

**Over-the-Counter Insecticides for Home, Yard and Garden Use  
2012 Survey, Fort Collins, Colorado  
(Products arranged by active ingredient)**

The following insecticides have been found on the shelves of local nurseries, box stores, and hardware stores during a survey of Fort Collins. August 5-9, 2012. The number of times the product was found is in parentheses.

**ACEPHATE** (Orthene)

- Bonide Systemic Insecticide Bullets (1)
- Ortho RosePride Insect, Disease and Mite Control (aerosol with resmethrin, triforine) (2)

**ACETAMIPRID**

- Ortho Bug B Gon Insect Killer Ready-to-Use (A)
- Ortho Flower, Fruit and Vegetable Insect Killer Ready-to-Use (2)
- Ortho Rose and Flower Insect Killer Ready-to-Use (2)
- Ortho Flower, Fruit & Vegetable Ready-to-Spray (1)
- Ortho Rose & Flower Insect & Disease Control (with triticonazole) (1)
- Ortho RosePride Insect Killer Ready-to-Use (1)

**ALLETHRIN/(TRANS-ALLTHRIN/BIO-ALLETHRIN/PRALLETHRIN**

**Allethrin**

- Ace Flea & Tick Killer for Pet and Home (1)
- Ace Wasp & Hornet Killer<sub>3</sub> (with lambda-cyhalothrin) (1)
- Ace Home & Garden Bug Killer<sub>2</sub> (awith permethrin) (1)
- Ace Ant, Roach & Spider Killer<sub>2</sub> (allethrin, lambda-cyhalothrin) (1)
- Coughlans Mosquito Coils (1)
- Hot Shot flying Insect Killer (with permethrin) (1)
- Off! Mosquito Coil Patio and Deck (1)
- Raid House and Garden (2)
- Raid Yard Guard Mosquito Fogger (with permethrin) (1)
- Ultra Kill Ant & Roach Killer (with lambda-cyhalothrin) (1)

**S-Bioallethrin**

- Bonide Termite and Carpenter Ant Killer (deltamethrin) (1)
- Spectracide Commercial Wasp & Hornet Killer<sub>3</sub> (with deltamethrin)(1)
- Spectracide Bug Stop Flying & Crawling Insect Killer (with deltamethrin) (2)

**Prallethrin**

- Hot Shot Spider & Scorpion Killer (with lambda-cyhalothrin)(1)
- Hot Shot Ant & Roach Plus Germ Killer (with lambda-cyhalothrin) (2)
- Spectracide Wasp & Hornet Killer<sub>3</sub> (with lambda-cyhalothrin) (1)
- Raid Wasp & Hornet (with cypermethrin) (2)
- Raid Flying Insect (with d-phenothrin) (2)

**AVERMECTIN**

- Raid Max Double Control Small Roach Baits (with hydroprene) (2)
- Raid Max Double Control Ant Baits (with hydroprene) (1)

Raid Ant Baits III (3)

**AZADIRACTIN (NEEM EXTRACT)**

BioNeem (3)

Safer Grub Killer Ready-to-Spray (1)

***BACILLUS THURINGIENSIS (var. KURSTAKI)***

American Thuricide Concentrate (1)

Bonide Thuricide Concentrate (2)

ferti-lome Dipel Dust (4)

Hi-Yield Thuricide Concentrate (1)

Green Light BT Worm Killer (1)

Safer Caterpillar Killer (1)

Safer Garden Dust (2)

***BACILLUS THURINGIENSIS (var. ISRAELENSIS)***

Biological Mosquito Control/Mosquito Dunks (5)

Quick Kill Mosquitoes/Mosquito Bits (4)

**BIFENTHRIN**

Eliminator Ant, Flea and Tick Killer II Granules (1)

Heavy Weight Multi-Insect & Fire Ant Granules (1)

K-Gro Home Pest Insect Control Ready-to-Use (1)

Ortho Home Defense Max Perimeter and Indoor Insect Killer Ready-to-Use (3)

Ortho Home Defense Max Insect Killer (1)

Ortho Home Defense Max Insect Killer for Indoor & Perimeter<sup>1</sup> (with zeta-cypermethrin) (7)

Ortho Home Defense Max Ant and Roach Killer (2)

Ortho Home Defense Max Insect Killer Granules (4)

Ortho Bug B Gon Max Insect Killer for Lawns (4)

Ortho Max Bug B Gon Lawn & Garden Insect Killer<sub>1</sub> Concentrate (3)

Ortho Max Bug B Gon Lawn & Garden Insect Killer<sub>1</sub> Ready-to-Spray (4)

**BORIC ACID/BORAX/ORTHOBORIC ACID/SODIUM TETRABORATE  
TETRAHYDRATE**

Hot Shot Roach Killing Powder (1)

JT Eaton Boric Acid Insecticidal Dust (1)

Hot Shot Max Attrax Roach Killing Powder (1)

Pic Liquid Ant Bait Killer (1)

Pic Boric Acid Roach Killer<sup>II</sup> (1)

Terro Ant Killer<sup>II</sup> (4)

