Diatomaceous earth (DE) Concern Diatomaceous Earth Crawling Insect Killer, Safer Brand Diatomaceous Earth Ant and Crawling Insect Killer, St. Gabriel Organics

Insect Dust—Diatomaceous Earth

Boric acid powder Bonide Boric Acid Roach Powder, Hot Shot MaxAttrax Roach Killing Powder

with Boric Acid

Hand duster Pest Pistol

Biocare Cockroach Traps, Biocare Professional Strength Cockroach Traps, Sticky traps

Black Flag Roach Motel, Springstar Biocare Cockroach Trap S1303

Victor Poison-free Insect Magnet, Victor Roach Pheromone Traps Sticky traps with pheromone attractant

Baits containing boric acid Harris Famous Roach Tablets, Seabright Roach Free System (traps and bait)

Combat Source Kill products, Ortho Roach Bait Station Baits containing hydramethylnon

Cockroaches are dark in color, oval-shaped, and have long antennae. Cockroach egg cases are small, dark, and shaped like beans. Cockroach droppings look like black pepper. Cockroaches are mainly active at night and generally stay hidden during the day in cracks and crevices near their source of food. They like warm, damp, dark, and tight spaces.

### WE KNOW WHERE THEY LIVE

Finding cockroaches and their nests is the first step to getting rid of them.

- Go into a dark room and flip on the light. Watch to see where cockroaches run.
- Use a flashlight and a mirror to check for cockroach nests in cracks and crevices behind cabinets or under appliances. You'll know you've found a nest when you see dead cockroaches, cockroaches' shed skins, egg cases, and droppings.
- Use nontoxic sticky traps to locate cockroach nests. Place the traps next to a wall where you think a nest might be. Sticky traps containing a nontoxic pheromone that attracts cockroaches will catch more of them. Many cockroaches in the trap tells you a nest is nearby.

Cockroaches are unwelcome visitors to our homes. They can carry germs from sewers, garbage cans, or bathrooms to kitchen counters and human food. Cockroaches and their droppings also trigger asthma and allergies.

#### CONTROLLING COCKROACHES

- If you only have a few cockroaches, you may be able to control the problem with sticky traps and cleanup.
- Use a strong vacuum with a crevice attachment to pull cockroaches from their hiding places and clean up nests. Use a vacuum with a HEPA filter if possible. After vacuuming, take the vacuum cleaner outdoors, remove

the bag, seal it in a plastic garbage bag, and put it in the trash. Wipe down the vacuum cleaner with a damp cloth.

· Cockroach droppings (frass) attract more roaches and other pests. Clean up frass with soap and water.





- Then, use a hand duster such as a Pest Pistol to blow diatomaceous earth (DE) or boric acid powder into cracks, crevices, and other openings in walls, under large appliances, or in areas where you have found cockroach nests. Be sure to use DE sold for pest control, not for pool filters. When applying DE or boric acid powder, protect your lungs and eyes by wearing a dust mask, gloves, and safety goggles. Apply a very light coating because cockroaches will avoid piles of dust. It doesn't take much to kill them.
- One way to get to a cockroach hiding place behind a wall is to remove the cover plate on an electrical outlet or switch. Always turn off the power before applying products near electrical outlets.
- If dusting is not effective, use enclosed cockroach baits. See *Tips for Using Cockroach Baits*.

#### **KEEP COCKROACHES OUT!**

Keep cockroaches away by blocking access to your home and to their food, water, and shelter. Follow these simple good housekeeping tips to keep them from coming back:

- Store food in the refrigerator or in containers that seal tightly.
- Clean counters and eating areas daily. Vacuum or sweep floors. Don't leave dirty dishes out overnight, even in the dishwasher. Take out recycling and any garbage containing food scraps every night. Place pet food and water bowls in larger bowls of soapy water. Reduce clutter in all rooms (it provides shelter for cockroaches).
- Keep kitchen surfaces dry whenever they are not in use, especially overnight. Fix leaky plumbing.
- Check items you bring into your house for cockroaches or their egg cases. Pay special attention to used furniture and appliances, and cardboard cartons from food stores.

## **TIPS FOR USING COCKROACH BAITS**

- Use baits indoors only.
- Use baits with boric acid or hydramethylnon.
  Baits with hydramethylnon should be enclosed to protect people and pets.
- Clean up crumbs and put all food away in tightly covered containers or in the fridge so cockroaches will feed only on baits.
- Place baits near areas where cockroaches are hiding and between their hiding places and food sources. Put them along the edges of walls, and under or behind appliances and cabinets—not in the middle of the room, and never where children or pets can reach them.
- Check bait stations often. Remove empty bait stations because they make great cockroach hiding spots.
- Put out sticky traps so that you'll know as soon as cockroaches return. This is especially important in apartment buildings, condominiums, or other homes that share walls, where cockroaches can easily move from one home to another.

# MAKE SIMPLE REPAIRS THAT KEEP COCKROACHES FROM COMING BACK

 Seal cracks and crevices with caulk. Before sealing, vacuum and wash the area to eliminate all cockroach

egg cases, droppings, or other dirt. Caulk and paint cracks around baseboards, cabinets, pipes, and sinks, etc. Use mildew-resistant caulk in damp areas.

 Weatherstrip around doors and windows and repair holes in screens.





## WWW.OURWATEROURWORLD.ORG

Common home and garden pesticides are found in stormwater runoff, treated wastewater, and in local waterways, sometimes at levels that can harm sensitive aquatic life. **Our Water Our World** is a joint effort by water pollution prevention agencies, participating retail stores, and pesticide distributors and manufacturers—working together to reduce the risks associated with pesticide use.

Our Water Our World fact sheets and store displays educate residents about less-toxic pest management. For the rest of the series of fact sheets, visit www.OurWaterOurWorld.org. Look for the *Eco-friendly* tag next to less-toxic products in participating stores and nurseries. See the *Pesticides and Water Quality* fact sheet for information on active ingredients in common pesticides that may cause water quality problems.

Pest control strategies and methods described in this publication are consistent with integrated pest management (IPM) concepts, and are based on scientific studies and tests in actual home and garden settings. Use suggested products according to label directions and dispose of unwanted or leftover pesticides at a household hazardous waste collection facility or event. For more information on pesticide disposal, visit <a href="https://www.earth911.com">www.earth911.com</a>. No endorsement of specific brand name products is intended, nor is criticism implied of similar products that are not mentioned.

For more information, contact:

Bio-Integral Resource Center (BIRC), 510.524.2567, www.birc.org University of California Cooperative Extension Master Gardeners in your area University of California IPM website, www.ipm.ucanr.edu