

## **"Our Water, Our World" Promotion**

### **Less-Toxic Product List**

This product list is intended to help stores participating in the "Our Water, Our World" promotion stock less-toxic products that are compatible with Integrated Pest Management (IPM). IPM encourages the use of non-toxic and less-toxic alternatives, and emphasizes pest prevention and management rather than attempting to eradicate pest populations with broad-spectrum chemical pesticides.

The product list is not exhaustive. Although water pollution prevention agencies sponsoring the program intend to update the list periodically, the trade names given for each product/formulation are intended as examples only. Different products with the same active ingredients are equally suitable.

The target pests named in the table are those listed on product labels. This means that the product is registered for use against that specific pest. Listing on the label is not a guarantee that the product will be effective against that pest under all circumstances, or that the product is the best choice for managing that pest.

The product list does not include all less-toxic product types or active ingredients, only those most commonly available to or used by Bay Area residents for healthy gardening and less-toxic pest control. Call the National Pesticide Telecommunications Network, 1-800-858-7378, for information on pesticides not on this list.

Product types and product names in **bold** type are mentioned on one of the Fact Sheets developed for the "Our Water, Our World" promotion.

Detailed information about IPM and less-toxic alternatives is available in the Fact Sheets and in the reference materials on the last page of this product list.

If you have questions about the program's choice of products, or if you would like to suggest other products to be included on the list, call Geoff Brosseau, (650) 365-8620.



# Less-Toxic Product List

Revised February 8, 2001

<b>Chemical Controls</b>			
<b>PRODUCT TYPE</b>	<b>ACTIVE INGREDIENT(S)</b>	<b>TARGET PEST(S)</b>	<b>EXAMPLES OF TRADE NAME(S); (Ace SKU #)</b>
Abamectin ant and cockroach baits	Abamectin	Ants Cockroaches	Advance Dual-Choice Bait Station (Ants) Advance Granular Bait (Ants) Avert Cockroach Bait Station (Roaches) Avert Formula 1 (a dryflow bait) (Roaches) Avert Formula 2 (a gel bait) (Roaches)  Raid Max house & Yard Line Roach Bait Plus Egg Stoppers (abamectin and methoprene) (SKU 7014913)
<b>Arsenic ant baits</b>	Arsenic trioxide	Ants	<b>Grants Kills Ants</b> (SKU 72197 & 7069057)
<b>Bicarbonate Salt Fungicide</b>	Potassium bicarbonate	Powdery mildew	<b>Kaligreen</b>
<b>Borate-based carpet treatment for fleas</b>	Disodium octaborate tetrahydrate	Fleas (indoors)	<b>Fleanix</b>
Borate-based products <b>Boric Acid</b>  <b>Borax</b>	Disodium octaborate tetrahydrate (borate) Orthoboric acid (boric acid) Sodium tetrahydrate decahydrate (borax)	Ants (indoors and outdoors) Cockroaches	<b>Terro Ant Killer II</b> (SKU 70677) Victor Liquid Ant Killing System (SKU 74116) <b>Drax Ant Kil Gel and Drax Ant Kil pf</b> Drax Liquidator Ant Bait Station Enforcer Ant Baits (SKU 788034) Ant Begone liquid bait <b>Seabright Roach Free System Bait (sticky trap and boric acid bait station)</b> <b>Roach Prufe</b> (SKU 73862) Spectrum Hot Shot Roach Reward (SKU 7077340) Enforcer Roach Ridd (SKU 72439) <b>Victor Roach Killing Powder</b> (SKU 70588) PIC Boric Acid Roach Powder, and many other brands