Terro Liquid Ant Baits Outdoor (2)

Terro Perimeter Ant Bait (1)

Terro Multi-Purpose Insect Bait (3)

**CALCIUM POLYSULFIDE (See Lime Sulfur)**

**CARBARYL (Sevin)**

Bayer Complete Insect Killer for Gardens (1)  
Bonide Fruit Tree Spray (with malathion, captan) (4)  
Garden Tech Sevin Ready-to-Use Bug Killer (4)  
Garden Tech Sevin Ready-to-Spray Bug Killer (6)  
Garden Tech Sevin Concentrate Bug Killer (7)  
Garden Tech Sevin 5 Ready-to-Use 5% Dust Bug Killer (7)  
Garden Tech Sevin Lawn Insect Granules (2)  
Ortho Bug-Geta Plus Snail, Slug & Insect Killer (with metaldehyde) (2)

### **CHLOTHIANIDIN**

Bayer Advanced Tree & Shrub Protect & Feed (with chlothianidin) (6)  
Bayer Advanced Tree & Shrub Protect & Feed Ready-to-Use Granules (with chlothianidin) (5)

### **CYFLUTHRIN/BETA-CYFLUTHRIN**

Bayer Advanced Carpenter Ant & Termite Killer Plus (2)  
Bayer Advanced Complete Insect Killer for Soil & Turf Ready-to-Spread Granules (with imidacloprid) (3)  
Bayer Advanced Complete Insect Killer Soil & Turf Concentrate (with imidacloprid) (3)  
Bayer Advanced Garden Power Force Multi-Insect Killer, Ready-to-Spray (2)  
Bayer Advanced Garden Power Force Multi-Insect Killer, Ready-to-Spread Granules (2)  
Bayer Advanced Garden Rose & Flower Insect Killer Ready-to-Spray (with imidacloprid)  
Bayer Advanced Home Pest Plus Germ Killer Ready-to-Use (with antiseptic) (4)  
Bayer Advanced Home Pest Control Indoor & Outdoor Insect Killer Ready-to-Use (1)  
Bayer Advanced Triple Action Ant Killer Ready-to-Use Granules (3)  
Bayer Advanced Rose & Flower Insect Killer Ready-to-Use (with imidacloprid) (3)  
Bayer Advanced Vegetable & Garden Insect Spray Concentrate (1)  
Bayer Advance Vegetable Garden Insect Spray Ready-to-Spray (1)  
Green Thumb Ready-to-Use Insect Killer (1)

### **CYHALOTHRIN (gamma-cyhalothrin, lambda-cyhalothrin)**

#### **Gamma-cyhalothrin**

Spectracide Insect Killer Once & Done Concentrate<sub>2</sub> (3)  
Spectracide Triazicide Once and Done Insect Killer<sub>2</sub> Concentrate for Lawn & Landscape (1)  
Triazicide Insect Killer Once & Done Granules (4)  
Spectracide/Triazicide One & Done Insect Killer<sub>2</sub> (1)

#### **Lambda-cyhalothrin**

Ace Ant, Roach & Spider Killer<sub>2</sub> (with allethrin) (1)  
Ace Home Insect Control<sub>5</sub> (1)  
Cutter Backyard Bug Control Spray Concentrate (5)  
Hot Shot Spider & Scorpion Killer (with prallethrin) (1)  
Hot Shot Ant & Roach Plus Germ Killer (with prallethrin) (2)  
Hot Shot Home Insect Control Clear Formula<sub>2</sub> (1)  
Spectracide Triazicide Once & Done Insect Killer Granules (1)

Spectracide Triazicide Once & Done Insect Killer Concentrate<sup>2</sup> (1)  
Spectracide Bug Stop Indoor Plus Outdoor Insect Killer (3)  
Spectracide Ant Shield Home Barrier Granules (1)  
Spectracide Wasp & Hornet Killer<sup>3</sup> (with prallethrin) (1)  
Spectracide Indoor Plus Outdoor Insect Killer (with zeta-cypermethrin)(1)  
Spectracide Extended Reach Tree Insect Killer Concentrate (1)  
Spectracide Ant Shield Home Barrier Insect Killer<sup>3</sup> (1)  
Spectracide Ant Shield Home Barrier Insect Killer (with deltamethrin) (1)  
Terro Ant Killer Plus Multi-Purpose Insect Control<sup>2</sup> (4)  
Ultra Kill Ant & Roach Killer (with allethrin) (1)

