EFFICACY REVIEW
SCIMITAR WP INSECTICIDE IN WATER-SOLUBLE PACKS, EPA No. 100-1065

DATE: 04/08/05

DP BARCODE: D303711

DECISION NUMBER: 341763

REGISTRANT: Syngenta Crop Protection, Inc.

GLP: No

CHEMICAL: lambda-cyhalothrin (10%)

CHEMICAL NUMBER: 128897

PURPOSE: The purpose of this submission is to provide fire ant efficacy data as stipulated in Agency letter dated July 21, 2000.

MRID: 46275901. Morris, K.; Unruh, J. (2004) Efficacy of Scimitar WP Against Imported Fire Ants: Final Report. Project Number: T006277/04, TMPH/91E020/B, IE/91/0027. Unpublished study prepared by Morris Research & Services and University of Florida. 26 p.

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4-8-05

BACKGROUND:

Scimitar WP Insecticide in Water-Soluble Packs is intended for use by state licensed individuals and is labeled for the control of insect pests on ornamentals and lawns, including the public health pests: ants (including fire ants), cockroaches, mosquitoes, spiders, wasps, centipedes, fleas, and ticks (including species which transmit Lyme disease).

In a letter dated July 21, 2000, the Agency acknowledged the absence of efficacy data necessary for fire ant label claims within the file for this product and requested that such data be submitted. MRID #46275901 has been submitted in an attempt to address this deficiency.

DATA REVIEW:

The following data review is comprised of explanations of materials and methods, and a summation of experimental results containing a table with reformatted data.

The objective of this study was to determine the efficacy of Commodore 10WP (10% lambda-cyhalothrin) for the control of the red imported fire ant (*Solenopsis invicta*) when applied as a mound drench. The study was conducted in North Carolina, within a field approximately five acres in size and contained an excess of 100 mounds per acre. Treatments consisted of three different rates of Commodore 10WP (0.015%, 0.03%, and 0.06%) being tested against the industry standards Dursban 2E, Orthene, and Talstar 10 WP, as well as a control. A total of three replicates were completed for each treatment, each containing 10 mounds. Observations on mound activity were taken at one HAT, two DAT, three DAT, one WAT, two WAT, and four WAT.

Reported Results

Table 1. Efficacy of Various Insecticides Against the Red Imported Fire Ant Using the Mound Drench Application.

	Number of Inactive Mounds (Mean)					
	1 HAT[a]	1 DAT[b]	3 DAT	1 WAT[c]	2 WAT	4 WAT
Commodore (0.015%)	6.67	9.67	10.00	9.67	9.67	10.00
Commodore (0.03%)	10.00	10.00	10.00	10.00	10.00	10.00
Commodore (0.06%)	9.00	10.00	10.00	10.00	10.00	10.00
Dursban	3.00	8.33	9.33	9.67	10.00	9.33
Orthene	0.00	1.67	5.67	9.67	9.33	9.00
Talstar	1.00	4.67	10.00	7.67	9.67	10.00
Control	0.00	0.00	0.00	0.33	0.00	0.33

[a] ***hours after treatment*** [b] ***days after treatment*** [c] ***weeks after treatment***

In comparing the results, Commodore provided the quickest control of the mounds, with the number of inactive mounds after one hour ranging from 6.67 (Commodore 0.015%) to 10.00 (Commodore 0.03%). In addition, Commodore provided the most consistent control having the mean number of inactive mounds at 100% (Commodore 0.03%).

RECOMMENDATIONS:

The submitted data do not support the use of Scimitar WP Insecticide in Water-Soluble Packs for the control of fire ants when used as a mound drench. The following recommendation has been included:

1. According to Product Performance Test Guidelines OPPTS 810.3100 Soil Treatments for Imported Fire Ants, submitted data should contain a minimum of at least three sites located within different states. Although efficacious, the reviewed study only contained data from North Carolina. Additional data must be submitted demonstrating that this product is efficacious when used as a mound drench in at least two other states. Alternatively, data from additional sites may be cited.