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
Citrus Oil Spray	d-Limonene	Ants, cockroaches, fleas	Orange Guard (SKU 746002) Concern Citrus Home Pest Control
<b>Corn Gluten Meal herbicide</b> (pre-emergent herbicide)	Corn gluten	Weeds	WOW <b>Suppressa</b> <b>Concern Weed Prevention Plus</b>
<b>Desiccating Dust Insecticidal Dust (Diatomaceous Earth)</b>	Silicon dioxide from diatomaceous earth	Ants, cockroaches, and fleas (indoors)	<b>Concern Diatomaceous Earth Crawling Insect Killer</b> <b>Safer Crawling Insect Killer</b> (SKU 7012479) Safer D-3 Plus Flea Killer (SKU 7062532) <b>Grow More Diatomaceous Earth Pest Pistol</b> (for applying DE)
<b>Fipronil ant and cockroach baits</b>	Fipronil	Ants Cockroaches	<b>Combat Quick Kill Formula</b> (ant bait stations) (SKU 7025190) Combat Outdoor Ant Stakes (SKU 7035959) <b>Combat Quick Kill Roach Control Gel</b> <b>Combat Quick Kill Formula</b> (bait stations for large roaches) <b>Combat Quick Kill Formula</b> (bait stations for small roaches) (SKU 7025182)
Garlic	Garlic	Mosquitoes	Victor Mosquito Barrier (SKU 7061930)
Garlic	Garlic	Ants, aphids, leafhoppers, thrips, whiteflies, etc.	Garlic Barrier Insect Repellent
Herbicidal Soap	Potassium salts of fatty acids	Weeds (especially broadleaf)	Safer Superfast Weed & Grass Killer (SKU 74809) <i>NOT to be confused with Safer Weed-Away</i>
<b>Horticultural oil</b>	Cottonseed Oil/Soybean oil	Aphids, scales, mites, mealy bugs	Stoller Natur'l Oil
Hot Pepper Insect Repellent	Capsaicin	Aphids, spider mites, thrips, whiteflies and others	Hot Pepper Wax Insect Repellent (SKU 746004 & 746006)

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
Hydramethylnon ant and cockroach baits	Hydramethylnon	Ants (indoors and outdoors) Cockroaches (indoors)	<b>Combat Ant Control (bait stations)</b> (SKU 74509) Combat Outdoor Ant Killing Granules  <b>Combat Roach Prevention (large roach bait stations)</b> <b>Combat Roach Prevention (small roach bait stations)</b> (SKU 71873) <b>Combat Roach Killing Gel</b> (SKU 7062177)
Imidacloprid	Imidacloprid	White grubs	Advanced Lawn Season-Long Grub Control (SKU 7099096)
<b>Insecticidal Soap</b>	Potassium salts of fatty acids	Ants, aphids, scales, mites, mealy bugs, small caterpillars, and others	Safer Flower & Garden Insecticidal Soap Concentrate Safer Multipurpose Insecticidal Soap Ready-to-Use & Concentrate Safer Multipurpose Insecticidal Soap concentrate (SKU 750025) <b>Safer Insecticidal Soap Insect Killer</b> (SKU 74805) Rose and Flower Insect Killer (SKU 74807) Fruit and Vegetable Insect Killer (SKU 74808)
<b>Insecticidal Soap</b>	Pyrethrins		<b>Safer Yard and Garden Insect Killer</b>
Mint oil	Mint oil, sodium lauryl sulfate	Yellowjackets, other flying insects	Victor Poison Free Wasp & Hornet Killer (SKU 7094709) Victor Poison Free Flying Insect Killer (SKU 7094733)
<b>Neem</b>	Clarified hydrophobic extract of neem oil	Aphids, whiteflies, mites, black spot, powdery mildew, rust, anthracnose	Safer BioNeem <b>Greenlight Rose Defense</b> (SKU 7062615 or 7071970) Greenlight Tomato & Vegetable Spray (SKU 7071996) Greenlight Fruit, Nut, & Vegetable Spray (SKU 7071988)
Pelargonic acid herbicide	Pelargonic acid	Weeds (broadleaf and grasses)	Quick Weed Killer
<b>Snail and slug bait</b>	Iron phosphate	Snails, slugs	<b>Monterey Sluggo</b> <b>Escar-Go</b> <b>Worry Free Slug and Snail</b>

