

DATA EVALUATION REPORT

1. Chemical: Pyridate; Shaughnessey Number 128834
2. Test Material: 92% active ingredient
3. Study Type: Avian acute oral LD50 with Bobwhite quail.
4. Study Identification: Grimes, Jennie, An Acute Oral Toxicity Study with Bobwhite, Performed by Wildlife International Ltd. for Gilmore Inc., Study No: 217-101A, Study Date: May 2, 1986, Accession No: 403732-01
5. Review By: Daniel Rieder, Wildlife Biologist Daniel Rieder 1-21-88
Ecological Effects Branch
Hazard Evaluation Division
6. Approved By: Norman J. Cook, Head, Section 2 Norman J. Cook
Ecological Effects Branch
Hazard Evaluation Division 1-22-88
7. Conclusion: This study has been reviewed and found to be scientifically sound. It fulfills the guideline requirement for an avian acute oral LD50 with an upland gamebird. The LD50, as calculated by the probit method, was 1269 mg/kg, with 95% C.L. of 1023 to 1577 mg/kg for bobwhite quail.
8. Recommendations: N/A
9. Background: This study was submitted to support registration.
10. Discussion of Individual Studies: N/A

At the three highest test levels, there was a reduction in feed consumption during the first three days of the study.

13. Study Author's Conclusions:

LD50=1269 mg/kg (95% C.L. of 1023 to 1577 mg/kg)

14. Reviewer's Discussion:

A. Test Procedure: The test procedure was acceptable.

B. Statistical Analysis: The reported LD50 appears consistent with the reported mortality data.

C. Discussion of Results: The LD50 of 1269 mg/kg indicates the pyridate is slightly toxic to upland gamebirds.

D. Category of Study: Core

15. Completion of One-Liner: Completed

16. CBI Attachments: N/A

11. Materials and Methods:

Test Material: 92% ai Pyridate, all dosages were adjusted to 100% active ingredient.

Test Organism: Bobwhite quail (Colinus virginianus)

Age: 23 weeks

No./level: 10, 5 male and 5 female

Source: Fritt's Quail Farm, Phillipsburg, NJ

History: Pen reared, phenotypically indistinguishable from wild birds

Acclimation: 46 days, fasted 15 hours before dosing

Housing Conditions: indoor

Size: 78 cm X 51 cm X 20 to 25 cm high

Birds per cage: 5

Test Conditions: Reference, Pesticide Guidelines

Photoperiod: 8 hours light per day

Temperature: 69° F \pm 6° F

Relative Humidity: 67%

Diet: gamebird ration and water provided ad libitum

Vehicle: carboxymethyl cellulose

Observation period: 14 days

Test Dates: Acclimation, Feb. 17, 1986

Initiation, April 4, 1986

Termination, April 18, 1986

Statistics: Probit analysis

12. Reported Results:

Acute oral LD50 = 1269 mg/kg

95% confidence limits = 1023 to 1577 mg/kg.

No observed effect level = 486 mg/kg

DOSE MG/KG	OBSERVATIONS		REDUCED FOOD CONS.		REDUC. (DAY) ¹		
<u>NOMINAL</u>	<u>MORTALITY</u>	<u>TOXIC SIGNS</u>	<u>WT GAIN¹</u>	<u>0</u>	<u>3</u>	<u>7</u>	<u>14</u>
control ²	0/10	none	-----	---	---	---	---
292	0/10	none	no	no	no	no	no
486	0/10	none	no	no	no	no	no
810	1/10	yes ³	yes	yes	yes	yes	yes
1350	5/10	yes	yes	yes	yes	yes	yes
2250	10/10	yes	yes	yes	yes	yes	yes

¹ Relative to control values.

² Control birds received a corresponding volume of diluent only.

³ Overt signs of toxicity noted from approximately 2-2 1/2 hours after dosing, including lethargy or depression, ruffled appearance, reduced reaction, wing droop, loss of coordination, lower limb weakness, prostrate posture, loss of righting reflex and coma.