### **CYPERMETHRIN/ZETA-CYPERMETHRIN**

Ace Indoor Fogger (1)  
Raid Concentrated Deep Reach Fogger (2)  
Enforcer Bug Max Fogger (1)  
Hot Shot Fogger<sup>5</sup> (with tetramethrin) (2)  
Hot Shot No Mess Fogger<sup>3</sup> with Neutralizer (with tetramethrin) (3)  
Hot Shot Pest Control Concentrate (1)  
Raid Max Roach Killer<sup>7</sup> (with imiprothrin) (1)  
Real-Kill Indoor Fogger<sup>5</sup> (1)  
Ortho Home Defense Max Insect Killer for Indoor & Perimeter (with bifenthrin) (7)  
Spectracide Indoor Plus Outdoor Insect Killer (with lambda-cyhalothrin) (1)  
Raid Concentrated Deep Reach Fogger (2)  
Raid Max Concentrated Deep Reach Fogger (1)  
Raid Wasp & Hornet (with prallethrin) (2)  
Raid Ant Killer (with imiprothrin) (1)  
Raid Ant and Roach Killer<sup>17</sup> (with imiprothrin) (4)  
Spectracide Bug Stop Insect Fogger<sup>5</sup> (with tetramethrin) (1)

### **DELTA METHRIN**

Black Flag Extreme Home Insect Control (1)  
Bonide Termite and Carpenter Ant Killer (with s-bioallethrin) (1)  
Bonide Termite & Carpenter Ant Killer Ready-to-Use (2)  
Bonide Termite & Carpenter Ant Killer Dust (1)  
Hi-Yield Turf Ranger Insect Control Granules (1)  
Raid Max Indoor/Outdoor Bug Barrier (3)  
Spectracide Ant Shield Home Barrier Insect Killer (with lambda-cyhalothrin) (1)  
Spectracide Commercial Wasp & Hornet Killer<sup>3</sup> (with s-bioallethrin) (1)  
Spectracide Bug Stop Flying & Crawling Insect Killer (with s-bioallethrin) (2)  
Terro Ant Dust (3)  
Terro Spider Killer<sup>3</sup> (with pyrethrins) (2)  
Terro Home Insect Killer (1)

### **DIATOMACEOUS EARTH/SILICON DIOXIDE**

Natural Guard Diatomaceous Earth Crawling Insect Control (2)  
Safer Ant & Crawling Insect Killer Diatomaceous Earth (4)

## **DICHLORVOS**

Hot Shot No-Pest Strip (1)

## **DINOTEFURAN**

Hot Shot Ultra Liquid Ant Bait (2)

## **D-LIMONENE/CITRUS EXTRACTS**

Orange Guard (1)

Safer Wasp & Hornet Killer (with pyrethrins and insecticidal soap) (1)

Safer Ant & Roach Killer (with pyrethrins and insecticidal soap) (2)

Safer Flying Insect Killer (with pyrethrins and insecticidal soap) (1)

## **FIPRONIL**

Combat Ant Killing Gel

Combat Outdoor Ant Stakes (1)

Combat Source Kill Max2 (2)

Combat Source Kill A2 Ant (2)

Combat Source Kill Max R3 Roach (2)

## **GAMMA-CYHALOTHRIN (See Cyhalothrin)**

### **HALOFENOZIDE**

C Hi-Yield Kill-A-Grub (1)

## **HYDRAMETHYLNON**

Amdro Ant Block Home Perimeter Ant Bait (3)

Amdro Kills Ants Ant Killing Bait (3)

Combat Source Kill4 (1)

Combat Source Kill5 Roach (1)

Grant's Kills Ants (2)

Grant's Kills Ants & Roaches (1)

## **IMIDACLOPRID**

Bayer Advanced 2-in-1 Insect Control plus Fertilizer (1)

Bayer Advanced 2-in-1 Systemic Rose & Flower Care Ready-to-Use Granules (1)

Bayer Advanced 3-in-1 Insect, Disease and Mite Control Ready-to-Use (with tau-fluvalinate, tebuconazole) (2)

Bayer Advanced 3-in-1 Insect, Disease and Mite Control Concentrate (with tau-fluvalinate, tebuconazole) (5)

Bayer Advanced 3-in-1 Insect, Disease and Mite Control Ready-to-Spray (with tau-fluvalinate, tebuconazole) (7)

Bayer Advanced All-in-One Rose and Flower Care Concentrate (with tebuconazole) (8)

Bayer Advanced All-in-One Rose and Flower Care Granules (with tebuconazole) (1)

Bayer Advanced Complete Insect Killer for Soil and Turf Ready-to-Spread Granules (with beta-cyfluthrin) (2)

Bayer Advanced Complete Insect Killer for Soil and Turf Ready-to-Spray (with beta-

cyfluthrin) (4)  
Bayer Advanced Complete Insect Killer Soil & Turf Concentrate (with beta-cyfluthrin) (3)  
Bayer Advanced Complete Insect Killer for Soil and Turf Ready-to-Use Granules (with beta-cyfluthrin) (1)  
Bayer Advanced Fruit, Citrus and Vegetable Insect Killer (1)  
Bayer Advanced Lawn Season Long Grub Control Granules (1)  
Bayer Advanced Rose & Flower Insect Killer Ready-to-Use (with beta-cyfluthrin) (3)  
Bayer Advanced Rose & Flower Insect Killer Ready-to-Spray (with beta-cyfluthrin) (3)  
Bayer Advanced Tree & Shrub Protect & Feed (with chlothianidin) (7)  
Bayer Advanced Tree & Shrub Protect & Feed Ready-to-Use Granules (with chlothianidin) (6)  
Bayer Advanced Tree & Shrub Protect and Feed (1)  
Bonide Annual Tree & Shrub Control (2)  
Bonide Systemic Granules Insect Control (2)  
Bonide Systemic Houseplant Insect Control (5)  
Bonide Systemic Insect Spray (1)  
Bonide Rose Rx Systemic Drench (with tebuconazole) (1)  
ferti-lome Tree & Shrub Systemic Insect Drench (1)  
Hi-Yield Systemic Insect Granules (1)  
Ortho Bug B Gon Year-Long Tree & Shrub Insect Control (1)  
Ortho Rose & Flower Insect Control Plus Miracle Gro Granules (1)

