

"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.

Revised April 12, 2002

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
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Less-Toxic Product List

Revised April 12, 2002

Chemical Controls			
PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
Algicidal soap	Potassium salts of fatty acids	Algae and moss	Schultz Garden Safe Moss And Algae Killer
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)
Arsenic ant baits	Arsenic trioxide	Ants	Grants Kills Ants (SKU 72197 & 7069057)
Bicarbonate salt fungicide	Potassium bicarbonate	Powdery mildew	Bonide Remedy Kaligreen
Borate-based carpet treatment for fleas	Disodium octaborate tetrahydrate	Fleas (indoors)	Fleanix
Boron-based products Boric acid Borax Borate	Disodium octaborate tetrahydrate (borate) Orthoboric acid (boric acid) Sodium tetrahydrate decahydrate (borax)	Ants (indoors and outdoors) Cockroaches	Drax Ant Kil Gel and Drax Ant Kil pf Drax Liquidator Ant Bait Station Enforcer Ant Baits (SKU 788034) Grants Kills Ants Liquid Ant Killer Bait Terro Ant Killer II (SKU 70677) Terro Ant Killer Liquid Baits Victor Liquid Ant Killing System (SKU 74116) Enforcer Roach Ridd (SKU 72439) PIC Boric Acid Roach Powder, and many other brands Roach Prufe (SKU 73862) Seabright Roach Free System Bait

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
			(sticky trap and boric acid bait station) Spectrum Hot Shot Roach Reward (SKU 7077340) Victor Roach Killing Powder (SKU 70588)
Cedar oil	Cedar oil/sodium lauryl sulfate	Ants, cockroaches	Victor Poison Free Ant and Roach Killer
Citrus oil spray	d-Limonene	Ants, cockroaches, fleas	Orange Guard (SKU 746002) Concern Citrus Home Pest Control
Clove oil	Eugenol	Ants, cockroaches, fleas, other crawling insects	Bioganic Safety Brand Dust Insecticide
Clove oil	Eugenol/Sesame oil	Flies, yellowjackets	Bioganic Safety Brand Flying Insect Killer
Corn gluten meal herbicide (pre-emergent herbicide)	Corn gluten	Weeds	WOW Suppressa Concern Weed Prevention Plus
Copper soap fungicide	Potassium salts of fatty acids and copper		Concern Copper Soap Fungicide
Desiccating dust Insecticidal dust (Diatomaceous Earth)	Silicon dioxide from diatomaceous earth	Ants, cockroaches, and fleas (indoors)	Concern Diatomaceous Earth Crawling Insect Killer Grow More Diatomaceous Earth Pest Pistol (for applying DE) Safer Crawling Insect Killer (SKU 7012479) Safer D-3 Plus Flea Killer (SKU 7062532)
Fipronil ant and cockroach baits	Fipronil	Ants Cockroaches	Combat Quick Kill Formula (ant bait stations) (SKU 7025190) Combat Outdoor Ant Stakes (SKU 7035959) Combat Quick Kill Roach Control Gel Combat Quick Kill Formula (bait stations for large roaches) Combat Quick Kill Formula (bait stations for small roaches) (SKU 7025182)
Garlic	Garlic	Mosquitoes	Victor Mosquito Barrier (SKU 7061930)
Garlic	Garlic	Ants, aphids, leafhoppers, thrips,	Garlic Barrier Insect Repellent