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
<b>Snail and slug barrier</b>	Coconut Oil Soap	Snails, slugs	<b>SlugStop</b>
<b>Spray Oil</b> (Horticultural Oil)	Paraffinic oil Petroleum oil	Aphids, scales, mites, mealy bugs, leafhoppers, and powdery mildew	<b>Sunspray Ultrafine</b> (SKU 746200) Monterey Saf-T-Cide/Spreader-Sticker <b>Ortho Volck Oil Spray</b> (SKU 71560) Greenlight Horticultural Oil Spray (SKU 71313)
Sulfluramid ant baits	N-ethyl perflouroctanesulfonamide	Ants	Hot Shot Maxattrax Ant Bait (SKU 7065162)  Raid Ant Bait Plus <i>NOT to be confused with Raid Ant Bait which contains chlorpyrifos.</i>
<b>Sulfur fungicide</b>	Calcium polysulfides	Powdery mildew Black spot Rust	Ortho Dormant Disease Control (for roses) Lily Miller Polysul Summer Dormant Spray (concentrate) Lily Miller Dormant Spray for Insects Lily Miller Dormant Spray for Disease
<b>Sulfur fungicide</b>	Sulfur	Powdery mildew Black spot Rust	Safer Garden Fungicide (SKU 74806) Sulfur 90W Grant's Sulfur Dust

<b>Physical Controls</b>		
GENERIC NAME	TARGET PESTS	EXAMPLE OF TRADE NAMES
Anti-transpirant	Fungal Diseases Plant stress reduction	<b>Cloud Cover</b> (SKU 751005 & 751287) <b>Wilt Pruf</b> (SKU 7097991, 7097983 & 7098098)
Asphalt Crack Filler	Weeds	Crack-Fill
<b>Cockroach Sticky Trap</b>	Cockroaches	<b>Black Flag Roach Motel</b> (SKU 71136) and many other brands
<b>Cockroach Sticky Trap with pheromone attractant</b>	Cockroaches	<b>Victor Roach Magnet</b> (SKU 7036643)
Caulk	Ants Cockroaches	Various
<b>Copper Barrier</b>	Slugs and snails	<b>Safer Slug and Snail Copper Barrier Tape</b> (SKU 7012628)

## Physical Controls

GENERIC NAME	TARGET PESTS	EXAMPLE OF TRADE NAMES
<b>Flea Comb</b>	Fleas	Various brands
<b>Flea Trap</b>	Fleas	<b>The Ultimate Flea Trap (Victor)</b> <b>PestNomore Flea Trap</b> <b>Raid Flea Killer Plus Trap</b>
Flying Insect Traps	Winged aphids and whiteflies	Yellow Sticky Trap Safer Sticky Whitefly Trap (SKU 7012602) (also Central Garden & Pet and L&L brands)
<b>Floating Row Cover</b> <b>Row Cover</b>	General pest control and extending the growing season	<b>Fast Start</b> <b>Seed Blanket</b> <b>Tufbell</b> Grow Cover Grass-Fast Protective Seedling Cover for Lawns (SKU 76002) Many other brands
Netting	Birds and Deer	Tree Netting Garden Netting
Reflective Tape	Birds (to scare them away)	Bird Scare Tape Birds Away Reflective Scarecrow Tape
<b>Slippery Barrier</b>	Ants, Cockroaches	Safer Insect Barrier Tape (SKU 7021710)
<b>Slug and Snail Pitfall Trap</b>	Slugs and snails	<b>Safer Pit Slug and Snail Trap (SKU 76991)</b>
<b>Spikes</b> <b>Spiked shoes or sandals</b>	White Grubs (also used to aerate lawn)	<b>Spikes of Death</b> Green Giant Spike Shoes Aerator Sandals
<b>Sticky Barriers</b>	Ants	<b>Tanglefoot Tree Sticky Barrier (SKU 70406 &amp; 99015)</b> <b>Stickem Tree Pest Barrier (SKU 70410)</b>
<b>Yellowjacket Trap</b>	Yellowjackets	<b>Rescue! Yellowjacket</b> (disposable, SKU 7006927) <b>Rescue! Trap</b> (reusable, SKU 74521)- Lilly Miller Yellowjacket Trap <b>Safer Deluxe Yellowjacket and Wasp Trap (SKU 7003494)</b> Sterling Int'l Yellowjacket Control Trap (SKU 74521) <b>Victor Yellowjacket and Flying Insect Trap (74078)</b>

## Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
<b>Slow-release Fertilizers and Encapsulated Fertilizers</b>	General prevention of pests, but especially aphids which thrive on succulent new growth produced by quick-release fertilizers.	<b>Vigoro Lawn Fertilizer</b> <b>Osmocote Outdoor and Indoor Plant Food (SKU 72811)</b> <b>Osmocote</b> (SKU 72660, 7036981, 7036999, 72661, 72306)
<b>100% organic fertilizers</b>	Same as above	Whitney Farms Dr. Earth
<b>Alfalfa Meal</b>	Source of nitrogen	Down to Earth Alfalfa Meal Whitney Farms Alfalfa Meal
Blood & Bone Meal	Source of nitrogen and phosphorus	GreenAll Bandini Tagline Whitney Farms
<b>Blood Meal</b>	Source of nitrogen	GreenAll Bandini Tagline Whitney Farms Scott's Blood Meal (SKU 7064470)
Blood Meal, bone meal, feather meal	Slow release fertilizer	Ringer Lawn Restore (SKU 75867) Bio-Turf
Bone Meal	Source of phosphorus	GreenAll (SKU 746044) Bandini Tagline Whitney Farms Ace Premium Bone Meal (SKU 71865) Scott's Bone Meal (SKU 7064462)
Composted Poultry Litter	Slow-release fertilizer	Sustane Lily Miller Lawn Renew Redi-Gro Chicken Manure (SKU 7060197)
<b>Cottonseed Meal</b>	Source of nitrogen	GreenAll (SKU 746047) Down to Earth Cottonseed Meal Whitney Farms Cottonseed Meal



## Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
Fish Emulsion	Complete source of nitrogen, phosphorus & potash in liquid concentrate	GreenAll Atlas Black Leaf Alaska Fish Fertilizer (SKU 73208)
Kelp Meal Seaweed-based Fertilizers	Supply micro nutrients to plants	Whitney Farms Kelp Meal Grow More Kelp Meal
Cocoa Bean Hull Mulch	Good weed suppression, can make the soil more alkaline	Cocoa Bean Hulls
Fir mulch (All organic fir bark + 15% chicken fertilizer)	Medium weed suppression, can acidify soil	GreenAll
Landscape Fabric	Good weed suppression	Weed Mat WeedBlock (SKU 75091, 72782, 73227, 75434, & 75435)
Micro-Bark(All organic fir bark)	Same as above	GreenAll Bandini Black Magic
Paper Mulch	Good weed suppression	Planter's Paper
<b>Insectary Plants</b>	Pollen- & nectar-rich flowering plants that attract beneficial insects to help control pests	Call for information (see Fact Sheet entitled "Naturally Managing Pests")
Insect-Resistant Turf	Reduce white grub damage	Fescues and warm season grasses
<b>Potting Soil</b>	Planting substrate	<b>Whitney Farms</b> <b>Fox Farms</b>

## Biological Controls

COMMON NAME (ACE SKU)	SCIENTIFIC NAME	TARGET PESTS
<b>Beneficial Nematodes</b>	<i>Steinernema carpocapsae</i>	Lawn pests, such as white grubs and sod webworms, and immature fleas
Flea Destroyer (beneficial nematode)	<i>Steinernema carpocapsae</i>	Immature fleas
<b>Lacewings</b>	<i>Chrysoperla carnea</i>	Aphids, mealy bugs, mites and other soft-bodied insects
Ladybug lures: Safer Ladybug Lures (SKU 7012628)		Aphids, mealy bugs, mites and other soft-bodied insects
Mosquito Dunks (SKU 7092927 & 7092935)	<i>Bacillus thuringiensis israelensis</i> (B.t.i.)	Mosquito larvae (in water)

## Biological Controls

COMMON NAME	(ACE SKU)	SCIENTIFIC NAME	TARGET PESTS
Safer B.T. Caterpillar Killer (SKU 75440) Greenlight Bio-Worm Killer (SKU 71339) Dragon Chemical Corp. Thuricide Spray (SKU 73996)		<i>Bacillus thuringiensis kurstaki</i> (B.t.k.)	Various caterpillars including sod webworm
Trichogramma		<i>Trichogramma pretiosum</i>	Over 200 species of insects

## Monitoring Aids

TOOL	FUNCTION OR PURPOSE	TRADE NAME
Hand Lens (10x)	Magnifying insects and mites in order to identify them	
Soil Probe	Test soil moisture to keep plants vigorous	Soil Sampler
Soil Thermometer	Test soil temp. to determine when nematodes can be used or to determine whether or not to plant	Soil Test Thermometer