## **IMIPROTHRIN**

Raid Ant and Roach Killer<sub>17</sub> (with cypermethrin) (4)  
Raid Ant Killer (with cypermethrin) (1)  
Raid Max Roach Killer<sub>7</sub> (with deltamethrin) (1)

## **INDOXCARB**

MaxAttrax Ant Bait<sub>2</sub> (3)  
MaxAttrax Nest Destroyer Roach Bait (1)  
Spectracide Ant Shield Outdoor Killing Stakes (1)

## **IRON PHOSPHATE**

Bayer Advanced Snail & Slug Killer Bait (1)  
Bayer Advanced Natria Snail & Slug Killer Bait (1)  
Bonide Slug Magic (1)  
ecosense brand Slug & Snail Killer (1)  
Earth-tone Slug & Snail Control (1)  
Earth-tone Bug & Slug Killer (with spinosad) (1)  
Ortho Elementals Slug & Snail Killer (1)  
Sluggo (3)  
Sluggo Plus (with spinosad) (1)  
Whitney Farms Slug & Snail Killer (1)

## **LAMBDA-CYHALOTHRIN (See cyhalothrin)**

### **LIME SULFUR**

- Bonide Lime Sulfur Spray (1)
- Hi-Yield Lime Sulfur Spray (3)

### **MALATHION**

- Ace Malathion 50 Insect Spray (1)
- Bonide Fruit Tree Spray (with carbaryl, captan) (4)
- Hi-Yield 55% Malathion Spray (2)
- Ortho Max Malathion Insect Spray Concentrate (1)
- Spectracide Malathion Insect Spray Concentrate (3)

### **METALDEHYDE**

- Eliminator Snail & Slug Bait (1)
- Ortho Bug-Geta Snail and Slug Killer<sub>1</sub> (2)
- Ortho Bug-Geta Plus Snail, Slug & Insect Killer (with carbaryl) (2)

### **METHOPRENE**

- PreStrike Mosquito Torpedo (1)
- Raid Flea Fogger (with pyrethrins)(1)

### **NAPHTHELENE**

- Enoz Old Fashioned Moth Balls (1)

### **NEEM (see Azadirachtin)**

### **NEEM OIL (see Oil, Neem)**

### ***NOSEMA LOCUSTAE***

#### **F G Nolo Bait**

**Note:** *Nosema locustae* is perishable and has a shelf life of only a few months if not properly refrigerated.

### **OILS, ESSENTIAL (mints, clove, cinnamon, garlic, etc.)**

- Bonide MiteX (cottonseed oil, clove oil, garlic oil) (2)
- Bonide Mosquito Beater Ready-to-Spray (includes cedar oil, citronella oil, geranium oil, lemongrass oil) (1)
- Bonide Mosquito Beater Area Mosquito Repellent (citronella oil, garlic, geranium oil, cedar oil, lemongrass oil) (1)
- EcoSmart Flying Insect Killer (peppermint oil, cinnamon oil, sesame oil) (1)
- EcoSmart Ant & Roach Killer (peppermint oil, rosemary oil) (1)
- EcoSmart Organic Insect Killer for Lawn and Landscape (sodium lauryl sulfate, eugenol, thyme oil, sesame oil) (1)
- EcoSmart Garden Insect Killer (rosemary oil, peppermint oil, thyme oil, clove oil) (1)
- EcoSmart Organic Home Pest Control (clove oil, rosemary oil, peppermint oil, thyme oil) (1)

EcoSmart insect Killer Granules for Lawns and landscape (eugenol, thyme oil) (1)  
EcoSmart Wasp & Hornet Killer (peppermint oil) (1)  
Green Light Rose & Flower Spray Ready-to-Use (rosemary oil) (2)  
Hot Shot Natural Flying Insect Killer (lemongrass oil) (1)  
Hot Shot Natural Home Insect Control (lemongrass oil) (1)  
Rescue WHY Spray (lemongrass oil, clove oil, rosemary oil, geranium oil) (1)  
Victor Poison-Free Wasp & Hornet Killer (mint oil) (1)

**OILS, MINERAL/HORTICULTURAL (refined petroleum distillates)**

Bonide All Seasons Horticultural & Dormant Spray Oil (3)  
Bonide All Seasons Horticultural & Dormant Spray Oil Ready-to-Use (1)  
Bonide All Seasons Horticultural & Dormant Spray Oil Ready-to-Spray (5)  
ferti-lome Horticultural Oil Spray (1)  
ferti-lome Horticultural Oil Spray Ready-to-Spray (1)  
Hi-Yield Dormant Spray (2)  
Ortho Volck Spray Oil (3)

