawk, Plow & Hearth (Tomahawk) • Woodstream, Great Lakes, Harmony, Peaceful Valley, Gardener's Supply (Havahart, Victor) • Margo

**Repellents:**

Bird-X (Bird-Proof) • Sutton • Peaceful Valley

**Repelling balloons:**

Reed-Joseph (Evil Eye) • ARBICO (Bird Scare Eye Balloon, Owl Scarecrow) • Plow & Hearth (Scare Eye) • Bird-X, Peaceful Valley, Gemplers (Scare Eye) • W. Atlee (Birds-Away Inflating Snake, Ollie-Owl) • Bird-X (Terror Eyes) • Gempler's • Sutton • Tanglefoot

**Repellent gel:** Sutton • Hot Foot America

**Repelling kites:**

Sutton • Cochranes • Peaceful Valley

**Sticky repellent:**

Tanglefoot (Tanglefoot Bird Repellent) • Peaceful Valley

**Sticky Adhesive:**

Olson, Hydro-Gardens (Stiky Stuff) • Seabright (Stickem Special) • Gemplers, Great Lakes, Necessary, Nixalite (Tanglefoot) • Peaceful Valley

**Least-Toxic Chemical Controls**

**Repellents:**

Nixalite, Peaceful Valley, Plow & Hearth (Ropel) • Bird-X (Bird Proof) • JT Eaton (4-the-birds) • Becker Underwood, Martinson-Nicholls (ReJexit Migrate for Canada geese, ReJexit Fog Force for pigeons, gulls, ReJexit Crop Guardian for starling, gulls, catbirds on fruit)

**CATS/DOGS**

**Biological Controls**

**Guard Donkeys to Protect Sheep:**

American Donkey

**Physical Controls**

**Cat tongs:**

Tomahawk, Plow & Hearth (Tomahawk)

**Electric Fencing:**

Gardener's Supply

**Least-Toxic Chemical Controls**

**Repellents:**

Animal Repellents • Sterling Intl. (Rescue! Dog & Cat Repellent) • Peaceful Valley (Ropel) • Farnam (Get Off My Garden)

**GOPHERS and MOLES**

**Biological Controls**

**Nematodes to Eat Insects that are Mole Food:**

Certis, Harmony, Hydro-Gardens, IPM Labs, The Green Spot *Beauveria bassiana* (to kill soil insects that attract moles):

Troy, Hydro-Gardens, Harmony (Naturalis)

**Owl Boxes (to shelter owls that prey on gophers):** Rincon Vitova • Harmony • Natural Insect Control

**Horticultural Controls**

Gopher Resistant Plants: (Call BIRC for list)

**Physical Controls**

**Barriers & Exclusion Devices:**

Harmony (Root Guard Baskets) • Peaceful Valley

**Tree Wrap:**

Gemplers (T&G Plastic Tree Shields) • Peaceful Valley (Spiral Tree Guard)

**Deterrents:**

Roxide (Revenge Smoke Bomb)

**Live Traps for gophers:**

Harmony, Peaceful Valley, Tomahawk

**Lethal Traps for moles:**

Woodstream, Harmony (Out of Sight squeeze type, Victor, harpoon type) • Peaceful Valley

**Lethal Traps for gophers:**

Woodstream, Harmony, Santa Cruz Hort, Arbico, Peaceful Valley, Great Lakes, Necessary, The Natural Gardening, Gardens Alive (Black Hole, box type) • Woodstream (Victor Easy Set, Gopher Getter, squeeze type)

**Least-Toxic Chemical Controls**

**Gopher Bait Blocks (for emergency use mainly in agriculture):** JT Eaton (Answer, diphacinone)

**Mole Repellent:** Mole-Med, Soil Technology, Gardens Alive (Mole-Med) • Gardener's Supply • Becker Underwood • Value Garden

**Gopher Repellent:** Gardens Alive (Gopher-Med)

**DEER**

**Physical Controls**

**Deterrents:**

**Alarms & detonators:**

Agricultural Supply • Critter Control • Margo • Coop Eco

**Roadside highway reflectors to deter deer:**

Strieter (Strieter-Lite)

**Electric fencing:**

North Bradford (Techfence) • Gardener's Supply • Gallagher Power Fence • Waterford • Tenax

**Wireless Fence (for guard dogs):** Drs. Foster and Smith

**IR Sensor to Turn On Sprinklers:** Gardener's Supply (Water Defence)

**Heat Activated Alarm:** Drs. Foster and Smith

### Tree Wrap:

Gemplers (T&G Plastic Tree Shields) • Peaceful Valley (Spiral Tree Guard)

### Least-Toxic Chemical Controls

#### Repellents:

Intagra, Gardener's Supply, Gardens Alive!, Harmony, Plow & Hearth, Peaceful Valley (Deer-Away, Get Away) • Harmony (National Deer Repellent) • Gardens Alive!, Harmony, Peaceful Valley (Hinder Deer & Rabbit Repellent) • Peaceful Valley, Harmony (National Scent) • Peaceful Valley (Ropel) • Gardener's Supply (Champon's) • Wildlife Management • Envirodyne (Meat Meal) • Harmony (Not Tonight Deer)

## LIVESTOCK PREDATORS

### Biological Controls

#### Donkeys to Protect Sheep:

American Donkey

### Physical Controls

#### Alarms & Detonators:

Reed-Joseph (Scare Away Pyrotechnics, Multi Bang Automatic Cannon, Rotomat Revolving Platform) • Agricultural Supply • Critter Control • Margo

#### Electric Fencing:

Gallagher Power Fence (Gallagher) • Waterford (ShockTactics, Flexinet) • Gardener's Supply

#### Live Traps:

Reed-Joseph (Trap Away) • Tomahawk, Plow & Hearth (Tomahawk) • Woodstream, Great Lakes, Harmony, Peaceful Valley, Gardener's Supply (Havahart)

### Least-Toxic Chemical Controls

#### Repellents:

Peaceful Valley, Nixalite, Peaceful Valley, Plow & Hearth (Ropel)

## RABBITS

### Physical Controls

#### Electric Fencing:

Gallagher Power Fence (Gallagher) • Waterford (ShockTactics, Flexinet) • Gardener's Supply

#### Live Traps:

Wildlife Management • Tomahawk, Great Lakes, Peaceful Valley • Woodstream, Harmony • Margo

#### Netting:

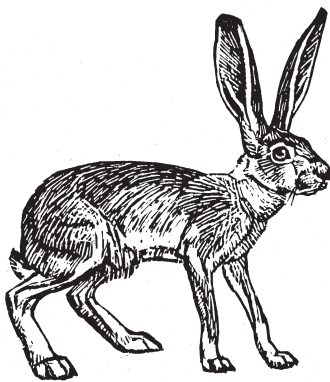
Wildlife Control, Gemplers (Wildlife Net)

#### Tree Wrap:

Gemplers (T&G Plastic Tree Shields) • Peaceful Valley (Spiral Tree Guard)

### Least-Toxic Chemical Controls

#### Repellents:



Gardens Alive, Harmony (Hinder Deer & Rabbit Repellent) • Harmony (National Scent) • Peaceful Valley (Ropel) • Envirodyne (Green Screen) • Intagra, Gardener's Supply, Gardens Alive, Harmony, Plow & Hearth, Peaceful Valley (Get Away)

## RACCOONS

### Physical Controls

#### Barriers & Exclusion Devices:

Stromberg's (Catcher-Holder Poles for animal restraint) • Tomahawk, Plow & Hearth (catch poles)

#### Electric fencing:

Gallagher Power Fence (Gallagher) • Waterford (ShockTactics, Flexinet) • Gardener's Supply

#### Wireless Fence (for guard dogs):

Drs. Foster and Smith

#### Heat Activated Alarm:

Drs. Foster and Smith

#### Live Traps and Carrying Cages:

National Live Trap • Reed-Joseph (Trap Away) • Safeguard (Safeguard) • Tomahawk, Plow & Hearth (Tomahawk) • Wildlife Control • Woodstream, Great Lakes, Harmony, Peaceful Valley, Gardener's Supply (Havahart, Victor) • Wildlife Management • Margo

#### Wildlife Removal/Relocation Services:

Critter Control (for small animals only)

### Least-Toxic Chemical Controls

#### Repellents:

Nixalite, Peaceful Valley, Plow & Hearth (Ropel) • Gardener's Supply (Champon's) • Intagra, Gardener's Supply, Gardens Alive, Harmony, Plow & Hearth, Peaceful Valley (Get Away)

## RATS and MICE

### Identification & Monitoring

#### Flashlight with red filters:

Streamlight (Streamlight)

#### Rodent contamination detection devices:

BioQuip (Spectronics, Blacklight Kits) • Professional Equipment

### Physical Controls

#### Copper mesh hole filler:

Allen Special Products (Stuf-Fit)

#### Traps (for rats and mice):

Sterling Intl. (Rescue! Dispose-A-Mouse) • Reed-Joseph (Trap Away) • Seabright, Phero Tech (Smart Mouse Trap) • Tomahawk, Plow & Hearth (Tomahawk) • Woodstream, Great Lakes, Harmony, Peaceful Valley, Gardener's Supply, Havahart, Victor) • Woodstream (Victor Holdfast) • Woodstream (Victor Tin Cat, Terminator) • Wildlife Management

#### Glue board trap:

Woodstream (Victor Holdfast) • Bell (Trapper products) • JT Eaton (Eaton's Stick-em) • Enforcer (Enforcer Rat & Mouse Glue Traps)

#### Electrocutor trap:

AgriZap • Professional Equipment

#### Live Trap:

Seabright • Tomahawk

## Least-Toxic Chemical Controls

### Tool to Place Baits and Traps:

Arcoa (EZ Reacher)

### Baits:

Necessary (Rampage) • Peaceful Valley • Trapper Jack's (macadamia nut lure) • Bell (Detex, non-toxic monitoring bait)

### Bait stations:

Bell (Protecta, RTU) • JT Eaton (Rat Depot) • Lipha Tech (Bait Safe)

### Stop feed, single dose (0.075% cholecalciferol Vitamin D3):

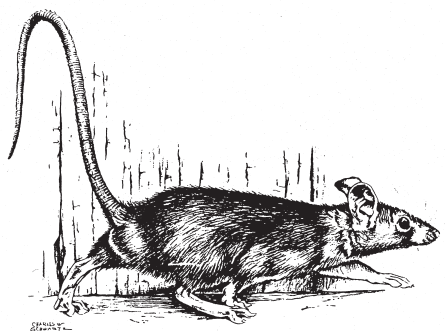
Bell (Quintox)

### Anticoagulants:

D-Con (D-Con, warfarin) • Bell (Final, warfarin)

• Bell (Contrac, bromadiolone) • Bell (Liqua-Tox II, diphacinone) •

Bell (Ditrac, Ditrac Tracking Powder, diphacinone)



• D-Con (D-Con II, brodifacoum) • Lipha Tech (Maki, bromadiolone) • Lipha Tech (Rozol, chlorphacinone)

### Zinc phosphide:

Bell (ZP Rodent Bait AG) • Bell (ZP Tracking Powder)

## SKUNKS

### Physical Controls

#### Catch Poles:

Tomahawk, Plow & Hearth (Tomahawk)

#### Electric Fencing:

Gallagher Power Fence (Gallagher) • Waterford (ShockTactics, Flexinet) • Gardener's Supply

#### Live Traps and Carrying Cages:

National Live Trap • Reed-Joseph (Trap Away) • Safeguard (Safeguard) • Tomahawk, Plow & Hearth (Tomahawk) • Woodstream, Great Lakes, Harmony, Peaceful Valley, Gardener's Supply (Havahart) • Margo (Tru Catch) • Nichols • Wildlife Management

### Least-Toxic Chemical Controls

#### Repellents:

Nixalite, Peaceful Valley (Ropel)

#### Skunk Deodorant:

Drs. Foster & Smith (Skunk Kleen) • NISUS (BAC-AZAP)

## SQUIRREL

#### Squirrel-Proof Bird Feeders:

Arundale (The Mandarin) • Looker

#### Hot Pepper Treatment for Birdseed:

Mellinger's (Squirrel Away)

