GUIDE TO PRODUCT APPLICATION

FOR THE FIRST TIME USER

Zoecon RF-379 Mosquito Growth Regulator SR-20 is the result of extensive research into the intricacies of natural biochemical and physiological development of insects New chemical technology and biological findings were combined to develop a unique mosquito larvicide.

Zoecon RF-379, an insect growth regulator (IGR), acts by inducing morphological changes which interfere with normal development. These effects, not immediately apparent, result in the failure of adult mosquitoes to emerge from pupae. Zoecon RF-379 is not a conventional pesticide. It does not produce the nondiscriminatory rapid, directly toxic effects that are associated with traditional larvicides

Zoecon RF-379 differs from other larvicides you may have used only in the manner and time course of its action after application.

Zoecon RF-379 is applied to second, third or fourth instar larvae using standard larviciding equipment in a manner similar to other larvicides.

After application to second, third or fourth instar larvae at recommended rates, absolutely no effects on larvae will be observed. They will continue developing normally and will pupate. Pupae will appear unaffected, but will eventually die Adults will not emerge. Infrequently, a few adults may be seen at the water surface but they will have abnormalities preventing flight and will not survive.

Because the effect of Zoecon RF-379 is neither death nor widespread mortality immediately following pupation, the number of adults which emerge is the only criterion for accurately assessing control Checks by dip counts during larval and pupal stages will give no measure of effectiveness.

Refer to the following diagram and checklist, in addition to label instructions for guidance in timing of application and performance evaluation. They will assist you in obtaining the best possible results with this unique product

CHECKLIST

Things to remember when using Zoecon RF-379 Mosquito Growth Regulator SR-20

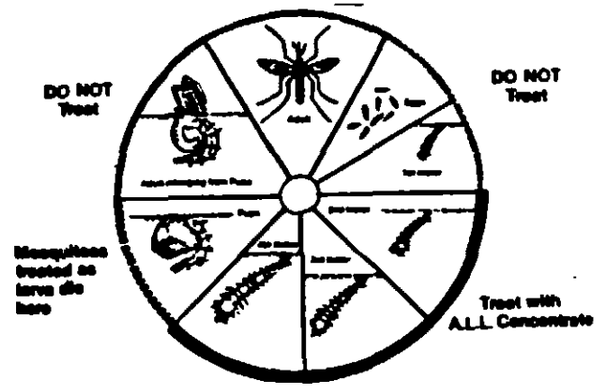
DO the following:

1. DO treat second, third and/or fourth larvae, not pupae or adults. (First instar larvae are so small they are not readily detectable.)
2. DO wait until treated larvae have pupated. Then collect pupae and transfer to laboratory to observe for emergence of adults.
3. DO observe pupae for several days, since death of IGR treated mosquitoes occurs when pupae would normally emerge as adults (Careful observation is necessary since dead pupae decompose rapidly and thus are not easily seen.)
4. DO monitor emerging adults at the treatment site. This absolutely requires that emergence traps be placed in treatment areas to capture adult mosquitoes as they emerge.

DO NOT do the following

1. DO NOT take dip counts of larvae after treatment for the purpose of performance evaluation Normal looking larvae will be present.
2. DO NOT take dip counts of pupae after treatment for the purpose of performance evaluation Normal looking pupae will be seen but these will not develop into normal adults
3. DO NOT think Zoecon RF-379 has failed if some adult mosquitoes are flying in treated areas, they probably have flown in from nearby untreated areas Numbers 2 and 3 of the "DO" checklists are the only methods of accurately assessing effectiveness
4. DO NOT spray again, either with Zoecon RF-379 or a conventional insecticide, because larvae or pupae are present after application This is normal The effectiveness of Zoecon RF-379 can only be measured by lack of adult emergence

LIFE CYCLE OF MOSQUITO
WHEN TO APPLY ZOECON RF-379 MOSQUITO GROWTH REGULATOR SR-20



Preparation of ALTOSAND® Granular Formulation

An "On-Site" Method of Preparing a Granular Formulation of Zoecon RF-379 Mosquito Growth Regulator SR-20

INTRODUCTION

A method of application of Zoecon RF-379, using sand as a carrier, has been developed for use in floodwater mosquito breeding areas with dense vegetation or canopy. The characteristics of ALTOSAND provide excellent foliage penetration, insuring that the active ingredients reach the water where they are released from the sand. ALTOSAND will prevent the emergence of species of the floodwater mosquito complex when applied to second, third or fourth larval instars at a rate of eight to ten pounds per acre.

PREPARATION INSTRUCTIONS

The following materials are required to prepare a 100-pound batch of ALTOSAND:
- 99 lbs. washed, dry sand (20-45 mesh)
- 0.5 lbs. Zoecon RF-379, (7.5 fluid oz.)
- 0.5 lbs. Hisil 233 (silicon dioxide)
- Small funnel
- Cement mixer

1. Measure the time required for a level funnel full of sand to empty
2. Into a rotating-type mixer place 99 pounds of dry (20-45 mesh) sand. While the mixer is rotating, slowly pour 0.5 pound (7.5 fluid ounces) Zoecon RF-379, onto the sand (If better wetting is required, Zoecon RF-379 may be diluted in up to an equal volume of water.)
3. Mix until the sand is uniformly coated with Zoecon RF-379 , (usually five to ten minutes).
4. Stop the mixer and add 0.5 pound of Hisil 233 Cover the mixture to reduce dust Start the mixer and run for approximately five minutes (The quantity of Hisil 233 necessary to achieve a dry, free-flowing mixture will vary depending on the particle size distribution and moisture on the sand)
5. Compare the flow rate of the ALTOSAND mixture with that of untreated sand in step No 1 Add more Hisil if it flows significantly slower and reduce the amount of Hisil in subsequent batches if the mixture flows at the same or a faster rate and is excessively dusty

APPLICATION RATE AND METHODS

Apply at a rate of eight to ten pounds of the final mixture per acre using standard granular dispersal equipment

Ms. P. Leanne Pruett
Fairfield American Corporation
809 Harrison Street
Frenchtown, NJ 08825

Subject: Allethrin 7% Coil Base
EPA Registration No. 4816-526
Your Submission Dated May 24, 1990

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

Sincerely yours,

Phil Hutton
Product Manager (17)
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Enclosure

52337:I/C:Hollis:L17-18:KENCO:10/09/90:11/04/90:DD:vo:ek:de

CONCURRENCES

SYMBOL							
SIGNATURE							
DATE							

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