**OIL, NEEM\***

Bonide Bon-Neem (with pyrethrins) (1)  
Bonide Neem Oil Ready-to-Spray (1)  
Bonide All Season Horticultural Spray Oil Ready-to-Use (1)  
Bonide Rose Rx 3-in-1 (1)  
Bonide Neem Oil (1)  
ferti-lome Triple Action Plus (1)  
ferti-lome Triple Action Plus, Ready-to-Use (with pyrethrins) (4)  
ferti-lome Triple Action Plus II (with pyrethrins) (3)  
ferti-lome Rose, Flower & Vegetable Spray (1)  
ferti-lome Fruit Tree Spray (with pyrethrins) (1)  
Garden Safe Fungicide 3-in-1 (1)  
Monterey 70% Neem Oil (1)  
Natural Guard Neem Py (with pyrethrins) (1)  
Natural Guard Neem (1)  
Natural Guard Neem Ready-to-Use (1)  
Southern Ag Triple Action Neem Oil (1)

\*All the above products are described as "clarified hydrophobic extract of neem oil". These apparently are the oil fraction of neem seed extracts. *They do not contain as an active ingredient azadirachtin*, the primary insecticidal compound associated with neem seed extracts.

**OILS, VEGETABLE (Soybean, cottonseed, canola, sesame)**

Bonide MiteX (cottonseed oil, clove oil, garlic oil) (2)  
ecosense brand indoor insect killer aerosol (soybean oil) (1)  
Earth-tone Insect Control (canola oil and pyrethrins) (2)  
EcoSmart Organic Insect Killer for Lawn and Landscape (sodium lauryl sulfate, eugenol, thyme oil, sesame oil) (1)  
Garden Tech Worry Free Vegol Year Round Pesticidal Oil (canola oil) (1)  
Lilly Miller Vegol Year-Round Pesticidal Oil (canola oil) (1)  
Organocide 3-in-1 Garden Spray (sesame oil, fish oil) (1)  
Ortho Elementals Ant & Roach Killer Aerosol (soybean oil) (1)  
Ortho Elementals Home Insect Killer (soybean oil) (1)



Whitney Farms Outdoor Insect Killer (canola oil with pyrethrins) (1)

## **ORTHOBORIC ACID (See Boric Acid)**

## **PEPPER, HOT**

Bonide Hot Pepper Wax Ready-to-Use (capsaicin active ingredient) (3)

Hot Pepper Wax Insect Repellent (1)

## **PERMETHRIN**

Ace Home & Garden Bug Killer<sup>2</sup> (with allethrin) (1)

Ace Multi-Purpose Garden and Pet Dust (1)

Ace Soil & Turf Insect Control Concentrate (1)

Bayer Advanced Complete Insect Dust for Gardens Ready-to-Use (1)

Bengal Roach Spray II (1)

Bonide Ant Killer Granules (1)

Bonide Eight Insect Control Yard & Garden Ready-to-Spray (3)

Bonide Eight Insect Control Vegetable, Fruit & Flower Concentrate (2)

Bonide Eight Insect Control/Garden and Home, Ready-to-Use (2)

Bonide Eight Insect Control Garden Dust Ready-to-Use (2)

Bonide Mosquito Beater, Ready-to-Spray (1)

Coleman Insect Treatment Gear and Clothing (1)

Country Vet Metered Fly Spray (1)

Enforcer Mosquito and Flying Insect Killer II (1)

ferti-lome Indoor/Outdoor Multi-Purpose Insect Spray (2)

Green Thumb Outdoor Mosquito Fogger (with tetramethrin) (1)

Hi-Yield D.I.Y. Indoor Pest Control (with pyrethrins) (2)

Hi-Yield Total Release Fogger (with pyrethrins) (1)

Hi-Yield Kill-A-Bug II Lawn Granules (2)

Hi-Yield Turf, Termite and Ornamental 38 Plus (4)

Hot Shot Flying Insect Killer (with allethrin) (1)

Hot Shot Bedbug and Flea Home Insect Killer (1)

K-Gro Multi-Purpose Insect Killer Concentrate (1)

Ortho Bug B Gon Max Insect Killer for Lawns (1)

Ortho Indoor Insect Fogger (with pyrethrins) (1)

Raid Fumigator (4)

Raid Yard Guard Mosquito Fogger (with allethrin) (1)

Raid Flying Insect Killer Formula 6 (with tetramethrin) (1)

Spectracide Immunox Plus Insect and Disease Multi-Purpose Concentrate (with myclobutanil) (1)

Sprayway Good Night (1)

Terro Ant Killer Spray (with pyrethrins) (1)

Terro Ant Killer Outdoor (with tetramethrin) (3)

Terro Ant Killer Plus Multi-Purpose Insect Control Outdoor (1)