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
		whiteflies, etc.	
Herbicidal soap	Ammoniated salts of fatty acids	Weeds (especially broadleaf)	Concern Fast Acting Weed Killer
Horticultural oil (see "Spray Oil")			
Hot pepper insect repellent	Capsaicin	Aphids, spider mites, thrips, whiteflies and others	Hot Pepper Wax Insect Repellent (SKU 746004 & 746006) Bonide Hot Pepper Was
Hydramethylnon ant and cockroach baits	Hydramethylnon	Ants (indoors and outdoors) Cockroaches (indoors)	Combat Ant Control (bait stations) (SKU 74509) Combat Outdoor Ant Killing Granules Combat Roach Prevention (large roach bait stations) Combat Roach Prevention (small roach bait stations) (SKU 71873) Combat Roach Killing Gel (SKU 7062177)
Imidacloprid	Imidacloprid	White grubs	Bayer Season-Long Grub Control
Insecticidal soap	Potassium salts of fatty acids	Ants, aphids, scales, mites, mealy bugs, small caterpillars, and others	Concern Insect Killing Soap Safer Fruit and Vegetable Insect Killer (SKU 74808) Safer Rose and Flower Insect Killer (SKU 74807) Safer Flower & Garden Insecticidal Soap Concentrate Safer Insecticidal Soap Insect Killer (SKU 74805) Safer Multipurpose Insecticidal Soap concentrate (SKU 750025) Safer Multipurpose Insecticidal Soap Ready-to-Use & Concentrate Schultz Garden Safe Insecticidal Soap
Insecticidal soap	Potassium salts of fatty acids, pyrethrins	See above	Safer Yard and Garden Insect Killer
Jojoba Oil	Jojoba oil	Powdery mildew	Monterey Erase
Mint oil	Mint oil, sodium lauryl sulfate	Ants, cockroaches, yellowjackets, flying insects	Victor Poison Free Flying Insect Killer (SKU 7094733) Victor Poison Free Wasp & Hornet
Mint oil & thyme oil	Mint oil, thyme oil	Aphids	Pond Care Herbal Aphid Control
Neem	Clarified hydrophobic extract of neem oil	Aphids, whiteflies, mites, black spot, powdery mildew, rust,	Bonide Boneem Greenlight Fruit, Nut, & Vegetable

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
		anthracnose	Spray (SKU 7071988) Greenlight Neem Concentrate Greenlight Rose Defense (SKU 7062615 or 7071970) Greenlight Tomato & Vegetable Spray (SKU 7071996) Safer BioNeem Schultz Garden Safe Fungicide 3
Pelargonic acid herbicide	Pelargonic acid	Weeds (broadleaf and grasses)	Monterey Quick Kill
Pyrethrins and oil	Pyrethrins, canola oil	Broad spectrum insecticide	Monterey Take Down Schultz Garden Safe Fruit and Vegetable Schultz Garden Safe Houseplant and Garden Insect Schultz Garden Safe Rose and Flower Insect Spray
Rosemary oil	Rosemary oil	Crawling insects	Bioganic Crawling Insect Killer
Snail and slug bait	Iron phosphate	Snails, slugs	Escar-Go Monterey Sluggo Schultz Garden Safe Slug and Snail Bait Worry Free Slug and Snail
Snail and slug barrier	Coconut Oil Soap	Snails, slugs	Concern SlugStop
Spray oil (Horticultural Oil)	Paraffinic oil Petroleum oil Cottonseed Oil/Soybean oil Canola oil	Aphids, scales, mites, mealy bugs, leafhoppers, and powdery mildew	Concern Pesticidal Oil (Canola Oil) Greenlight Horticultural Oil Spray (SKU 71313) Lily Miller Dormant Spray for Insects Lily Miller Superior Type Oil Spray Monterey Saf-T-Cide/Spreader-Sticker Ortho Volck Oil Spray (SKU 71560) Stoller Natur'l Oil (Cottonseed/Soybean Oil) Summit Year ROUND Oil Sunspray Ultrafine (SKU 746200)
Sulfuramid ant baits	N-ethyl perflourooctanesulfo- namide	Ants	Hot Shot Maxattrax Ant Bait (SKU 7065162)

