HISTORY

There are over 8000 different species of ant, the Pharaoh ant being the only one considered to be of significance in terms of public health.

The term Pharaoh ant was first used by the eighteenth century biologist Carl Linnaeus, who associated the ants with the biblical plagues of Egypt. Pharaoh ants are tropical in origin and found mainly in large heated buildings in this country.

APPEARANCE

Worker ants are approximately 2mm in length, with the queen being slightly larger at 4mm. Worker ants are red in appearance with a darker abdomen. The worker ants are wingless. The queen ants do have wings, but do not fly. Winged males will appear periodically and mate with the queens. A Pharaoh ant colony consists of queens, males, immature worker ants, eggs, larvae and pupae. A colony can vary in size from a few dozen to several hundred thousand individuals. Due to their coloration Pharaoh ants are often referred to as ‘red ants’ however this is incorrect.

LIFE CYCLE

The queens lay around 400 eggs throughout their lifetime in batches of 5-10. The eggs hatch in about a week and take approximately 36 days to reach maturity. Queen ants live for about year and worker ants for 9-10 weeks. Worker ants remove the developing larvae from a nest and form a new (satellite) nest elsewhere. The behaviour of the worker ants to the developing larvae determines whether they develop into worker or queen ants. It is the ability of the Pharaoh ant to establish satellite nests in the absence of a queen ant that makes these ants so difficult to eradicate.

HABITS AND HABITAT

Nests will occupy any suitable crevice and are often located deep within the foundations, service ducting and wall cavities of buildings. The size of the nest appears to be determined by the amount of space available more than any other factor. Pharaoh ants will feed on almost anything, however prefer sweet and proteinaceous foodstuffs.

It is the sterile female worker ants which are most commonly observed as they forage for food, when a food source is found the information is communicated to other ants using chemical (pheromone) trails. Therefore it is common to see long narrow trails of ants moving to and from the food source.

Pharaoh ants are tropical in origin, this is reflected in the fact that they require a minimum temperature of 18°C to breed, with 30°C being the optimum. For this reason the ants will inhabit warm areas such as boiler rooms and around central heating pipework. The large boilers and hot water pipes in tower blocks, hospitals, prisons and factories make them particularly susceptible to Pharaoh ant infestation.

DISEASE RISK AND DAMAGE

There are no specific diseases associated with Pharaoh ants. However due to their extremely small size they are able to penetrate all but the most secure packaging. This means that they may contaminate foodstuffs intended for human consumption, with pathogens picked up whilst travelling through buildings. Pharaoh ant infestations within hospitals may pose additional risks to human health.

CONTROL METHODS

Pharaoh ants can be extremely difficult to eradicate, but control can be achieved by the use of juvenile growth hormone analogues. These chemicals mimic the action of juvenile growth hormone (produced naturally be the ants) and prevent the larvae from developing as well as sterilising the queens and winged males.

The use of ant powders or insecticides (Raid) is strongly discouraged as this will encourage the formation of satellite nests.