

US EPA ARCHIVE DOCUMENT

File No. 128850

DATA EVALUATION RECORD

1. CHEMICAL: Monoammonium-2-amino-4-(hydroxymethyl phosphinyl) butanate
2. FORMULATION: (HOE 39866) technical; 95.3% a.i.
3. CITATION: Ebert and Weigand. 1983. Testing for acute oral toxicity in male and female Japanese quail (Coturnix c. japonica) with HOE 39866. Prepared by Hoechst AG, Frankfurt, FRG; submitted by American Hoechst Corp., Somerville, NJ; Registration No. 8340-EUP-RN; Accession No. 072967
4. REVIEWED BY: John J. Bascietto
Wildlife Biologist
Ecological Effects Branch/HED
5. DATE REVIEWED: November 26, 1984
6. TEST TYPE: Avian acute oral LD₅₀
 - A. Japanese quail, Coturnix c. japonica
7. REPORTED RESULTS: 14-day LD₅₀ > 2000 mg/kg
8. REVIEWER'S CONCLUSIONS: The study is not scientifically sound, because the study did not use a control group. This was essential, however, because although no death occurred, considerable intoxication was evident. Also, Japanese quail is not an acceptable test species. The study does not fulfill a guidelines requirement.

9. MATERIALS/METHODS:

A. Test Procedure:

The study was generally conducted in accordance with protocols recommended by the EPA Pesticide Assessment Guidelines, Subdivision E, October, 1982

B. Statistical Analysis:

N/A

10. RESULTS:

No mortality was observed at the only level tested, i.e., 2000 mg/kg. Body weight gains and food consumption of the surviving birds were normal and unaffected by the test substance. There was no abnormal gross pathology.

Signs of intoxication:

By end of 240 minutes following dose by gelatin capsules, the following were observed: hyperactivity, slight disequilibrium, squatting position, diarrhea. One (1) day after treatment two (2) birds showed "passivity" and one (1) bird exhibited disequilibrium, ataxia, "squatting" position and "basking" posture. After 2 days following dose, none of these symptoms were noticed.

11. REVIEWER'S EVALUATION:

A. Test Procedure:

The following were identified as not in accordance with EPA Pesticide Assessment Guidelines for this test:

1. Coturnix c. japonica is an unacceptable test species.
2. The study did not run concurrent control birds.

The fact that the birds were 14-months old at the initiation of the study was unusual, although not in itself grounds for rejecting the study.

B. Statistical Analysis:

No statistical analysis was necessary.

C. Results:

Since no controls were run the study cannot be used. We are unable to establish or refute the treatment-relatedness of the observed toxic symptoms.

D. Conclusions:

1. Category: Invalid
2. Rationale: Unacceptable test species
No controls
3. Repair: None possible.