Reg # 275-66 PM-18 177

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Dr. Ralph J. Hodosh
Manager, Labeling and Product Safety
CAPD Regulatory Affairs
Abbott Laboratories
North Chicago, IL 60064-4000

APR 25 1990

Dear Dr. Hodosh

Subject: Vectobac AS Application for Labeling Amendment Dated 1/29/90
EPA File Symbol/Reg. No. 275-52

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the following comments.

1. Add the statement "Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles" to the directions for use section.

2. Replace the statement "In case of irritation, contact physician" with "In case of irritation, get medical attention."

3. Please note that you are subject to the requirements of 40 CFR Part 180.1011 including batch to batch testing.

51202:I:Mendelsohn:C.Disk:KENCO:04/16/90:CT:SW:EK:CT

CONCURRENCES								
SYMBOL								
SURNAME								
DATE								

EPA Form 1320-1 (12-70) OFFICIAL FILE COPY

A stamped copy of the label is enclosed for your records. Submit five (5) final printed labels.

Sincerely yours,

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

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APR 26 1990

315 | 263164

18

Dr. Ralph J. Hodosh
Manager, Labeling and Product Safety
CAPD Regulatory Affairs
Abbott Laboratories
North Chicago, IL 60064-4000

Dear Dr. Hodosh

Subject: Vectobac G Application for Labeling Amendment Dated 10/10/89
EPA File Symbol/Reg. No. 275-50

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the following comments.

1. Delete the statement "Where non-target aquatic invertebrate parasites and predators are present longer periods of suppression may result since these beneficials would be conserved to aid in mosquito population management."

You may list specific nontarget insects not adversely affected by your product if you have submitted supporting acceptable studies. However, such beneficial insect claims would have to submitted for Agency approval.

51202:I:Mendelsohn;C.Disk:KENCO:04/16/90:CT:SW:EK:CT

CONCURRENCES								
SYMBOL								
SURNAME								
DATE								

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2. Add the statement "Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles" to the directions for use section.

3. Add the following block to the front panel.

"Statement of Practical Treatment

If in eyes, flush eyes with plenty of water. Get medical attention if irritation persists."

4. Please note that you are subject to the requirements of 40 CFR Part 180.1011 including batch to batch testing.

A stamped copy of the label is enclosed for your records. Submit five (5) final printed labels.

Sincerely yours,

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

01-0120/R2

Biological Larvicide

VectoBac® AS/12AS

CAUTION

KEEP OUT OF REACH OF CHILDREN

VECTOBAC AS

Active Ingredient: *Bacillus thuringiensis*, Serotype H-14, 600 International Toxic Units (ITU) per mg (Equivalent to 2.19 billion ITU per gallon; 0.576 billion ITU per liter).....0.6%

Inert Ingredients.....99.4%

E.P.A. Reg. No. 275-52

VECTOBAC 12AS

Active Ingredient: *Bacillus thuringiensis*, Serotype H-14, 1200 International Toxic Units (ITU) per mg (Equivalent to 4.84 billion ITU per gallon; 1.279 billion ITU per liter).....1.2%

Inert Ingredients.....98.8%

E.P.A. Reg. No. 275-66

STORAGE AND DISPOSAL

See container label.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS

As a precautionary measure in case of contact, flush eyes with plenty of water. In case of irritation, contact a physician.

PHYSICAL OR CHEMICAL HAZARDS

Diluted or undiluted VectoBac Aqueous suspension can cause corrosion if left in prolonged contact with aluminum spray system components. Rinse spray system with plenty of clean water after use. Care should be taken to prevent contact with aluminum aircraft surfaces, structural components and control systems. In case of contact, rinse thoroughly with plenty of water. Inspect aluminum aircraft components regularly for signs of corrosion.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

APPLICATION DIRECTIONS

Suggested Rate Range*

Mosquito Habitat	VECTOBAC AS	VECTOBAC 12AS
(Such as the following examples): Irrigation ditches, roadside ditches, flood water, standing ponds, woodland pools, snow melt pools, pastures, catch basins, storm water retention areas, tidal water, salt marshes and rice fields.	0.5 - 2 pts/acre	0.25 - 1 pt/acre
Polluted water (such as sewage lagoons, animal waste lagoons).	2 pts/acre	1 - 2 pts/acre

*Use higher rate range in polluted water and when late 3rd and early 4th instar larvae predominate, mosquito populations are high, water is heavily polluted, and/or algae are abundant.