## **PHENOTHRIN**

Ace Flying Insect Killer (with tetramethrin) (1)

Cutter Backyard Bug Control Outdoor Fogger (with tetramethrin) (1)  
Ortho Home Defense Max Wasp & Hornet Killer (with tetramethrin) (1)  
Raid Flying Insect (with prallethrin) (2)

**POTASSIUM SALTS OF FATTY ACIDS (See Soaps, Insecticidal)**  
**PRALLETHRIN (See Allethrin)**

**PROPOXUR**

Ortho Ant B Gon Bait (1)  
Ortho Home Defense Max Ant Baits (3)  
TAT Ant Bait (1)  
TAT Roach Killer VI (1)

**PYRETHRINS**

Ace Flower & Vegetable Insect Spray (1)  
Bayer Advanced Natria Insect, disease & Mite Control (with sulfur)(1)  
Bonide Bon-Neem (with insecticidal soap)(1)  
Bonide Tomato and Vegetable Ready-to-Spray (with sulfur)(1)  
Bonide Citrus, Fruit & Nut Orchard Spray (with sulfur)(1)  
Doktor Doom Total Release Fogger (1)  
Doktor Doom Spider Mite Knock Out Insecticide Plant Spray(1)  
Earth-tone 3-in-1 Disease Control (with sulfur) (3)  
Earth-tone Insect Control (with canola oil) (2)  
Enforcer Ant Killer & Barrier Treatment (1)  
ferti-lome Red Spider & Mite Spray (2)  
ferti-lome Triple Action Plus, Ready-to-Use (with neem oil) (3)  
ferti-lome Triple Action Plus II (with neem oil) (3)  
ferti-lome Fruit Tree Spray (with neem oil) (2)  
Fox Farms Don't Bug Me (2)  
Garden Tech Worry Free Concentrate (1)  
Garden Tech Worry Free Ready-to-Use Dust (1)  
Garden Safe Houseplant & Garden Insect Killer (2)  
Hi-Yield Total Release Fogger (with permethrin) (1)  
Hi-Yield D.I.Y. Indoor Pest Control (with permethrin) (2)  
Hot Shot Kitchen Bug Killer<sub>2</sub> (1)  
Hot Shot Bedbug and Flea Fogger (1)  
J T Eaton Kills Bedbugs, Fleas, Brown Dog Ticks (1)  
Natural Guard Neem Py (with neem oil) (1)  
Ortho Indoor Insect Fogger (with permethrin) (1)  
Ortho Elementals 3-in-1 Rose & Flower Care (with sulfur) (2)  
Raid Flea Fogger (with methoprene) (1)  
Safer Bug Patrol Lawn & Landscape Insecticide Concentrate (1)  
Safer Yard & Garden Insect Killer Ready-to-Use (with insecticidal soap) (4)  
Safer Houseplant Insect Killer (with insecticidal soap) (1)  
Safer Tomato & Vegetable Insect Killer (with insecticidal soap) (2)  
Safer EndAll Insect Killer (with insecticidal soap) (3)

Safer Wasp & Hornet Killer (with insecticidal soap and d-limonene) (1)  
Safer Ant & Roach Killer (with insecticidal soap and d-limonene) (1)  
Safer Flying Insect Killer (with insecticidal soap and d-limonene) (1)  
Schultz Houseplant & Garden Insect Spray (1)  
Terro Ant Killer Spray<sub>1</sub> (with permethrin) (2)  
Terro Spider Killer (1)  
Terro Spider Killer<sub>3</sub> (with deltamethrin) (1)  
Whitney Farms Outdoor Insect Killer (with canola oil) (1)  
Whitney Farms 3-in-1 Rose and Flower Care (with sulfur) (1)

**SEVIN (See Carbaryl)**

**SILICON DIOXIDE (See Diatomaceous Earth)**

**SOAP, INSECTICIDAL (Potassium Salts of Fatty Acids)**

Garden Safe Insecticidal Soap Insect Killer (2)  
Natural Guard Insecticidal Soap (1)  
Natural Guard Insecticidal Soap Ready-to-Use (2)  
Ortho Elementals Insecticidal Soap (1)  
Safer Houseplant Insect Killer (with pyrethrins) (1)  
Safer 3-in-1 Garden Spray (with sulfur) (2)  
Safer Ant & Roach Killer (with pyrethrins and d-limonene) (2)  
Safer EndAll Insect Killer (with pyrethrins) (3)  
Safer Flying Insect Killer (with pyrethrins and d-limonene) (1)  
Safer Fruit & Vegetable Insect Killer V (1)  
Safer Houseplant Insect Killing Soap Ready-to-Use (3)  
Safer Insect Killing Soap Concentrate (4)  
Safer Insect Killing Soap with Seaweed Extract (2)  
Safer Rose & Flower Insect Killer II Ready-To-Use (1)  
Safer Tomato and Vegetable Insect Killer (with pyrethrins) (2)  
Safer Wasp & Hornet Killer (with pyrethrins and d-limonene) (1)  
Safer Yard & Garden Insect Killer II Ready-to-Use (with pyrethrins) (4)  
Whitney Farms Insecticidal Soap (1)

