



BUG BIZ

Pest Management and Insect Identification Series



Fleas

Fleas developed on earth thousands of years ago and have adapted many survival techniques. In Louisiana, they are a pest in and around homes and on pets and other animals year round.

Some fleas tend to be somewhat host specific. That is, dog fleas usually get on dogs, rodent fleas on rodents and cat fleas on cats. Cat fleas, however, tend to use any host available. All will feed on other hosts, including humans, but they usually prefer their specific host. Therefore, fleas that are brought into the house and yard are from dogs, cats and rodents. There are many other species of fleas.

Fleas feed by siphoning blood through piercing, sucking mouthparts that contain salivary and food tubes. Only adult fleas feed on the host. They can survive several weeks and even months without food. It is important to note that fleas spend most of the life cycle off the host animal. This means if fleas are left in an area after a host animal is removed, they can wait patiently for the next host to move into the area.

The female flea must have a blood meal before she can lay fertile eggs. She will then lay several hundred pearly eggs; the larvae hatch in three to 15 days. The little white grub-looking worms mature in 15 to 30 days. The eggs are usually laid on the host and then drop onto the bed of the host or onto the flooring where the larvae will feed on the dust, dried blood and organic matter in and around the sleeping area of the host (bedding, dust in carpet, cracks in floor, molding, etc.). The larvae do not suck blood, so they are not animal pests.

Fleas seem to have a built-in mechanism for survival. For example, if an egg is in a good environment with the proper amount of moisture and proper temperature, the larva may hatch in as few as three days. The same thing is true of the larval stage of the flea. If it has good food and an optimum environment in which to live, the flea will develop from an egg into an adult in about two and a half to three weeks. In poor conditions, it may take six to eight months to become an adult.

Ideal conditions for flea development include a temperature of 80 to 90 degrees F, adequate moisture and sufficient organic matter for food for the larvae. When

these conditions exist, fleas can complete their life cycle in 18 to 21 days. The adult flea itself will live from several weeks to several months.

Flea problems may be seasonal or not, depending on geographical and environmental factors. In the northern United States, the problem may be seasonal; fleas tend to occur year round in the South.

Injury to Pets

Fleas can cause skin disease with their biting. This can result in infection or produce an allergic response. The flea is well known for producing an allergic response in dogs or cats. Substances in the flea saliva can produce allergic skin reactions. For animals highly sensitive to the flea, only one or two may cause intense itching and disease. On the other hand, several fleas may be present and not produce an intense allergy problem. Heavy infestation on small puppies and kittens has caused anemia because of blood loss.

Diagnosis of the flea infestation is usually based on the physical findings and history. The distribution of lesions, presence of fleas, flea dirt (fecal material) and tape worm segments (*Dipylidium*) are evidence of a flea infestation.

Suppression of clinical signs of flea-induced skin disease in the animal may be possible with flea control alone. If symptoms persist, consult a veterinarian.

Control Measures

Flea control can be difficult. It usually takes two to three applications of the proper insecticide to get good control. One application of an insecticide on the surface or in the area where the fleas are will not take care of the problem. To control fleas, always apply at least two to three applications at 10- to 12-day intervals. The animal, its bedding and the area where the animal spends most of its times should be treated.

Insecticides to Use

When used properly, several insecticides are cleared for controlling fleas; they give good control. Malathion, carbaryl and pyrethroids are three of the most common insecticides you can use. Use them according to the rate and directions on the labels. The label is the law.

Those who would rather not spray, but who want to control fleas, may want to use a fogger, sometimes called a “flea bomb.” Many of these ready-to-use (RTU) products are on the market. Some contain an adulticide (kill adult fleas); others will kill only larvae and eggs. Two insecticides that will kill larvae and eggs only are sold as Precor (methoprene) and phenoxycarb. Methoprene and phenoxycarb are both growth regulators that prevent the larvae from emerging from eggs or otherwise prevent the immature flea from reaching adulthood.

Before using any flea control insecticide indoors, the infested area should be thoroughly vacuumed and the contents of the vacuum cleaner bag discarded. Put the vacuum cleaner bag in a plastic bag, tie the plastic bag and put the plastic bag in a trash can outside.

For inside use, apply Malathion 2% or a pyrethroid at the rate specified on the label. When these are used at the correct rate, the carpet will be slightly moist but definitely not saturated. Be careful to calibrate the sprayer by using plain water and measuring off a given area. Check carefully to determine how long it takes to spray a particular measured area. Again, make two to three applications at 10- to 14-day intervals, depending on the initial flea numbers.

A vital part of getting rid of fleas is controlling them on the host. Obtain a shampoo dip or treatment from a veterinarian or veterinary supply store. Dip or treat the animal as recommended, or obtain a flea or impregnated medallion.

One of the most important factors in putting a flea collar on a dog or cat is getting the collar tight enough. The way a flea collar works is that a flea will usually, during a 24-hour period, move over the entire animal. If the collar is loose, the flea may not come in contact with the collar enough to get a lethal dose of the insecticide. The collar should be tight enough for the flea to have contact.

Several dusts are cleared for applying to animals. They will work if applied regularly enough and applied so that the dust reaches the skin of the animal. Five percent carbaryl dust is cleared for use on dogs and cats. It will give good control of fleas if applied and rubbed into the hair so that dust particles get down to the skin. Do not put excessive amounts on your animal, and do not allow the material to become wet or caked on the animal. It can make the animal sick.

Two rub-on products can be obtained from your veterinarian. Advantage comes in a tube and is applied between the shoulders of the pet and rubbed in. The dose is based on the animal’s weight. Front Line comes in a bottle with a pump for spraying the animal’s fur. Rub the chemical into the fur. Use rubber gloves when applying the chemical, and be sure to keep it out of the animal’s eyes.

No insecticide kills fleas instantly. Allow two to three days for the insecticides to work. Remember, that fleas will get on your pet while it is outside. If the animal is allowed outside, do not expect it to be 100% flea-free. If you keep a flea collar on your pet and treat the animal as directed, however, fleas should not be a problem in and around your home.

Outdoor Flea Control

To control fleas outdoors, it is important to use the proper rate of the insecticide in sufficient water per area. Use a granular spreader to apply Delta Gard G at 2-3 lbs/1,000 sq. ft. It will effectively manage the flea population. Use Astro applied at 0.6-3.2 ozs. or 3.0-6.0 TBS in 16-20 gallons of water and apply to 4,000 sq. ft. of yard. Sevin 50% WP should be used at the rate of 1 pound per 5 gallons of water. Two to three applications at 10- to 14-day intervals will be needed if heavy populations of fleas are present. Be sure to check your water pH to improve control and reduce cost and number of applications. Water should be buffered to a pH between 5.5 and 6.5.

It is rare that an entire yard needs treating. Usually only the immediate area where the animal spends most of its time will need to be treated.

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