9-13-90

Data Evaluation Report
Ecological Effects Branch

1. **Chemical:** Bromacil

2. **Test Material:** Received by the laboratory on March 27 and identified as H-16287 with a purity of 96.6 %

3. **Study Type:** Acute oral LD_{50} test with bobwhite quail

4. **Study Identification:**

   Study Author: Grimes, Jenny
   Study Laboratory: Wildlife International, Easton, Md.
   Study Dates: April 28- May 12, 1986
   Identification: Study No. 112-173
   Sponsor: E.I. duPont de Nemours and Co.
   EPA Identification: MRID 409515-01

5. **Reviewed by:** Brian Montague, Fisheries Biologist Brian Montague 9/12/90
   Ecological Effects Branch
   Environmental Fate and Effects Division(H7507C)

6. **Approved by:** Ray Matheny, Supervisory Biologist Ray Matheny 9/13/90
   Ecological Effects Branch
   Environmental Fate and Effects Division(H7507C)

7. **Conclusions:** The study has followed Agency guidelines for acute oral testing of an upland gamebird species. The LD_{50} has been established to be over 2250 mg/Kg which was the highest dosage tested. The NOEL based on slight reductions in body weight gains at 1350 ppm is 810 mg/Kg.

8. **Recommendations:** N/A

9. **Submission Purpose:** To satisfy registration guideline requirements.

10. **Study Methods and Protocol:** Procedures were based on 71-1 guidelines presented in FIFRA Subdivision E.

Test Organisms: Bobwhite quail, 21 weeks of age, were used. The birds were obtained from Fritts Quail Farm in Phillipsburg, N.J. and weighed from 172-213 gms. The birds were acclimated 18 days before test initiation. The quail were fed a gamebird ration developed at Wildlife International. Water and feed were available ad libitum except for a 15 hour fasting period prior to test initiation.

Test Diet: Corn oil was used as the test diet vehicle and dosages were adjusted upward to correct to 100% active ingredient. The dosages prepared were 292, 486, 810, 1350, and 2250 mg/Kg.

Test Materials and Procedures: The birds were randomly assigned to galvanized steel wire cages measuring 78x51 cm and equipped with sloping floors. Five males or five females were assigned to each pen with 2 pens employed for each dosage level(5 ♂s and 5♀s). Room temperature averaged 76±6°F and humidity averaged 74%. An 8D/16N was employed at a 12 footcandle intensity. Birds were observed twice daily during the test and body weights were measured on days 0, 3, 7, and 14. Estimated food consumption was determined for days 0-3, 4-7, and 8-14, but does not account for spillage.

11. Reported Test Results: No mortalities occurred in any of the test levels or the controls and all birds appeared normal. A slight reduction in body weight for 1350 ppm dosed females and 2250 ppm dosed males and females was also accompanied by a slight reduction in food consumption. This food consumption reduction did not extend past the third day. By day 14 all body weights had returned to levels comparable to the controls.

12. **Study Author's Conclusions:** "In conclusion, the bobwhite acute oral LD_{50} value for H-16,287 was determined to be greater than 2250 mg/Kg, the highest dosage tested. The no-observed-effect dosage was 810 mg/Kg, based on a reduction in body weight gain in females at 1350 mg/Kg."

13. **Reviewers Discussion:** The study appears to have followed acceptable protocol and procedures. The test material is shown to be practically non-toxic to bobwhite quail.

Adequacy of Study:

Classification: Core

Rationale: Study appears to be scientifically sound.

Repairabilty: N/A