Researchers are reporting progress toward a once a-month pill for fighting fleas and ticks in dogs and cats. Credit: Mzelle Laure, Wikimedia Commons

Scientists in New Jersey are describing discovery and successful tests of the first once-a-month pill for controlling both fleas and ticks in domestic dogs and cats. Their study is in the current issue of ACS’ Journal of the Medicinal Chemistry.

Peter Meinke and colleagues at Merck Research Laboratories note the need for better ways of controlling fleas and ticks, driven in part by increases in pet ownership. Estimates suggest that there were 71 million pet dogs and 81 million pet cats in the United States alone in 2007 -- up
from 61 million and 70 million in 2001.

Although many powders, sprays and other topical agents are on the market, many pet owners prefer the convenience of pills. Products given orally can reach more parts of an animal’s body, do not wash off in rain or bath water, and don’t transfer from pets to people. At least one existing pill fights fleas in pets, but does not appear effective for ticks.

In tests on fleas and ticks in dogs and cats, a single dose of the new pill was 100 percent effective in protecting against both fleas and ticks for a month. There were no signs of toxic effects on the animals. Scientists obtained the flea and tick fighter from a substance first found in a fungus that “has the potential to usher in a new era in the treatment of ecoparasitic [ticks and fleas, for instance] infestations in companion animals.”

More information: Journal of Medicinal Chemistry, “Discovery of the Development Candidate N-tert-Butyl Nodulisporamide: A Safe and Efficacious Once Monthly Oral Agent for the Control of Fleas and Ticks on Companion Animals”

Source: American Chemical Society (news : web)