



VARMINT GUARD®

ENVIRONMENTAL SERVICES INC.



Residential Services ✧ Commercial Services ✧ Bird Solutions

Common Name: **German cockroach**
Scientific Name: **Blattella germanica**

GERMAN COCKROACH



Introduction. The German cockroach does not actually originate from Germany but from Asia. It is by far the most important and usually the most common of the cockroaches. In addition to being a nuisance, it has been implicated in outbreaks of illness, the transmission of a variety of pathogenic organisms including at least one parasitic protozoan, and allergic reactions in many people. The German cockroach has worldwide distribution.

Recognition. Adult German cockroaches measure 1/2 to 5/8 inch long. They are light brown to tan except for 2 dark, parallel stripes on the pronotal shield (the back, behind the head). Females have a broader abdomen than males. These cockroaches are not good fliers but use their wings like a parachute to break a fall. The nymphs have 2 dark brown to black stripes on their tan thorax, similar to adults and have a dark abdomen.

The egg capsule (ootheca) is yellowish-brown, measures 1/4 to 3/8 inch long, is nearly three times longer than wide, has subdivisional furrows extending its entire width, is slightly bowed or arched, and contains 30 to 40 eggs.

Similar Groups. (Adults only) (1) The Brownbanded cockroach (*Supella longipalpa*) lacks the 2 dark longitudinal stripes on the pronotal shield. (2) Other cockroaches are larger and lack the characteristic pronotal stripes.

www.varmentguard.com (800) 793-8169



Residential Services ✧ Commercial Services ✧ Bird Solutions

Biology. The female carries her egg capsule until it is within 1 to 2 days of hatching, and then deposits it in a sheltered area. On the average, the female will produce about 5 egg capsules (range 4 to 8), averaging 30 to 40 eggs (range 18 to 50) each.

Developmental time (egg to adult) usually varies from 50 to 215 days, averaging about 103 days, under ideal conditions of 80°F and 40% relative humidity; often only 45 to 60 days are required. This means usually 3 to 4 generations per year, but up to 6. Adults live about 100 to 200 days. Established German cockroach populations are typically composed of at least 75% nymphs.

Habits. German cockroaches are found throughout structures but show a preference for warm (70°F) and humid places. They are usually found in kitchens and secondarily in bathrooms, but infestations often occur in rooms where people eat and drink while watching television such as the den, bedroom, etc. Any crack or crevice located near a source of food and/or water is prime harborage, and they spend about 75% of their time in such harborages. First instar nymphs require a crack of about 1/32 inch; whereas, adults require a crack of about 1/8 inch in width.

These cockroaches are most commonly introduced into buildings via paper products or paper packaging such as grocery bags, cardboard boxes, drink cartons, and via secondhand appliances such as refrigerators, televisions, VCR's, boomboxes, microwaves, etc. They have been observed to migrate from building to building on warm evenings, if spaced closely together. Although uncommon, they can survive outdoors during the warm months.

They feed on almost anything with nutritive value including all kinds of food, and such things as soap, paste, glue, and toothpaste.

Activity periods vary with life stage, age, and condition. For instance, reproducing females are quite active whereas, gravid (ootheca-bearing) females are relatively inactive starting about the 5th day after mating and go only to food and water when necessary. Males spend most of their time in harborages, even at night. All nymphs become immobile and stay in harborage during the last 3 days of each instar while they prepare to molt. Hence, about 1/3 of the time the cockroach nymphs will not be found exposed during an inspection.

Cultural Control & Precautionary Measures. The best way to avoid a German cockroach infestation is to thoroughly inspect used appliances, entertainment systems, computer components, furniture and cardboard boxes before bringing these items into your house or workplace.



VARMANT GUARD®

ENVIRONMENTAL SERVICES INC.



Residential Services ✧ Commercial Services ✧ Bird Solutions

The best way to get rid of an infestation of German cockroaches is to 1) implement good sanitation and food storage practices, 2) call in the Varmant Guard pest management specialists and 3) refrain from using over-the-counter insecticides. The unskilled use of repellent insecticides will actually result in a larger, more scattered cockroach infestation. [Customer cooperation is essential.]

Professional Control. At least 95% of the population must be eliminated on the initial or clean-out service, or the typical maintenance program will usually fail. Varmant Guard technicians utilize insecticide baits, non-repellent insecticide formulations and food-lure pest monitors (sticky traps) to destroy and capture German cockroaches. Baits are particularly effective, but correct placement along structural junctures and/or in cracks and crevices, in or near harborages, is essential. Incorporating insect growth regulators (IGRs) and pest monitoring into the service helps with long-term control. In severe infestations, a pest vacuum cleaner may be used to quickly remove cockroaches from harborages, thereby quickly removing a significant portion of the population.



Food lure sticky monitor with German Cockroaches



Kitchen sink and counter top with food residues



Using a pest vacuum to remove cockroaches



Application of an insecticide bait into crevices