DATA EVALUATION RECORD

9-12-86
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1. Chemical: PP 321

2. Test Material: PP 321, Technical 96.5% ai

3. Study/Action Type: Avian Subacute Dietary - Bobwhite Quail

4. Study ID: PP 321: The subacute dietary toxicity of PP 321 to the bobwhite quail, N. Roberts, C. Fairley, A. Anderson, and I. Dawe, ICI, March 28, 1985. EPA Accession No. 259807.

5. Reviewed By: Ann Stavola
Aquatic Biologist
EEB/HED
Signature: Ann Stavola
Date: Sept-3, 1986

6. Approved By: Doug Urban
Supervisory Biologist
EEB/HED
Signature:
Date: 9/12/86

7. Conclusions:

The study is scientifically sound and meets EPA Guidelines requirement for an avian subacute dietary study. It indicates that technical PP 321 is practically nontoxic to upland gamebirds.

8. Recommendations: N/A.

9. Background:

This study was submitted to support the EUP application of Karate 1 EC Insecticide.

10. Materials and Methods:

a. Test Animals: Bobwhite quail (Colinus virginianus). Age at start of treatment: 11 days. Source: D.R. and R.E. Wise, Monkfield, Bourn, Cambridgeshire

b. Dose: Test diets were prepared by premixing PP 321 with chick diet to give a nominal level of 10000 ppm ai. The premix was used to mix the final diets. The diets were analyzed for PP 321 content by HPLC.

c. Study Design: The birds were randomly allocatd to the test groups and acclimated for 3 days before being given the treated diets. There were 10 birds per group: 3 control groups and 6 treatment groups. The measured concentration of PP 321 in the treatment groups were: 577, 1020, 1980, 3040, 4090, and 5300 ppm. The birds were fed the treated diet for 5 days and were observed for 3 additional days.

d. Statistical Analysis: None was done since mortalities were below 50 percent.

11. Reported Results:

| Treatment (ppm) | No. of Birds | Mortalities |
|---|---|---|
| Controls | 30 | 0 |
| 577 | 10 | 1 |
| 1020 | 10 | 1 |
| 1980 | 10 | 0 |
| 3040 | 10 | 1 |
| 4090 | 10 | 0 |
| 5300 | 10 | 1 |
| | 10 | |

$LC_{50}$ > 5300 ppm

There were no behavioral or pathological abnormalities in any of the treated birds.

There were no treatment-related differences in body weight and food consumption.

12. Study Author's Conclusions/QA Measure:

The dietary $LC_{50}$ for PP 321, 96.5% ai, to bobwhite quail was > 5300 ppm.

QA: "To the best of our knowledge and belief the study described in this report was conducted in compliance with the following Good Laboratory Practice Standards: U.S. EPA, Title 40 CFR, Federal Register, November 29, 1983."

13. Reviewer's Discussion and Interpretation of Results:

a. Test Procedures: The study protocol is sound as it follows the protocol recommended by EPA's Pesticide Guidelines, Subdivision E, 1982.

b. Statistical Analysis: None was done since mortalities were very low and did not exceed 10 percent.

c. Discussion/Results: The results indicate that with an $LC_{50}$ value > 5300 ppm technical PP 321, 96.5% ai is practically nontoxic to upland gamebirds on a dietary basis.

d. Adequacy of Study:

1. Classification: Core.

2. Rationale: The study is scientifically sound and meets EPA Guidelines requirement for an avian dietary study.