

US EPA ARCHIVE DOCUMENT

5-4-87

TDMS

DATA EVALUATION RECORD

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CASE GS \_\_\_\_\_

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X

CHEM Diazinon

BRANCH EEB DISC ✓

FORMULATION Technical, 14G (14.3% ai granular)

FICHE/MASTER ID ROODI002

CITATION: Hill, E.F.; Camardese, M.B. (1984) Toxicity of Anticholinesterase Insecticides to Birds; Technical Grade Versus Granular Formulations. Ecotoxicology and Environmental Safety. 8:551-563.

SUBST. CLASS=

OTHER SUBJECT DESCRIPTORS  
PRIM:

DIRECT REVIEW TIME= 1 week (MH) START DATE April 1986 END DATE April 1986

REVIEWED BY: Margaret Rostker  
TITLE: Wildlife Biologist  
ORG: EEB  
LOC./TEL: 557-7600

*H. T. Craven*

*5/4/87*

SIGNATURE:

APPROVED BY: Harry Craven  
TITLE: Supervisory Biologist  
ORG: EEB  
LOC./TEL: 557-7600

*5/4/87*

SIGNATURE: *Henry T. Craven*

This study is supplemental due to lack of all raw data and minor deviations from guidelines. It is useful in hazard assessment and shows Diazinon LD50 = 10 mg ai/kg to bobwhite Quail when technical material is tested, and Bobwhite LD50 = 8 mg ai/kg when granular 14.37% ai (14G) is tested.

*L.A. (1982) ✓*

*71.1*

*1/3*

DATA EVALUATION RECORD

1. Chemical: Diazinon
2. Test Material: Technical and 14.3% ai granular (14G).
3. Study Type: Single oral dose to Bobwhite Quail
4. Study ID: Hill, E.F.; Camardese, M.B. (1986) Toxicity of Anticholinesterase Insecticides to Birds: Technical Grade Versus Granular Formulations. Ecotoxicology and Environmental Safety. 8:551-563.
5. Reviewed by: Margaret Rostker  
Wildlife Biologist  
EEB/HED  
Signature: *H.T. Craven*  
Date: *5/4/87*
6. Approved by: Harry Craven  
Supervisory Biologist  
EEB/HED  
Signature: *Henry T. Craven*  
Date: *5/4/87*
7. Conclusions:  

Diazinon LD<sub>50</sub> = <sup>1</sup>/<sub>50</sub> mg/kg ai for technical and 8 mg/kg ai for 14G for Bobwhite Quail.

The study provides useful data for a hazard assessment but are classed Supplemental because the tests were not conducted strictly according to guidelines.
8. Recommendations: N/A
9. Background: N/A
10. Discussion of Individual Test:

Diazinon is discussed in this DER.

Length of Study?  
NOEC / LOEC?  
% ai Tech?  
CL's ?

11. Materials and Methods:

- a. Test Animals: Ten to twelve week old Bobwhite Quail from Fayetteville, North Carolina were purchased and held in test facilities. The Bobwhite were tested at 16 to 20 weeks of age, with mean weight = 205 g.
- b. Dose: Oral dosing.
- c. Design: 5 dose levels, geometrically spaced; 10 birds per dose level.
- d. Statistics: Probit analysis; two-tailed to test.

12. Reported Resulted:

LD<sub>50</sub> = 10 mg ai/kg for technical grade and LD<sub>50</sub> = 8 mg ai/kg for 14G.

13. Study Author's Conclusions/QA Measures:

See reported results.

14. Reviewer's Discussion and Interpretation of Study:

- a. Test Procedures: The study is in accordance with guideline protocols.
- b. Statistical Analysis: The analysis was properly conducted.
- c. Discussion/Results: See reported results. Diazinon is considered "very highly toxic" to birds.

15. Adequacy of Study:

1. Classification: Supplemental.
2. Rationale: Guideline deviations though only minor.
3. Repair: N/A.