**SODIUM TETRABORATE TETRAHYDRATE (See Boric Acid)**

**SPINOSAD**

Bonide Captain Jack's Dead Bug Brew Flower & Vegetable Insect Dust (2)  
Bonide Captain Jack's Dead Bug Brew Concentrate (2)  
Bonide Captain Jack's Dead Bug Brew Ready-to-Use (2)  
Bonide Captain Jack's Dead Bug Brew Ready-to-Spray (1)  
Earth-tone Bug & Slug Control (with iron phosphate) (1)  
ferti-lome Borer, Bagworm, Leafminer & Tent Caterpillar Spray (3)  
Natural Guard Ready-to-Spray Spinosad Landscape & Garden Insecticide (3)  
Green Light Lawn & Garden Spray Spinosad Ready-to-Spray (1)  
Sluggo Plus (with iron phosphate) (1)

## **SPINOSYNS (See Spinosad)**

### **SUMITHRIN**

- Enforcer Wasp & Yellow Jacket Foam (with tetramethrin) (1)
- Terro Wasp & Hornet Killer (with tetramethrin) (1)

### **TAU-FLUVALINATE**

- Bayer Advanced 3-in-1 Insect, Disease and Mite Control Ready-to-Spray (with imidacloprid, tebuconazole) (7)
- Bayer Advanced 3-in-1 Insect, Disease and Mite Control Ready-to-Use (with imidacloprid, tebuconazole) (2)
- Bayer Advanced 3-in-1 Insect, Disease and Mite Control Concentrate (with imidacloprid, tebuconazole) (5)

### **TETRAMETHRIN**

- Ace Flying Insect Killer (with phenothrin)(1)
- Black Flag Extreme Flying Insect Killer (1)
- Bonide Wasp & Hornet Killer (with permethrin) (1)
- Coleman Outdoor Yard and Camp Fogger (1)
- Cutter Backyard Bug Control Outdoor Fogger (with phenothrin) (4)
- Enforcer Wasp & Hornet Killer (with permethrin) (1)
- Enforcer Wasp & Yellow Jacket Foam (with sumithrin) (1)
- Green Thumb Outdoor Insect Fogger (with permethrin) (1)
- Hot Shot Fogger<sup>5</sup> (with cypermethrin)(2)
- Hot Shot No Mess Fogger<sup>3</sup> with Neutralizer (with cypermethrin)(3)
- Ortho Home Defense Max Wasp & Hornet Killer (with phenothrin)(3)
- Raid Flying Insect Killer Formula 6 (with permethrin) (1)
- Spectracide Bug Stop Insect Fogger<sup>5</sup> (with cypermethrin) (1)
- Terro Ant Killer Outdoor (with permethrin) (3)
- Terro Wasp & Hornet Killer (with sumithrin) (1)

### **THIAMETHOXAM**

- Raid Ant Gel Precision Placement Bait (1)

### **TRICHLORFON**

- Bayer Advanced 24 Hour Grub Killer Plus Granules (1)

### **ZETA-CYPERMETHRIN (See Cypermethrin)**

#### **Locations in Survey (Date of Survey)**

- |  |                                 |
|--|---------------------------------|
| Ace Hardware Downtown (August 5)               | Bath Nursery (August 6)         |
| Creekside Garden Center (August 9)             | Fort Collins Nursery (August 6) |
| Gulley Greenhouse and Garden Center (August 7) | Home Depot (August 8)           |
| JAX Ranch and Home (August 9)                  | Big K-Mart (August 8)           |
| Lowe's (August 8)                              | Wal-Mart (August 9)             |

## 2012 Survey of Over-the-Counter Insect/Arachnid/Mollusk Pesticides Summary of Results

Whitney Cranshaw  
Colorado State University  
August 10, 2012 Draft

A survey of insect control chemicals on the shelves of Fort Collins area stores was conducted during the period of 5-9 August, 2012. Included in the survey were four nurseries (Bath Nursery, Creekside Garden Center, Fort Collins Nursery, Gulley's Greenhouse and Nursery), two large hardware stores (Downtown Ace, JAX Ranch and Home) and four "box stores" (Home Depot, Big K-Mart, Lowe's, Wal-Mart). Every insect control product found on shelves of the stores (N=574) was examined and active ingredients noted. A total of 320 different products were found in the survey with the great majority of products being carried by a single outlet.

As in the previous survey (2008) pyrethroid insecticides predominated. Overall, 37.6% of the products encountered on shelves contained pyrethroids; an additional 12% included pyrethrins. Various "oils" (mineral, vegetable, essential) were found in 14.3% of the products, neonicotinoid insecticides in 10.9%, and 5.6% included soaps.

**Table 1.** Most common active ingredients of insecticides and molluscicides found a survey of over-the counter pesticides in Fort Collins area stores. Figures in parentheses are the number of different products with the active ingredient and the number of times products with the active ingredient that were found on store shelves.