## Reference Materials

TITLE, AUTHOR, PUBLISHER	YEAR PUBLISHED	USES IN STORE	TOPIC
California Insects Gerry Powell & Charles Hogue California Princeton Fulfillment Service 1445 Lower Ferry Rd. Ewing, NJ 08618 800-822-6657	1979	Reference and Sale	Identification of pests and beneficial insects
Common Sense Pest Control William Olkowski, Sheila Daar, and Helga Olkowski Taunton Press, Box 5506 Newtown, CT 06740 800-926-8776	1991	Reference and Sale	Controlling pests in and around the home using integrated pest management (IPM)
Controlling Pests and Diseases Patricia S. Michalak Rodale Press Book Reader's Service 333 East Minor Street Emmaus, PA 18098 800-848-4735	1994	Reference and Sale	Controlling pests in the garden using IPM

## Reference Materials

TITLE, AUTHOR, PUBLISHER	YEAR PUBLISHED	USES IN STORE	TOPIC
Garden Pests and Diseases Editors of Sunset Books & Magazine Sunset Publishing Corp Menlo Park, CA 94025. 800-526-5111	1993	Reference and Sale	Controlling pests in the garden using IPM
Gardener's Guide to Common Sense Pest Control William Olkowski, Sheila Daar, and Helga Olkowski Taunton Press	1996	Sale	Controlling pests in the garden using IPM
Good Bugs for Your Garden Allison Mia Starcher Algonquin Books of Chapel Hill P.O. Box 2225 Chapel Hill, NC 27515 800-722-7202	1995	Reference and Sale	Identifying beneficial insects
Natural Disease Control: A Common-Sense Approach to Plant First Aid 21st-Century Gardening Series Brooklyn Botanic Garden 1000 Washington Ave. Brooklyn, NY 11225 718-623-7200	2000	Reference and Sale	Identifying and treating diseases using IPM
Natural Enemies Handbook Mary Louise Flint and Steve H. Dreistadt Dept. of Agriculture and Natural Resources, University of California (DANR) 6701 San Pablo Ave. Oakland, CA 94608 510-642-2431	1998	Reference and Sale	Identifying beneficial insects
Pests of Landscape Trees and Shrubs (Publication #3359) Steve H. Dreistadt DANR	1994	Reference and Sale	Controlling pests on trees and shrubs using IPM

## Reference Materials

TITLE, AUTHOR, PUBLISHER	YEAR PUBLISHED	USES IN STORE	TOPIC
Pests of the Garden and Small Farm (Publication #3332) Mary Louise Flint DANR	1990	Reference and Sale	Controlling pests in the garden using IPM
Pests of the West Whitney Cranshaw Fulcrum Publishers Golden, CO 80401 303-277-1623	1995	Reference and Sale	Identification of pests
The Best of Fine Gardening: Healthy Soil Editors of Fine Gardening magazine Taunton Press	1995	Reference and Sale	Soils and soil types; improving soil
The Chemical-Free Lawn Warren Schultz Rodale Press	1993	Reference and Sale	Less-toxic lawn care
The Sunset Western Garden Problem Solver Editors of Sunset Books & Magazines Sunset Publishing Corp.	1998	Reference and Sale	Controlling pests in the garden using IPM
Trees and Shrubs for Temperate Climates, 3 <sup>rd</sup> Edition Gordon Courtright Timber Press Portland Oregon 503-227-2878	1998	Reference and Sale	Selecting trees and shrubs for Bay Area gardens
Turfgrass Pests (Publication #4053) A.D. Ali and Clyde L. Elmore DANR	1989	Reference and Sale	Controlling pests in lawns
The UC Guide to Solving Garden and Landscape Problems: An Interactive CD-ROM (Publication #3400) University of California in cooperation with Washington State and Oregon State Universities DANR	2000	Reference	Controlling pests in the garden and landscape using IPM

## Reference Materials

TITLE, AUTHOR, PUBLISHER	YEAR PUBLISHED	USES IN STORE	TOPIC
U.C. IPM Pest Management Guidelines: Turfgrass (Publication #3365-T) Edited by Mary Louise Flint DANR	1996	Reference	IPM for lawns
Water Conserving Plants and Landscapes for the Bay Area, 2 <sup>nd</sup> Edition East Bay Municipal Utility District Oakland, CA 510-287-1630	1990	Reference	Landscaping with drought-tolerant plants