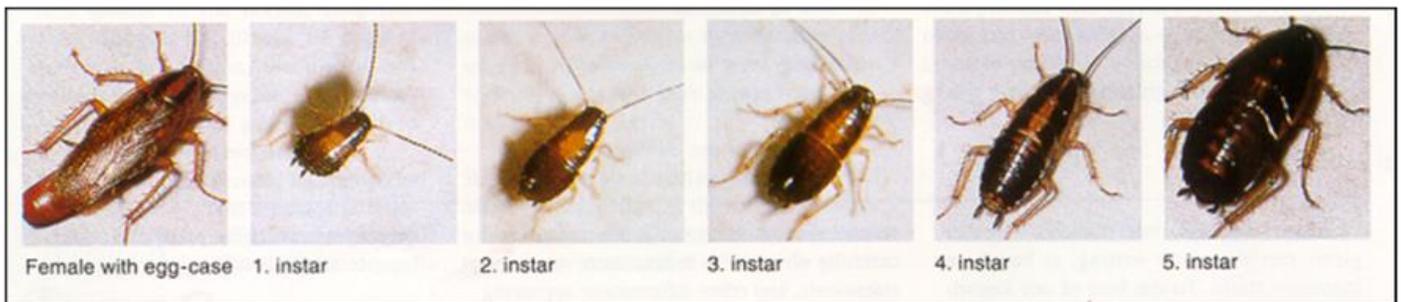
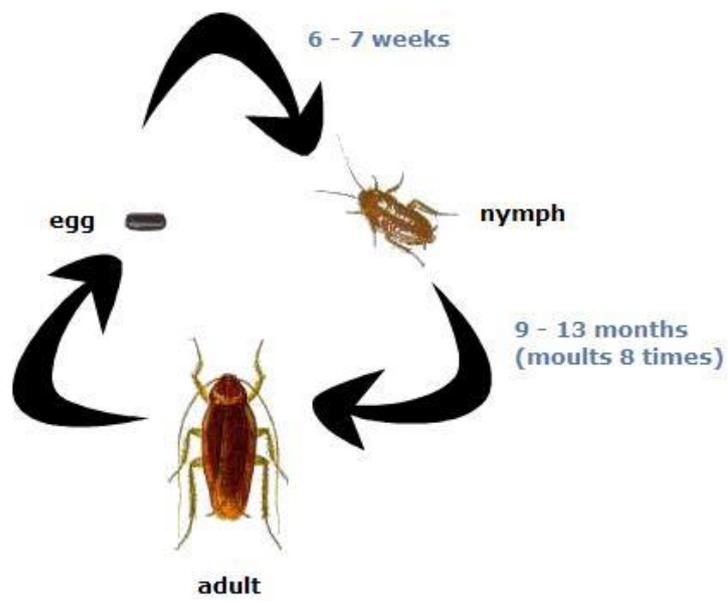


# Cockroaches



# German Cockroach

(*Blattella germanica*)



The German cockroach is the most important species as it is the most common species found inside a structure.

## Appearance

Light brown with two dark stripes on the pronotum. Length 14 mm.

## Life Stages

1 Egg capsule every 1-2 months, 24 -48 eggs in capsule, 28 days to hatch. Female carries egg case until about 24 hours before hatching then drops it in a secluded place. The female produce about 5 oothecae averaging 30-40 eggs. Adults live about 180 days and the cockroach population normally consists of 75% nymphs

## Location

German cockroaches are normally found in warm and humid areas. They are normally found in kitchens and bathrooms but infestation normally occur where people eat and drink. Any crack or crevice is used for harbourage near a food and water source. They spend about 75% in their nest or harbourage. These cockroaches are normally brought into a facility in boxes or bags or second hand appliances.

## Food

They feed on any food source including things like soap, glue and toothpaste.

## Control

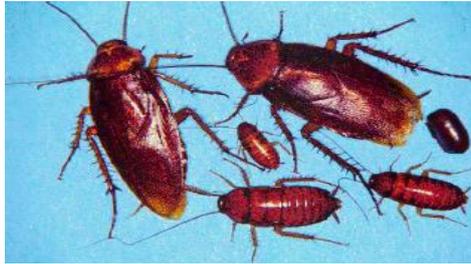
Perform an initial or clean-out service to eliminate most of the infestation. Use a flushing agent to inspect for nesting sites to flush out any potential infestation. Care must be taken to eliminate harbourage areas by sealing and exclusion measures. Sanitation must be performed by eliminating all water sources.

Hygiene standards must be implemented to ensure that all food sources are eliminated and concentrating on rubbish removal. Apply gel baits to harbourage areas to ensure that cockroaches feed on the baits and die in the harbourage or nest where other cockroaches will feed on the carcass thereby causing a cascading effect eliminating the infestation. Residual contact spray insecticide may also be used to ensure a quick knock down of infestation.

**Caution:** Do not use insecticidal sprays and gel baits together as the spray treatment will contaminate the baits, rendering the baits unpalatable for cockroach consumption. Remember baits attract while pesticide sprays repel.

