

US EPA ARCHIVE DOCUMENT

FILE

109702

Date Out EFB: 06 FEB 1984

TO: Tim Gardner/Heyward
Product Manager 17
Registration Division
TS-767

FROM: Sam Creeger, Chief *SC*
Review Section No. 1
Exposure Assessment Branch
Hazard Evaluation Division

Attached please find the environmental fate review of:

Reg./File No.: 10182-AL

Chemical: Cypermethrin

Type Product: Insecticide

Product Name: Cymbush 2EC

Company Name: ICI Americas

Submission Purpose: Review data on file to support use use on
pecans.

ZBB Code: Other

ACTION CODE: 106

Date in: 10/28/83

EFB # 4050

Date Completed: _____

TAIS (level II) Days

63

1.5

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

1.0 INTRODUCTION

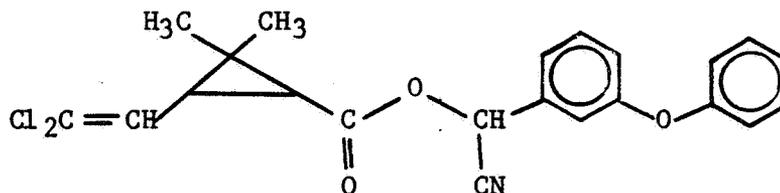
ICI Americas has submitted an application for registration of Cymbush 3E (cypermethrin, as a. i.) for use on pecans.

1.1 Chemical

Common name: Cypermethrin

Chemical name*: (\pm)- α -cyano-3-(phenoxyphenyl)methyl (\pm)-cis,trans-3-(2,2-dichloroethenyl)-2,2-dimethyl cyclopropane-carboxylate

Chemical structure



2.0 DIRECTIONS FOR USE

Use directions are appended to this review.

Briefly, 0.16-0.27 pint/acre (0.06-0.10 lb ai/acre) per application is applied by ground equipment using sufficient water to obtain uniform coverage. Application can be made up to shuck split. No more than 8 applications per season are permitted.

3.0 DISCUSSION OF DATA

3.1 No additional data were submitted with the application. Previously submitted data were referenced for review.

3.2 EAB reviewed the data previously submitted in support of other uses of cypermethrin. See EAB reviews dated 5/14/81, 4/29/82 and 5/14/82.

All data requirements, with the exception of an adequate field dissipation study, have been satisfied for cypermethrin for the proposed use.

In EAB review dated 4/29/82 the field dissipation study was found inadequate since the soil analyses were for parent cypermethrin only and did not include the major soil metabolites found in the aerobic soil metabolism study. The degradation products were identified as DCVA (cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethyl cyclopropane-carboxylic acid) and PBAC (3-phenoxybenzoic acid).

*Alternate chemical name: (\pm)- α -cyano-3-phenoxybenzyl (\pm)-cis,trans-3-(2,2-dichlorovinyl)-2,2-dimethyl cyclopropanecarboxylate

4.0 CONCLUSION

- 4.1 EAB does not consider all the data requirements as being satisfied for registration of cypermethrin for the proposed use. The field dissipation study is not adequate to describe the field dissipation of cypermethrin.
- 4.2 EAB, in review dated 4/29/82 recommended for conditional registration of cypermethrin on the condition that the registrant submit the data on formation and decline of the degradates of cypermethrin under field conditions.
- 4.3 In reviews dated 5/4/83 and 10/3/83, EAB requested that the registrant provide the data or justification. Because the data were not available EAB objected to the registration of the proposed uses. To date, no response has been received.

5.0 RECOMMENDATION

The registrant must provide either data on the formation and decline of soil metabolites for the field study or provide a justification as to why analysis of these metabolites was not done in the studies submitted. Open literature studies on field dissipation of cypermethrin or of similar compounds having the same degradation products may suffice.



Clinton Fletcher
Review Section No. 1
Exposure Assessment Branch
Hazard Evaluation Division

Cypermethrin exposure assessment review

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Pages 4 through 5 are not included in this copy.

The material not included contains the following type of information:

- Identity of product inert ingredients
 - Identity of product impurities
 - Description of the product manufacturing process
 - Description of product quality control procedures
 - Identity of the source of product ingredients
 - Sales or other commercial/financial information
 - A draft product label
 - The product confidential statement of formula
 - Information about a pending registration action
 - FIFRA registration data
 - The document is a duplicate of page(s) _____
 - The document is not responsive to the request
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- The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.
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