#### Live Traps:

Tomahawk • Woodstream • Harmony • Peaceful Valley

#### Repellent:

Harmony • Peaceful Valley • J.T. Eaton

## WILDLIFE

### Physical Controls

#### Control Equipment:

##### Cat tongs:

Tomahawk, Plow & Hearth, Harmony

##### Poles to catch animals:

National Live Trap • Tomahawk, Plow & Hearth (Tomahawk) • Wildlife Management

##### Protective Gloves:

Tomahawk, Plow & Hearth (Tomahawk)

##### Snake tongs:

National Live Trap

##### Alarms & Detonators:

Reed-Joseph (Scare Away Pyrotechnics, Multi Bang Automatic Cannon, Rotomat Revolving Platform) • Agricultural Supply • Critter Control • Margo

##### Infra-Red Triggered Water Cannon:

Gardener's Supply (Water Defence)

##### Heat Activated Alarm:

Drs. Foster and Smith

##### Wireless Fences (for guard dogs):

Drs. Foster and Smith  
Allen Special Products (Stuf-Fit)

##### Electric Fencing:

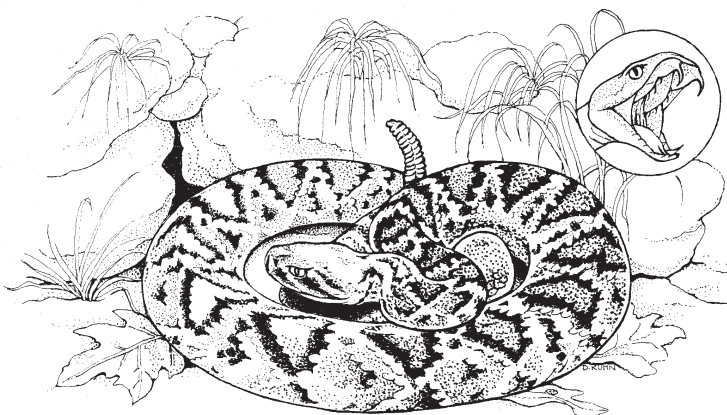
Waterford (ShockTactics, Flexinet) • Gallagher • Gardner's Supply • Peaceful Valley • Harmony • Jade Mountain (solar electric) • Margo (for bear, wolverine)

##### Live traps:

Margo (for large animals) • National Live Trap • Reed-Joseph (Trap Away) • Safeguard (Safeguard) • Tomahawk, Plow & Hearth, Great Lakes (Tomahawk) • Wildlife Control • Woodstream, Great Lakes, Harmony, Peaceful Valley, Gardener's Supply (Havahart, Victor)

##### Wildlife Removal/Relocation Services:

Margo (for large animals) • Critter Control (for small animals only)



## Least-Toxic Chemical Controls

### Repellents:

Nixalite, Peaceful Valley, Plow & Hearth (Ropel) • Becker Underwood (Rejexit to deter Canada geese) • Mole-Med, Gardens Alive, Soil Technologies (Mole-Med, Repellent for moles)

## MISCELLANEOUS

### Educational Materials

#### Integrated Pest Management Publications:

Bio-Integral Resource Center



## WEED MANAGEMENT

### Educational Materials

#### Pest Management Publications & AV Products:

#### Integrated Pest Management publications, videos:

Bio-Integral Resource Center

### Identification & Monitoring

#### Information/Identification Services

#### Information, identification of agricultural, urban insects:

Cooperative Extension Service (local offices)

#### Information service on biological control of weeds:

International Institute of Biological Control

### Physical Controls

#### Barriers and Exclusion Devices:

##### Asphalt crack filler:

Garon Products (Crack-Fill)

##### Electric Shredder to Make Mulch:

Gardener's Supply (Gloria) • BCS America

##### Mulch:

Peaceful Valley (IRT, Planter's Paper) • Birkett Mills (Mul-Tex) • Appleseed (EweMulch) • Penny Newman (Rice Hull Mulch)

##### Sunlight Barrier (aquatic weeds):

Applied Biochemists (Aquashade)

##### Weed control fabric/plastic:

Easy Gardener, Peaceful Valley (WeedBlock Landscape Fabric) • BBA, Planet Natural (Tyar Landscape Fabric) • Gardener's Supply (Weed Mat) • Gardens Alive! • Amoco (Duon) • AEP (IRT Plastic) • Peaceful Valley (IRT Plastic) • BBA (Tree Circles)

##### Flamers:

Ben Meadows • Forestry Suppliers (Panama) • Plow & Hearth (Weed Destroyer) • Flame Engineering, Planet Natural, Harmony (Red Dragon) • Peaceful Valley • Planet Natural • Gemplers

##### Heat Treatment (system using boiling water):

Waipuna (Waipuna System) • Aqua Heat

**Heat Treatment (portable propane radiant heat):** Forevergreen

##### Skin Protectant:

##### Poison oak/ivy cleanser/prevention:

Apex Medical (Stoko-Gard Outdoor Cream) (Sell only to pharmacists) • Smith & Hawken (Tecnu Cleanser) • Masune (Ivy Block, Technu) • Gempler's (Ivy Shield) • Sawyer (Itch Balm)

##### Weeding Animals:

##### Books, pamphlets, lists of breeders:

American Donkey & Mule • American Southdown Breeders' (sheep) • Natural Colored Wool Growers'

##### Weeding Tools:

##### Brush-clearing tools:

 Forestry Suppliers

**Hand tools:** Gardener's Supply • Smith & Hawken • Plow & Hearth • Peaceful Valley • BCS America • A.M. Leonard • New Tribe (Weed Wrench, woody shrubs) • The Natural Gardening (Thistle Monster)

**Mechanical Weeder:** Weed Badger (Tiller, Qwik-Disk, Cyclone Spade, Mower, Undercutter)

**Mechanical harvester:** Hockney Weed Cutter (underwater weeds)

**Rotary cutters:** Bush Hog (Bush Hog Rotary Cutter)

**Tiller/mulcher/mower:** Weed Badger (Weed Badger)

**Weedeater:** Poulan/Weed Eater • BeeTee Equipment Sales

(Husqvarna)

### Biological Controls

#### Bacterial Biostimulation for Algae Control:

Plant Health Care (Pond Saver) • Enviro-Rep (Super Bug) • Gardener's Supply (Bacta-Pur)

#### Sterile grass carp fish (for aquatic weeds):

American Sport (not often available in CA; diploid and triploid) • East Arkansas • J.M. Malone (triploid grass carp) • Keo Fish Farms (diploid and triploid) • Richmond Fisheries • Whiskers Catfish Farm (triploid)

**California Native Plants:** California Native Plant Society

#### Herbivores:

*Aceria malherbae* (mite for field bindweed): Praxis

*Agapeta zoegana* (for knapweed): Praxis

*Agonopterix alstroemeriana* (poison hemlock): BCW

*Aphthona* spp. (beetle for leafy spurge): Praxis • BCW

*Apion fuscirostre* (stem weevil for Scotch broom): Bio Collect

*Apion ulicis* (stem weevil for gorse): Bio Collect

*Aplocera plagiata* (St. john's wort): BCW

*Bangasternus orientalis* (for yellow starthistle): Bio Collect • BCW • Peaceful Valley

*Cassida rubiginosa* (for Canada thistle): BCW

*Ceuthorynchidius horridus* (for musk thistle): Praxis

*Ceutorhynchus litura* (thistle weevil for Canada thistle): BCW • Praxis

*Chrysolina quadrigemina* (beetle for St. johnswort): Bio Collect • BCW

*Coleophora klimeschiella* (for Russian thistle leafminer): Bio Collect

*Coleophora parthenica* (for Russian thistle stem borer): Bio Collect

*Cypocleanus achates* (knapweed root weevil): BCW

*Eustenopus villosus* (yellow starthistle): BCW • Bio Collect • California Bioworks

*Gallerucella californiensis* (purple loosestrife defoliating weevil): BCW

*Hyles euphorbiae*  
(hawk moth for spurge weed): Praxis

*Larinus planus* (weevil for Canada thistle): BCW

*Leucoptera spartifoliella* (leafminer for Scotch broom): Bio Collect

*Longitarsus jacobaeae*  
(flea beetle for tansy ragwort): BCW • Bio Collect

*Metzneria paucipunctella* (for knapweed): BCW

*Microlarinus lareynii*  
(weevil for puncturevine): Bio Collect • Peaceful Valley

*Microlarinus lypriformis* (weevil for puncturevine): Bio Collect

*Oberea erythrocephala* (beetle for leafy spurge): BCW • Praxis

*Rhinocyllus conicus* (weevil for musk, milkthistle, Italian thistle): Bio Collect • Praxis

*Sphenoptera jugoslavica* (stem borer for knapweed): Praxis

*Spurgia esulae* (gall midge for leafy spurge): Praxis • BCW

*Urophora affinis* (gall fly for knapweed): BCW

*Urophora cardui* (gall fly for Canada thistle): BCW

*Urophora quadrifasciata* (gall fly for knapweed): BCW

*Urophora sirunaseva* (gall fly for yellow starthistle): Bio Collect

*Trichosirocalus horridus* (weevil for musk thistle): BCW • Praxis

*Tyria jacobaeae* (cinnabar moth for tansy ragwort): Bio Collect • BCW

#### **Distributes stem & seed weevils against puncture vine:**

CALTEC Agri Marketing Services • Peaceful Valley

#### **Weeder Geese (brown Chinese):**

Holderread's Waterfowl Farm & Preservation Center • Morris Farms & Hatcheries

#### **Weeding Chickens:**

Inman Hatcheries • Murray McMurray Hatchery • Stromberg's Chicks & Game Birds Unlimited

#### **Microbial Herbicides:**

*Alternaria cassiae* (for sicklepod, available sporadically): Dow Agro (Casst)

*Colletotrichum gloeosporioides* (for northern jointvetch, available sporadically): Ecogen (Collego)

*Phytophthora palmivora* (available sporadically for strangervine): Valent USA (DeVine)

*Xanthomonas campestris* (annual bluegrass): EcoSoil (XPo)

#### **Least-Toxic Chemical Controls**

Application equipment:

Forestry Suppliers (Hypo-Hatchet Tree Injectors) • AG Spray Equipment

#### **Herbicidal Soap** (postemergent):

Monterey, Harmony (QuiK Weed) • Gardens Alive (WeedAside) • Intagra, Harmony (Concern)

#### **Herbicidal Fatty Acids** (postemergent):

Dow Agro, Harmony (Scythe)

#### **Herbicidal Essential Oil** (postemergent):

EcoSmart (BioOrganic) • North Country (Burnout, limonene, vinegar)

#### **Least-Toxic Herbicide** (corn gluten meal pre-emergent):

Grain Processing • Soil Technologies • Gardens Alive (WOW) • Fertrell, Gardener's Supply, Peaceful Valley, North Country (Weedzstop) • Floyd Rogers • Hardesty (Suppressa) • Manning Agricultural • Rhodes • Safe Earth • Walts • Blue Seal • Soil Technologies • Harmony • BioScape (Bioweed)

#### **Corn Gluten hydrolysate:**

Grain Processing



# ADDRESSES OF PRODUCERS AND SUPPLIERS

## A

**3M Corp.**, 3M Center, St Paul, MN 55144; 800/364-3577, 408/663-5324, Fax 800/713-6329

**A-1 Unique Insect Control**, 5504 Sperry Dr., Citrus Heights, CA 95621; 916/961-7945, Fax 916/967-7082

**Actron Inc.**, PO Box 55655, Santa Clarita, CA 94385; 661/287-3335, Fax 661/287-3339

**AEP, Inc.**, 14000 Monte Vista Avenue, Chino, CA 91710; 909/465-9055

**Aerogen**, see The Aerogen

**AgBioChem Inc.**, 3 Fleetwood Ct., Orinda, CA 94563; 925/254-0789; 530/527-8028, Fax 530/527-6288

**AgBio Development Inc.**, 9915 Raleigh St., Westminster, CO 80030; 877/268-2020, 303/469-9221, Fax 303/469-9598

**Agdia Inc.**, 30380 County Road 6, Elkhart, IN 46514; 219/264-2014, Fax 219/264-2153

**AgraQuest**, 1530 Drew Avenue, Davis, CA 95616; 530/750-0150, Fax 530/750-0153

**AgriEvo Environmental Health**, 95 Chestnut Ridge Rd., Montvale, NJ 07645; 800/438-5837, Fax 201/307-3386

**Agricola "El Sol"**, 30 Calle 11-42, Zona 12, GUATEMALA, C.A.; tel. 760496, Fax 7604-96

**Agricola Mas Viader**, Mas Viader 7, 17244 Cassa de la Selva, Girona, SPAIN; +34(9) 72 46 04 15, Fax +34(9) 72 46 04 15

