NKIDE 107491

DATA EVALUATION RECORD

1. CHEMICAL: RH-6201 Sodium 5-[2-chloro-4-(trifluoromethyl)-phenoxy]-2-nitrobenzoate

2. FORMULATION: 39.8% Technical

3. CITATION: Najarian, G. and V.J. Piccirillo. Unpublished. One-generation reproduction study in bobwhite quail, RH-6201, Final Report. Hazelton Lab. for Rohm and Haas Co. 1978 (097718).

4. REVIEWED BY: Richard R. Stevens
Biologist, Ecological Effects Br.
Hazard Evaluation Division
April 2, 1979

5. TEST TYPE: Avian Reproduction 71 1a
A. EEB VI
B. Bobwhite quail (Colinus virginianus)

6. CONCLUSIONS:

Based on the results of this study, feeding of up to 20 ppm of RH-6201 to Bobwhite quail did not result in reproductive impairment. A dietary level of 100 ppm of RH-6201 resulted statistically in a significantly lower than control number of viable 11-day embryos as compared to the number of eggs set. Although not statistically significant the percentage of 14-day-old survivors/hatchlings was also lower than control for the 100 ppm group. These findings are considered treatment-related. This study satisfies the guideline requirement for an avian reproduction study.

based on a.i.

7. MATERIALS AND METHODS:

RH-6201 LC (39.8 active ingredient in water, lot# PL 76/8005) was fed to male and female Bobwhite quail at dietary concentrations of 20 and 100 ppm active ingredient during a one-generation reproduction study. One hundred and eight mature Bobwhite quail, phenotypically indistinguishable from wild birds, were distributed among one control and two treatment groups, each containing 12 male and 24 females. The birds were approaching their second laying season, which was photo-induced; the first laying season occurred in the preceding spring.

Parental birds and hatchings were observed daily for mortality and toxic or pharmacologic effects. In addition, hatchlings were observed for obvious weakness or malformations. Total body weights of the 3 parental birds in each pen were recorded weekly. All birds were sacrificed and discarded without gross necropsy. Calculations were made for the number of: eggs laid, eggs cracked, eggs set, viable embryos, live 21-day embryos, hatchlings, 14-day survivors and the egg shell thickness. Experimental data was evaluated statistically at the 5% probability level.

8. REPORTED RESULTS:

No toxicological or pharmacological effects were observed in parental birds. Evaluation of group means for body weight and food consumption changes showed there was no effect in either of the treated groups compared to control means. No toxicologically significant effects were observed in either their total number of eggs laid, the number of eggs cracked, the eggshell thickness, the incidence of 21-day embryo viability or hatchlings survival. The incidence of 11-day embryo viability was statistically significantly higher ($p < .05$) than control in the 20 ppm group and statistically significantly lower ($p < .05$) in the 100 ppm group.

Based on the results of this study, feeding of up to 20 ppm of RH-6201 to Bobwhite quail did not result in reproductive impairment. A dietary level of 100 ppm of RH-6201 resulted in a statistically significantly lower than control number of viable 11-day embryos as compared to the number of eggs set. Details of the study are in Section 7.

9. DISCUSSION:

This study is determined to be scientifically sound and satisfies the guideline requirements for an avian reproduction study.

Validation category: Core

Category repairability: none required.