Suggested Rate Range

Blackflies Habitat	VECTOBAC AS	VECTOBAC 12AS
Streams		
stream water** (=ppm) for 1 minute exposure time.	1-50 mg/liter	0.5 - 25 mg/liter
stream water** (=ppm) for 10 minutes exposure time.	0.1-5 mg/liter	0.05 - 2.5 mg/liter

**Use higher rate range when stream contains high concentration of organic material, algae, or dense aquatic vegetation.

Ground and Aerial Application

VectoBac may be applied in conventional ground or aerial application equipment with quantities of water sufficient to provide uniform coverage of the target area. The amount of water needed per acre will depend on weather, spray equipment, and mosquito habitat characteristics. Do not mix more VectoBac than can be used in a 72-hour period.

For most ground spraying, apply in 5-100 gallons per acre using hand-pump, airblast, mist blower, etc., spray equipment.

For aerial application, VectoBac may be applied either undiluted or diluted with water. For undiluted applications, apply 0.5 to 2.0 pt/acre of VectoBac AS, or 0.25 to 2.0 pt/acre of VectoBac 12AS through fixed wing or helicopter aircraft equipped with either conventional boom and nozzle systems or rotary atomizers.

For diluted application, fill the mix tank or plane hopper with the desired quantity of water. Start the mechanical or hydraulic agitation to provide moderate circulation before adding the VectoBac. VectoBac suspends readily in water and will stay suspended over normal application periods. Brief recirculation may be necessary if the spray mixture has sat for several hours or longer. AVOID CONTINUOUS AGITATION OF THE SPRAY MIXTURE DURING SPRAYING.

For blackfly aerial applications, VectoBac can be applied undiluted via fixed wing or helicopter aircraft equipped with either conventional boom and nozzle systems or open pipes. Rate of application will be determined by the stream discharge and the required amount of VectoBac necessary to maintain a 1-50 ppm concentration for VectoBac AS and .5-25 ppm concentration for VectoBac 12AS in the stream water. VectoBac can also be applied diluted with similar spray equipment. Do not mix more VectoBac than can be used in a 72-hour period.

Dr. Ralph J. Hodosh
Manager, Labeling and Product Safety
CAPD Regulatory Affairs
Abbott Laboratories
North Chicago, IL 60064-4000

APR 25 1990

Dear Dr. Hodosh

Subject: Vectobac AS Application for Labeling Amendment Dated 1/29/90
EPA File Symbol/Reg. No. 275-52

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the following comments.

1. Add the statement "Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles" to the directions for use section.

2. Replace the statement "In case of irritation, contact physician" with "In case of irritation, get medical attention."

3. Please note that you are subject to the requirements of 40 CFR Part 180.1011 including batch to batch testing.

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EPA Form 1320-1 (12-70) OFFICIAL FILE COPY

SMALL QUANTITY DILUTION RATES

Gallons Spray Solution/Acre
(Ounces Needed per Gallon of Spray)

VECTOBAC AS Rates in Pints Per Acre	10 Gal/A	25 Gal/A	50 Gal/A
0.5	.8	.33	.16
1.0	1.6	.66	.32
2.0	3.2	1.30	.64
VECTOBAC 12AS Rates in Pints Per Acre	**10 Gal/A**	**25 Gal/A**	**50 Gal/A**
0.25	0.2	0.1	0.04
0.5	0.4	0.2	0.08
1.0	0.8	0.33	0.16
2.0	1.6	0.65	0.32

CHEMIGATION

Apply this product only through: sprinkler including solid set; flood (basin); or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

RICE – FLOOD (BASIN) CHEMIGATION

Systems using a gravity flow pesticide dispensing systems must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

