

Data Evaluation Record

1. Chemical: EL-107
2. Formulation: 92.4% active ingredient
3. Citation: Lake, S.G. and C.C. Kehr. December 1982. The toxicity of EL-107 (Compound 121607) to Mallards in a 5-day dietary study. Study A00882. Prepared by Lilly Research Laboratories, Greenfield, Indiana. Submitted to Elanco Chemical Co., Indianapolis, Indiana EPA Accession No. 250793.
4. Reviewed by: Elizabeth E. Zucker
Wildlife Biologist
EEB/HED
5. Date Reviewed: January 24, 1984
6. Test Type: Avian 8-day dietary
A. Test Species: Mallard Duck (Anas platyrhynchos)
7. Reported Results:

The 8-day dietary LC₅₀ was greater than 0.5% of test material.
8. Reviewer's Conclusions

This study is scientifically sound and may be used to fulfill guidelines requirement for an avian dietary study on a waterfowl species. With an 8-day dietary LC₅₀ in excess of 5,000 ppm, EL-107 is considered practically non-toxic to mallards.

Materials/Methods

Test Procedures

Mallards, two days old, were obtained from Whistling Wings, Hanover, Illinois, and acclimated to laboratory conditions for 8 days prior to the study's initiation. Birds were randomly assigned to pens 74 cm (l) x 43 cm (w) x 27 cm (h) with 5 ducklings per pen. There were 2 pens per treatment group. Temperature of pens was maintained at a gradient of 36 to 27°C. Diets were mixed at levels of 0; 0.0062; 0.02; 0.056, 0.18 and 0.5%. Birds had free access to water and treated diets for 5 days and then all groups received water and basal diets for another 3 days.

Individual body weights were measured at the beginning of the study, on day 5 and at the study's termination. Mean body weight and body weight gain were calculated for each group for the 5 day treatment and the 3 day recovery phase. Birds were observed daily for toxic symptoms.

Statistical Analysis

No mortalities occurred during the study, thus analysis was unnecessary.

Results/Discussion

No mortalities or symptoms of toxicity were observed in the control or treatment groups. Mean body weight gains for birds fed treated diets were not significantly different from control birds. Food consumption values for birds in the treatment groups were at least 80% of the control group's value and were considered within an expected range for juvenile mallards in this test system. Assay values for EL-107 were at more than 89% of nominal concentrations.

Reviewer's Evaluation

A. Test Procedures

This study was performed under conditions that complied substantially to current guidelines.

B. Statistical Analysis

There were no mortality thus analysis is not necessary

C. Results/Discussion

The 8-day dietary LC₅₀ for EL-1-7 is greater than 5,000 ppm for mallards.

D. Conclusions

1. Category: Core
2. Rationale: N/A
3. Repairability: N/A