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Pyrethrins (39/54)  
Permethrin (33/49)  
Imidacloprid (26/72)  
Insecticidal Soap (18/34)  
Lambda-cyhalothrin (17/26)  
Cypermethrin (16/26)  
Oil, Neem (16/22)  
Oil, Essential (15/15)  
Tetramethrin (14/23)  
Cyfluthrin (13/27)  
Deltamethrin (12/19)  
Bifenthrin (11/31)  
Iron Phosphate (11/13)  
Allethrin (11/13)  
Boric Acid (9/13)  
Carbaryl (8/33)  
Oil, Mineral (7/16)

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**Table 2.** Brand name products most commonly encountered during the 2012 survey of over-the-counter insect/arachnid/mollusk control pesticides. Active ingredients are in parentheses.

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*Found in 8 of 10 Stores*

Bayer Advanced All-in-One Rose and Flower Care Concentrate ((imidacloprid, tebuconazole)

*Found in 7 of 10 Stores*

Ortho Home Defense Max Insect Killer for Indoor and Perimeter<sub>I</sub> (bifenthrin and zeta-cypermethrin)

Garden Tech Sevin Concentrate Bug Killer (carbaryl)

Garden Tech Sevin Ready-to-Use 5% Dust Bug Killer (carbaryl)

Bayer Advanced Tree & Shrub Protect & Feed (imidacloprid and chlothianidin)

Bayer Advanced 3-in-1 Insect, Disease and Mite Control Ready-to-Spray (imidacloprid, tau-fluvalinate, tebuconazole)

*Found in 6 of 10 Stores*

Garden Tech Sevin Ready-to-Use Bug Killer (carbaryl)

Bayer Advanced Tree & Shrub Protect & Feed Ready-to-Use Granules (imidacloprid, chlothianidin)

*Found in 5 of 10 Stores*

Cutter Backyard Bug Control Spray Concentrate (lambda-cyhalothrin)

Bayer Advanced 3-in-1 Insect, Disease and Mite Control Concentrate (imidacloprid, tau-fluvalinate, tebuconazole)

Bonide All Seasons horticultural and Dormant Spray Oil Ready-to-Use (mineral oil)

*Found in 4 of 10 Stores*

Home Defense Max Insect Killer Granules (bifenthrin)

Ortho Bug B Gon Max Insect Killer for Lawns (bifenthrin)

Terro Ant Killer<sub>II</sub> (boric acid)

Bonide Fruit Tree Spray (malathion, carbaryl, captan)

Garden Tech Sevin Ready-to-Use Bug Killer (carbaryl)

Bayer Advanced Home Pest Plus Germ Killer Ready-to-Use (cyfluthrin)

Bayer Advanced Complete Insect Killer for Soil and Turf Ready-to-Spray (imidacloprid, beta-cyfluthrin)

Safer Ant & Crawling Insect Killer (diatomaceous earth)

Raid Ant and Roach Killer<sub>17</sub> (imiprothrin, cypermethrin)

ferti-lome Triple Action Plus, Ready-to-Use (neem oil, pyrethrins)

Raid Fumigator (permethrin)

Safer Insect Killing Soap Concentrate (insecticidal soap)

Safer Yard & Garden Insect Killer<sub>II</sub> Ready-to-Use (insecticidal soap, pyrethrins)

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Some products that were found exclusively, or primarily, at certain types of outlets. For example, all *Bacillus thuringiensis* (*kurstaki* and *israelensis*) products, all spinosad products, azadirachtin, horticultural oils, and the 38% permethrin product for borers and bark beetles were only carried by garden centers/nurseries or hardware stores. On the other hand, box stores carried a wider selection of the persistent pyrethroids (e.g., bifenthrin, lambda-cyhalothrin, deltamethrin). Fipronil baits also were primarily found at box stores.

**Changes in products since 2008 survey.** Very few new active ingredients were encountered in insect control products compared to a similar survey conducted in 2008. Most notable was acetamiprid, a systemic neonicotinoid insecticide that was included in six Ortho Brand Ready-to-Use formulations. Chlothianidin, in combination with imidacloprid, was found in two Bayer Advanced soil systemic treatments for trees and shrubs. Also, a single thiamethoxam-containing ant bait was found. Among the botanical products lemongrass oil was a new ingredient, encountered in five products

Several products were encountered with much greater frequency including bifenthrin, lambda-cyhalothrin, cypermethrin, imidacloprid, and iron phosphate. Various vegetable oils (canola oil, soybean oil) and myriad mixtures of essential oils (e.g., thyme oil, rosemary oil, clove oil, cinnamon oil, peppermint oil) were more commonly available.

Several active ingredients found in 2008 were absent from shelves. These include arsenic trioxide (ant bait), disulfoton (systemic organophosphate for ornamentals), dicofol (miticide), esfenvalerate (general purpose garden pyrethroid), resmethrin (short persisting pyrethroid) and rotenone (botanical insecticide used on vegetables). Acephate (systemic organophosphate) products were almost completely absent. Other insecticides that were notably less commonly encountered in the current survey were tetramethrin and sumithrin. There were also fewer metaldehyde products.