**Agricultural Supply**, 1435 Simpson Way, Escondido, CA 92029; 800/527-6699, 760/737-2442, Fax 760/741-9412

**AgriZap Inc.**, 1860 Eastman Avenue, Bldg 111, Ventura, CA 93003; 888-deadrat, 805/654-0657, Fax 805/654-1390

**Agro Distribution**, 600 Fourth Street, PO Box 7000, Sioux City, IA 51102-7000; 800/831-1002 Extn 8770

**AG Spray Equipment**, 1100 New Industry Lane, Hopkinsville, KY 42240; 800/637-7172, 502/886-0296

**Ag Tech Corporation**, 1380 N. Abby, Fresno, CA 93703; 559/266-3824, Fax 559/233-1068

**A.I. Root Co.**, PO Box 706 623 W. Liberty St., Medina, OH 44258; 330/725-6677, Fax 330/725-5624

**Air Products and Chemicals**, 4000 Nelson Ave., Concord, CA 94520; 800/224-2724, 925/687-1906, Fax 925-687-3694

**Allen Special Products Inc.**, PO Box 605, Montgomeryville, PA 18936; 800/848-6805, Fax 215/997-6654

**Allergy Control Products Inc.**, 96 Danbury Rd., Ridgefield, CT 06877; 800/422-DUST, Fax 203/431-8963

**Alsto's**, PO Box 1267, Galesburg, IL 61402; 800/447-0048, Fax 800/621-8263

**Alternative Control Technology**, 145 Mansfield Circle, Lexington, SC 29073; 800/200-1880, 803/996-1309, Fax 803/957-7031

**American Agrifabrics**, 1282 Old Alpharetta Rd., Alpharetta, GA 30005; 800/565-5151, 770/663-7600, Fax 770/663-7690

**American Biophysics**, 2240 South County Trail, East Greenwich, RI 02818; 401/884-3500, Fax 401/884-6688

**American Donkey & Mule Society**, 2901 North Elm St., Denton, TX 76201; 940/382-6845, Fax 940/484-8417

**American Entomological Institute**, 3005 SW 56th

Ave., Gainesville, FL 32608-5047; 352/377-6458, Fax 352/377-6458

**American Insectaries**, 30805 Rodriguez Rd., Escondido, CA 92026; 760/751-1436, Fax 760/489-0353

**American Rose Society**, 8777 Jefferson Paige Road, Shreveport, LA 71119-8817; 318/938-5402, Fax 318/760-5405

**American Semiochemical Association**, 1620 I St. NW, Ste. 925, Washington, DC 20006; 202/293-5800, Fax 202/463-8998

**American Southdown Breeders' Assoc.**, HCR 13, Box 220, Freedonia, TX 76842; 915/429-6226

**American Sport Fish Hatchery**, PO Drawer 20050, Montgomery, AL 36120; 334/281-7703, Fax 334/288-6376

**A.M. Leonard, Inc.**, 241 Fox Dr., PO Box 816, Piqua, OH 45356; 800/543-8955, Fax 800/433-0633

**Amoco Fabrics & Fibers**, PO Box 66, Greenville, SC 29602; 800/925-0664, 770/956-9025, Fax 803/297-3088

**Amos Rubin (Int.)**, 14, Rahavat Ilan, Givat Shmuel 54056, ISRAEL; 972-3-5351798, Fax 972-3-5341019

**Andermatt Biocontrol**, Unterdorf, 6146 Grossdietwil, SWITZERLAND; +41 62 917 5000, Fax +41 62 917 5001

**Animal Repellents Inc.**, PO Box 510, Orchard Hill, GA 30266; 800/241-5064, Fax 770/227-9190

**Apex Medical**, PO Box 1235, Sioux Falls, SD 57101; 800/328-2935, Fax 605/332-6818

**Appalachian Log Structures**, PO Box 614, Ripley, WV 25271; 800/458-9990, 304/372-6410

**Applesed Wool Co.**, 55 Bell St., PO Box 101, Plymouth, OH 44865; 800/881-9665, 419/687-9665, Fax 419/687-8272

**Applied Biochemists**, W175 N11163 Stonewood Drive #234, Germantown, WI 53022; 800/558-5106, 262/255-4449, Fax 262/255-4268

**Applied Bionomics Ltd.**, 11074 W. Saanich Rd., Sidney, BC, CANADA V8L 5P5; 250/656-2123, Fax 250/656-3844

**Applied Bio Pest**, 3310 Net Place, Oxnard, CA 93035; 805/984-9224, Fax 805/984-1517

**Aqua Heat**, 8030 Main St. NE, Minneapolis, MN 55432; 800/328-2418, 612/780-4116, Fax 612/780-4316

**ARBICO**, PO Box 8910, Tucson, AZ 85738; 800/827-2847, 520/825-9785, Fax 520/825-2038

**Arcoa Industries**, 130 Bosstik Blvd, San Marcos, CA 92069; 800/748-5529, 760/599-6915, Fax 760/599-6986

**Arnold Brothers**, PO Box 450, Fairacres, NM 88033; 505/526-6165, Fax 505/526-8061

**Arundale Products**, PO Box 4637, St. Louis, MO 63108; 800/866-2473, 314/645-1220

**A Safe Pest Eliminators**, 11338 SW 158th Place, Miami, FL 33196; 305/447-7152

**AS Skadedycentralen**, Glentevej 11, 6705 Esbjerg, DENMARK; 75 14 28 00

**Association of Natural Biocontrol Producers (ANBP)**, 10202 Cowan Heights Drive, Santa Ana, CA 92705; 714/544-8293, Fax 714/544-8293

**Automata Inc.**, 104 New Mohawk Road, Suite A, Nevada City, CA 95959-3261; 800/994-0380, 530/478-5882, Fax 530/478-5881

**Aventis**, www.termidorhome.com

**Avian Flyaway**, 2231 Ridge Road, Suite 101, Rockwall, TX 75087; 800/888-0165, 972/771-

6679, Fax 972/722-0165

**Azienda Agraria Giardina**, S.P. 104, Contrada Carrozzeri Milocca, 90600 Siracusa, ITALY; 0931-721444

## B

**Baley's**, 1206 N. 31st Ave., Melrose Park, IL 60160; 708/681-0900, Fax 708/544-3204

**Ball Seed Co.**, 622 Town Rd., West Chicago, IL 60185; 630/231-3500, Fax 630/231-3605

**Bat Conservation International**, PO Box 162603, Austin, TX 78716-2603; 800/538-BATS, 512/327-9721, Fax 512/327-9724

**Bayer Agricultural Products**, PO Box 4913, 8400 Hawthorne Rd., Kansas City, MO 64120; 816/242-2000, Fax 816/242-2659

**Bayer Animal Health**, 12707 Shawnee Mission Parkway, Shawnee, KS 66216; 913/631-4800

**BBA Non-Wovens**, 70 Old Hickory Blvd., PO Box 511, Old Hickory, TN 37138-3651; 800/321-6271, 615/847-7000, Fax 615/847-7068

**BBC Labs**, 1217 North Stadem Drive, Tempe, AZ 85281; 480/967-5931, Fax 480/967-5036

**BCS America Inc.**, PO Box 18000, Portland, OR 97218; 800/543-1040, 503/252-8360, Fax 503/252-1249

**BCW**, see Biological Control of Weeds

**Beacon Dogs Inc.**, 1409 Bay Head Rd., Annapolis, MD 21401; 410/757-4999

**Beaver Plastics Ltd.**, 12150 160 St., Edmonton, AB, CANADA T5V 1H5; 403/453-5961, Fax 403/453-3955

**Becker Underwood**, 801 Dayton Ave. PO Box 667, Ames, IA 50010; 800/232-5907, Fax 515/232-5961

**Bee Tee Equipment Sales**, 21075 Alexander Ct. Unit H, Hayward, CA 94545; 510/887-8301

**Bell Laboratories Inc.**, 3699 Kinsman Blvd., Madison, WI 53704; 608/241-0202, Fax 608/241-9631

**Ben Meadows Co.**, PO Box 5277, Jamesville, WI 53547; 800/241-6401, Fax 800/628-2068

**Beneficial Insectary**, 9664 Tanqueray Ct., Redding, CA 96003; 800/477-3715, 530/226-6300, Fax 530/226-6310

**Best Sulfur Products (BSP)**, 5427 East Central Avenue, Fresno, CA 93725; 559/485-0114, Fax 559/264-1715

**Better Flora**, 603 N. Kimball, Excelsior Springs, MO 64024; 816/630-3399, Fax 816/630-2399

**B & G Equipment Company**, PO Box 130, Plumsteadville, PA 18949-0130; 800/544-8811, 215/766-8811, Fax 215/766-8240

**Binab Bio-Innovation AB**, Bredholmen, SE-545 92 Algaras, SWEDEN; 46-505-10093, Fax 46-505-10054

**Bio Ag Services**, 4218 W. Muscat, Fresno, CA 93706; 559/268-2835, Fax 559/268-7945

**BioBase Technologies, Inc.**, RD 1 Box 715, Landisburg, PA 17040; 717/789-3434

**Bio-Bee Sde Eliyahu-BCI**, Kibbutz Sde Eliyahu, D.N. Beit Shean 10810, ISRAEL; +972-6-6580905, Fax +972-6-6580908

**Biobest Canada**, 2020 Mersea Rd. #3, RR4, Township of Mersea, Leamington, Ontario CANADA N8H 3V7; 519 232-2178, Fax 519 /322-1271

