File

DP Barcode : D178885
PC Code No : 109901
EEB In : 06-05-92
EEB Out : DEC 9 1992

To: Bruce Sidwell
Product Manager 53
Special Review and Reregistration Division (H7508W)

From: Douglas J. Urban, Acting Chief
Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : 109901-003125
Chemical Name : Triadimefon
Type Product : Fungicide
Product Name : Bayleton
Company Name : Miles Inc.
Purpose : Review honey bee acute study

Action Code : 606 Date Due : 08-12-92
Reviewer : A. Vaughan

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)			72-2(A)			72-7(A)		
71-1(B)			72-2(B)			72-7(B)		
71-2(A)			72-3(A)			122-1(A)		
71-2(B)			72-3(B)			122-1(B)		
71-3			72-3(C)			122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)			72-4(B)			124-2		
72-1(B)			72-5			141-1	423078-04	Y
72-1(C)			72-6			141-2		
72-1(D)						141-5		

Y=Acceptable (Study satisfied Guideline)/Concur
P=Partial (Study partially fulfilled Guideline but additional information is needed
S=Supplemental (Study provided useful information but Guideline was not satisfied)
N=Unacceptable (Study was rejected)/Nonconcur

DP BARCODE: D178885 REREG CASE # 2700

CASE: 816353 DATA PACKAGE RECORD DATE: 06/03/92
SUBMISSION: S418814 BEAN SHEET Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 606 DATA PACKAGE REVIEW
CHEMICALS: 109901 Chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1- 100.00 %

ID#: 109901-003125
COMPANY: 003125 MILES INC.
PRODUCT MANAGER: 53 BRUCE SIDWELL 703-308-8078 ROOM: CS1 3E3
PM TEAM REVIEWER: MARK WILHITE 703-308-8586 ROOM: CS1 3RD FL
RECEIVED DATE: 05/04/92 DUE OUT DATE: 08/02/92

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 178885 EXPEDITE: N DATE SENT: 06/03/92 DATE RET.: / /
CHEMICAL: 109901 Chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-but
DP TYPE: 999 Miscellaneous Data Package
ADMIN DUE DATE: 08/12/92 CSF: N LABEL: N

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	06/04/92	/ /
BRAN: EEB	06/05/92	DEC / 9/1992
SECT:	/ /	/ /
REVR :	/ /	/ /
CONTR:	/ /	/ /

* * * DATA REVIEW INSTRUCTIONS * * *

Acute contact toxicity in honeybees study (MRID 42307804) [gdln 141-1]. Please review.

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
178884	RSCB	06/03/92	08/12/92	Y	N	N

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 9 1992

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Honey Bee Study with Bayleton
(D178885)

FROM: Anthony Maciorowski, Chief
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

TO: Bruce Sidwell, PM 53
Accelerated Reregistration Branch
Special Review and Reregistration Division (H7508W)

EEB has reviewed MRID 423078-04, which was submitted in support of reregistration of Bayleton. Data from this acute contact study indicate that Bayleton is practically nontoxic to honey bees. No further bee testing is required for Bayleton.

Any questions or comments on this memo should be referred to Allen Vaughan at 305-6464.

DATA EVALUATION RECORD

1. Chemical: Triadimefon (Bayleton)

2. Test Material: Technical, 95.6% ai

3. Study Type: Honey bee acute contact LD50

   Species tested: Apis mellifera

4. Study ID: Hoxter, K.A., and S.P. Lynn. 1992. Technical BAYLETON: An acute contact toxicity study with the honey bee. Wildlife International Ltd. Project No. 149-168B. Submitted by Miles Incorporated, Kansas City, MO. EPA Acc. No. 423078-04.

5. Reviewed By:

   Allen W. Vaughan
   Entomologist
   EEB/EFED

   Signature: Allen W. Vaughan
   Date: 11-30-92

6. Approved By

   Norman J. Cook
   Supervisory Biologist
   EEB/EFED

   Signature: Norman J. Cook
   Date: 12-01-92

7. Conclusions:

   This study is scientifically sound, and shows Bayleton to be practically nontoxic to honey bees. In an acute contact test, the LD50 was determined to be greater than 25 micrograms per bee. This study fulfills the guideline requirement for an acute contact toxicity test on honey bees.

8. Recommendations: N/A

9. Background: This study was submitted in support of reregistration for Bayleton fungicide.

10. Discussion of Individual Tests: N/A

11. Materials and Methods:

Apparently healthy worker bees, less than six days of age, were collected from frames incubated in the testing laboratory. Test chambers were rolled paper containers. Each container was covered with a plastic petri dish through which a glass vial containing 50% sugar water was inserted. This food source was available to the test bees throughout the study.

Test photoperiod was eight hours of light per day. Test temperatures ranged from 20 to 24° C.

Five treatment levels, 1.6, 3.1, 6.3, 12.5, and 25 micrograms per bee, were tested along with a solvent control and a negative control. Two replicates were tested at each dosage, with 25 bees per replicate. The solvent control bees received a volume of acetone equal to the largest volume used during the test.

Recently collected bees were immobilized with N_2 to facilitate handling. Each bee was individually dosed with the appropriate test solution. Solvent control bees were dosed with acetone.

Observations on mortality and signs of toxicity were made twice on the day of initiation and once on Day 1 and Day 2 after dosing.

The mortality pattern in this study was not conducive to calculating the LD50 value. An LD50 was estimated by visual inspection of the mortality data.

12. Reported Results:

The study authors found that Bayleton was practically nontoxic to honey bees, with an LD50 greater than 25 ug per bee.

13. Study Authors' Conclusions/ QA Measures

48-hr. LD50 greater than 25 ug per bee (practically nontoxic).

14. Reviewer's Discussion and Interpretation of the Study

A. Test Procedures: Procedures were in accordance with protocols recommended in the guidelines. There were no problems in this regard.

B. Statistical Analysis: Due to the nature of the data, no analysis was conducted.

C. Discussion/Results: Bayleton is practically nontoxic to honey bees.

D. Adequacy of Study:

1. Classification: Core

2. Rationale: Guidelines protocol

3. Reparability: N/A

15. Completion of One-Liner for Study: N/A

16. CBI Appendix: N/A