1-18-84

1. CHEMICAL: MON 097 (Harness)

2. FORMULATION: Technical

3. CITATION: Atkins, E.L. 1982. Bee toxicity dusting test summary. In EPA Acc. No. 071973. Subm. by Monsanto Agricultural Products Co., St. Louis, Missouri, Sept. 22, 1983.

4. REVIEWER: Allen W. Vaughan
Entomologist
EEB/HED

5. DATE REVIEWED: January 18, 1984

6. TEST TYPE: Bee Toxicity

A. Test species: Honey bee (Apis mellifera)

7. REPORTED RESULTS: When test bees were exposed to direct application of MON 097, the mean percent mortality after 48 hours was 4.87% at 33 micrograms per bee, 9.83% at 67 micrograms per bee, and 11.16% at 100 micrograms per bee. The estimated LD_{50} is 1715 micrograms per bee (practically non-toxic to honey bees.)

8. REVIEWER'S CONCLUSIONS: This study is scientifically sound, and shows MON 097 to be practically non-toxic to honey bees.

MATERIALS AND METHODS

Test Procedure

Technical pesticide is mixed with a non-toxic dust diluent. Test bees are then exposed to direct application of the chemical in a vacuum duster apparatus. Following treatment, bees are removed to holding cages and provided with water and sugar syrup. Mortality readings are taken at 24, 48, 72, and 96 hours posttreatment.

Statistical Analysis

Mortality figures are analyzed through the use of probit analysis. Values are corrected for control mortality using Abbott's formula.

DISCUSSION/RESULTS

MON 097 tested non-toxic to honey bees.

REVIEWER'S EVALUATION

A. Test Procedure

Procedures were sound.

B. Statistical Analysis

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

C. Discussion/Results

This study is scientifically sound.

MON 097 - Honey bee hazard

Based on information submitted by the registrant, use of MON 097 should present no hazard to honey bees.