FILE COPY

PROPRIETARY

Date Out EFB: DEC 15 1980

To. Product Manager 23 (Mountfort)
TS-767

From: Dr. Willa Garner S M Creeger (Acting Chief)
Chief, Review Section No. 1
Environmental Fate Branch

Attached please find the environmental fate review of:

Reg./File No. 2139 - EUP - 23

Chemical: Thidiazuron

Type Product: plant growth regulator

Product Name: DROPP

Company Name: Noram

Submission Purpose: cotton defoliant

ZBB Code: 3(c)(5), other

ACTION CODE: 356

Date in: 12-3-80

EFB # 690, 691

Date Completed: DEC 15 1980

Time (days) 1

TAIS 52

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

Introduction

Our review of 9/3/80 noted that two matters must be resolved before EFB could concur with removal of the rotational crop restriction from the Dropp 50 WP registered label (2139-EUP-23; ai thidiazuron). This was discussed with NOR-AM at a meeting on 11/13/80 (refer to minutes of that meeting in our file). The two issues requiring clarification were:

1) no leafy vegetable rotational crop study has been submitted

2) recovery data must be submitted for the methanol extraction procedure employed in the radiolabel rotational crop study.

These points are addressed in this submission (Acc. n. 099755).

Discussion of Data

"Rotational Plant Uptake of Thidiazuron Soil Residues", report no. 49537/NA 63, 3/27/80.

Dropp 50 WP was applied to cotton at 0.25 and 0.5 lb ai/A. About 9 weeks later rotational cabbage was planted, grown to maturity, and analyzed for aniline - containing residues by previously-reviewed methods. None (<0.02 ppm) were found. Recoveries at a fortification level of 0.2 ppm were 90% or better.

"Specific Determination of Residues of SN 49537 in Cottonseed Meal", report no. 49537/3, 2/15/78.

Recovery data and associated chromatographs for the methanol extraction procedure used in study R-2 (8/10/78; Acc. no. 242669) are contained in this report. Cottonseed meal was the spiked sample, and recoveries at fortification levels of 0.05 and 0.1 ppm thidiazuron were in the 82-101% range.

Recommendation

A satisfactory leafy vegetable rotational crop study has been submitted, and the submitted recovery data indicate that the extraction procedure in question is effective. EFB therefore concurs with removal of the rotational crop restriction from the Dropp 50 WP label.

Joe C. Reinert
Review Section #1
Environmental Fate Branch

Joe C Reinert

2