

DATA EVALUATION RECORD

1. Chemical: Farnesol SN: 128910
2. Test Material: 98% ai Technical
3. Study/Action Type: Acute avian single-dose LD₅₀
4. Study ID: Fletcher, D.W. Acute Oral LD₅₀ Study in
Bobwhite Quail with Farnesol Technical (1986)
Bio Life Associates, BLAL No. 86DD63. Study
Sponsor: Fermone Chemical Co. Study Location:
Neillsville, WI. EPA Accession No. 264426.
5. Reviewed by: Robert W. Pilsucki Signature: *Robert W. Pilsucki*
Microbiologist Date: 1/8/87
EEB/HED
6. Approved by: Raymond W. Matheny Signature: *Raymond W. Matheny*
Head, Section 1 Date: 1/8/87
EEB/HED
7. Conclusions:
This study is classified as core. The LD₅₀ for
Bobwhite quail is greater than 2150 mg/kg.
8. Recommendations:
None.
9. Background: N/A.
10. Discussion of Individual Studies or Tests: N/A.



2016033

Jan

11. Materials and Methods:

Species: Bobwhite quail

Ages: 23 weeks

Source and pretest history: Oak Ridge Game Farm
Gravette, AK

The birds selected for testing had been observed for 19 days while being acclimated to laboratory conditions. The birds were examined for suitability for testing.

Selection of test birds:

The test birds were leg-banded and then were randomly distributed into groups of 10 birds, balanced for sex.

Dosing:

The dosing was performed using a disposable syringe.

Vehicle:

The vehicle used was table-grade corn oil.

Housing conditions:

Temperature: 64 °F - 74 °F
Humidity: 47 - 85%
Photoperiod: 8 hr light/16 hr dark
Pen size: 121.9 cm x 121.9 cm x 121.9 cm

Controls:

A vehicle control group was performed concurrently with the test groups.

Duration of Study: 21 days.

Food Withholding: 20 hours.

Food consumption and body weights:

See attached tables.

Observations:

The birds were observed daily for adverse clinical signs.

Necropsies:

Two male and two female birds from each group were necropsied at the end of the study.

12. Reported Results:

Farnesol: Bobwhite Quail

<u>Concentration</u> <u>(mg/kg)</u>	<u>Number</u> <u>Exposed</u>	<u>Number</u> <u>Dead</u>	<u>Percent</u> <u>Mortality</u>
0	10	0	0
1470	10	0	0
2150	10	0	0

The author reported that no behavioral changes or toxic signs were observed. Gross pathological examination revealed no abnormalities except for an enlarged gall bladder in one of the birds dosed at 2150 mg/kg.

13. Study Author's Conclusions/Quality Assurance Measures:

The author drew no conclusions about the study.

The author stated that the study was reviewed by BLAL's Quality Assurance Unit.

14. Reviewer's Discussion and Interpretation of Study:

- a. Test Procedure: This study follows the procedures outlined in EPA's Pesticide Assessment Guidelines: Subdivision E.
- b. Statistical Analysis: There was no statistical analysis performed on the mortality data. These data are not amenable to statistical analysis. There were no statistical differences, using the student t-test, in weight gain.
- c. Discussion/Results: It appears, from the results of this study, that Farnesol is not acutely toxic to adult bobwhite quail. The enlarged gall bladder may or may not be a significant finding; not enough birds were necropsied to determine the extent of this pathological finding.
- d. Adequacy of the Study:
 1. Category: Core.

2. Rationale: This study follows the procedures outlined in EPA's Pesticide Assessment Guidelines: Subdivision E.
3. Repairability: N/A.