German Cockroach
Blatta germanica
a.k.a. “Croton bug”

**Adult size**
0.5 inch

**Thorax** (“Body”)
Light brown. Two black stripes on pronotum (back of head).

**Wings**
Females do not grow wings. Both sexes have traces of wings on nymphs.

**Egg Case**
Light brown. Egg case glued to wall, ceiling, picture frames, furniture, in closets or other dark places.

**Feces**
Pepper-like specks on the wall, near nest site.

**Habitat**
Warm, moist areas. Prefers kitchens and bathrooms. Likes to squeeze into tight cracks.

Brownbanded Cockroach
Blatta longipalpa

**Adult size**
0.5 inch

**Oriental Cockroach**
Blatta orientalis
a.k.a. “Water bug” or “Black bug”

**American Cockroach**
Periplaneta americana
a.k.a. “Waterbug” or “Water bug”

**Adult size**
1 to 1.25 inch
1 to 1.75 inch

**Wings**
Dark, reddish-brown to black.

**Egg Case**
Traces of wings on females, short wings on males.

**Feces**
Similar to mouse droppings. Under magnifier, one end is rounded, the other is slightly tapered.

**Habitat**
Throughout the house, prefers high locations. Also in closets, under furniture, and in heat-generating appliances.

*Note: The Pennsylvania wood roach is sometimes discovered in homes during warm months. It is about the size of the German and brownbanded but does not reproduce inside and dies quickly.*

Can’t I live with a few roaches?
Perhaps they don’t disgust or embarrass you, but there are good reasons to exclude cockroaches from your home. A cockroach will travel through many types of wastes then walk over, and defecate on, your kitchen counters, plates, silverware, and any accessible food. Cockroaches are known to carry disease-causing bacteria, although their ability to transmit diseases to humans is under study. They’re still a significant health concern because they trigger allergies that contribute to asthma.

Finding even one roach warrants alertness. All roach problems start small, but roaches reproduce rapidly, so early intervention is highly recommended. Look inside for a common-sense approach to cockroach management.

The New York State IPM Program

We encourage people to adopt a sustainable approach to managing pests, using methods that minimize environmental, health, and economic risks. For more information: NYS Integrated Pest Management Program, NYSAES, Geneva, NY 14456; 1-800-665-8536; <www.nysaes.cornell.edu/ipmnet/ny>. For additional copies of this brochure IPM No. 602, contact your local Cooperative Extension office or the NYS IPM Program.

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Why can’t I just spray? Because roaches take their food, eggs, and larvae indoors and shelter them from predators. Once inside, roaches seek a food source, a place to drink, and a place to lay their eggs. These habits limit the amount of pesticides that can affect the roaches.

Integrative pest management (IPM) focuses on your current problem and preventing future invasions.

Make your home uninhabitable to roaches—fix the problem at its source—or you’ll likely welcome roaches again.

To find the lair, think like a roach: roaches prefer dark, warm places to hide. Semi-humid areas are ideal—cabinets, basements, and other建国 with materials roaches can easily hide in.

To begin a management program, try to find the source of the infestation and discover which roaches are present.

To find the roaches, use “sticky traps” to capture the roaches and the chart in this brochure to identify the species, or consult other knowledgeable sources.

Find the roaches in each room, then begin your inspection. Use a flashlight and dental mirror to peek into corners, behind or under cabinets. Search for living or dead cockroaches, shed exuviae (“skin” or “shed”) of various sizes, and food. You can also find their hiding places by quietly entering a dark room and searching for roaches using a flashlight.

If you find roaches, use the chart in this brochure to identify the species and to determine if you need to call a pest management professional.

Kitchen: You’re most likely to find German cockroaches here. Look on the countertops and behind and underneath sinks, sinks, and other appliances. Use a flashlight, peep into the interior frame of cabinets and drawers, and look into any spaces through the gaps in the frames of cabinets and drawers. Remember to check under sinks, tubs, and other fixtures.

Bathroom: Check behind the toilet, under toilet paper holders, and around plumbing pipes.

Bedrooms: Check the spaces between walls and floors for roaches, and look under and behind bed frames for roaches, especially the American cockroach. Also check the spaces behind and under the bed for roaches and their eggs. Look under the headboard and the mattress for roaches and their eggs. Check under the base of the bed for roaches.

Living Rooms: Check behind recliners, sofas, and behind the television. Check behind the fireplace and under the fireplace for roaches.

Dormitory: Check behind the sleeping areas for roaches and their eggs, and check under the mattresses and pillows for roaches.

Other rooms: Check behind the doors and around the doors for roaches, and check the spaces between the walls and floors for roaches.

Scrub all surfaces, especially between counters and appliances. Spread underneath and behind refrigerators and stoves (floor and walls). Remember to check the corners, drawers, cabinets, and shelves for roaches.

Store all food, including pet food, in tightly closed containers. Do not leave bowls or bowls of pet food on the floor. Do not leave bowls of pet food on the floor overnight.

Remove debris. Cut back ground vegetation (such as weeds, chrysanthemums). Insecticide baits (available in small containers that look like hockey pucks, or as gel) are highly effective and are environmentally sensitive. Some roaches may die quickly; others may die slowly. Some roaches may survive for many weeks after eating the bait.

Disposing of roaches: To quickly reduce cockroach populations, vacuum them from the house attachment, preferably using a machine equipped with a high-efficiency particulate air (HEPA) filter. As soon as you’re done, remove the hose from the vacuum cleaner and seal all the ends that the vacuum touches. Insecticide baits (available in small containers that look like hockey pucks, or as gel) are highly effective and are environmentally sensitive. Some roaches may die quickly; others may die slowly. Some roaches may survive for many weeks after eating the bait.

KITCHEN: Use “sticky traps” to capture the roaches and the chart in this brochure to identify the species, or consult other knowledgeable sources.

1. Identify the species
2. Find their hiding places
3. Eliminate their access to food, water, and air
4. Repel them from previous invasions

Other species: Vomiting droplets and furniture, especially between counters and appliances. Spread underneath and behind refrigerators and stoves (floor and walls). Remember to check the corners, drawers, cabinets, and shelves for roaches.

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German cockroach: Most likely found in drains or sewers; more common in northern regions; prefers dark, moist areas. German cockroaches are common in New York City. To find the roaches, use “sticky traps” to capture the roaches and the chart in this brochure to identify the species, or consult other knowledgeable sources.

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Keep your garbage, compost, and recyclables in tightly closed containers. Store food in tightly closed containers off the floor and away from walls, or keep it in the refrigerator. Rotate stock, inspect.

Scour the kitchen. Clean refrigerator; cabinets, drawers, countertops, floor, sinks, corners; fixtures, and underneath the sink. Keep it clean!

Empty and seal trash, compost, and garbage every day.

Fix leaks. Seal around pipes, tubs, and sinks. Keep bathroom dry. Eliminate other “watering holes.”

Wash and dry dishes promptly. Wipe up spills and puddles.

Don’t leave pet’s food or water unattended.

Eliminate their shelter

• Remove clutter and debris (both inside and outside).
• Secure loose wallpaper, counters, and splashboards.
• Remove cockroaches (even motors anywhere it’s warm and dark) such as clocks, televisions; stereo; and computers.
• Vacuum furniture and drapes.
• Seal gaps in cabinets and woodwork.
• Empty and clean bookshelves.

Prevent future invasions

Close openings around pipes, vents, drains, registers, ducts, and other openings every evening.

Fix cracks in walls (inside and out) and floors.

Tighten doors, windows, and screens.

Inspect bags, boxes, furniture, and other items before bringing them into your home.

Professional.)