VectoBac is metered or dripped into rice floodwater at application stations positioned at the point of introduction (levee cut) of water into each rice field or pan. Two pints of VectoBac AS (or 1 pint of VectoBac 12AS) are diluted in water to a final volume of 5 gallons. The diluted solution is contained in a 5 gallon container and metered or dispersed into the irrigation water using a constant flow device at the rate of 80 ml per minute. Introduction of the solution should begin when 1/3 to 1/2 of the pan or field is covered with floodwater. Delivery of the solution should continue for a period of approximately 4-1/2 hours. Floodwater depth should not exceed 10-12 inches to prevent excessive dilution of VectoBac which could result in reduced larval kill. Agitation is not required during the period in which the VectoBac solution is being dispersed.

Application of VectoBac into rice floodwater is not permitted using a pressurized water and pesticide injection system.

DRIP (TRICKLE) AND SPRINKLER CHEMIGATION

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from th supply tank when the irrigation system i either automatically or manually shu down.

The system must contain functiona interlocking controls to automaticall shut off the pesticide injection pum when the water pump motor stops, or i cases where there is no water pump when the water pressure decreases to th point where pesticide distribution i adversely affected.

Systems must use a meter pump, suc as a positive displacement injection pum (e.g., diaphragm pump) effectivel designed and constructed of material that are compatible with pesticides an capable of being fitted with a syster interlock.

The system must contain a functiona check valve, vacuum relief valve and lo pressure drain appropriately located o the irrigation pipeline to prevent wate source contamination from backflow.

The irrigation line or water pump mus include a functional pressure switc which will stop the water pump moto when the water pressure decreases to th point where pesticide distribution i adversely affected.

If VectoBac needs to be diluted prior t injection, material may be mixed sepa rately and then put into the injecto Agitation may be necessary if material are kept more than one day. VectoBa may be applied continuously. Where sup ply tanks are used for continuous applica tion – not injection – do not dilute in th supply tank.

NOTICE TO USER

Seller makes no warranty, express o implied, of merchantability, fitness o otherwise concerning use of this produc other than as indicated on the label. Use assumes all risks of use, storage or han dling not in strict accordance with accom panying directions.

For information call:
1-800-323-9597

Abbott Laboratories
Chemical and Agricultural
Products Division
North Chicago, IL 60064 USA

List 5059/5605

AS 01-0117 7x11

Biological Larvicide

VectoBac® AS

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
As a precautionary measure in case of contact, flush eyes with plenty of water. In case of irritation, contact a physician.

PHYSICAL OR CHEMICAL HAZARDS
Diluted or undiluted VectoBac Aqueous suspensions can cause corrosion if left in prolonged contact with aluminum spray system components. Rinse spray system with plenty of clean water after use. Care should be taken to prevent contact with aluminum aircraft surfaces, structural components and control systems. In case of contact, rinse thoroughly with plenty of water. Inspect aluminum aircraft components regularly for signs of corrosion.

DIRECTIONS FOR USE
General Classification
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Refer to Package Enclosure for application rates and general directions.

CHEMIGATION
Refer to Package Enclosure for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

VECTOBAC 12AS

Active Ingredient: *Bacillus thuringiensis* Serotype H-14, 1200 International Toxic Units (ITU) per mg (Equivalent to 4 84 billion ITU per gallon, 1 279 billion ITU per liter) 1 2%

Inert Ingredients 98 8%

E P A Reg No 275-66

STORAGE AND DISPOSAL

See container label.

PRECAUTIONARY STATEMENTS
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ACCEPTED
with COMMENTS
In EPA Letter Dated:

9 . 5 1990

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

275-52

SMALL QUANTITY DILUTION RATES

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(Ounces Needed per Gallon of Spray)

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The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a meter pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

If VectoBac needs to be diluted prior to injection, material may be mixed separately and then put into the injector. Agitation may be necessary if materials are kept more than one day. VectoBac may be applied continuously. Where supply tanks are used for continuous application – not injection – do not dilute in the supply tank.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

For information call
1-800-323-9597

Abbott Laboratories
Chemical and Agricultural
Products Division
North Chicago, IL 60064 U.S.A.

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