11-5-80

MULTIPLE

TDMS0030 DATA EVALUATION RECORD PAGE 1 OF 2

CASE GS0014 ENDOSULFAN PM 110 ~~08/12/79~~

CHEM 079401 Endosulfan (hexachlorohexahydromethanol)

BRANCH EEB DISC 55 TOPIC 10154045

FORMULATION 06 - WETTABLE POWDER (WP, EC)

FICHE/MASTER ID 05004447 CONTENT CAT 01

Needham, P.H.; Stevenson, J.H. (1973) The toxicity to foraging honeybees, Apis mellifera , of endosulfan, malathion and azinphos-methyl applied to flowering oil seed rape, Brassica napus . Annals of Applied Biology 75(2):235-240.

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS
SEC: EEB -40-10250545

DIRECT RVW TIME = 3 Hr. (MH) START-DATE 2/8/80 END DATE 2/20/80

REVIEWED BY: Allen W. Vaughan
TITLE: Entomologist
ORG: EEB/HED
LOC/TEL: Crystal Mall #2/71405

SIGNATURE: Allen W. Vaughan DATE: 11/5/80

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE:

CONCLUSIONS: This study is scientifically sound.

METHODS AND MATERIALS:

A. Test Type - Toxicity to honey bees

B. Test Species - Honey bee (Apis mellifera)

C. Test Procedures - Groups of bee colonies were located at the edges of plots of flowering oil seed rape, prior to spray applications. Effect of spray applications was evaluated through use of dead bee traps, examination of colonies, and determination of bee cholinesterase levels.

D. Statistical Analysis - None reported.

REPORTED RESULTS: Following application of the three pesticides to different plots of flowering oil seed rape, dead bee counts indicated that endosulfan was much safer to bees than malathion and azinphos-methyl. Comparison of endosulfan EC vs. WP under similar conditions revealed little difference in bee hazard.

Data indicate that endosulfan was much safer to bees than the other two test insecticides.

DISCUSSION:

A. Test Procedure - Procedure is sound.

B. Statistical Analysis - None reported.

C. Discussion/Results - This study is scientifically sound.