

US EPA ARCHIVE DOCUMENT

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PROPRIETARY

Date Out EFB:

JAN 12 1981

To: Product Manager Jacoby (21)
TS-767

From: Dr. Willa Garner III
Chief, Review Section No. 1
Environmental Fate Branch

Attached please find the environmental fate review of:

Reg./File No.: 100-607

Chemical: Metalaxyl

Type Product: F

Product Name: Ridomil

Company Name: Ciba - Geigy

Submission Purpose: review groundwater monitoring data, protocol review,
add non-bearing citrus to label, requests for numerous administrative
decisions

ZBB Code: other

ACTION CODE: 570

Date in: 11/21/80

EFB # 684

Date Completed: JAN 12 1981

TAIS (level II)

Days

Deferrals To:

67

8

Ecological Effects Branch

Residue Chemistry Branch

Toxicology Branch

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INTRODUCTION This submission (Acc. no. 243743) contains a number of items pertaining to the groundwater monitoring studies required by the Agency for Ridomil 2E Fungicide (ai metalaxyl; Reg. no. 100-607):

- 1) submission of the 4th interim report on monitoring studies underway in Florida and Maryland.
- 2) submission for review of a protocol for a groundwater monitoring in the Indian River area of Florida.
- 3) a request to include the use on non-bearing citrus in Florida only on the registered label.

Ciba-Geigy is also requesting administrative decisions in the following matters:

- 1) a request to terminate the monitoring study underway in Suwannee County, Florida.
- 2) a request to change the sampling interval from 15 to 30 days at the Maryland site.
- 3) a request for permission to terminate all metalaxyl groundwater monitoring studies after two years if the data indicate no contamination of groundwater.
- 4) a request that the agency promise not to require any additional monitoring studies for any pending or proposed new uses of Ridomil since the Indian River site is a "worst-case "situation.

On October 31, 1980 Ciba-Geigy representatives met with EFB personnel to discuss the Ridomil groundwater monitoring program. At this meeting it was agreed that the Suwannee County study could be terminated if one at the Indian River area is started. It was also agreed that the use on non-bearing citrus in Florida only which is presently on a 24 (c) label (SLN FL 800032) could be transferred to the registered federal label when an acceptable protocol for Indian River study was submitted. (The above information via personal communications with Bob Carsel and Hank Jacoby).

Review of Monitoring Data

"Ridomil Mobility Study-Tobacco-Suwannee County, Florida and the Tobacco Experimental Farm Maryland," Interim Report, November 13, 1980.

FLA Soil and groundwater analyses have now been completed through 154 days post application. Soil was sampled to a depth of 48 inches, and water samples were taken from four wells (one is a control) separate analyses for parent and CGA-62826, the principal soil degradate of metalaxyl, were carried out.

A total of 25.7 inches of accumulated rainfall and irrigation had occurred by day 154.

No metalaxyl or acid degradate residues were detected in any soil (≤ 0.05 ppm) or water (≤ 0.001 ppm) samples at day 154.

MD. This study has now proceeded for 76 days. A total of 9 1/2 inches of rain has fallen since the first application, and a total of 5 inches since the second application. Water from seven wells (including one control well) and soil samples were analyzed for parent only.

Metalaxyl was not detected in the soil (≤ 0.05 ppm) below a depth of 6 inches nor in any samples of groundwater (≤ 0.001 ppm) at day 76.

Protocol Review

"Ridomil Mobility Study - Fort Pierce Research Station, Florida" W. B. Nixon,
Project Coordinator

This study will be carried out in the Indian River area of Florida, a region which accounts for 20% of the Florida citrus output and where subsurface drainage systems are employed to provide optimum surface drainage.

Ridomil will be applied at 4 lb ai/A to shallow tilled 1 ha plots at the first spring flush of growth (late February or early March). 1.3 cm of irrigation will be added immediately following application, and supplemental irrigation will be used if necessary to simulate the maximum rainfall of the year for that area.

Refer to Figures 1 and 2. The drainage tubes discharge into manholes, so the volume of drainage can be measured accurately. Soil increments of 15 cm down to the drains, and the drainage water will be analyzed for metalaxyl and CGA-62826. The sampling schedule will be: before application, 0 days, days 1-14, day 21, day 30, then at a schedule consistent with the observed mobility.

Recommendations

1. The protocol submitted for the Indian River study is acceptable.
2. EFB concurs with the addition of the use on non-bearing citrus in Florida only to the registered label.
3. EFB recommends for administrative decisions which

allows termination of the monitoring study in Suwannee County, FL

allows changing the sampling intervals from 15 to 30 days at the Maryland site

allows termination of all monitoring studies after two years if the data indicate no potential for groundwater contamination

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4. EFB recommends against an administrative decision which would guarantee that no additional groundwater monitoring studies will be required for any pending or proposed new uses of Ridomil. This administrative decision should be made after the results of the Indian River study have been submitted and reviewed.

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Review Section #1
EFB/HED

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