

Controlling Fleas, Ticks, and Heartworm

Success lies in understanding the life cycle of parasites, and how active ingredients work.

Audrey Pavia

Posted: Tue Feb 1 00:00:00 PST 2005

Environmental Treatments Although many of the newer treatments on the market have reduced the need for environmental control for some dog owners, products designed to kill fleas in the home and yard are still necessary under certain circumstances.

"If you live in an area where there are a lot of fleas, like in parts of the Southeast where it's warm and humid all year round, you'll need to treat the environment as well as the dog," says Richardson. "In Tampa, for example, some people can't sell their houses because they have wall-to-wall fleas in their homes. In areas like these, you need the extra help an environmental product can bring."

Phenothrin is one of several active ingredients also used in environmental products designed to kill fleas. Phenothrin is a synthetic pyrethroid, which binds with the adult insect on contact, disrupting its nervous system and causing paralysis and death.

S-methoprene is also found in some environmental products, and is a growth regulator. This chemical sterilizes female fleas and keeps larvae from turning into adult fleas. "It mimics the juvenile hormone so the flea remains a [non-biting] juvenile until it dies," says Richardson.

A wide variety of active ingredients, combined with the growing array of flea, tick, and heartworm preventative products, offers dog owners a considerable arsenal when it comes to selecting methods of parasite control. So until NASA finds a pest-free planet, you'll be well-equipped to keep your dog flea-and-tick free.