**Biobest N.V.**, Ilse Velden, 18, 2260 Westerlo, BELGIUM; 32-14-257980, Fax 32-14-257982

**BioCare Specialty Products**, 75 Executive Avenue; Suite 9, Rohnert Park, CA 94928; 800/799-2273,

- Fax 707/586-2759
- Bio Collect**, 5481 Crittenden St., Oakland, CA 94601; 510/436-8052, Fax 510/532-0288
- BioComp, Inc.**, 2116-B BioComp Dr., Edenton, NC 27932; 800/624-4769, Fax 252/482-3491
- Biocontrol Ltd.**, PO Box 515, Warwick, Queensland, AUSTRALIA 4370; 076/614488
- Biofac Crop Care, Inc.**, PO Box 87, Mathis, TX 78368; 800/233-4914, 361/547-3259, Fax 361/547-9660
- Bio-Integral Resource Center**, PO Box 7414, Berkeley, CA 94707; 510/524-2567, Fax 510/524-1758, birc@igc.org, www.birc.org
- BioLogic**, PO Box 177, Willow Hill, PA 17271; 717/349-2789, Fax 801/912-7137
- Biological Control Insectaries**, Kibbutz Sde Eliyahu, D.N. Bet-Shean, ISRAEL 10810; 972-6-580903-5, Fax 972-6-580908
- Biological Control of Weeds Inc. (BCW)**, 1418 Maple Dr., Bozeman, MT 59715; 800/334-9363, 406/586-5111, Fax 406/586-1679
- Biological Crop Protection, Ltd.**, Occupation Rd., Wye, Nr. Ashford Kent TN25 5EN, UNITED KINGDOM; +44(0)1233 81 3240, Fax +44(0)1233 81 3383
- BioNET-International**, Bakeham Lane, Egham, Surrey TW20 9TY, UNITED KINGDOM; 01784-470111, Fax 01491 829100
- BioOrganics Inc.**, 53606 Bridge Drive, La Pine, OR 97739; 888/332-7676, Fax 541/536-1583
- BioPlanet**, Via Masiera I, MSS, 47023 Cesena (FC), ITALY; 0547-632212, Fax 0547-632266
- Bio Pre**, Geerweg 65, 2461 TT Langeraar, THE NETHERLANDS; 31-172-539333, Fax 31-172-537859
- BioQuip Products**, 17803 La Salle Ave., Gardena, CA 90248-3602; 310/324-0620, Fax 310/324-7931
- Biosafe**, 80 Commerce St, Glastonbury, CT 06033; 888/273-3088, 860/657-2211
- Bioscape**, 4381 Bodega Avenue, Petaluma, CA 94952; 877/246-7227, 707/781-9233, Fax 707/781-9234
- Bioscientific, Inc.**, 4405 S. Litchfield Rd., Avondale, AZ 85323; 800/872-2461, 623/932-4588, Fax 623/925-0506
- Biosensory Inc.**, Windham Mills Technology Center; 322 Main St; Bldg 1, Willimantic, CT 06226; 860/423-3009, Fax 860/423-3028
- Biotactics, Inc.**, 20780 Warren Road, Perris, CA 92570; 909/943-2819, Fax 909/943-8080
- Biotechnik (Int.)**, Winnekendonck Str. 43, (Potthaus) D 4178 Kevelaer 2, GERMANY; 01149-2825/6571, Fax 01149-2825/1776
- Biowise**, Hoyle Depot, Graffham, Petworth, West Sussex, GU28 0LR, UNITED KINGDOM; 01798-867574, Fax 01798-867574
- BioWorks Inc.**, 122 N. Genesee St., Geneva, NY 14456; 800/877-9443, 315/781-1703, Fax 315/781-1793
- Birdbarrier America**, 300 Calvert Ave., Alexandria, VA 22301; 800/662-4737, 703/299-8855, Fax 703/299-0844
- Birdbarrier America (main office)**, 20925 Chico St., Carson, CA 90746; 800/503-5444, 310/527-8000, Fax 310/527-8005
- Bird-X Inc.**, 300 N. Elizabeth, Chicago, IL 60607; 800/662-5021, 312/226-2473, Fax 312/226-2480
- Birkett Mills**, PO Box 440, Penn Yan, NY 14527; 315/536-3311, Fax 315/536-6740
- Blue Diamond Manufacturing Co.**, 1001 Old Hwy 11W, Mooresburg, TN 37811; 800/237-5705, 423/921-9994, Fax 423/921-9488
- Blue Seal Feeds**, PO Box 8000, Londonderry, NH 03053; 800/367-2730, 603/437-3400, Fax 603/437-3403
- Boerick and Tafel**, 2381 Circadian Way, Santa Rosa, CA 95407; 800/876-9505, 707/571-8202
- Bonide Products**, 6301 Sutcliffe Rd., Oriskany, NY 13424; 315/736-8231, Fax 315/736-7582
- Borregaard Bioplant**, Helsing Forsgade 27B, DK-8200 Aarhus N, DENMARK; +45/86 78 69 88, Fax + 45/86 78 69 22
- Bowen Biosystems**, 5313 E. Hannibal Street, Mesa, AZ 85205; 800/900-0246, 209/384-2130, Fax 916/237-4545
- Bramton Co.**, PO Box 655450, Dallas, TX 75265; 800/272-6336, Fax 972/438-0959
- Budai Cs**, PO Box 99, 6801, Hodmesvasarhely, HUNGARY; 46-611
- Buena Biosystems**, PO Box 4008, Ventura, CA 93007; 805/525-2525, Fax 805/525-6058
- Bugs for Bugs (Int.)**, 28 Bowen St., Mundubbera 4626, AUSTRALIA; 61-7-4165-4663, Fax 61-7-4165-4626
- Bug Factory**, see The Bug Factory
- Bug Store**, see The Bug Store
- Bush Hog**, PO Box 1039, Selma, AL 36702-1039; 334/872-6261, Fax 334/872-0168
- Bushwhacker**, see The Bushwhacker
- B&W Sales**, 800/843-6334, Fax 770/985-8273
- BWS Distributors Inc.**, 1847 Piner Rd., Santa Rosa, CA 95403; 800/862-4685, Fax 707/546-4804
- C**
- CABI BioScience (Entomology, Biological Control, Mycology, Parasitology) UK Centre**, Silwood Park, Ascot, Berkshire SL5 7TA, UNITED KINGDOM; +44 (0)(1344) 872999, Fax +44 (0)(1491) 829123
- Cabot Corp.**, 700 E. US Highway 36, Tuscola, IL 61953-9643; 800/222-6745, 217/253-3370
- California BioWorks**, 33016 Road 204, Woodlake, CA 93286; 559/564-2620, 559/564-8182, Fax 559/564-0708
- California Native Plant Society**, 1722 J Street, Suite 17, Sacramento, CA 95814; 916/447-2677
- Calmax**, 8800 Cal Center Drive MS #23, Sacramento, CA 95826-3268; 916/255-2369, Fax 916/255-4580
- CALTEC Agri Marketing Services**, PO Box 576155, Modesto, CA 95357; 800/491-BUGS, 209/575-1295, Fax 209/575-0366
- Carter-Wallace, Inc.**, 1345 Avenue of the Americas, New York, NY 10105; 212/339-5000, 212/489-2200
- Care Technologies**, 10 Corbin Drive, PO Box 82, Darien, CT 06820-0582; 203/655-9680, Fax 203/655-9682
- Cat Claw Inc.**, PO Box 5250, Johnstown, PA 15904; 800/832-2473, Fax 814/269-3800
- Celite Corp.**, 137 W. Central Avenue, Lompoc, CA 93434; 800/527-7315, 805/735-7791
- Central Coast Insectary**, 391 Hames Rd., Watsonville, CA 95076-0234; 831/726-1853, Fax 831/726-3090
- Certis**, 9145 Guilford Rd. Suite 175, Columbia, MD 21046; 800/847-5620, Fax 301/604-7015
- Charley's Greenhouse Supply**, 17979 State Route 536, Mt. Vernon, WA 98273; 800/322-4707, 360/428-2626, Fax 800/233-3078
- Chemical-Free Lawn**, 260 Pottersville Rd., Chester, NJ 07930; 908/879-2269
- C. H. Musgrove**, 2901 Everwood Dr., Riverside, CA 92503; 909/785-1680
- CIE La Croix**, Rue du Pont, 21 Plougastel-, Daoulas, FRANCE 29213; 98-403030, Fax 98-042437
- Clarke Mosquito Control Products, Inc.**, PO Box 72197, Roselle, IL 60172; 800/323-5727, 630/894-2000, Fax 630/894-1774
- Cleary Chemical**, 178 Ridge Road, Dayton, NJ 08810-1501; 800/524-1662, 732/329-8399
- Clorox Company**, 3030 LBJ Freeway, Ste. 1220, LB38, Dallas, TX 75234; 800/426-6228, 214/484-6326, Fax 214/406-0496
- Coast-to-Coast Log Homes**, 7015 Palmer Rd., Millersport, OH 43046; 800/360-9777
- Cochranes of Oxford Ltd.**, Leafield Witney, Oxfordshire, UNITED KINGDOM, OX29 9NY; +44 1993 878641, Fax +44 1993 878416
- CO. DEA**, CREAT del Chambre d'Agriculture, Quartier la Baronne, La Gaude, FRANCE 06610
- Cognis Corp.**, 5051 Estecreek Drive, Cincinnati, OH 45232; 800/543-7370, Fax 513/482-5515
- Combined Scientific Supplies**, PO Box 1446, Fort Davis, TX 79734; 915/426-3851
- Conrad Appel**, Bismarckstr. 5g, 6100 Darmstadt, GERMANY; 06151-852200
- Consulting Diagnostic Service**, 992 Santa Barbara Rd., Berkeley, CA 94707; 510/524-9476
- Cooperative Extension Service (local offices)**
- Copper Brite Inc.**, PO Box 50610, Santa Barbara, CA 93150-0610; 805/565-1566, Fax 805/565-1394
- Cornflower Farms**, PO Box 896, Elk Grove, CA 95759; 916/689-1015, Fax 916/689-1968
- Critter Control**, 9435 Cherry Bend Rd., Traverse City, MI 49684; 800/451-6544, 231/947-2400, Fax 231/947-9440
- Custom Copper/Snail-Barr**, PO Box 4939, Ventura, CA 93004; 805/647-1652; 805/647-3271
- D**
- Dadant & Sons**, 51 S. 2nd St., Hamilton, IL 62341-1399; 800/637-7468, 217/847-3324, Fax 217/847-3660
- Darby Group, Inc.**, 865 Merrick Ave., Westbury, NY 11590; 800/645-3696
- D-Con, Inc.**, 225 Summit Avenue, Montvale, NJ 07645
- De Groene Vlieg**, Duivenwaardsedijk 1, 3244 LG Nieuwe Tonge, THE NETHERLANDS; 0187-651862, Fax 0187-652445
- Degussa Corp.**, 379 Interpace Parkway, PO Box 677, Parsippany, NY 07054-0677; 800/237-6745
- Delmhurst Instrument Co.**, 51 Indian Ln. E., Towaco, NJ 07082; 800/222-0638, 973/334-2557, Fax 973/334-2657
- Del Pharmaceuticals, Inc.**, 178 EAB Plaza West Tower, Union Dale, NY 11156; 516/844-2020, Fax 516/293-1515
- Dey Laboratories**, Napa, CA; 800/869-9005
- Dow AgroSciences**, 9330 Zionsville Road, Indianapolis, IN 46268-1054; 800/255-3726; 800/745-7476, 800/258-3033, Fax 800/905-7326
- Drs. Foster and Smith, Inc.**, 2253 Air Park Rd., PO Box 100, Rhinelander, WI 54501; 800/826-7206
- Dryacide Australia Pty Ltd.**, 1/20 Ryeland St., Maddington 6109, Western AUSTRALIA
- Dryacide USA**, 3536 Emerson St., San Diego, CA 92106; 619/222-1680, Fax 619/523-1713
- Duclos Agro-Biotech S.A.**, B.P. 3, 13240 Septemes les, Vallons, FRANCE; 91-963000, Fax 91-962527
- Dunhill Chemical**, 642 South Duggan, Azusa, CA 91702; 626/815-1663, Fax 626/815-1687
- D-VAC Company**, PO Box 2506, Ventura, CA 93002; 805/643-5407, Fax 805/643-6267
- E**
- Eagle Picher Minerals, Inc.**, 6110 Plumas St., Reno, NV 89509; 800/366-7607, Fax 702/824-7694
- Earthgro/Scotts**, PO Box 143, Rte 207, Lebanon, CT 06249; 800/874-7336, 860/642-7591
- Earth Tea Brewer**, PO Box 1295, Cottage Grove, OR 888/600-9558; 541/343-8727, Fax 541/343-8374
- East Arkansas Fish Distributors**, PO Box 361, Hazen, AR 72064; 870/255-3455
- Easy Gardener**, PO Box 21025, Waco, TX 76702-1025; 800/327-9462, 254/753-5353, Fax 254/753-5372





