

# Need to Know

- Straight talk for professionals about pests and pest control products

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## Flea Control with Suspend®

Have you recently received calls about flea control? Did you think that flea control is a thing of the past? Well, **Fleas** are back and are pests that seem to arrive with the spring yet they can be a year-round pest.

There are about 2,000 species of fleas. They are generally described as 1-8 mm long; brownish in color, body laterally compressed (streamlined) and covered with backward-directed bristles; piercing mouth parts; no wings, metamorphosis complete with egg, larval, pupal and adult stages.



Adult fleas live exclusively as parasites feeding on the blood of their host animal and consequently they can be vectors of disease. Bubonic plague and murine typhus are examples of diseases spread by oriental rat fleas. Dog and cat fleas are intermediate hosts of tapeworms that can infect humans if ingested. Perhaps the most common complaint associated with flea infestations is the skin irritation caused by flea bites. In this article we will discuss cat flea, *Ctenocephalides felis*. It is the most common flea species encountered by PMP's.

### Life-Cycle

Flea eggs are about 0.5mm long, oval, pearly white in color and lay indiscriminately in the fur of the host. They do not adhere to the host but readily fall from the animal, are shaken or scratched off and will accumulate in areas that the animal spends its time. The same applies to the dark colored faeces of the adult fleas thus creating the black and white - salt and pepper – effect associated with flea infestations. The eggs hatch in about one week to give white, threadlike, legless larvae 1.5mm long. The larvae thrive in dark, humid places such as animal bedding and carpet fluff, and feed on organic debris and adult flea excrement. The latter forms a critical part of the diet as it is a required for their development. After 2-3 weeks, by which time they will have molted twice and be about 5mm long, the larvae spin silken cocoons, incorporating debris and attaching themselves to the substrate, in which to pupate. The adult flea will then be stimulated to emerge by the vibrations set up by a passing host. This explains the occasional mass attacks which take place in deserted premises.

### Control

#### a) Hygiene/management

Fleas are always closely associated with the host animal. Regular cleaning of their bedding in hot, soapy water will help reduce the eggs, larvae and pupae. Regular vacuuming of carpeting (several times a week) will remove eggs and the fecal material the larvae need for development. Also use a vacuum with a crack and crevice device to clean the cracks between floorboards and baseboards. Don't forget to have the customer vacuum under and around any piece of furniture that the animal may use. When done vacuuming place the contents of the vacuum in a bag and place in the trash outside.

#### b) Insecticidal control

Insecticides can be used to treat infested premises. **Suspend®** is an excellent product to kill adult fleas found in and on carpeting and furniture. It can also be used to treat any crack or crevice that may be harboring larvae and adults. **Suspend** should be combined with an insect growth regulator (IGR) to provide the best control. Pay particular attention to areas where the host animal spends their time either resting or traveling. These areas will harbor the majority of the larvae and pupae and should be treated with 8.5 fl. oz of finished spray per 100 sq. ft. However, the best results are obtained if 17 fl. oz of finished spray (0.015%) is applied to the same 100 sq. ft. Make sure to inform the customer that they need to remain away until the carpet has dried. That includes their pet(s).

#### c) Host treatments

Insecticidal products are available which have been specifically formulated and registered for use on the host animals. Only these products should be applied to animals and care should be taken to follow the manufacturer's instructions. Two excellent products for on animal control are **Advantage®** and **Advantix®**.

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