

# MuseumPests.net

A Product of the Integrated Pest Management Working Group

## German Cockroach

*Blattella germanica* (Linnaeus)



### GENERAL INFORMATION

German cockroaches are a common cockroach associated with food and moisture areas inside structures and have worldwide distribution. Their relatively short life cycle and high fecundity allow small infestations to increase rapidly. Individuals can be transported to new locations in a variety of objects, not limited to paper products and used appliances. Infestations that reoccur in the same area within a couple months were probably not completely eliminated originally. They have been implicated in outbreaks of food borne illness and cast skins can cause allergic reactions in some people.

### SIGNS OF INFESTATION

Warm and humid areas are preferred but infestations can occur in many structural areas. Kitchens, locker rooms, and bathrooms are most commonly infested areas but German cockroaches can survive well where people eat and drink such as break rooms and dining areas. Signs to look for beside adults and nymphs are the fecal spots that deposited in and near harborage areas. Any crack from 1/32" to 3/16" is a potential harborage spot. Egg capsules may be noticed but are usually deposited in protected areas. There are many harborage areas that can not be visually inspected, such as wall voids or behind paneling. Placing glue based insect monitors as close as possible to these areas will help detect infestations when re-inspected after a few days.

### FOOD SOURCES

Almost any food with nutritional value is fed upon as well as soaps, toothpaste, and glue.

### LIFE CYCLE

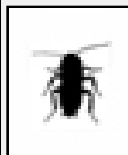
Females carry the ootheca until it is within 1 to 2 days of hatching, and then deposit it in a protected location. From 4 to 8 ootheca are produced per



### DIAGNOSTIC MORPHOLOGY

#### Adults:

- Adults are 1/2" to 5/8" (13-16mm) long.
- Light brown in color with two dark longitudinal stripes on the pronotal shield just behind the head.
- Early nymphal instars will not show the stripes but older instars will.
- Asian cockroaches also have two dark stripes on the pronotum but live outside of structures and can be attracted to lights. This behavioral characteristic can help distinguish these cockroaches apart. Asian cockroaches have a limited distribution in North America.



#### Immature Stage:

- Cockroaches experience gradual metamorphosis and have no larval form. The process goes from egg to nymph to adult.



female, with average 30 - 40 eggs per ootheca. Develop time from egg to adult varies from 54 days to 215 days depending upon temperature and humidity. At 80 degrees Fahrenheit and 40% relative humidity, it takes 50 to 60 days for an egg to develop into an adult. Adults live 100 to 200 days.

### CONTROL & TREATMENT

There are a variety of pest management tools and tactics to control German Cockroaches. Physical removal, exclusion, chemical contact pesticides, pesticide baits, and other tactics are used based on the infested area. Confirming infestations are controlled is helped by inspecting insect monitors placed next to or in potential harborage areas.