DATA EVALUATION RECORD

TRICHLORFON

Acute Toxicity in Rats by the Intraperitoneal Route

CITATION: Brodeur J, Dubois KP. 1963. Comparison of acute toxicity of anticholinesterase insecticides to weanling and adult male rats. Proc. Soc. Exp. Biol. Med. 114:509-511.

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ACCESSION NUMBER: Not available.

MRID NUMBER: 00091100.

LABORATORY: University of Chicago, Department of Pharmacology.

TEST MATERIAL: The test compound was Dipterix (trichlorfon); purity was not stated.

PROTOCOL:

1. The test animals were male Holtzman rats.

   a. Weanling (23 day old) rats weighed 50 to 60 g.
   b. Adult rats weighed 200 to 300 g.

3. The test compound was administered in distilled water by intraperitoneal injection. The concentration of test material was adjusted so that the volume injected was equivalent to 0.2 percent of body weight in weanlings and 0.1 percent in adults. Thirty weanlings and 21 adult rats were given Dipterex.

4. The 14-day LD_{50} was calculated by the method of Litchfield and Wilcoxon with 95 percent confidence limits.

RESULTS:

Weanling male rats were more susceptible to Dipterex than were adult males. For weanlings the LD_{50} was 190 mg/kg (155-234) and for adults it was 250 mg/kg (200-313).

CONCLUSIONS:

Weanling and adult male rats were administered Dipterex intraperitoneally, and LD_{50}'s were determined. Weanlings showed greater susceptibility (LD_{50} 190 mg/kg) than adults (250 mg/kg). Although the total number of rats administered trichlorfon was given, individual group sizes and the doses given to each group were not reported, so the results could not be verified.

CORE CLASSIFICATION: ~~Invalid.~~ Supplementary (Dec 07, 30, 83)

The study is invalid since only summary tabular data was reported. The reported LD_{50} had confidence intervals greater than 20 percent.