Date Out EFB: 03 MAR 1982

To: Product Manager 23 Mountfort
    TS-767

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

Attached please find the environmental fate review of:

Reg./File No.: TX-810047

Chemical: Endothall

Type Product: Herbicide

Product Name: Accelerate

Company Name: Penwalt

Submission Purpose: Drift data - use on cotton in Texas - 24c registration

ZBB Code: 24c

ACTION CODE: 581

Date in: 1/28/82

Date Completed: 03 MAR 1982

EFB #: 154

TAIS (level II) Days

53 1

Deferrals To:

Ecological Effects Branch

Residue Chemistry Branch

Toxicology Branch
1.0 INTRODUCTION

The Texas Department of Agriculture has submitted drift data in support of a 24(c) registration for endothall use on cotton in Texas.

2.0 Accelerate: endothall
7-oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid

\[
\begin{align*}
\text{H} & \quad \text{COOH} \\
\text{H}_2 & \quad \text{H} \\
\text{H} & \quad \text{COOH} \\
\end{align*}
\]

active ingredient: mono(N,N-dimethylaklylamine) salt of endothall

3.0 DISCUSSION

Accelerate is a cotton harvest aid when used in combination with organic phosphate or sodium chlorate cotton defoliants. Accelerate speeds the leaf drop and achieves more complete defoliation.

When applying aerially using ULV oil, sodium chlorate defoliants are not to be used, only organic phosphate type. Pilots are instructed to fly as close as possible to plant tops and not to apply in excessive winds.

Drift data were obtained by performing two tests. The first test (Test I) used 5 gal of water per acre and the second (Test II) used one quart cotton seed oil. Each test also used 1.5 pt of a defoliant and 1 pt Accelerate.

Forty moisture sensitive strips were spaced 2 ft apart for each test in a north-south line with card #1 being on the north end. The wind was southerly at 25-30 mph. Card #20 was center line in each test.

Test I (water) results show considerable drifting of material to the north (card #1) while in Test II (ULV oil) no drifting appears to occur. (See attachment).
4.0 CONCLUSIONS

The use of ULV oil does appear to decrease drift possibilities even in winds blowing at 25-30 mph as they were during these tests. These wind speeds would be considered excessive under normal conditions.

5.0 RECOMMENDATION

EFB concurs with the granting of this 24(c) registration to Texas for endothall use as a harvest aid for cotton.

Richard V. Moraski
Review Section No. 1
Environmental Fate Branch
Test I  Edcouch, TX
1.5 pts Def  Air Tractor
1 pt. Accel.  600 hp.
5 qts. Water
Wind - 15-20 MPH

Test II
1.33 pts Def
1 pt. Accel.
1 qt. Cotton Seed Oil
Wind - 25-30 MPH

40 Cards spaced 2 ft. apart for each test
Numbered 1-40 from left-right
or North-South. "South wind blowing"
Card # 20 was center line in each test
Ciba-Geigy moisture sensitive paper &
Adding Machine paper was used in each test
Test I is identified by number only e.g. (1-40)
Test II is identified by number & II.
Id. is written on back of the moisture sensitive