- Gross and James, Inc.**, PO Box 26113, Fenton, MO 63026; 314/343-8484
- Growing Solutions**, 160 Madison St., Eugene, OR; 888/600-9558, 541/33-8727, Fax 541/343-8374
- Gulf Coast Biological Controls**, 72 West Oak, Huntsville, TX 77340; 800/524-1958, 409/291-2302, Fax 409/291-0511
- Gustafson, Inc.**, 1400 Preston Rd. Suite 400, Plano, TX 75093; 800/248-6907, 972/985-8877, Fax 972/985-1696
- H**
- Hansen's Pet Systems**, PO Box 793, Huntington Beach, CA 92648; 800/HPS-5735, 714/846-7375, Fax 714/960-7879
- Happy Jack Co.**, PO Box 475, Hwy. 258 South, Snow Hill, NC 28580; 800/326-jack, 252/747-2911, Fax 252/747-4111
- Harantonis**, 58500 Skydra, Pellis, GREECE; +30 38183110, Fax +30 38183111
- Hardesty Organic Supply**, PO Box 751, Cottonwood, CA 96022-0751, Fax 650/325-5959
- Harmony Farm Supply**, 3244 Gravenstein Hwy, No. B, Sebastopol, CA 95472; 707/823-9125, Fax 707/823-1734
- Hawkesbury Integrated Pest Management**, PO Box 436, Richmond, NSW 2753, AUSTRALIA; 02 4570 1331, Fax 02 4570 1331
- Health Enterprises Inc.**, 90 George Levin Dr., N. Attleboro, MA 02760; 800/633-4243, Fax 508/695-3061
- Hedley Technologies Inc**, 5160 Explorer Drive, Suite 20, Mississauga, ON, CANADA L4W 4T7; 888/476-4473, 905/206-0013, Fax 905/206-1413
- Heirloom Roses**, 24062 Riverside Dr. NE, St. Paul, OR 97137, Fax 503/538-5902
- Heitman Labs**, 6829 K Ave. Suite 112, Plano, TX 75074; 800/451-6539, 972/509-2400, Fax 972/509-2401
- Henley Chemical**, 199 Courtland Avenue, Concord, Ontario, Canada L4K 4T2; 416/661-1500
- Hercon Environmental Products**, PO Box 435, Aberdeen Rd., Emigsville, PA 17318; 717/764-1192, Fax 717/767-1016
- Heritage Rosarium**, 211 Haviland Mill Rd., Brookville, MD 20833; 301/774-2806
- Heritage Rose Gardens**, 16831 Mitchell Creek Dr., Fort Bragg, CA 95437
- Hess & Clark, Inc.**, 7th and Orange Streets, Ashland, OH 44805; 800/992-3594, 800/356-7202
- Hockney Underwater Weed Cutter Co.**, PO Box 1000 / 913 Cogswell Dr., Silver Lake, WI 53170; 262/889-4581
- Hogil Pharmaceutical**, Two Manhattanville Road, Purchase, NY 10577-2118; 914/696-7600, Fax 914/696-4600
- Holderread's Waterfowl Farm & Preservation Center**, PO Box 492, Corvallis, OR 97339; 541/929-5338
- Hollister-Stier Labs**, PO Box 3145, Spokane, WA 99220-3145; 800/992-1120, Fax 509/484-4320
- Homax Products**, 840 West Horton Road, Bellingham, WA 98226-7621; 800/729-9029, 360/733-9029, Fax 360/647-1071
- Hortico Inc.**, RR 1, 723 Robson Rd., Waterdown, ON, CANADA L0R 2H1; 905/689-6984, Fax 905/689-3002
- Hot Foot America**, PO Box 1339, Sausalito, CA 94966; 800/533-8421, 415/789-5135, Fax 415/789-0564
- Hydro-Gardens, Inc.**, PO Box 25845, Colorado Springs, CO 80936; 800/634-6362, 719/495-2266, Fax 719/495-2266
- I**
- Idexx Inc.**, Idexx Drive, Westbrook, ME 04092; 800/321-0207, 408/745-0544, Fax 408/745-0243
- Igene (PMG) Biotechnology**, 9110 Red Branch Rd., Columbia, MD 21045; 337/623-4294
- Industrial Narcotic Discovery Systems, Inc.**, PO Box 130, Kenner, LA 70063; 504/466-9964
- Inman Hatcheries**, PO Box 616, Aberdeen, SD 57402-0616; 800/843-1962, 605/225-8122, Fax 605/225-4836
- Innovative Pest Products**, PO Box 880216, Boca Raton, FL 33488; 561/483-4997, Fax 561/488-0443
- Insects Limited**, 16950 Westfield Park Drive, Westfield, IN 46074-9374; 317/846-5444, Fax 317/846-9799
- Intagra/Necessary Organics**, 8906 Wentworth Ave S., Minneapolis, MN 55420; 800/468-2472, 952/881-5535, Fax 952/881-7002
- Integrated Biocontrol Systems**, PO Box 96, Aurora, IN 47001; 812/537-8674, Fax 812/537-8644
- International Technology Services**, PO Box 75, Lafayette, CO 80026; 303/661-9546, Fax 303/661-9543
- InterNet Inc.**, 7300 49th Ave. N., Minneapolis, MN 55428; 800/328-8456, Fax 612/971-0872
- Intvitrogen**, 1600 Farraday Avenue, Carlsbad, CA 92008; 800/828-6686; 800/955-6288
- IPM Laboratories Inc.**, PO Box 300, Locke, NY 13092-0300; 315/497-2063, Fax 315/497-3129
- Ivar Labs**, 625 Marina Vista Avenue, Martinez, CA 94553; 925/372-6966, Fax 925/372-6966
- J**
- Jack and the Beanstalk**, Kou 2779-71 Moriya, Moriya-Machi Kitsoma-Gun, Ibaragi 302-01, JAPAN; 0297-45-2838, Fax 0297-45-2838
- Jackson and Perkins**, PO Box 1028, Medford, OR 97501
- Jade Mountain**, PO Box 4616, Boulder, CO 80306; 800/442-1972, 303/449-6601
- JH Biotech Inc.**, 4951 Olivias Park Dr., Ventura, CA 93003; 805/650-8933, Fax 805/650-8942
- Jim Simmons**, 952 Main St., Nashville, TN 37206; 615/228-4931, Fax 615/226-4996
- J.L. Hudson**, Star Route 2, Box 337, La Honda, CA 94020
- J.M. Malone & Son Enterprises**, PO Box 158, Lonoke, AR 72086; 501/676-2800, Fax 501/676-2910
- JMS Flower Farms**, 1105 25th Avenue, Vero Beach, FL 32960; 561/567-9241, Fax 561/567-9394
- Johnny's Selected Seeds**, 184 Foss Hill Rd., Albion, ME 04910; 207/437-4301, Fax 800/738-6314; 207/437-2165
- J. Reilly**, 5000 Trenton St., Metairie, LA 70006; 504/887-3666
- JT Eaton & Company, Inc.**, 1393 E. Highland Rd., Twinsburg, OH 44087; 800/321-3421, 216/425-7801, Fax 216/425-8353
- K**
- Kemira Oy/Kemira Biotech**, Porkkalankatu 3, PO Box 330, 00101 Helsinki, FINLAND; 011-358-10-8611511, Fax 011-358-10-862-1384
- Kencco Manufacturing**, 1105 3rd St. NE, Ruskin, FL 33570; 813/645-2591
- Keo Fish Farms, Inc.**, PO Box 166, Keo, AR 72083; 501/842-2872, Fax 501/842-2156
- Kinzua Environmental Inc.**, 1176 E. 38th St, Cleveland, OH 44114; 800/233-5079, 216/881-4040, Fax 216/881-8968
- Koppert B.V.**, Veilingweg 17 PO Box 155, 2650 AD Berkel en, Rodenrijs, THE NETHERLANDS; 010-514 04 44, Fax 010-511 52 03
- Koppert United Kingdom**, Homefield Road, Haverhill, Suffolk CB9 8QP, United Kingdom; 44 1440704488, Fax 44 1440704487
- Koppert USA**, 28465 Beverley Rd., Romulus, MI 48174; 734/641-3763, Fax 734/641-3793
- Kuida Ag Supply Co.**, PO Box 2598, Salinas, CA 93902; 831/758-9914, Fax 831/758-9933
- Kunafin Trichogramma Insectaries**, Rte. 1 Box 39, Quemado, TX 78877; 800/832-1113, 830/757-1181, Fax 830/757-1468
- KWS**, Postfach 146, 37555 Einbeck, GERMANY; 05561-311531, Fax 05561-311544
- L**
- Lab Safety Supply**, PO Box 1368, Janesville, WI 53547-1368; 800/356-0783, 800/356-2501, Fax 800/543-9910
- Ladd Research Industries Inc.**, 83 Holly Court, Williston, VT 05495; 800/451-3406, 802/658-4951, Fax 802/660-8859
- Ladybug Company**, see The Ladybug Company
- Ladybug Farms**, PO Box 186, North Highlands, CA 95660; 916/348-1917, Fax 916/339-1927
- Lane Inc**, 1601 13th Ave, Charles City, IA 50616; 800/457-5013
- Lipha Tech**, 3600 W. Elm St., Milwaukee, WI 53209; 800/558-1003, 414/351-1476, Fax 414/351-1847
- Live Oak Structural**, 801 Camelia St., Suite B, Berkeley, CA 94710; 510/524-7101
- Lofts Seed Co.**, 9327 US Route 1, Suite J, Laurel, MD 27114; 800/732-3332
- Lohse Mill**, 7752 County Rd. 29, Glenn, CA 95943; 530/934-2157, Fax 530/934-9106
- Lok-n-Logs**, PO Box 677, Route 12 South, Sherburne, NY 13460; 800/343-8928
- Looker, Inc.**, PO Box 29, Milford, IL 60953; 815/889-5555, Fax 815/889-5550
- Louisiana Pacific (suppressive mix)**, 111 SW 5th Ave., Portland, OR 97204; 800/648-6893
- Louisiana Pacific (treated lumber)**, 10115 Kincey Ave. Suite 150, Huntersville, NC 28078; 800/580-4296, 704/875-2131, Fax 704/875-1680
- Loveland Industries**, PO Box 1289, Greeley, CO 80632; 800/356-8920
- Lowe's Own**, 6 Sheffield Road, Nashua, NH 03262
- M**
- Makhteshim-Agan**, PO Box 60 Industrial, 84100 Beer-Sheva, ISRAEL; 212/661-9800; 972-7296611, Fax 972-7-280304/364
- Manning Agricultural Center**, 619 Julia St., Manning, IA 51455; 800/248-4409, Fax 712/655-2981
- Margo Horticultural Supplies, Ltd.**, PO Box 5400, High River, Alberta, CANADA T1V 1M5; 403/652-1932, Fax 403/652-3511
- Market VI**, 6613 Haskins, Shawnee, KS 66216; 913/268-7504, Fax 913/268-2694
- Martin Grima**, Ghajn Astas, St. Paul's Bay, MALTA SPB 07; +356 574474, Fax +356 583087
- Martinson-Nicholls Inc.**, 4910 E 345th St., Willoughby, OH 44094; 800/876-1312, 440/951-1312, Fax 440/951-1315
- Masune**, 500 Fillmore Avenue, Tonawanda, NY 14150; 716/695-4999, Fax 800/222-1934
- McCluney Manufacturing Inc.**, 28 Morehouse Dr., La Selva Beach, CA 95076; 831/689-9502
- Mellinger's**, 2310 W. South Range Rd., North Lima, OH 44452; 800/321-7444, 330/549-9861, Fax 330/549-3716
- Merial (Aventis)**, Duluth, GA 08830; 888/merial-1, 732/855-3800, Fax 732/855-9366
- Micro Brewer**, 182 Capital Lane, Roseburg, OR 97470; www.mircobrewer.com
- Microcide Ltd.**, Shepherds Grove, Stanton, Bury St. Edmunds, Suffolk, UK IP31 2AR; 01359 251077, Fax 01359 251545
- MicroFlo Co.**, PO Box 772099, Memphis, TN 38117; 800/451-8461; 800/642-7635 in CA, 901/432-5000, Fax 901/432-5100
- Mikro-tek Labs**, PO Box 2120, Timmons, Ontario, CANADA P4N 7X8; 705/268-3536, Fax

705/268-7411  
**Miller Bee Supply**, 1156 N. Carolina Hwy 16, Miller's Creek, NC 28651; 336/667-7513, Fax 910/921-2681  
**Miller Chemical & Fertilizer Corp.**, PO Box 333, Hanover, PA 17331; 800/233-2040, 717/632-8921; 717/632-4581  
**Mipco Ag Plastics**, PO Box 3156, San Luis Obispo, CA 93403; 805/549-9540, Fax 805/549-0384  
**Mole-Med**, 515 Main Street, Lawrenceburg, IN 47025; 800/255-2527, 812/537-4464, Fax 812/537-9750  
**Monterey Lawn & Garden Products Inc.**, 3654 S Willow Avenue, PO Box 35000, Fresno, CA 93745; 559/499-2100, Fax 559/499-1015  
**Morris Farms & Hatcheries, Inc.**, 18370 SW 232nd St., Goulds, FL 33170; 305/248-5589  
**M & R Durango Inc.**, PO Box 886, Bayfield, CO 81122; 800/526-4075, 970/259-3521, Fax 970/259-3857  
**Murray McMurray Hatchery**, 191 Close Drive, Webster City, IA 50595-0458; 800/456-3280, 515/832-3280, Fax 515/832-2213  
**Mycorrhizal Applications Inc.**, PO Box 1181, Grants Pass, OR 97528; 541/476-3985, Fax 541/476-1581

