# EDDY APPROVED LESS-TOXIC PEST CONTROL THAT WORKS

KEEPING

# OUT OF YOUR HOUSE

Ithough cockroaches are useful outdoors, where they help recycle plant and animal wastes, they are not usually welcome indoors. Research clearly indicates that roaches can carry disease causing organisms from sewers, garbage cans, or bathrooms to kitchen counters and human food. Cockroaches can also trigger allergic reactions in some people.

#### DETECTION

Except for size and markings, all cockroaches have a similar appearance. These insects are dark in color, oval shaped, and have long antennae. Roaches are mainly active at night and generally remain hidden during the day in cracks and crevices near their source of food.

• Use nontoxic sticky traps to locate roach habitat. Roaches like to travel by touching the edges of objects. Place traps along the edges of walls, appliances, cupboards, etc., and not in the middle of the room. Sticky traps with a nontoxic "pheromone" attractant will catch more roaches. When you find out where roaches are hiding, you'll know where to concentrate your efforts.

#### **LESS-TOXIC CONTROLS**

• Use sticky traps for small infestations. If you only have a few roaches, you may be able to control the problem with sticky traps.

- Use a strong vacuum with a crevice attachment to pull roaches from their hiding places.
- Use insecticidal dusts such as diatomaceous earth (DE) or boric acid in wall voids or cracks and crevices before you seal them, under large appliances, or in other prime habitats. One way to gain access to a wall void is to remove the cover plates on electrical outlets and switches. Always turn off the power before applying products near electrical outlets.

When properly used, DE has little toxicity to humans and pets, but kills insects by absorbing their outer waxy coating, causing dehydration and death. Use DE sold for pest control and not for pool filters.

Although boric acid has a low acute (immediate) toxicity for humans and pets, it should be handled carefully and kept out of the reach of children and pets. For roaches, boric acid is a slow acting but effective stomach poison.

When applying these dusts, use a hand duster and wear a dust mask, gloves, and safety goggles. Apply a very light coating because roaches will avoid piles of dust.

• Use cockroach baits because they use minimal amounts of insecticide and confine the poison to a very small area (see Tips for Using Cockroach Baits on back)

#### PREVENTION

Prevent cockroach infestations by denying them access to your home and to the food, water, and shelter they need to survive.

- Store food in the refrigerator or in containers that seal tightly.
- Keep things clean and tidy. Thoroughly clean counters and vacuum or sweep floors daily in eating and food preparation areas. Don't leave dirty dishes out overnight, even in the dishwasher. Any garbage containing food scraps should be removed from the house nightly. Thoroughly clean recyclables before storing them. At night, place pet food and water bowls in a moat of soapy water. Reduce clutter in all rooms (it provides habitat for roaches).
- **Keep things dry.** Fix leaky plumbing. Keep kitchen surfaces dry whenever they are not in use, especially overnight.
- **Seal cracks and crevices.** Before sealing, vacuum and wash the area to eliminate all roach egg cases, fecal matter, or other debris. Caulk and paint cracks around baseboards, cupboards, pipes, sinks, etc. Use mildew resistant caulk in moist areas.
- Weatherstrip around doors and windows and repair holes in screens.



- **Inspect materials you bring into your house** for roaches or their egg cases (small, dark, kidney bean shaped). Pay special attention to used furniture and appliances and cardboard cartons from food stores.
- Monitor with sticky traps.

Once you have eliminated roaches or significantly reduced their numbers, continue to use sticky traps to alert you to a new infestation or a rise in the population. This is especially important in apartment buildings, condominiums, or other connected dwellings where roaches can easily move from one household to another.

### TIPS FOR USING COCKROACH BAITS

- Use baits indoors.
- Use baits with boric acid, fipronil, or hydramethylnon.
- Reduce or eliminate food sources so roaches will feed on baits.

- If you are using a gel bait, put small dabs in a number of locations rather than large blobs in a few locations.
- Place baits near areas where roaches are hiding and between their hiding places and food sources.
- Place baits where roaches are most likely to travel or congregate, such as along the edges of walls, appliances, cupboards, etc. - not in the middle of the room.
- Keep baits out of the reach of children and pets.
- Check bait stations frequently, especially if you have a large infestation. Empty bait stations should be removed because they make great roach hiding spots.

#### WATER POLLUTION

Common household pesticides (a term which includes all chemical control such as herbicides, insecticides, rodenticides, etc.) can make their way into treated wastewater and local waterways, and may be at levels that can harm sensitive aquatic life. Pesticides can also get into ground water which may be used as drinking water. Water pollution prevention agencies have teamed up with participating retail stores, and professional pest control associations to reduce the risks associated with improper pesticide use.

Use pesticides according to label directions, paying close attention to surface and ground water advisories. Dispose of unwanted or leftover pesticides at a household hazardous waste collection facility or event; or through the Idaho State Department of Agriculture (ISDA) Pesticide Disposal Program (PDP). Clean, plastic pesticide and fertilizer containers may also be recycled through ISDA's Container Recycling Operation Program (CROP). Please call 208-465-8442 or visit: www.agri.idaho.gov for more information. For additional information on pesticide disposal, call 1-800-CLEANUP or visit: www.1800CLEANUP. org.

## FOR MORE INFORMATION

Active ingredients are listed on the front of the product. Pesticide information profiles can be found on the Oregon State University hosted webpage http:// extoxnet.orst.edu/pips. The University of Idaho's Extension Educators, located in most counties, can often assist in local pest management questions. No endorsement of specific brand name products is intended, nor is criticism implied of similar products that are not mentioned.

For more information, contact: **Partners for Clean Water** www.PartnersForCleanWater.org Idaho State Department of Agriculture www.agri.state.id.us/ University of Idaho IPM website: www.extension.uidaho.edu/ University of Idaho Cooperative Extension Master Gardeners in your area www.extension.uidaho.edu/idahogardens/ Western Integrated Pest **Management Center** www.wripmc.org/ **IPM Institute of North America** www.ipminstitute.org/ **National Pest Management Association** www.Pest World.org

#### THINGS TO AVOID AND WHY

These considerations will reduce the potential indiscriminate use of chemical control products and therefore reduce the potential exposure of pesticide residues to humans, animals and the environment.

- Use of pesticide products without:
  - 1. knowing what pest you are trying to control,
  - 2. consideration of alternative control options (IPM),
  - 3. selecting the most appropriate product for your situation, and
  - 4. reading and following the label directions.
- Automated aerosols and plant feeders: These devices may disperse chemicals in a way that can increase the risks of exposure to unintentional targets.
- Careless use of ground sterilants: These can leach; either use great care or alternative control methods to prevent damage to desired plants or water contamination.

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www.PartnersForCleanWater.org