A N Z

DATA EVALUATION RECORD PAGE 1 OF

CASE: GS0333 FENAMIPHOS

CONT-CAT: 01 GUIDELINES: 71-5

MRID: 114008

Lamb, D.; Nelson, D. (1971) Toxicity of Nemacur 3 Lb/gal S.C. to Pheasants and Rice Birds under Simulated Field Conditions for Pineapples: Report No. 29053. (Unpublished study received May 1, 1973 under unknown admin. no.; submitted by Mobay Chemical Corp., Kansas City, MO; CDL:120301-P).

REVIEW RESULTS:

VALID____ INVALID__X__ INCOMPLETE____

GUIDELINE: SATISFIED ___ PARTIALLY SATISFIED ___ NOT SATISFIED _X_

DIRECT RVW TIME = START DATE: END DATE:

REVIEWED BY: Richard W. Felthousen

TITLE: Wildlife Biologist

ORG: EEB/HED

LOC/TEL: 557-1392

SIGNATURE: DATE: 12/06/86

APPROVED BY: O. Gutenson

TITLE: Acting Registration Standard Coordinator

ORG: EEB/HED

LOC/TEL:

SIGNATURE: DATE: 12/21/87

Discrepancies with study design invalidates test results. As such, the study is inadequate to fulfill data requirements for an avian field study.

6 pages

103.5.0 Field Toxicity

DATA REVIEW NUMBER: ES CC1

TEST: Simulated Field Study

SPECIES: Rice Bird (Lonchura punctulata)
Pheasant (Phasianus colchicus)

RESULTS: Pheasants and rice birds were exposed to pineapples sprayed with Nemacur. The birds were held in cages positioned over a treated area to give 0, 50 and 100 percent exposure for a 14-day period. Some mortalities occurred among rice birds in the 100 percent exposure area. No behavioral differences, toxic symptoms or deaths resulted from 50 percent exposure for rice birds. Pheasants caged in the 50 and 100 percent exposure areas demonstrated no behavioral difference, weight decrease, cholinergic symptoms or deaths throughout the study.

CHEMICAL: Nemacur 3lbs/gal (35% A.I.) Sprayed at 5 lbs. A.I./acre.

TITLE: Toxicity of Nemacur 3 lbs/gal S.C. to Pheasants and Rice Birds Under Simulated Field Conditions for Pineapples.

ACCESSION NO: 120301 Report No. 29053

STUDY DATE: January 4, 1971

RESEARCHER: Lamb, D. W. and D.L. Nelson
Chemagro Corporation, Research Department

REGISTRANT: Chemagro Chemical Corporation

VALIDATION CATEGORY: Supplemental (regardless of use pattern)

CATEGORY REPAIRABILITY: No - Test birds were supplemented in their diet in such a manner that they would probably not have any reason to be exposed to chemical. Pheasants from a game farm fed cracked corn daily will eat cracked corn.

Other discrepancies noted were that only 10 birds were challenged, the pens were not moved daily, birds were positioned on test area after application,

not prior to it. The rice birds that died were not necropsied to determine cause of death. Only one test level was used and this study does not indicate hazard for higher application rates requested, up to 40 lbs. A.I./acre on some crops.

ADDITIONAL INFORMATION: Twenty rice birds and twenty pheasants were used in the study.

Pheasants were caged in pens within one hour of application - birds were pened, 4 pheasants, (2 pair) 8' x 5' cages exposed to 50% treated area. One pair of pheasants were put into three 4' x 5' cages with 100% of the cage area exposed. Food was provided during the study by spreading cracked corn or bird seed on the ground, and the food supply was replinished every day. The birds were not identified as to sex used in the cage, and exposure period was 14 days.

The test procedure for the rice birds was identical. The control plot contained the same number of birds and cages. Therefore, only 10 birds (pheasant and rice birds) were tested. Two mortalities occurred among the rice birds in the 100 percent exposure area. The birds were from different cages and died within 2-3 days of exposure.

Location: Pineapple Research Institute Field Station
Wahiaha, Hawaii

Nemacur was applied at the rate of 5 lbs. A.I. per 250 gallons of water per acre. The 327 sq. ft. experimental area received 47.3 ml of the formulation or 17 g A.I. in 1.9 gallons of water by means of a hand spray boom. This is approximately 0.052 grams/square foot (52 mg/Ft^2).

trtlab Data (Eggs Laid)

TABLE OF STATUS BY TRT

STATUS — TRT

FREQUENCY / CELL CHI2 / PERCENT / ROW PCT / COL PCT

STATUS		CON	TRT1	TRT2	TRT3	TOTAL
EXP	FREQUENCY	1203	1203	1203	1203	4812
	CELL CHI2	0.9	0.1	0.8	0.1	
	PERCENT	10.81	10.81	10.81	10.81	43.23
	ROW PCT	25.00	25.00	25.00	25.00	
	COL PCT	44.42	42.83	42.14	43.62	
OBS	FREQUENCY	1505	1606	1652	1555	6318
	CELL CHI2	0.7	0.1	0.6	0.1	
	PERCENT	13.52	14.43	14.84	13.97	56.77
	ROW PCT	23.82	25.42	26.15	24.61	
	COL PCT	55.58	57.17	57.86	56.38	
TOTAL		2708	2809	2855	2758	11130
		24.33	25.24	25.65	24.78	100.00

STATISTICS FOR 2-WAY TABLES

CHI-SQUARE	3.319	DF= 3	PROB=0.3449
PHI	0.017		
CONTINGENCY COEFFICIENT	0.017		
CRAMER'S V	0.017		
LIKELIHOOD RATIO CHISQUARE	3.319	DF= 3	PROB=0.3450

not significant

Fenamiphos 66bwhite Reproduction) study

TrtTab DATA (# Alive / # Dead at 14 days

TABLE OF STATUS BY TRT

STATUS	TRT				
FREQUENCY¶ CELL CHI2¶ PERCENT ¶ ROW PCT ¶ COL PCT ¶	CON	TRT1	TRT2	TRT3	TOTAL
ALIVE	574	601	606	375	2156
	9.4	4.5	1.2	(40.6)	
	10.98	11.49	11.59	7.17	41.23
	26.62	27.88	28.11	17.39	
	46.86	44.95	43.13	29.71	
DEAD	651	736	799	887	3073
	6.6	3.1	0.9	(28.5)	
	12.45	14.08	15.28	16.96	58.77
	21.18	23.95	26.00	28.86	
	53.14	55.05	56.87	70.29	
TOTAL	1225	1337	1405	1262	5229
	23.43	25.57	26.87	24.13	100.00

contribution to X^2 suggest chemical (8 ppm) effects chick survival

STATISTICS FOR 2-WAY TABLES

significant

CHI-SQUARE	94.807	DF= 3	PROB=0.0001
PHI	0.135		
CONTINGENCY COEFFICIENT	0.133		
CRAMER'S V	0.135		
LIKELIHOOD RATIO CHISQUARE	97.278	DF= 3	PROB=0.0001

Trttrt 6 Alive/dead chick

eggset – 14 day son = Dead

		Control	trt 1	trt 2	trt 3
		1225	1337	1405	1262
Alive →	14 day –	574	601	606	375
Dead	Dead	651	736	799	887

Alive