

FILE COPY

Date Out EFB: MAY 14 1979

To: Product Manager 17  
TS-767

Through: Dr. Gunter Zweig, Chief  
Environmental Fate Branch

From: Review Section No. 1 *RLH*  
Environmental Fate Branch

Attached please find the environmental fate review of:

Reg./File No.: 201-EUP-AL, 9G2143

Chemical: Cyano(3-phenoxyphenyl)methyl-4-chloro-alpha-(1-methyl  
ethyl)benzeneacetate (Pydrin)

Type Product: Insecticide

Product Name: Pydrin Insecticide 2.4 EC

Company Name: Shell Oil Co.

Submission Purpose: Celery

ZBB Code: Sec. 5

Date in: 4/3/79

Date Completed: 4/27/79

Deferrals To:

☒ Ecological Effects Branch

☐ Residue Chemistry Branch

☐ Toxicology Branch

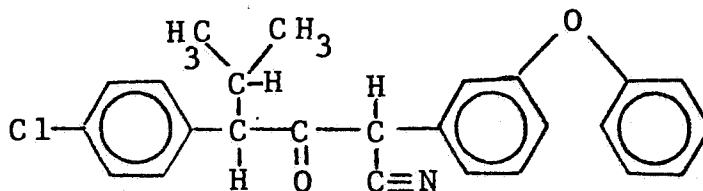
1.0 Introduction

1.1 Active ingredient: cyano-(3-phenoxyphenyl)methyl-4-chloro-alpha-(1-methylethyl)-benzeneacetate.

1.2 Trade Name: Pydrin Insecticide 2.4 Emulsible concentrate. The following names are also used to indicate the active ingredient: Pydrin, TM SD43775, WL 43775, fenvalerate, Sumicidin, and S5602.

1.3 Pydrin formulation in the application consists of 30% of the active Ingredient and 70% Inert, the product contains 2.4 lbs of Pydrin per gallon.

1.4 Chemical Structure:



1.5 The proposed experimental program is as follows: The material will be applied on celery in the state of California and Florida in the next two years. A total of 180 acres of crop will be treated in the program, with a total of 540 lbs. ai being utilized. A total of 60 acres will be treated in Florida, and up to 30 acres will be sprayed in California in each of the next two years. Performance, phototoxicity, and residue data plus environmental information will be collected.

2.0 Directions for Use:

For celery, foliage application, mix the required amount of pydrin in sufficient water to provide uniform coverage. Do not mix the product with methyomyl SP. Do not rotate to roots crops within 12 months of last application.

Apply to give uniform coverage. The recommended dosage range is 0.05 to .2 lbs AI/acre. Repeat at 3 to 5 days or as needed throughout season to maintain control. Do not apply within 1 day of harvest. Apply no more than 3 lbs/acre to a crop in growing season. Do not graze livestock on treated fields or feed treated plant parts.

3.0 Discussion

Studies on photolysis/hydrolysis and Aerobic soil metabolism have been previously reviewed (5/11/78). A meeting was held on July 14, 1978 between representatives of EPA and the Shell Oil Company concerning the above tests.

See review file for summary of meeting.

4.0 Recommendations:

The fate of pydrin is known to support this use under the permit if the label restrictions required by the review dated 11/16/79 (201-UNR) are put on the label. These are:

1. Do not rotate non-root crops for 270 days after last application.
2. We note the 1 year root crop restriction is on the label.

Ronald E. Ney, Jr.

*John R. Harris*

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Hazard Evaluation Division  
Environmental Fate Branch