

US EPA ARCHIVE DOCUMENT

4-4-80

TDMS0030

DATA EVALUATION RECORD

PAGE 1 OF 2

CASE GS0014

ENDOSULFAN

PM 110 08/12/79

CHEM 079401

Endosulfan ( hexachlorohexahydromethano )

BRANCH EEB DISC 40 TOPIC 05200045

FORMULATION 00 - ACTIVE INGREDIENT

FICHE/MASTER ID 05004414

CONTENT CAT 01

Palmer-Jones, T. (1959) Effect on honey bees of thiodan applied to broad beans in a cage. New Zealand Journal of Agricultural Research 2:229-233.

SUBST. CLASS = S.

DIRECT RVW TIME = 2 hrs. (MH) START-DATE 1/25/80 END DATE 1/25/80

REVIEWED BY: Allen W. Vaughan  
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DATE: *1/4/80*

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### Conclusions

This study is scientifically sound.

### Methods and Materials

Test Procedures - A small nucleus of young bees and brood was enclosed in a large cage with flowering broad beans. With the bees confined to the hive, Thiodan was applied to the beans at 5.6 ~~15~~ AI/A rate. One hour after application, bees were allowed to forage.

Effects were evaluated by counting the number of foraging bees, by collecting and caging foragers for mortality determination, and by examining the nucleus.

Statistical Analysis - None reported.

### Results

Reported Results - Thiodan application to flowering broad beans resulted in bee repellency for three hours. Following this, the bees foraged extensively with no adverse effects recorded.

Discussion/Results - Bees were apparently repelled for several hours following application; after this period foraging activity returned to preapplication levels.

In the mortality evaluation, only 1 of 120 bees died in 48 hours, indicating very low toxicity.

No adverse effect on the nucleus was observed.

### Discussion

Test Procedure - Procedures were scientifically sound.

Statistical Analysis - None reported.

Discussion/Results - This study is scientifically sound.