Releasable

DATA EVALUATION RECORD

TRICHLORFON

Embryotoxic Evaluation of Trichlorfon in Chicken Embryos

CITATION: Dinerma AA, Lavrent'eva NA, Il'inskaya NA. 1970. Embryotoxic action of some pesticides. Gigiena i Sanitariia. 35(7):34-42 [English translation from Russian].

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3 pages

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ACCESSION NUMBER: Not available.

MRID NUMBER: Not available.

LABORATORY: A.N. Sysin Institute of General and Communal Hygiene of the Academy of Medical Sciences of the USSR, location not stated.

TEST MATERIAL: Chlorofos (Trichlorfon). No information on purity, source, or physical description were provided.

PROTOCOL:

1. Trichlorfon, referred to as chlorofos was evaluated for its embryotoxicity. The source, purity, and physical description were not stated.

2. The study was conducted with an unspecified breed of chick embryos. The number of chicken embryos used to study chlorofos was not given.

3. The chlorofos was "introduced into the yolk sac of the chick embryo by the method described by Aleksandrov et al. (Vestn. AMN SSSR, 1965), and Fraser (In: Congenital Malformations, 1963), in the form of a suspension obtained by careful trituration [sic] in physiologic solution..." The solutions were introduced into seven-day old chick embryos at a volume of 0.1 ml. A control group received physiologic "solution" and the treated group received "0.0008 of the LD_{50} for rats"; the rationale for dose selection was not specified. An untreated control group was also utilized.

4. The chicken embryos were dissected on the 21st day of development. The following parameters were examined: number of live chicks, number of dead chicks, body weight, "total nucleic acids in the liver, amount of RNA and DNA, and the ratio RNA:DNA." The methods of determining RNA and DNA content were not described.

5. "All data obtained were statistically processed by the small sample method"; no description of or reference to the method were given.

RESULTS:

No data were reported. The authors stated that a slight reduction in survival was observed. No other results were reported.

CONCLUSIONS:

Chlorofos was introduced into the yolk sac of seven-day old chicken embryos. The chicks were examined on the 21st day of development for viability and liver nucleic acid content was determined.

The failure to report any data prevents the evaluation of chlorofos for its embryotoxic activity in chicken embryos.

CORE CLASSIFICATION: Invalid data.

The following major deficiency was noted:

- No data were reported by the authors. The only information on chlorofos activity reported was that it "caused a slight reduction in survival."