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**Nabat Agricultural**, PO Box 926160, Amman 11110, JORDAN; +962 5815813, Fax +962 6815813  
**National Netting Inc.**, 202 Tree Trail Parkway, Norcross, GA 30093; 800/233-7896, 770/925-8811, Fax 770/925-3420  
**National Pediculosis Association**, PO Box 610189, Newton, MA 02161-0189; 800/446-4672; 888/542-3634, 781/449-6487, Fax 781/449-8129  
**Natural Animal Health Products**, 7000 US 1 North, St. Augustine, FL 32095; 800/274-7387, 904/824-5884, Fax 904/824-5100  
**Natural Colored Wool Growers' Assoc.**, 3012 Sutton Rd., Lapeer, MI 48446; 810/797-4155, Fax 810/797-4155  
**Natural Enemy Rearing Center**, Guangdong Academy of Agricultural Sciences, Guangzhou, Wushan, P.R. China 510640; 86 020 87597447, Fax 86 020 85268070  
**Natural Fertilizer (Sustane)**, 310 Holiday Avenue, PO Box 19, Cannon Falls, MN 55009; 800/352-9245, 507/263-3003, Fax 507/263-3029  
**Natural Gardening**, see The Natural Gardening  
**Natural Insect Control**, RR#2, Stevensville, ON, CANADA LOS 1S0; 905/382-2904, Fax 905/382-4418  
**Natural Insecto Products, Inc.**, PO Box 12138, Costa Mesa, CA 92627; 800/332-2002, 949/548-4275, Fax 949/548-4576  
**Natural Pest Control Ltd.**, Yapton Road, Barnham, Bognor Regis, West Sussex, UNITED KINGDOM PO22 0BQ; Yapton (0243) 553250, Fax 0243 552879  
**Natural Pest Controls**, 8864 Little Creek Dr., Orangevale, CA 95662; 800/873-1252, 916/726-0855, Fax 916/726-0855  
**Natural Plant Protection**, Route d'Artix B.P. 80, 6450 Noguères, FRANCE; 33-59-84-10-45, Fax 33-59-84-89-55  
**Nature House Inc.**, Purple Martin Junction, Griggsville, IL 62340; 800/255-2692, 217/833-2393, Fax 217/833-2123  
**Nature's Control**, PO Box 35, Medford, OR 97501; 800/698-6250, 541/245-6033, Fax 541/899-9121  
**Necessary Organics (wholesale only)** see **Intagra for distribution**, PO Box 305, New Castle, VA 24127; 800/447-5354, 952/881-5535, Fax 952/881-7002  
**Nematec**, PO Box 3324, San Ramon, CA 94583; 925/735-8800

**Neogen Corp.**, 620 Leshar Place, Lansing, MI 48912; 800/234-5333, 517/372-9200, Fax 517/372-0108  
**New BioProducts Inc.**, 2166 NW Fritz Place, Corvallis, OR 97330; 541/752-2045, Fax 541/754-3968  
**New Era Farm Service**, 23004 Rd. 140, Tulare, CA 93274; 559/686-3833, Fax 559/686-1453  
**New Tribe**, 5517 Riverbanks Rd., Grants Pass, OR 97527; 541/476-9492, Fax 541/476-5804  
**Nichols Garden Nursery**, 1190 Old Salem Rd. NE, Albany, OR 97321-4580; 541/928-9280, Fax 541/967-8406  
**Nichols Net & Twine Co.**, 2200 Hwy 111, Granite City, IL 62040; 800/878-6387, 618/797-0211, Fax 618/797-0212  
**NISUS Corp.**, 215 Dunavant Dr., Rockford, TN 37853; 800/264-0870, 423/577-6119, Fax 423/577-5825

**Nitron Industries Inc.**, PO Box 1447, Fayetteville, AR 72702; 800/835-0123, 501/587-1777, Fax 501/587-0177  
**Nixalite of America**, PO Box 727, E. Moline, IL 61244; 800/624-1189, 309/755-8771, Fax 309/755-0077  
**North Bradford Enterprises**, 1204 Main Rd. Box 364, Bradford, ME 04410; 207/327-1237  
**North Country Organics**, PO Box 372, Bradford, VT 05033; 802/222-4277, Fax 802/222-9661  
**Northeast Organics**, Box 7, Beaver Dam Road, Manchester-by-the-Sea, MA 01944; 800/924-7347, 978/526-7888, Fax 978/526-9818  
**NPIRS User Services**, CERIS, 1231 Cumberland Ave., Ste. A, W. Lafayette, IN 47906-1317; 765/494-6614, Fax 765/494-9727

**O**

**Oakfield Apparatus Inc.**, PO Box 65, Oakfield, WI

## Box C. Koppert Distributors

**Agrofrasas S.A.**, Chalet El Pozuelo, Ctra. Rábida - Moguer, Apartado de Correos 71, E-21800 Moguer (Huelva), SPAIN; +34959372443, Fax +34959371300  
**Autrosaat A.G.**, Postfach 40, A-1232 Wien, AUSTRIA; 43 18167023, Fax 43 16163965  
**BayWa A.G.**, Postfach 328, D-97318 Kitzingen, GERMANY; +49 9321700749, Fax +49 9321700745  
**Bio-Bee Sde Eliyahu-BCI**, Kibbutz Sde Eliyahu, D.N. Beit Shean 10810, ISRAEL; +972-6-6580905, Fax +972-6-6580908  
**DDS, U1 II Oktomvir**, BR/115/B/9, 91000 Skopje, Macedonia; 389 91236632, Fax 389 91237454  
**Dea-Chi Ind. Co.**, 3rd Floor, Sung-Kwang B/D, 456-13, Sung-Nae-Dong, Kang-Dong-Ku, SeoulKOREA; +82 24866316, Fax +82 24866318  
**Eurotrac Ltd.**, 56/5 Horton Place, Colombo 7, SRI LANKA; +94 1 698245, Fax +94 1 684345  
**Fa. Wilhelm**, Neue Heimat 25, D-74343 Sachsenheim 4, GERMANY; +49 70462386, Fax +49 704612198  
**Garta**, Postboks 1130, DK - 2650 Hvidovre, DENMARK; +45 36 49 11 44, Fax +45 36 49 15 58  
**Geereking Handels Gesellschaft GmbH**, Curslackter Deich 194 a, D-21039 Hamburg, GERMANY; +49 407232015, Fax +49 407232014  
**Gródurvörur sf.**, Sölufélag Gardyrkjumanna, PO Box 9260, IS-129 Reykjavik, ICELAND; +354 143211, Fax +354 866514  
**Harantonis**, 58500 Skydra, Pellis, GREECE; +30 38183110, Fax +30 38183111  
**Hatto Welte**, Mauershorn 10, D-78479 Insel Reichenau, Germany; 49 75347190, Fax 49 75341458  
**H & T BioProtect BT**, Kiss János 54, H-2500 Esztergom, HUNGARY; +36-33413240, Fax +36-33813240  
**Koppert Canada Ltd.**, 50 Ironside Crescent, Unit 2, Scarborough, Ont.CANADA MIX 1G4; 519/259-6972, Fax 519/322-0426  
**Koppert France SARL**, Lot. Ind. du Puits des Gavottes, 147 Avenue des Banquets, F-84300 Cavaillon, FRANCE; +33 90783013, Fax +33 90782598  
**Koppert Italia**, Via Don Giovanni Bosco, 6/B, I-37060 Lugagnano di Sona, ITALY; +39 458680695, Fax +39 458680695  
**Koppert Sistemas, Finca Labradorcico del Medio**, Apdo. correos 286, 30880 Aguilas (Murcia), SPAIN; +34 968493078, Fax +34 968493086

**Koppert United Kingdom**, Homefield Road, Haverhill, Suffolk CB9 8QP, United Kingdom; 44 1440704488, Fax 44 1440704487  
**Koppert USA**, 28465 Beverley Rd., Romulus, MI 48174; 734/641-3763, Fax 734/641-3793  
**L.O.G.**, Boks 141, økern, N-0509 Oslo, NORWAY; +47 22643360, Fax +47 22630636  
**Leu + Gygax AG**, Fellstrasse 1, Postfach 30, CH - 5413 Birmenstorf AG, SWITZERLAND; +41 562251515, Fax +41 562252515  
**Martin Grima**, Ghajin Astas, St. Paul's Bay, MALTA SPB 07; +356 5744474, Fax +356 583087  
**Mertens B.V.**, Handelstraat 6, 5961 PV Horst, Postbus 6128, 5960 AC Horst, The Netherlands; 077-3999111, Fax 077-3999199  
**Merulin Garten**, Karl-Arnold-Strasse 25, D-47638 Straelen, GERMANY; +49 28349190, Fax +49 2834919210  
**Nabat Agricultural**, PO Box 926160, Amman 11110, JORDAN; +962 5815813, Fax +962 6815813  
**Neoquímica**, Av. Defensores de Chaves 35-6, 1000 Lisbon, PORTUGAL; +35111-548417, Fax +35111-3560230  
**Olcosa**, La Moura 38, 15010 La Coruña, SPAIN; +34981-253928, Fax +34981-267349  
**Oy Schetelig AB**, Martinkyläntie 52, SF - 01720 Vantaa, FINLAND; +358-9852061, Fax +358-98843839  
**Schetelig EV**, Mustamäe Tee 60, 12916 Tallinn, Finland; 372 6562770, Fax 372 6562878  
**Spyros Stavrinides Chemicals Ltd.**, PO Box 21278, Nicosia 1505, CYPRUS; +357 2756984, Fax +357 2756902  
**Stan Broadard Ltd.**, PO Box 383, Landes du Marche, Vale, Guernsey, CHANNEL ISLANDS; +44 148152521, Fax +44 148156556  
**Svenska Predator AB**, Knut Pals Vag 8, Box 14017, S-250 14 Helsingborg, SWEDEN; +46 42201130, Fax +46 42200905  
**Tomagro International**, PO Box 30195, 3001 DD Rotterdam, NETHERLANDS; 10 405 23 00, Fax 10 405 51 06  
**Tomen Corporation, 8-1, Marunouchi**, 3-Chome, Chiyoda-ku, JAPAN; +81 352882111, Fax +81 352889092  
**Unifruco Ltd.**, PO Box 505, Bellville 7535, REPUBLIC OF SOUTH AFRICA; +27 219461066, Fax +27 219461967  
**Zonda Resources Ltd.**, 403 Alexandra St., Hastings 4201, NEW ZEALAND; +64 68786010, Fax +64 68762132

