

Getting to know... COCKROACHES

The cockroach is described as nature's perfect creature. This is because based on fossil evidence, they have remained unchanged for the past 300 million years. This means that the cockroach was on planet earth long before the dinosaur which evolved only 200 million years ago!

Welcome to the Cockroach Park.

There are approximately 3,500 species of cockroaches worldwide but only 3 are commonly found inside Singapore buildings. They are:

- American cockroach, *Periplaneta americana*, found in sewers, gully traps, rubbish chutes and drains
- Brown-banded cockroach, *Supella longipalpa*, can be found anywhere in a building where it is relatively dry
- German cockroach, *Blattella germanica*, found in kitchens, food preparation and storage areas

Cockroaches are pests because the organisms found on and in their bodies transmit diphtheria, dysentery,

gastro-enteritis, hepatitis and typhoid. The American cockroach produces a characteristic, foul smelling secretion which taints food, making it unfit for human consumption.

Cockroaches are prolific breeders. Assuming that all survived, one pair of healthy German cockroaches can give rise to as many as 20,000 offsprings at the end of one year.

To ensure a better chance of survival for the young cockroaches (called nymphs), the female will carry its egg casing that is purse-shaped (called the ootheca) during the entire time that the embryos are developing inside. Within 24 hours of its

hatching, the female will deposit the ootheca in some protected place where the young will find harbourage, water and food when they emerge.

This explains why this species is the nightmare of owners and operators of food establishments. They can lose their licence to operate if cockroach infestation persists in their premises.

All it takes is for one egg casing to be brought into the building and when it hatches, as many as 48 nymphs will scamper around, making themselves at home.

Being nocturnal creatures, their presence in the day is a sure sign of heavy infestation. Another sign of heavy infestation is the sight of the newly moulted ("white") nymphs, particularly in the day.

Pest management professionals know that the cockroach has sticky pretarsal pads on their legs that serve as tasting organs. This means that an insecticide properly sprayed, can be absorbed directly through these pads to attack its nervous system.

These pads are also put into the insect's mouth in the process of grooming and this is another way to get the cockroach to digest the insecticide. This grooming process spreads disease organisms because it introduces pathogens picked up in the dirty places the insect visits, into its body and is spread by its faeces.

After a nuclear holocaust, scientists believe that because of their omnivorous habit (they will eat anything including the faeces of other cockroaches) and their special ability of living in cracks and crevices, cockroaches (and ants) will inherit the earth long after the extinction of man. ♣

Aardwolf Pestkare's COCKROACH CONTROL

The traditional approach of relying solely on the spraying of insecticide to control cockroaches must, in this day and age, give way to a more environmental friendly approach.



The Aardwolf Pestkare approach consists of:

- Conducting an inspection to determine the status of the infestation
- Using a specially-designed vacuum back-pack to physically remove as much as possible of the oothecae, nymphs and adults
- Creating a fine residual barrier with an approved insecticide to take care of new entrants
- Laying a gel bait which has a cascading effect, in "hot spots" to lure those that somehow escaped the physical removal
- Installing pheromone-based Aardwolf Cockroach Monitoring Stations (ACMS) to ensure that fresh activity will be detected and eliminated quickly and effectively
- Recommending ways and means of improving your housekeeping and sanitation practices ♣

It is a "NO-NO" to spray insecticides on crockery. Leong Siew Kee safely removes the cockroaches with this vacuum back-pack.



These cockroaches could not resist the newly-laid gel bait. The fatal attraction took effect within 12 hours.