

TABLE II

MORTALITIES RESULTING FROM THE ADMINISTRATION OF SINGLE ORAL DOSES OF 2,4,5-TRICHLOROPHENOXYACETIC ACID TO RATS, MICE, GUINEA PIGS AND CHICKS

Dose (mg./kg.)	Rats		Mice		Guinea Pigs		Chicks	
	No. fed	No. died	No. fed	No. died	No. fed	No. died	No. fed	No. died
0.1		-	3	0			6	0
0.2							6	0
0.3	10	0	6	2	5	0	6	4
0.4					5	4		
0.5	10	5	6	4	5	4	6	5
0.7	10	8	6	6	5	5	6	6
1.0	10	10	6	6			3	3

The acute oral LD₅₀ values with their 19/20 confidence limits were determined for each species by use of the method described by Litchfield and Wilcoxon¹. The results of the statistical treatment of the dosage-response data are presented in Table III.

TABLE III

ACUTE ORAL LD₅₀ VALUES FOR 2,4,5-TRICHLOROPHENOXYACETIC ACID WHEN ADMINISTERED TO RATS, MICE, GUINEA PIGS AND CHICKS

Species	LD ₅₀ (19/20 confidence limits) mg./kgm.	Slope Function ²
Rats	0.500 (0.391 - 0.640)	1.49
Mice	0.389 (0.245 - 0.619)	1.80
Guinea Pigs	0.381 (0.307 - 0.472)	1.21
Chicks	0.310 (0.211 - 0.455)	1.40

² the fold change in dosage required to produce one unit standard deviation in response along the line.

1. Litchfield, J. T., Jr., and Wilcoxon, J. J. Pharm. and Expt. Ther. 96: 99,

EX 21

4
The Litchfield and Wilcoxon tests for parallelism of two lines and estimate of relative potency revealed that the 2,4,5-tri-chlorophenoxyacetic acid was significantly (19/20 probability) more toxic to the chicks than to the rats. There were no significant differences in either parallelism or relative potency as a result of the following comparisons: rats versus mice, rats versus guinea pigs, mice versus guinea pigs, mice versus chicks and guinea pigs versus chicks.

8326933