- 53065; 920/583-4114, Fax 920/583-4166  
**Oliver Products Co.**, 445 Sixth St. NW, Grand Rapids, MI 49504; 800/253-3893, 616/456-7711, Fax 616/456-5820
- Olson Products Inc.**, PO Box 1043, Medina, OH 44258; 330/723-3210, Fax 330/723-9977
- O.M. Scott & Sons**, 14111 Scotts Lawn Rd., Marysville, OH 43041; 800/543-0006, 937/644-0011, Fax 937/644-7509
- Onset Computer Corporation**, 470 MacArthur Blvd., Bourne, MA 02532; 800/564-4377, 508/759-9500, Fax 508/759-9100
- Orange Guard**, 20 Village Square, Suite 7, Carmel Valley, CA 93924; 888/659-3217, Fax 831/659-5128
- Organic Control Inc. (Orcon)**, 5132 Venice Blvd., Los Angeles, CA 90019; 323/937-7444, Fax 323/937-0123
- Organic Solutions**, 8745 Grissom Rd. #197, San Antonio, TX 78251; 800/862-7482, 210/688-3779, Fax 210/688-9340
- Osmose Corporation**, PO Box O, Griffin, GA 30224; 800/241-0240, 770/228-8434
- P**
- Pacific Biocontrol Corp. (Biocontrol Ltd.)**, 14615 NE 13th Court, Suite A, Vancouver, WA 98685-1451; 360/571-2247, Fax 360/571-2248
- Pacific Coast Seed**, 6144A Industrial Way, Livermore, CA 94550; 925/373-4417, Fax 925/373-6855
- Paragon Professional Products**, 3635 Knight Rd., Suite 7, Memphis, TN 38118; 800/238-9254
- Park Seed Co.**, 1 Parkton Avenue, Greenwood, SC 29647; 864/223-7333
- Parker Pest Control Inc.**, 3616 E. Lake Rd., Ponca City, OK 74604; 800/654-4541, Fax 580/765-4613
- Paygro Co.**, PO Box W, S. Charleston, OH 45368; 937/462-8358, Fax 937/462-7180
- PBI/Gordon Corp.**, PO Box 014090, Kansas City, MO 64101; 800/821-7925, 816/421-4070, Fax 816/474-0462
- Peaceful Valley Farm Supply**, PO Box 2209, 110 Springhill Blvd., Grass Valley, CA 95945; 530/272-4769, Fax 530/272-4794
- Penny Newman Grain Company**, 1201 S. River Road, West Sacramento, CA 95691; 916/373-7450, Fax 916/373-7456
- Perma-Chink Systems**, 1605 Prosser Rd., Knoxville, TN 37914; 800/548-3554, Fax 423/523-9475
- Perma-guard, Inc.**, 115 Rio Bravo SE, Albuquerque, NM 87105; 505/873-3061, Fax 505/873-3261
- Pfizer, Inc.**, 235 East 42nd St, New York, NY 10017; 212/573-2323, Fax 800/573-7851
- Phero Tech Inc.**, 7572 Progress Way, Delta, BC, CANADA V4G 1E9; 604/940-9944, Fax 604/940-9433
- Philom Bios**, 318-111 Research Drive, Saskatoon, Saskatchewan, CANADA S7N 2X8; 306/668-8220, Fax 306/975-1215
- Planet Natural**, 1612 Gold Ave., Bozeman, MT 59715; 800/289-6656, 406/587-5891, Fax 406/587-0223
- Plant Health Care**, 440 William Pitt Way, Pittsburgh, PA 15238; 800/421-9051, 412/826-5488, Fax 412/826-5445
- Plant Health Technologies**, 2563 E. Bergenson St., Boise, ID 83706; 208/389-7265, Fax 208/338-7816
- Plant Revolution Inc.**, 592 W. Explorer St., Brea, CA 92821; 714/990-8172, Fax 714/672-0184
- Plant Sciences Inc.**, 342 Green Valley Rd., Watsonville, CA 95076; 831/728-7771, Fax 831/728-4967
- Plow & Hearth**, Route 230, P.O. Box 5000, Madison, VA 22727-1500; 800/627-1712, 540/948-2272, Fax 800/843-2509
- PNE**, 34555-C Mills Road, North Ridgeville, OH 44039-1844; 440/327-2930; Fax 440/327-4194
- Pole Care**, PO Box 1330, Harrisburg, NC 28075; 800/355-6615, 704/455-1940
- Poulan Weed Eater**, PO Box 91329, Shreveport, LA 71149-9329; 800/554-6723, 318/687-0100
- Praxis**, 2723 116th Ave., Allegan, MI 49010; 616/673-2793, Fax 616/673-2793
- Precision Laboratories Inc.**, PO Box 127, Northbrook, IL 60065; 800/323-6280, 847/498-0800, Fax 847/498-1176
- Premier Enterprises**, 2806 Oakhurst Drive, Los Angeles, CA 90034; 800/776-1889, Fax 310/837-9867
- Pristine Products**, 2311 E. Indian School Rd., Phoenix, AZ 85016; 800/266-4968, 602/955-7031, Fax 602/955-1812
- Professional Equipment**, 90 Plant Avenue, Suite 3, Hauppauge, NY 11786; 800/334-9291, Fax 888/776-3187
- Pro-Team**, PO Box 520125, Salt Lake City, UT 84152; 888/893-3583, 801/487-0417, Fax 866/866-5152
- Purity Products**, 4 Maxwell Ct., Santa Rosa, CA 95401; 707/546-2585, Fax 707/546-7637
- R**
- Reed-Joseph International Co.**, PO Box 894, 800 Main St., Greenville, MS 38701; 800/647-5554, 662/335-5822, Fax 662/335-8850
- REI**, PO Box 1938, Sumner, WA 98390-0800; 800/426-4840, 253/395-3780, Fax 253/395-4368
- RF Inter-Science Co.**, PO Box 445, Coram, NY 11727; 631/698-4799, Fax 631/698-4988
- Richmond Fisheries**, 8609 Clark Rd., Richmond, IL 60071; 815/675-6545, Fax 815/675-6545
- Richway Industries**, PO Box 508, 504 N. Maple, Janesville, IA 50647; 800/553-2404, 319/987-2224, Fax 319/987-2251
- Rincon-Vitova Insectaries Inc.**, PO Box 1555, Ventura, CA 93002; 800/248-2847, 805/643-5407, Fax 805/643-6267
- Rohde's Services**, 1651 Wall Street, Garland, TX 75041; 972/864-1934, Fax 972/864-0128
- Rohm and Haas**, 100 Independence Mall West, Philadelphia, PA 19106; 215/592-3000
- Roots Inc.**, 25 Science Park Suite 205, New Haven, CT 06511; 800/342-6173, 203/786-5295, Fax 203/786-5065
- Rose Catalog**, PO 677, Manua, OH 44255
- Roxidex International Inc.**, PO Box 249, New Rochelle, NY 10802; 800/431-5500, 914/235-5300, Fax 914/235-5328
- Roy O. Martin Lumber**, PO Box 1110, Alexandria, LA 71309; 318/445-1973
- S**
- Safe Earth Lawn and Gardens**, 900 52nd St., W. Des Moines, IA 50265; 515/222-1997
- Safe Effective Alternatives**, PO Box 528, Belleville, IL 62222-0528; 877/730-2727, Fax 618/236-2826
- Safeguard Products**, PO Box 8, New Holland, PA 17557; 800/433-1819, Fax 717/355-2505
- San Jacinto Environmental Supplies**, 2221-A West 34th, Houston, TX 77018; 713/957-0909, Fax 713/957-0707
- San Luis Video Publishing**, PO Box 6715, Los Osos, CA 93412; 805/528-8322, Fax 805/528-7227
- Santa Cruz Horticultural Supply**, PO Box 1534, Morro Bay, CA 93443; 805/772-8262, Fax 805/772-8262
- Sashco Sealants**, 10300 E. 107th Pl., Brighton, CO 80601; 800/767-5656, Fax 303/286-0400
- Saskatoon Boiler Manufacturing**, Saskatoon, Saskatchewan CANADA; 306/652-7022
- Sautter & Stepper**, Rosenstr. 19, 72119 Ammerbuch, Altingen, GERMANY; 07032-957830, Fax 07032-957850
- Sawyer Products**, PO Box 188, Safety Harbor, FL 34695; 800/9404464
- Scentry Biologicals**, 610 Central Avenue, Billings, MT 59102; 800/735-5323, 406/248-5856, Fax 406/245-2790
- Scenturion Inc.**, PO Box 585, 8754 SR 525 #1, Clinton, WA 98236; 360/341-3989, Fax 360/341-3242
- S.C. Johnson**, 1525 Howe St., Racine, WI 53403; 262/260-2000
- Seabright Laboratories**, PO Box 8647, Emeryville, CA 94662; 800/284-7363, 510/655-3126, Fax 510/654-7982
- Security Products**, PO Box 34820, Phoenix, AZ 85067; 888/241-9547, 602/285-1660, Fax 602/285-1803
- Senoret Chemical Co.**, 566 Leffingwell Ave., Kirkwood, MO 63122; 314/966-2394
- Sespe Creek Insectary**, PO Box 176, Lindsay, CA 93247; 559/562-6464, Fax 559/562-5565
- Shepherd's Garden Seeds**, 30 Irene St., Torrington, CT 06790; 860/482-3638, Fax 860/482-0532
- Sigma Chemical Co.**, PO Box 14508, St. Louis, MO 63178; 800/325-3010, 314/771-5750, Fax 800/325-5052
- Silver Lake Research**, PO Box 686, Monrovia, CA 91017; 888/438-1942, Fax 626/359-6601
- Sioux Steam Cleaner Corp.**, One Sioux Plaza, Beresford, SD 57004; 605/763-3333, Fax 605/763-3334
- S & J Ranch**, PO Box 3347, Pinedale, CA 93650; 559/439-2598, Fax 559/435-8067
- Smith & Hawken**, 2 Arbor Lane, PO Box 6900, Florence, KY 41022; 800/776-3336, 02 4570 1331, Fax 02 4570 1331
- Soil Foodweb Inc.**, 1128 NE 2nd St. Suite 120, Corvallis, OR 97330; 541/752-5066, Fax 541/752-5142
- SoilSoup**, Seattle, WA; 877/711-7687, www.soilsoup.com
- Soil Technologies**, 2103 185th Street, Fairfield, IA 52556; 800/221-7645, 641/472-3963, Fax 641/472-6189
- Southern Importers, Inc.**, PO Box 8579, Greensboro, NC 27419; 800/334-9658, 336/292-4521, Fax 336/852-6397
- Spalding Laboratories**, 760 Printz Rd., Arroyo Grande, CA 93420; 800/845-2847, Fax 805/489-0336
- Specialty Products**, 977 Waterman Ave., East Providence, RI 02914; 800/556-3484, 401/434-1680, Fax 401/431-0237
- Spectrum Industries**, 8825 Page Blvd., St. Louis, MO 63114; 800/242-1166; 888/kill-termites
- Spray-N-Grow**, 20 Hwy 35 South, Rockport, TX 78382; 800/288-6505
- Springstar**, PO Box 2622, Woodinville, WA 98072; 800/769-1043, 425/487-6011, Fax 425/487-4360
- Sterling International, Inc.**, E. 15916 Sprague Ave., Veradale, WA 99037; 800/666-6766, 509/926-6766, Fax 509/928-7313
- St. Gabriel Laboratories**, 14540 John Marshall Highway, Gainesville, VA 20155; 800/801-0061, 703/754-3823, Fax 703/754-8078
- Stoller Enterprises, Inc.**, 8580 Katy Freeway, Suite 200, Houston, TX 77024; 800/539-5283, 713/464-5580, Fax 713/461-4467
- Streamlight Inc.**, 30 Eagleview Road, Eagleview, PA 19403; 800/523-7488, 610/631-0600, Fax 610/631-0712
- Strieter Corp.**, 2100 18th Ave., Ste. 1, Rock Island, IL 61201; 309/794-9800, Fax 309/788-5646

