

US EPA ARCHIVE DOCUMENT

CASE GS0106

ETHOPROP

PM 300 08/20/82

CHEM 041101

Ethoprop (O-ethyl S,S-dipropyl phospho

BRANCH EEB DISC 40 TOPIC 05050045

FORMULATION 90 - FORMULATION NOT IDENTIFIED

FICHE/MASTER ID 00043714 CONTENT CAT 11

MRID 44262001

Atkins, E.L.; Kellum, D.; Neuman, K.J.; et al. (1975) Effect of Pesticides on Apiculture: Project No. 1499. (Unpublished study received Dec 2, 1976 under 10182-EX-3; prepared by Univ. of California--Riverside, Citrus Research Center and Agricultural Experiment Station, Dept. of Entomology, submitted by ICI Americas, Inc., Wilmington, Del.; CDL:095996-D)

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS

SEC: EEB -40-05103545

DIRECT RVW TIME = (MH) START-DATE 1/20/83 END DATE 1/20/83

REVIEWED BY: Allen W. Vaughan
TITLE: Entomologist
ORG: EEB/HED.
LOC/TEL: Crystal Mall 2 / 79307

SIGNATURE: *Allen W. Vaughan*

DATE: 2/1/83

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE:

DATE:

Bjm

MRID 44262001

1. CHEMICAL: Ethoprop (Mocap)
2. FORMULATION: Technical
3. CITATION: Atkins, E.L.; Kellum, D.; Neuman, K.J.; et al. (1975) Effect of Pesticides on Apiculture: Project No. 1499. (Unpublished study received Dec 2, 1976 under 10182-EX-3; prepared by Univ. of California--Riverside, Citrus Research Center and Agricultural Experiment Station, Dept. of Entomology, submitted by ICI Americas, Inc., Wilmington, Del.; CDL:095996-D)

FICHE/MASTER ID 00043714

4. REVIEWER: Allen W. Vaughan
Entomologist
EEB/HED
5. DATE REVIEWED: January 20, 1983
6. TEST TYPE: Bee toxicity
 - A. Test species: Honey bee (Apis mellifera)
7. REPORTED RESULTS: Ethoprop (Mocap) was determined to be moderately toxic to honey bees in a laboratory acute contact toxicity test (LD50 = 5.56 micrograms per bee.)
8. REVIEWER'S CONCLUSIONS: This study is scientifically sound, and shows ethoprop to be moderately toxic to honey bees.

Materials and Methods

Test Procedures

A bell-jar vacuum duster is used to apply the pesticide, mixed with a pyrolite dust diluent, to the test bees. Dosages of dust are weighed, bees are aspirated into dusting cages and treated, and bees are then transferred into holding cages. Observations are recorded at 12, 24, 48, 72, and 96 hours.

Statistical Analysis

Analysis of the data was performed to enable the authors to determine LD50 values of pesticides from either dosage-mortality curves or from LC50 values. The slope value was also obtained from the dosage-mortality curve.

Discussion/Results

See "Reported Results," above.

Reviewer's Evaluation

A. Test Procedure

Procedures were sound.

B. Statistical Analysis

Analysis as performed by the authors was assumed to be valid. No validation was performed by EEB.

C. Discussion/Results

This study is scientifically sound.