Pharaoh's Ant – (*Monomorium pharaonis)*

Pharaoh's Ants are tiny 2mm ants; tropical in origin but have become a serious pest of some hospital premises and blocks of flats. Pharaoh's ant probably originated in North Africa or the Mediterranean. It was first recorded in the early 19th Century.

As they are not capable of living outdoors, nor without the heat and moisture that describes a tropical habitat, they are usually to be found associated with heating systems, particularly those connecting to a food supply and preferably proteinaceous. Thus they can be found foraging for food in kitchens or anywhere food is made available to them. They will feed in unheated lesions on a patient's body, dirty laundry and used dressings, dead cockroaches, waste food in drains etc, they are a serious health hazard.

As they are a very tiny pest, with strong biting mouth-parts, they can make holes in the paper coverings of sterile equipment rendering them not only unsterile but likely to be carrying bacteria picked from the last forage for food which could be the dirty dressings bin.

Pharaoh's Ants, in common with all the Ant pest species, are social insects living in nests with thousands of other ants. The nest itself is governed by several queens, each an egg laying machine, directing their offspring, the sterile female workers, to do the work of the nest, the cleaning, foraging for food, feeding of the young stages and generally tending for its occupants under the direction of the queens. The presence of insect fragments in a pile can indicate a nest nearby. It is the foraging workers that are most often seen. Like similar species of ants, Pharaoh's ants trail. If a foraging worker finds a food supply it will communicate this fact to other workers and, following

a chemical ‘pheromone’ trail, often hundreds of ants can be seen going to and from nest to food.

The workers will move pupae and larvae away if the danger threatens the nest. The optimum temperature for a Pharaoh’s ant colony is 30^{o}C but can tolerate minimum breeding temperatures of 18^{o}C.

Workers have the ability to start off new colonies where suitable conditions exist or if the original colony is subjected to stress, by carrying brood to new locations. Satellite colonies may be moved around, spreading infestation further.

Unfortunately these nests are often deep in the fabric of the building so all we usually see are the workers, although sometimes queens can be found foraging with the workers.

Periodically, usually at intervals of 3-4 months if food supply is good and at certain times in the life of the nest anyway, some of the eggs that the queens lay will develop into male and fertile females who mate inside the nest. The production of these sexual forms takes two weeks. These sexual forms are winged, but do not fly, they are rarely seen. The ensuing queens replace the old and form satellite colonies by ‘budding’. That is a queen, together with a collection of workers, eggs, larvae and pupae, will migrate to a different part of the premises they are infesting. Hence these colonies can be found hitching a ride on heated trolleys, in laundry, sterile packs, in clothing and furniture which is moved around and have also been found under pillows of a patient’s bed. In this way infestation spreads along ducting systems, from room to room, from hospital to hospital through central laundries, from kitchen to wards in heated trolleys, from one building to another in staff belonging. Once established the process carries on.

The workers only live for about 60 days and are continuously replenished. The queen may live up to 39 weeks. A typical ant colony can contain 100,000 individuals but we only see about 10% foraging at any one time, the rest are hidden away. Killing the workers only by insecticidal spraying makes matters worse as the production of ants is accelerated and more satellite colonies appear spreading infestation further afield.