- Stromberg's Chicks & Game Birds Unlimited**, Box 400, Pine River, MN 56474; 218/587-2222, Fax 218/587-4230
- Summit Chemical Co.**, 7657 Canton Center Dr., Baltimore, MD 21224-2079; 800/227-8664, 410/282-5200, Fax 410/282-7963
- Sun-Gro Horticultural**, 841 Sun-Gro Drive, Elizabeth City, NC 27909; 800/334-3311, 252/338-5128
- Sun Oil Company**, 1801 Market Street, Philadelphia, PA 19103; 800/345-1142
- Survivair**, 3001 S. Susan St., Santa Ana, CA 92704; 714/545-0410, Fax 800/201-4407
- Suterra**, 213 SW Columbia St., Bend, OR 97702-1013; 800/367-8727, 541/388-3688, Fax 541/388-3705
- Sutton Ag Enterprises**, 746 Vertin Ave., Salinas, CA 93901; 831/422-9693, Fax 831/422-4201
- Sweetbriar Development, Inc.**, 151 Silliman Road, Watsonville, CA 95076; 831/722-5577, Fax 831/722-0191
- Syngenta**, PO Box 18300, Greensborough, NC 27419-8300; 800/334-9481, 336/632-6000, Fax 336/632-2192
- Syngenta BioLine USA**, PO Box 2430, Oxnard, CA 93034-2430; 805/986-8265, Fax 805/986-8267
- Syngenta BioLine UK**, Aldham Business Centre, New Road, Aldham, Colchester, Essex, UNITED KINGDOM CO6 3PN; +44 (0) 1206 243200, Fax +44 (0) 1206 243209
- T**
- Tallon Termite Pest Control**, 740 Whitney, San Leandro, CA 94577; 800/809-2653, 510/633-1774, Fax 510/633-1456
- Tanglefoot Co.**, 314 Straight Ave. SW, Grand Rapids, MI 49504; 616/459-4139, Fax 616/459-4140
- Target Specialty Products**, 1155 Mabury Rd., San Jose, CA 95133-1029; 800/767-0719, 408/293-6032, Fax 408/287-2004
- Tenax Corp.**, 4800 E. Monument St., Baltimore, MD 21205; 800/356-8495, 410/522-7000, Fax 410/522-7015
- Tender Corporation**, PO Box 290 Littleton Industrial Park, Littleton, NH 03561; 800/258-4696, 603/444-5464, Fax 603/444-6735
- Termi-Mesh (Hawaii)**, 1406 Colburn St. Suite 201C, Honolulu, HI 96817; 808/843-1968, Fax 808/843-0100
- Termi-Mesh USA**, 17101 Kuykendahl Road #270, Houston, TX 77068-1600; 832/249-0556, Fax 832/249-6621
- Terminex**, 860 Ridge Lake Blvd., Memphis, TN 38120; 901/766-1105
- The Aerogen Co. Ltd.**, Newman Lane, Alton, Hampshire, ENGLAND GU3 42Q; 44-1420-83744, Fax 44-1420-80032
- The Bug Factory**, 1636 East Island Hwy, Nanoose Bay, BC, CANADA V9P 9A5; 877/930-2847, 250/468-7912, Fax 250/468-7900
- The Bug Store**, 113 West Argonne, St. Louis, MO 63122; 800/455-2847, 314/966-2287, Fax 314/966-4644
- The Bushwhacker Assoc.**, PO Box 345, Rancho Mirage, CA 92270; 800/422-2687, 760/346-3019
- The Ecology Works**, PO Box 9067, San Rafael, CA 94912; 888/353-2649, Fax 415/459-3924
- The Green Spot, Ltd.**, Dept. of Bio-Ingenuity; 93 Priest Rd., Nottingham, NH 03290; 603/942-8925, Fax 603/942-8932
- The Ladybug Company**, PO Box 329, Berry Creek, CA 95916; 530/589-5227
- The Natural Gardening Co.**, PO Box 750776, Petaluma, CA 94975-0776; 707/766-9303, Fax 707/766-9747
- Thermo Lignum UK Ltd.**, Unit 19, Grand Union Centre, West Row, London W10 5AS, UNITED KINGDOM; Fax +44-208 964 2969
- Ticab AB Sweden**, PO Box 90, 61621 Aby, SWEDEN; +4640460257, Fax +461160170
- Tipper Tie-Net**, PO Box 520, West Chicago, IL 60186-0520; 800/736-0990, 630/293-3737, Fax 630/231-0353
- Tomagro International**, PO Box 30195, 3001 DD Rotterdam, NETHERLANDS; 10 405 23 00, Fax 10 405 51 06
- Tomahawk Traps and Equipment**, PO Box 302, Tomahawk, WI 54487; 800/272-8727 (ordering only), 715/453-3550, Fax 715/453-4326
- Topp Portable Air**, 12 Crozerville Rd., Aston, PA 19014; 800/892-8677, Fax 610/459-3822
- TopPro Specialties**, 530 Oak Court Drive, Memphis, 38117; 800/451-8461, 770/567-5566
- TPE Associates/Thermature**, PO Box 261811, San Diego, CA 92196-1811; 800/873-2912, 858/408-0470, Fax 858/408-0472
- Trapper Jack**, PO Box 402, Watertown, SD 57201; 800/423-3396, Fax 626/281-0941
- Trécé Inc.**, PO Box 6278, Salinas, CA 93912; 831/758-0205; 831/758-0204, Fax 831/758-2625
- TriCal Biosystems**, PO Box 1327, Hollister, CA 95024; 831/637-0195, Fax 831/637-0273
- Troy Biosciences, Inc.**, 113 S. 47th Avenue, Phoenix, AZ 85043; 800/448-2843, 602/233-9047, Fax 602/272-4155
- Turf Seed Inc.**, PO Box 250, Hubbard, OR 97032; 503/651-2130, Fax 503/651-2351
- U**
- University of California Statewide IPM Project**, University of California, Davis, CA 95616-8621; 530/752-8350, Fax 530/752-6004
- U.S. Borax Inc.**, 26877 Tournay Rd., Valencia, CA 91355-1847; 800/984-6267, 805/287-5400
- USDA Insect Rearing Lab**, 501 South Chapel St., Newark, DE 19713; 302/731-7330
- U.S. Forest Service, USDA**, 14th and Independence Aves., Washington, DC 20250; 202/205-8333
- V**
- Valent BioSciences**, 870 Technology Way, Liberty, IL 60048; 800/323-9597, 847/968-4700, Fax 847/968-4780
- Valent USA**, PO Box 8025, Walnut Creek, CA 94596-8025; 800/624-6094, 925/256-2700, Fax 925/256-2776
- Value Gardens**, 9100 W. Bloomington Freeway, Suite 113, Bloomington, MN 55431; 952/884-6477
- Vegetable Juices Inc.**, 6135 South Nottingham, Chicago, IL 60638; 312/586-6800
- Vintage Gardens**, 2833 Old Gravenstein Highway S., Sebastopol, CA 95472; 707/829-2035, Fax 707/829-9516
- Vopak**, 2256 Junction Ave., San Jose, CA 95131; 800/888-4897, 408/435-8700, Fax 408/434-6489
- W**
- Waipuna International Ltd.**, PO Box 62-140, Mt. Wellington, Auckland, New Zealand; 64-9-2765840, Fax 64-9-2760330
- Waipuna USA Inc.**, 701 West Buena No. 3, Chicago, IL 60613; 630/514-0364, Fax 630/654-2380
- Walt's Organic Fertilizer**, PO Box 31580, Seattle, WA 98103; 206/783-6685
- Warner Lambert**, Morris Plains, NJ 07950; 973/540-2000
- Waterbury Companies Inc.**, PO Box 1812, Waterbury, CT 06722; 800/845-3495, 970/482-0911, Fax 800/432-9982
- Waterford Corp.**, 404 N. Link Lane, Fort Collins, CO 80524-1513; 800/525-4952, 970/482-0911, Fax 970/482-0934
- W. Atlee Burpee Seed Co.**, 300 Park Ave., Warminster, PA 18974; 800/888-1447, 215/674-4900, Fax 800/487-5530
- Wavelength Entomologic Microwave Treatment Systems**, PO Box 3675, Riverside, CA 92519; 909/681-4046, Fax 909/681-3131
- Weed Badger Division**, 5673 95th Ave. SE, Marion, ND 58466-9718; 800/437-3392, 701/778-7511, Fax 701/778-7501
- Wellmark International**, 1100 E. Woodfield Road, Suite 500, Schaumburg, IL 60173; 800/248-7763, Fax 800/426-7473
- Wescor Inc.**, 459 S. Main St., Logan, UT 84321; 800/453-2725, 435/752-6011, Fax 435/752-4127
- Western Farm Service**, 2749 E. Malaga Avenue, Fresno, CA 93725; 559/233-0585, Fax 559/233-0633
- WF Young, Inc.**, 111 Lyman St., Springfield, MA 01103; 800/628-9653, Fax 413/739-7942
- Whiskers Catfish Farm**, 216 Thornton Lane, Bowling Green, KY 42104; 502/842-2555
- Whitmire Microgen Inc.**, 3568 Tree Court Industrial Blvd., St. Louis, MO 63122; 800/777-8570, Fax 314/225-3739
- W.H. Vinton**, 1056 South Fort St., Springfield, MO 65807; 417/862-4666
- Wiese Equine Supply**, PO Box 920, Brockport, NY 14420; 800/869-4373
- Wilbur-Ellis**, PO Box 1286, Fresno, CA 93715; 800/937-3446, 559/442-1220, Fax 559/442-4089
- Wildlife Control Technology Inc.**, 2501 N. Sunnyside Ave., Suite 103, Fresno, CA 93727; 800/235-0262, 559/490-2262, Fax 559/490-2260
- Wildlife Management Supplies (a Division of Critter Control)**, 9435 Cherry Bend Rd., Traverse City, MI 49684; 800/451-6544, 231/947-2400, Fax 231/947-9440
- Wildlife Supply Company**, 301 Cass St., Saginaw, MI 48602; 800/799-8301, 517/799-8100, Fax 517/799-8115
- Wilt-Pruf Products Inc.**, PO Box 469, Essex, CT 06426-0469; 860/767-7033, Fax 860/767-7265
- W. Neudorff**, Postfach 1209, D-31857, Emmerthal, GERMANY; 49-5155-624160, Fax 49-5155-6010
- Woods End Research Laboratory**, Old Rome Road, Route 2, Box 1850, Mt. Vernon, ME 04352; 800/451-0337, 207/293-2457, Fax 207/293-2488
- Woodstream Corp.**, 69 N. Locust St., Lititz, PA 17543-0327; 800/800-1819, 717/626-2125, Fax 717/626-1912
- WPC Brands**, 1 Repel Rd., PO Box 198, Jackson, WI 53037; 800/558-6614, 262/677-4121, Fax 262/677-9006
- W.R. Grace**, 62 Whittemore, Cambridge, MA 02140; 800/354-5414
- W.R. Grace**, 7379 Route 32, Columbia, MD 21044; 410/531-4791
- Z**
- Zaklad Produkcji Enteromotagow "Erna"**, Nowy Sacz, Wielopole 86, POLAND; 321-78, Fax 0326393
- Zema Corp.**, 6514 Chapel Hill Road, Raleigh, NC 27607; 800/334-5530, Fax 919/859-2170

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# Subscribe PickUp







# Roach Terminal

*Ecologix...delivering pest control...not pesticides*



Least toxic bait available

Ideal for sensitive accounts

Excellent acceptance and feeding  
even with competing food sources

EPA registered reduced risk pesticide

Effective on all stages of cockroaches

Economical and easy to use

**Ecologix Division**



178 Ridge Road  
Dayton, NJ 08810  
800-524-1662  
[www.clearychemical.com](http://www.clearychemical.com)



# Uncle Albert's Super Smart™ Ant Bait



- Shoots 15-20 feet.
- No ladders required.
- Treat an entire home in minutes.
- Comes with extended straw tip for precise applications.
- No CFC's, solvents or hazardous propellents.

**A true  
innovation in  
gel bait delivery  
that will  
save both  
TIME  
and MONEY.**

Uncle Albert's Super Smart™ Ant Bait is endorsed by America's most distinguished pest control experts, plus by South Florida's PCO's who have used it extensively and re-ordered large quantities on an ongoing basis. Extensive tests in South Florida have proven Uncle Albert's to be highly effective for all household ants, plus the white footed ants. It will definitely reduce your chemical costs as well as your call backs. Plus, it will please your environmentally aware customers and pose no health threats to your customers, their families and your technicians.

**Distributors:** Vopak (vwr), Southern Mill Creek, Forshaw Dist., York Dist.,  
Elbert's Specialty Products, Oldham Chemicals, B&G Chemicals, Estes Distributors,  
Residex, Superior-Angran, M&P Pest Control Prod. and Others

*For more information, please call A Safe Pest Eliminators Inc.,*

**(305) 447-7152**

*and ask for Jerry Goodman. Or E-mail at [jgheatwave@aol.com](mailto:jgheatwave@aol.com)*



## Your Alternative to Traditional Pesticides



# Victor® Poison-Free™

*The World's Leader in Poison-Free™ Pest Control*



### Ant and Roach Killer — M601

- Exempt from EPA registration
- Kills and flushes roaches, ants, silverfish, crickets, spiders, centipedes and other insects
- May be used in residential, commercial, and food handling establishments
- Acceptable for use in USDA meat and poultry plants
- Excellent for sensitive facilities such as schools, govt. buildings, etc.
- Safe for the environment – will not harm children or pets
- Fresh mint scent



### Flying Insect Killer — M603

- Exempt from EPA registration
- Kills flies, mosquitoes, gnats, moths, yellow jackets and crawling insects
- May be used in residential, commercial, and food handling establishments
- Acceptable for use in USDA meat and poultry plants
- Excellent for sensitive facilities such as schools, govt. buildings, etc.
- Safe for the environment – will not harm children or pets
- Fresh mint scent



### Wasp and Hornet Killer — M604

- Exempt from EPA registration
- Fast knockdown
- Kills wasps, hornets, and yellow jackets and their nests in seconds
- Shoots a 15-foot stream
- Excellent for sensitive facilities such as schools, govt. buildings, etc.
- Safe for the environment – will not harm children, pets or plants
- Will not stain vinyl siding
- Will not dissolve/damage roofing material
- An ideal IPM tool

Contact your professional products distributor or Woodstream at 1-800-800-1819