PRODUCT TYPE	ACTIVE INGREDIENT(S)	TARGET PEST(S)	EXAMPLES OF TRADE NAME(S); (Ace SKU #)
			Raid Ant Bait Plus <i>NOT to be confused with Raid Ant Bait which contains chlorpyrifos.</i>
Sulfur fungicide	Calcium polysulfides	Powdery mildew Black spot Rust	Lily Miller Polysul Summer Dormant Spray (concentrate) Lily Miller Dormant Spray for Disease
Sulfur fungicide	Sulfur	Powdery mildew Black spot Rust	Grant's Sulfur Dust Greenlight Wettable Dusting Sulfur Safer Garden Fungicide (SKU 74806) Schultz Garden Safe Fungicide Sulfur 90W

Physical Controls		
GENERIC NAME	TARGET PESTS	EXAMPLE OF TRADE NAMES
Anti-transpirant	Fungal Diseases Plant stress reduction	Cloud Cover (SKU 751005 & 751287) Wilt Pruf (SKU 7097991, 7097983 & 7098098)
Asphalt crack filler	Weeds	Crack-Fill
Cockroach sticky trap	Cockroaches	Black Flag Roach Motel (SKU 71136) and many other brands
Cockroach sticky trap with pheromone attractant	Cockroaches	Victor Roach Magnet (SKU 7036643)
Caulk	Ants Cockroaches	Various
Copper barrier	Slugs and snails	Cal Plastics Copper Barrier Tape Safer Slug and Snail Copper Barrier Tape (SKU 7012628)
Flea comb	Fleas	Various brands
Flea trap	Fleas	PestNomore Flea Trap Raid Flea Killer Plus Trap The Ultimate Flea Trap (Victor)
Flying insect traps	Winged aphids, flies, whiteflies	Big Stick Sticky Fly Trap Safer Sticky Traps for Houseplants Safer Sticky Whitefly Trap (SKU 7012602)

Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
		Yellow Sticky Trap (also Central Garden & Pet and L&L brands)
Floating row cover Row cover	General pest control and extending the growing season	Fast Start Gardeneer Harvest Guard Seed Blanket Grass-Fast Protective Seedling Cover for Lawns (SKU 76002) Grow Cover Many other brands Seed Blanket
Netting	Birds and Deer	Tree Netting Garden Netting
Pantry pest trap	Flour moths	Concern Kitchen Moth Trap Safer Pantry Pest Trap
Reflective Tape	Birds (to scare them away)	Bird Scare Tape Birds Away Reflective Scarecrow Tape
Slippery barrier	Ants, Cockroaches	Safer Insect Barrier Tape (SKU 7021710)
Slug and snail pitfall trap	Slugs and snails	Safer Pit Slug and Snail Trap (SKU 76991)
Spikes Spiked shoes or sandals	White Grubs (also used to aerate lawn)	Aerator Sandals Green Giant Spike Shoes Spikes of Death
Sticky barriers	Ants	Tanglefoot Tree Sticky Barrier (SKU 70406 & 99015) Stickem Tree Pest Barrier (SKU 70410)
Yellowjacket Trap and attractants	Yellowjackets	Lilly Miller Yellowjacket Trap Rescue! Yellowjacket attractant Rescue! Trap (reusable, SKU 74521)- Rescue! Yellowjacket (disposable, SKU 7006927) Safer Deluxe Yellowjacket and Wasp Trap (SKU 7003494) Safer Disposable Yellowjacket Trap Safer Yellowjacket Attractant (protein bait) Safer Yellowjacket & Wasp Trap (trap w/protein bait) Sterling Int'l Yellowjacket Control Trap (SKU 74521)

Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
		Victor Yellowjacket and Flying Insect Trap (74078)

Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
Slow-release Fertilizers and Encapsulated Fertilizers	General prevention of pests, but especially aphids which thrive on succulent new growth produced by quick-release fertilizers.	Jobes Spikes (many varieties) Miracle Gro Spikes (several varieties) Osmocote (SKU 72660, 7036981, 7036999, 72661, 72306) Osmocote Outdoor and Indoor Plant Food (SKU 72811) (and other varieties) Schultz Multicote Vigoro Lawn Fertilizer
100% organic fertilizers	Same as above	Down to Earth Dr. Earth E.B. Stone Glorius Gardens All Purpose Organic Whitney Farms
Alfalfa Meal	Source of nitrogen	Down to Earth Alfalfa Meal Whitney Farms Alfalfa Meal
Blood & Bone Meal	Source of nitrogen and phosphorus	Bandini GreenAll Whitney Farms
Blood Meal	Source of nitrogen	Bandini Glorious Gardens GreenAll Master Nursery Scott's Blood Meal (SKU 7064470) Whitney Farms
Blood Meal, bone meal, feather meal, kelp meal, dried poultry waste, sulphomag	Slow release fertilizer (not all ingredients contained in each brand)	Bio-Turf Lilly Miller Compost Maker Ringer Lawn Restore (SKU 75867) Whitney Farms Lawn Food
Bone Meal	Source of phosphorus	Ace Premium Bone Meal (SKU 71865) Bandini GreenAll (SKU 746044)

Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
		Master Nursery Scott's Bone Meal (SKU 7064462) Whitney Farms
Composted Poultry Litter	Slow-release fertilizer	Lily Miller Lawn Renew Redi-Gro Chicken Manure (SKU 7060197) Sustane
Cottonseed Meal	Source of nitrogen	Down to Earth Cottonseed Meal Glorius Gardens Cottonseed Meal GreenAll (SKU 746047) Master Nursery Whitney Farms Cottonseed Meal
Fish Emulsion	Complete source of nitrogen, phosphorus & potash in liquid concentrate	Alaska Fish Fertilizer (SKU 73208) Atlas Black Leaf Glorius Gardens GreenAll Liquinox
Kelp Meal Seaweed-based Fertilizers	Supply micro nutrients to plants	Glorius Gardens Kelp Meal Grow More Kelp Meal Whitney Farms 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	Gardeneer Weed Sheild Weed Mat WeedBlock (SKU 75091, 72782, 73227, 75434, & 75435)
Micro-Bark(All organic fir bark)	Same as above	Bandini Black Magic GreenAll
Paper Mulch	Good weed suppression	Planter's Paper
Insectary Plants	Pollen- & nectar-rich flowering plants that attract beneficial insects to help control pests	Call for information (see Fact Sheet entitled "Naturally Managing Pests")

Cultural Controls

GENERIC NAME	FUNCTION OR PURPOSE	EXAMPLE OF TRADE NAMES
Insect-Resistant Turf	Reduce white grub damage	Fescues and warm season grasses
Potting Soil	Planting substrate	Fox Farms Whitney Farms

Biological Controls		
COMMON NAME (ACE SKU)	SCIENTIFIC NAME	TARGET PESTS
Beneficial Nematodes	<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
Lacewings	<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 Bits Mosquito Dunks (SKU 7092927 & 7092935)	<i>Bacillus thuringiensis israelensis</i> (B.t.i.)	Mosquito larvae (in water)
Dragon Chemical Corp. Thuricide Spray (SKU 73996) Greenlight BT Worm Killer (SKU 71339) MontereyCaterpillar Clobber Monterey Worm Ender Safer B.T. Caterpillar Killer (SKU 75440)	<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
Compost Thermometer	Monitor composting process	No Wait Compost Thermometer

Reference Materials

TITLE, AUTHOR, PUBLISHER	YEAR PUBLISHED	USES IN STORE	TOPIC
California Insects Gerry Powell & Charles Hogue Calif. 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 by 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 by 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
Garden Pests and Diseases by the 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.	2000	Reference and Sale	Identifying and treating diseases using IPM

Brooklyn, NY 11225 718-623-7200			
Natural Enemies Handbook Mary Louise Flint and Steve H. Dreistadt Dept. of Agriculture and Natural Resources, Univ. 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
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 rd 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-	2000	Reference	Controlling pests in the garden and

ROM (Publication #3400) University of California in cooperation with Washington State and Oregon State Universities DANR			landscape using IPM
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 nd Edition East Bay Municipal Utility District Oakland, CA 510-287-1630	1990	Reference	Landscaping with drought-tolerant plants