New Insect Growth Regulators Control Fleas Safe and Effectively

by NANCY E. DOHN IFAS Information

Lis the season for fleas, but two new insect growth regulators developed by researchers at the University of Florida make future springs and summers look almost itchless for dogs, cats and owners. Soon to be released commercially, a dose of either product controls fleas up to six months, is 90 percent effective and safer than most pesticides currently available, say entomologist Phil Koehler with the Institute of Food and Agriculture Sciences (IFAS).

A result of a joint effort between IFAS and Richard Patterson of the USDA-Agricultural Research Service, the innovative products contain fenoxycarb and diflubenzuron, Koehler said. They will be initially marketed to the pest control industry under the trade names Torus and Dimilin.

"These chemicals have the potential to revolutionize the pest control industry.

Studies show they are a thousand times more effective than any flea pesticide used now, and they are the first to give long-lasting control outdoors," the IFAS Entomologist said.

While most flea products require monthly applications and break down quickly in the sun, those containing these new chemicals last up to four months indoors and up to five months outside, said Koehler. This long-term residual effect can help pest control companies provide an effective service and can save consumers money.

"And because they affect the insect's hormonal balance, they are potentially safer to humans and animals than many pesticides currently used," Koehler said.

Most flea controls work by affecting the insect's central nervous system. Insect growth regulators, however, influence the hormone production system of the biting pest, which differs from the systems of all warm-blooded animals. The one chemical attacks insects in their juvenile stage of development and the other prevents the formation of an outer skeleton, Koehler said.

Over-the-counter foggers, hand-held sprays and yard products containing the growth regulators will be available in time for next spring's flea season, Koehler predicts. Incorporating the new products into pet shampoos and daily pills furthers the possibility of a flealess future.

"These two products are going to completely change flea control, but they're just the tip of the iceberg. Five years from now growth regulators are going to be the primary means of staying one step ahead of most household insects," Koehler said.

