

US EPA ARCHIVE DOCUMENT

File No. 128850

DATA EVALUATION RECORD

1. CHEMICAL: Monoammonium-2-amino-4-(hydroxymethyl phosphinyl) butan^oate
2. FORMULATION: (HOE 39866) technical; 95.3% a.i.
3. CITATION: Ebert and Weigand. 1983. HOE 039866. 8-day dietary LC₅₀ test in the Japanese quail (Coturnix c. japonica). Prepared by Hoechst AG, Frankfurt, FRG; submitted by American Hoechst Corp., Somerville, N.J.; 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 dietary (8-day) LC₅₀
 - a. Japanese quail, Coturnix c. japonica
7. REPORTED RESULTS: LC₅₀ > 5000 ppm
8. REVIEWER'S CONCLUSIONS: The study is scientifically sound, and with an LC₅₀ > 5000 ppm. The substance is considered "practically non-toxic" to Japanese quail. Clinical signs of intoxication were readily apparent at 2500 ppm and significant signs of intoxication were observed in more than half of the birds at 5000 ppm, although only 30% mortality was observed. The study does not fulfill the requirement of the Pesticide Assessment Guidelines, however, because an unacceptable test species was used.

9. MATERIALS/METHODS:

A. Test Procedures:

The study was conducted generally in accordance with EPA Pesticide Assessment Guidelines, Subdivision E, § 71-2, October, 1982.

B. Statistical Analysis:

None performed.

10. RESULTS:

Mortality - By Day 8

<u>Dose</u> <u>(PPM in diet)</u>	<u>Number dead/</u> <u>number used</u>
0 (control)	0/10
312.5	0/10
625	0/10
1250	0/10
2500	0/10
5000	3/10 (all died on day 4)

Signs of intoxication:

0 mg/kg - none

312.5 - Days 5, 6 7 - 1 bird was passive and disoriented
625 - none
1250 - none
2500 - Day 5 - 1 bird was passive with ruffled feathers
Day 6 - 1 bird was passive with ruffled feathers
2 others had ruffled feathers
Day 7 - Same as day 6
5000
Day 4 - Three birds died,
1 bird was passive and standing on
hocks,
6 birds showed no signs.
Day 5 - 3 birds passive,
1 disequilibrium,
2 standing on hocks,
2 ruffled feathers,
4 birds were without clinical signs of
intoxication.

5000
ppm

Day 6 - 2 birds were passive,
1 was standing on hocks,
3 had ruffled feathers,
4 birds were without clinical signs of
intoxication.

Day 7 - 2 birds were passive,
1 bird standing on hocks,
3 birds had ruffled feathers,
4 birds were without clinical signs
of intoxication.

All birds in the 5000 ppm groups were necropsied. No abnormal gross pathology was observed.

Analytical chemistry results indicated that all diets contained > 95% a.i. on November 23, 1983, 22 days after the end of the study.

11. REVIEWER'S EVALUATION:

A. Test Procedure:

The test procedures were acceptable except that Japanese quail is an unacceptable test species.

B. Statistical Procedure:

N/A

C. Results:

The results indicate that the test material is "practically non-toxic" to Japanese quail. The results cannot however be used to satisfy a requirement because Japanese quail is not an acceptable test species.

D. Conclusions:

1. Category: Supplemental
2. Rationale: Unacceptable test species
3. Repair: None possible.