# American Cockroach

(*Periplaneta americana*)



## Appearance

Reddish brown throughout with a pale band on the edge of the pronotum. A very large roach. Both sexes are fully winged with the wings of males extending beyond the tip of the abdomen. American cockroaches are poor to moderately good fliers. Length 25-40 mm.

## Life Stage

Eggs are dropped near food source. Eggs take 60 days to hatch; 1 year from egg to adult. Egg case carried up to six days before depositing in a sheltered area. Female will produce about 9-10 oothecae with each containing 14-16 eggs. After the eggs hatch the nymphs will moult 10-13 times. The adult female lives for about 440 days where the adult male lives for about 200 days.

## Location

Damp areas, steam tunnels, sewers, palm trees and feeds on organic matter, sweets and glue. They are found in homes but predominantly in larger commercial buildings such as bakeries, restaurants, grocery stores, hospitals and food processing facilities. In summer months they are often found outside in alleys and food receiving areas. Often found in sewers when the manhole is lifted so do not forget to treat the drains when controlling American cockroaches.

## Control

Perform an initial or clean-out service to eliminate most of the infestation. Use a flushing agent to inspect for nesting sites to flush out any potential infestation. Care must be taken to eliminate harbourage areas by sealing and exclusion measures. Sanitation must be performed by eliminating all water sources. Hygiene standards must be implemented to ensure that all food sources are eliminated and concentrating on rubbish removal. Apply gel baits to harbourage areas to ensure that cockroaches feed on the baits and die in the harbourage or nest where other cockroaches will feed on the carcass thereby causing a cascading effect eliminating the infestation. Residual contact spray insecticide may also be used to ensure a quick knock down of infestation.

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# Brownbanded Cockroach

(*Supella longipalpa*)



## Appearance

Tan-golden with faint V-shaped lighter bands on wings. 2 pale bands running across the back, with females much darker than males, her abdomen is much broader and round and her wings do not completely cover the abdomen as they do in males. Males fly but females do not. Wings are darker at the base and paler toward the tips. Length 14 mm. It must be noted that the Brownbanded cockroach is not as common as the German or American cockroach.

## Location

Not usually found near man's food and water. Prefer 25°C and higher and found in attics, furniture, usually high in the room and does not need much water.

Infestation normally starts from materials shipped from one place to another. Brownbanded cockroaches are found throughout structures but show a preference for warmer areas. Often found at ceiling level and anything high on the walls like picture frames or wall mouldings. Also found near appliance motors, light switches and in furniture.

## Life stages

Does not carry egg long; glues eggs to the surface; 10-18 eggs per capsule and takes 70 days to hatch. Egg case glued under surface of objects, shelves, furniture in crevices.

## Control

Perform an initial or clean-out service to eliminate most of the infestation. Use a flushing agent to inspect for nesting sites to flush out any potential infestation. Care must be taken to eliminate harbourage areas by sealing and exclusion measures.

Sanitation must be performed by eliminating all water sources. Hygiene standards must be implemented to ensure that all food sources are eliminated and concentrating on rubbish removal.

Apply gel baits to harbourage areas to ensure that cockroaches feed on the baits and die in the harbourage or nest where other cockroaches will feed on the carcass thereby causing a cascading effect eliminating the infestation. Residual contact spray insecticide may also be used to ensure a quick knock down of infestation.

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# Oriental Cockroach

(*Blatta orientalis*)



## Appearance

Dark red-brown-black. Female has only little pads for wings, male's wings cover  $\frac{3}{4}$  of the abdomen. Adults do not fly. Length 25-32 mm.

## Life Stage

Egg case deposited in debris or food in a sheltered place. Drops eggs in moist places; 12-16 eggs in a capsule; eggs take 60 days to hatch. Oothecae is reddish brown when deposited then changes to black in colour, about 8-10mm in length. On average the female will produce 8 oothecae. Adult males live up to 160 days and females 181 days.

## Location

Damp areas, basements and enters through the drain system and feeds on organic matter. Oriental cockroach survives very well outdoors and spends considerable time outdoors. Typically found under debris, stones, and piles of leaves but also in wall voids. They normally enter buildings under doors and through gaps where piping and ducting is threaded into the building.

## Food

They feed on all kinds of food and decaying organic matter but prefer to feed on starchy foods. The oriental cockroach has a distinct odour because they feed on filth.

## Control

Perform an initial or clean-out service to eliminate most of the infestation. Use a flushing agent to inspect for nesting sites to flush out any potential infestation. Care must be taken to eliminate harbourage areas by sealing and exclusion measures.

Sanitation must be performed by eliminating all water sources. Hygiene standards must be implemented to ensure that all food sources are eliminated and concentrating on rubbish removal.

Apply gel baits to harbourage areas to ensure that cockroaches feed on the baits and die in the harbourage or nest where other cockroaches will feed on the carcass thereby causing a cascading effect eliminating the infestation. Residual contact spray insecticide may also be used to ensure a quick knock down of infestation.

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