

## EFFECTIVE, FLEXIBLE FLY CONTROL

### A serious nuisance and hazard

Flies represent a serious nuisance and hazard for human beings and animals. The damage and loss that flies can inflict on animal operations cannot be overstated.

House flies (*Musca domestica*) can harbor more than 100 different human and animal disease-causing organisms,<sup>1</sup> including avian influenza.<sup>2</sup> They are important vectors for several enteric infections, including salmonellosis<sup>3</sup> and campylobacter.<sup>4</sup> Flies can also transmit various organisms including those that cause acute mastitis in cattle.<sup>5</sup>

Along with being vectors of disease, flies agitate and irritate animals, which causes distress. This can have a detrimental effect on growth and performance in animals, causing significant economic losses by reducing meat, milk and egg production.<sup>5,6</sup>

Additionally, flies are an annoyance and nuisance to farm workers and can become an issue for neighbors and adjacent communities.

### Elector® PSP — Two modes of control

Elector® PSP, which is in the spinosyn class of insecticides, acts as both a larvicide and an adulticide — so there is only one product to mix and apply to ensure fly control.

As a larvicide, Elector PSP kills larvae before they can become pupae and adults that lay eggs. As an adulticide, Elector PSP is non-repellant, so flies stay longer on surfaces and obtain a toxic dose that kills them. The delayed mode of action allows the adults to fly away and die, which helps keep the immediate area clean.

### Flexible and effective

When part of an integrated pest management program, Elector PSP can be used in rotation with adulticides or larvicides for resistance management. Animals may be present at

the time of premise treatment.\*

Because Elector PSP has shown no cross-resistance with existing chemistries, it can be rotated with organophosphates, pyrethroids and neonicotinoids.<sup>7</sup>

### Safety profile<sup>7</sup>

Spinosad has a minimal risk to the environment, mammals and beneficial insects when Elector PSP is used according to the label. Elector PSP's active ingredient does not require workers to use protective equipment to apply.

### Apply thoroughly

For best results, spray early in the morning when flies are resting. Apply to vertical and overhead surfaces where flies may congregate. Pay particular attention to animal areas, including fence railings, alleyways, manure, stanchions, pipes, windows, doors and other areas.

Just 2 fl. oz. of Elector PSP in 10 gallons of water will treat 5,000-10,000 sq. ft. Make sure enough water is used in a directed spray so that it will contact flies and their resting surfaces. Spray thoroughly, but do not allow run-off to occur. Re-application may occur every 7 to 10 days as needed, or when fly populations reach nuisance levels. Do not contaminate feedstuffs, water or watering and feeding equipment with premise treatment.

Available for purchase through an authorized Elanco distributor. Contact your Elanco sales representative for more information.

Labeled for control of house flies (adults and larvae), stable flies and little house flies (*Fannia canicularis*), in and around agricultural premises. Elector PSP is part of a complete line of proven bioprotection solutions from Elanco, a company dedicated to maximizing animal health and performance.

### The label contains complete use information, including cautions and warnings.

### Always read, understand and follow the label and use directions.

\*Lactating and non-lactating dairy and beef cattle, swine, sheep and poultry may be present at the time of premise treatment. Horses not intended for human consumption may also be present at the time of premise treatment.

<sup>1</sup>"House Flies." Cornell University College of Agriculture and Life Sciences Department of Entomology.

<sup>2</sup>Wanaratana, S., Panyim, S. et al. (2011). The potential of house flies to act as a vector of avian influenza subtype H5N1 under experimental conditions. *Medical and Veterinary Entomology*, 25, 58-63.

<sup>3</sup>Olsen, A. and Hamack, T. (2000). Isolation of Salmonella spp. from the Housefly, *Musca Domestica* L., and the Dump fly, *Hydrotaea aenescens* (Wiedemann) (Diptera: Muscidae), at Caged Layer Houses. US Food and Drug Administration, HFS-315.

<sup>4</sup>Rosef, O. and Kapperud, G. (1983). House Flies (*Musca domestica*) as Possible Vectors of *Campylobacter fetus* subsp. *jejuni*. *Applied and Environmental Microbiology*, 45(2), 381-383.

<sup>5</sup>Stevenson, D. and Cocke, J. Integrated pest management of flies in Texas dairies. *AgriLife Communications*, The Texas A&M University System.

<sup>6</sup>Grogan, K. (2008). Beetles and houseflies play role in disease transmission. *Poultry Times*.

<sup>7</sup>Spinosad Technical Bulletin. (2001). Dow Agrosiences LLC.